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THE EFFECT OF FREQUENT FLYER PROGRAMS ON CONSUMER BEHAVIOR

DOCTORAL THESIS

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ANNOTATION

Competitive pressure in the airline sector has been augmenting in recent years and brand airlines seek to distinguish from low-cost carriers. Since the 1970ies, frequent flyer programs (FFP) have been established as popular incentive schemes combining monetary rebates, service and status awards. The effectiveness of FFP to gain and retain airline customers is increasingly questioned in the face of growing cost pressures in the aviation sector.

This study evaluates the impact of FFP on consumer behavior. It evaluates determiners and moderators of effective FFP design in a comprehensive mixed model approach, which comprises a market analysis, a systematic review of previous academic research, expert interviews and a representative customer survey (n = 502) of Miles & More members in Germany.

The study finds that FFP impact all levels of the customer behavior chain, particularly customer attitude, brand image, booking behavior, customer loyalty and sustainable customer relationships and value perception. FFP elements interact intensely in that process: Service, status and monetary awards have to be effectively combined to maximize customer impact. A broad and far-reaching partner network as well as transparent redemption options are essential to reconfirm customers of the program value. Airline safety and quality have been found important additional determiners of customer booking and loyalty behavior. Business customers with frequent and mainly short-distance flights are reached best by FFP. Airlines should develop their programs to appeal to these customer groups and take care to maintain the perceived honesty of their FFP by transparent and steady redemption conditions and a comprehensive service package awarding loyal customers reliably.

CONTENTS

LIST OF ABBREVIATIONS

AIDA   Attention-Interest-Desire-Action (model)

AM   premia height and availability

AS   service range and availability

AT   Status award range and availability

BA   Brand attitude

BI   Brand image

BL   Brand loyalty

BP   Purchase behavior

BR   Customer relationship

BV   Customer value

CRM   Customer Relationship Management

FFP   Frequent Flyer Program

H   hypothesis

IATA   International Air Transport Association

MAQ   moderator airline quality

MAS   moderator airline safety

N   population

n   sample size

P   proposition

QP   range and reach of partner networks

QT   perceived transparency of redemption

TAM   Technology Acceptance Model

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INTRODUCTION

Actuality of topic

The European aviation industry is under significant competitive pressure, in 2015 to 2017 three European airlines have filed for insolvency (Monarch Airlines, Air Berlin and Italian Alitalia). Due to the progressive deregulation of international flight markets and the decrease of fuel prices, rival low-cost carriers from around the globe have gained important market shares in Europe. Their coverage has risen from 9 % in 2002 to 43 % in 2017 (Powley, 2017). Airlines depend on a comparatively small community of customers: according to internal stats of two US airlines, about 85% of their customers fly less than once per year. About 50% of airline revenues are from the 15% of frequently flying customers. Appealing to and retaining frequent flyers is essential to airline survival and prosperity in an increasingly competitive market (IATA, 2017, p. 5).

IATA (2017, p. 4) sees strong competition in the airline market as a driver of "efficiency gains", cost reduction and innovation". Indeed, the race for passengers has made airlines innovators in logistics and marketing. Customer loyalty programs or more specifically "Frequent Flyer Programs" (in the following: FFP) were first launched by American Airlines in 1981 (Peacock, 1981), conquered aviation industry worldwide in the 1990ies and have since gained foot in other industries, e. g. in the hospitality business (DeKay et al., 2009, p. 1). Loyalty programs are based on the understanding that the acquisition of novel customers is more expensive and difficult than keeping existing ones (Reinartz, 2008, p. 357). Loyalty programs can contain diverse incentives: Frequent flyers are granted free flight miles as a rebate from a certain booking level (in miles or price) (Zhang, 2016), and equally enjoy further amenities like priority check-in, separate lounges or board service, which puts them into a VIP status (Peacock, 2019). Today, frequent flyer programs are usually kept as separate profit centers by airlines and often include external partner companies, which equally award credits or pay out premia (Pandit, 2018, p. 2).

Customers worldwide have well accepted loyalty programs in diverse industries. According to the 2018 Loyalty Program Survey, 52% of participating US consumers are members of loyalty programs (Bitran, 2018). Among Generation X even 82% join such a program. More than 70 mileage or frequent flyer programs are available globally (Peacock, 2019) and according to a UK Survey about 25% of flight passengers are members in frequent flyer programs (Statista, 2018).

Surprisingly, about 77% of loyalty program members are willing to pay a price premium to join the program (Crowd Twist, 2018). Apparently, loyalty programs are associated with superior status and prestige and accordingly should, as Griffin & Herres (2002, p. 25) suggest, be highly effective to enhance customer loyalty as well as airline turnovers and profits: By 2018 airlines globally sold top-up miles worth 14 billion USD to customers and partners and are certain that FFP have increased return on investment by increasing customer loyalty, brand image and generating higher revenues in the primary business. Airlines additionally inculcate the profit-enhancing effect of unredeemed miles and miles bought in advance by international business partners which will partly never be refunded (Pandit, 2018, p. 4).

Recent insights on frequent flyer program success and acceptance in the airline business however rise doubt concerning the sustainability of this strategy: Frequent Flyer Programs profitability for airlines suffers from low cost passengers booking huge mileage but paying discount prices (PWC, 2015, p. 3): the average fare, passengers pay per mile flown decreases with the total number of flown miles per airline from 0.62 USD at 250 miles to 0.14 USD at 2,000 miles (PWC, 2015, p. 8), which means that occasional customers displaying low loyalty levels would benefit most. To amend on this problem and avoid losses from free miles, many airlines have switched their miles assignment schemes from a mileage to a price basis. Mileage assignment now depends on the price not the distance of the booked flight – a strategy which favors high-class business customers. As a result, less than one third of FFP members are really authorized or willing to use their bonus miles due to access restrictions (Tripathi et al., 2018, p.4). This shift has unsettled the broad majority of budget customers and FFP now risk to deter rather than acquire customers (Saxon & Spickenreuther, 2018).

While FFP at first sight enhance airline image and customer loyalty, they equally evoke customers distrust due to complex premium schemes. While FFPs initially increase airlines turnovers and profits, the schemes partly turn out unprofitable later on, when miles are redeemed by low-cost passengers and customers keep switching brand in spite of the incentives.

As the introduction has shown, FFP effects on customer behavior are multiple and the net outcome of FFP from the airlines' perspective is not clear. There are two reasons for this uncertainty:

a) FFP is a multi-facetted marketing concept comprising diverse incentive design options e. g. pricing, redemption conditions, VIP status amenities and the range of

external partner programs. The effect of FFP on consumer behavior depend on the design of these parameters.

b) Potential consumer behavior effects are diverse, ideally FFP enhance consumer loyalty, ticket turnovers and airline image. However, these expected effects do not always coincide (PwC, 2015, p. 8; Tripathi et al., 2018, p.4; Saxon & Spickenreuther, 2018) and have hardly been analyzed within a comprehensive framework yet.

c) There are further limitations concerning the geographical range of existing studies: All above cited consultant surveys refer to U.S. airlines mainly. No topical study on the effectiveness and profitability of FFPs in the German Airline market is available. German airlines are insecure to what extent their FFP bear sustainable success effects on consumer behavior.

An academically founded comprehensive evaluation of the impact of FFP on consumer behavior is missing, which raises the question:

In what way do frequent flyer programs influence consumer behavior?

AIM

The aim of the dissertation is to assess to what extent and in what way Frequent Flyer Programs take effect on consumer behavior. The thesis thus evaluates the cause-and-effect-chain of FFP effectiveness, summarize it in a review-based model and on its basis analyzes the effect of FFP of German airlines on consumer behavior comprehensively to deduct general conclusions to FFP in general.

Tasks

1. To retrieve and structure potentially relevant consumer behavior theories referring to established marketing research

2. To identify design elements of frequent flyer programs as used in practice based on a comprehensive market research.

3. To conduct an analysis of previously observed impacts of FFP design on consumer behavior referring to previous publications in the field.

4. Devise an own empirical research design.

5. To define adequate methods of empirical analysis.

6. To assess impacts of FFP design on consumer behavior for the German airline market in a survey and by statistical analysis.

7. To classify the results in the context of previous research

8. To derive management recommendations for FFP design in order to maximize the customer effect of these measures.

Research Object

Consumer behaviour of airline customers

Research Subject

Impact of design elements of frequent flyer programs on consumer behavior in the extended purchase funnel

Research Questions

1. Which marketing theories are apt to explain consumer behavior resulting from FFP?
2. Which design elements of frequent flyer programs are applied in marketing practice?
3. Which effects of frequent Flyer Programs are observed in previous literature?
4. Which effects of frequent flyer programs are observed for the German Airlines market?
5. Which conclusions for airline marketing practice can be derived?

Hypothesis

By the development of the comprehensive research model the following basic hypothesis was defined:

"FFP design takes effect on consumer behavior".

Novelty

Theoretical Novelty

1. The study has developed a comprehensive model explaining the cause-and effect-chain of FFP effectiveness with consumers based on three crucial marketing theories.
2. The thesis is the first to integrate branding theory, the purchase funnel model and customer relationship management to come to a comprehensive explanation of the formation of brand impact, customer lifetime value and customer loyalty by FFP.
3. The study has shown that design elements of FFP each take an individual role in addressing consumers.

Practical Novelty

1. This study is the first to analyze FFP effectiveness on consumer behavior for the German aviation market, particularly the Miles & More program, which is the only dominant FFP in the DACH-countries. Due to its close embedding in earlier FFP research the research model is transferable to FFP in general and equally adaptable to related incentive systems.

2. The study supports marketers of German airlines in the development of a comprehensive FFP design which appeals conclusively to the target group of Germany-based flight customers and ensures loyalty and customer life-time value of this target group sustainably. Although all FFP utilize the same marketing principles and are devised in a conceptually similar way, there are small contractual differences that account for the attraction of FFP from a customer perspective and accordingly are apt to differentiate airlines from their competitors.

3. The study has identified FFP design details that particularly attract or deter customers and accordingly should be applied or dismissed from airlines FFP concepts.

4. The thesis explains how the Miles and More Program could be amended e.g by bringing the miles collection scheme back to a calculation basis of distance flown, extending the attraction of miles redemption options, the partner network and offering a larger variety of options to use the miles during the travel.

5. The study has detailed a major problem of mileage schemes of classical airlines: Dumping prices of low-cost carriers diminish the attraction of mileage schemes and put classical providers under cost pressure to the extent that FFP can hardly be financed any more.

6. To maintain the attraction of FFP airlines should focus on distinguishing their services by quality and draw a clearer line between true frequent flyers and once-upon a time holiday flyers.

Used methods

The study is deductive in its approach, i. e. progresses from theoretical reflection to empirical observation in accordance with the line of argumentation in this draft. It combines a thorough theory-guided analysis of the issue (a), an in-depth review of previous empirical studies (b), qualitative empirical expert interviews (c) and a quantitative empirical consumer survey (d).

a) Theoretical analysis: The theoretical foundations of the planned dissertation include

- An analysis of marketing theories and psychological research concerning consumer behavior related to marketing activities
- the analysis of design elements of FFP from previous academic and practitioner studies to extract the explaining input factors of the model
- the classification of moderating factors referring to psychologically founded consumer marketing research,

b) The theoretical framework is underpinned by a systematic review of previous empirical research on the impact of FFP on consumer behavior. The review uses a methodology suggested by Pettigrew & Roberts (2008, p. 285) and progresses based on a review protocol from literature research in academic databases, literature identification and classification to coding in table form and textual evaluation of the results. The review details and empirically founds the model draft developed in figure 2.

c) To verify the applicability and validity of the research model for the German FFP market a qualitative interview series with leading executives of aviation companies and external experts in this field has been cast. The study uses a problem-centered and semi-structured interview type which offers interviewees a set of open questions which can be answered but do not have to.

d) The empirical study analyses the impacts of FFP design on consumer behavior identified in a consumer survey. It assesses the impact of FFP design and moderators on three interlinked effect chains at the level of consumer behavior: These are consumers' attitudes and brand image, consumers booking behavior and loyalty as well as customer relationship and customer lifetime value (compare initial research model).

The multiple-choice frequent flyer survey was created in a web based online platform called surveymonkey.de and 699 eligible participants for the survey were identified – only members of the German Miles & More FFP Program. This sample is representative for FFP customers with German aviation companies. Each of the model categories is assessed in several part questions, which are deducted from diverse empirically proven and reliability checked scales of earlier general FFP specific and marketing studies. The retrieved data are checked for consistency normality and outliers. The model constructs are formed from the items (part questions) and checked for reliability (Hildebrandt & Temme 2006, S. 621) using exploratory factor analysis (Cronbach Alpha) (Backhaus et al. 2008, p. 323-325). The constructs find entry to regression models which estimate the impact of input factors and moderators on the target constructs. Hypotheses are tested based on an assessment of regression factor significance (F-Test) and the total model Fit (Chi² Test). Hypotheses are accepted if the Chi² test is significant at the 95% level (Backhaus et al., 2012, p. 55ff).

The study was published in December 2020 and potential impacts of the Corona-Crisis on study outcomes have to be considered. The interviews were done in March 2020 and the survey was done in June 2020. However, implications of the Corona crisis are probably not significant: Since the interviews were done via phone and the survey was cast electronically,

there were no physical restrictions to participation due to the lock-down. Although the Corona Crisis has had severe impacts on airline traffic and flight frequency in 2020, the crisis probably has not taken effect on participants' replies and opinions: The decision to use FFP has usually been taken before the crisis and FFP are not renounced and do not become obsolete due to Corona. Passengers can continue to use premium miles and related status advantage after the crisis as soon as air traffic is in operation again.

Approbation of results of research (publications, conferences)

Results of the research were presented and discussed in 7 scientific journals and 8 scientific conferences (7 international in the Czech Republic, United Kingdom, Italy, France and Germany and 1 local conference in Latvia).

Author's scientific publications in reviewed journals

- Wever, M. (2015) The importance of customer loyalty programs in the airline industry. In: Journal Of Interdisciplinary Research AD ALTA, Volume 5, Issue 1, 2015, pp. 84-90,ISSN 1804-7890, available from http://www.magnanimitas.cz/ADALTA/0501/PDF/0501.pdf (Web of Science)

- Wever, M. (2016) The importance of customer loyalty programs for the European airline Industry. In: Journal of US-China Public Administration, Volume 13, No. 1, January 2016, pp. 55-70, ISSN print 1548-6591, ISSN online 1935-9691, available from http://www.davidpublisher.org/Public/uploads/Contribute/5744100842da3.pdf

- Wever, M. (2016) The association of frequent flyer programs with affective and behavioral customer loyalty in the European airline market. In: Macrotheme Review multidisciplinary journal, Volume 5(5), Special Issue 2016, pp. 47-71, ISSN print 2379-9765, ISSN online 1848-4735, available from http://macrotheme.com/yahoo_site_admin/assets/docs/6MR55We.356133230.pdf

- Wever, M. (2017) Advantages and disadvantages of deploying frequent flyer programs as impact factors affecting airline customer behavior and retention. In: Journal of Advances in Business-Related Scientific Research, Volume 8, No. 1, January 2017, pp. 23-34, ISSN 1855-931X, available from http://www.absrc.org/wp-content/uploads/2017/06/PAPER-Wever.pdf

- Wever, M. (2017) The impact of control variables on the interrelation between passenger loyalty programs and airline customer retention. In: Journal of American Academy of Business, Cambridge, Volume 22, Number 2, March 2017, pp. 42-48, abstract available from http://www.jaabc.com/jaabcv22n2preview.html

- Wever, M. (2020) The Effect of frequent flyer programs on consumer behavior in the German airline market. In: Journal of Administrative and Business Studies, Volume 6, Issue 6, December 2020, pp. 222-235, abstract available from https://tafpublications.com/platform/Articles/full-jabs6.6.1.php

- Wever, M. (2021) Designing Frequent Flyer Programs Effectively - a Market-Research- and Interview-Based Study for the German Aviation Sector.   In: International Journal of Business and Management, Volume 16, No. 3 February 2021,   pp.58-83,   abstract   available   from http://www.ccsenet.org/journal/index.php/ijbm/article/view/0/44705

Author's presentations in scientific conferences

- Wever, M. (2015) The importance of customer loyalty programs in the European airline industry. Interdisciplinary scientific international conference for PhD students and assistans QUAERE. 25th – 29th of May 2015, Hradec Kralove, Czech Republic. Organized by the Magnanimitas Academic Association.

- Wever, M. (2016) The importance of customer loyalty programmes for the European airline industry. Conference on the impact of globalization to national economies and business. 28th January 2016, Riga, Latvia. Organized by the Faculty of Economics and Management of the University of Latvia.

- Wever, M. (2016) The impact of control variables on the interrelation between passenger loyalty programs and airline customer retention. International business research conference on economics, finance, IT and management. 7th – 10th of July 2016, London, United Kingdom. Organized by the economics, finance, IT, management, marketing, MIS, international business, accounting and healthcare management research conference in London, United Kingdom.

- Wever, M. (2016) Advantages and disadvantages of deploying frequent flyer programs as impact factors affecting airline customer behavior and retention. International conference of business and business-related sciences. 20th – 21st of October 2016, Milan, Italy. Organized by the Faculty of Entrepreneurship of the GEA College in Ljubljana, Slovenia.

- Wever, M. (2016) The association of frequent flyer programs with affective and behavioral customer loyalty in the European airline market. International conference on business and social science. 20th – 21st of December 2016, Paris, France.

Organized by the Macrotheme Review Journal, Austin, Texas, United States of America.

- Wever, M. (2017) A qualitive study of the association between airline loyalty programs and customer retention in the European airline market. International academic multidisciplinary research conference. 4th – 6th of May 2017, Munich, Germany. Organized by ICBTS conference center & applied sciences, Paris, France.

- Wever, M. (2019) The Effect of Frequent Flyer Programs on Consumer Behavior in the German Airline Market. Business & Management Conference. 10th – 13th of September 2019, Paris, France. Organized by The International Institute of Social and Economic Scienes, Prague, Czech Republic and co-organized by the Czech Technical University - Department of Management and Economics, Prague, Czech Republic

- Wever, M. (2020) The Effect of Frequent Flyer Programs on Consumer Behavior in the German Airline Market. ISER International Conference on Novel Approaches in Social Science, Management Disciplines, Education, Economy and Business (NAMEE). 27th – 28th of October 2020, Rome, Italy. Organized by The Institute for Social and Economics Research, Bruneck-Brunico, Italy

Content of dissertation

The main body of the dissertation is structured as follows:

Chapter 1 develops the theoretical foundations of the study. Referring to behavioral psychology in the field of marketing (section 1.1), branding theory (section 1.2), and marketing purchase funnel models (section 1.3) a model of consumer behavior effects of marketing is suggested (section 1.4).

Chapter 2 conducts a systematic review of previous empirical studies on the effect of FFP on consumers. Section 2.1 explains evolution and concept of FFP, section 2.2 details the review method, accomplishes the process of literature selection and coding and provides an overview in table form. Section 2.3 to 2.5 comprise review evaluation and develop the research hypotheses directly from previous academic results. A review summary and comprehensive validated model for the empirical study is provided in section 2.6. Here limitations of previous research and further research requirements are outlined.

Chapter 3 of the main body develops the research methodology. Section 3.1 details the empirical research objectives, summarizes the hypotheses as concretized in the review section and details the research model. Section 3.2 develops the empirical research design

which is a mixed method approach and combines an interview-based analysis and a survey among members of Miles & More (only FFP of German airlines). The interview questions and survey measures are developed and coded in section 3.3. The process of survey implementation is described (section 3.4). Section 3.5 details the methods of statistical analysis. A comprehensive research plan (section 3.6) summarizes the research process.

Chapter 4 presents the empirical results of the survey. Section 4.1 evaluates the interview-pretest. Section 4.2 contains the descriptive analysis of results by part question. Section 4.3 develops the final research constructs using exploratory factor analysis. Section 4.4 implement the regression models and interprets the results and formally tests the hypotheses. Section 4.5 triangulates the qualitative and quantitative survey results.

The conclusion classifies the study in the context of previous academic research and outline limitations and further research requirements. The suggestions transfer the results to business practice and advise German airlines how to design FFPs in order to guide customer behavior so that airline profitability is maximized sustainably. A management summary is provided.

Limitations

The study is limited in range and hence subject to usual statistical biases.

The study focusses on the German Airline business and particularly on the Miles & More program offered by Lufthansa and its partners. The survey comprises a representative number of 502 participants, but has only addressed individuals, who are members in the Miles & More program. The insights of the survey, accordingly, are limited to the impact of Miles & More design elements and refer to the behavior customers of Miles & More show, only. Comparing the empirical results to the review however, all categories that were found in the review have been confirmed. This suggests that the results for Miles & more are transferable to other FFP and FFP members from other cultural contexts.

The survey categories are derived from a comprehensive systematic review of previous research and marketing which do not explicitly refer to the German aviation industry. These categories are then applied to the German airline sector. It is possible that further factors would be of relevance in this context which are not mentioned in previous studies and hence are falsely exempted from analysis.

The data are validated by interviews with five experts in FFP. The interview results however are not comprehensive concerning the retrieved categories, but the participants meander concerning their personal experiences, which are not always connected to Miles & More. The interviews have not revealed additional FFP design elements to be considered but have

rather contributed to narrow down the research model. Since the interviews are the only basis of empirical model validation, it is possible that further categories not detected in the review are relevant to FFP in the German airline sector, which are not addressed in the survey.

Further the quantitative survey could be biased: The frequent flyer survey is published via a public online-portal. Participants are screened for membership in the Miles & More Program, in order to obtain a representative and competent sample. Still, it is possible that online-participants falsely indicate their aptitude or characteristics which do not correspond to true experience. However, this is not very likely as the participants were contacted through a frequent flyer community were frequent flyers exchange their experiences with airlines.

The retrieved data are tested for independence and reliability. Significance tests explore the fit of the regression models applied for the test of the hypotheses. However, regression methodology is limited in reach. The statistical analysis is based on hierarchical regression models only. These assess only linear relationships, while other nonlinear effects are underestimated. Regression evaluates the impact of several inputs on a single target, but does not consider the interaction effects between the input factors and neither the interactions between several targets. The results could accordingly be incomplete concerning relevant interrelationships and overestimate the considered effects. These biases are common for most regression-based studies and could be reduced by an additional large-scale qualitative evaluation and structural equation modeling.

In regressions practicable number of inputs by model is limited to prevent that input factor significance is underestimated due to mutual interactions. This study will to some extent compensate these problems by conducting an additional collinearity test of the input factors and by evaluating the correlations between several targets. However, no comprehensive model comprising all inputs and targets is developed.

Further limitations due to the present Covid situation have to be considered:

The corona crisis has changed the flight business. In 2020 total fight volumes were down 50% on the previous years, and airlines expect significant cutbacks to last until 2024. Even after that hygiene standards will be higher, allowing less passengers on board. Still a significant share of earlier passengers could be discouraged due to infection risks (Bouwer et al., 2020). Business travel has virtually come to a halt and most business meeting take place online today. While initially (spring 2020) most customers were convinced to return to normal within that year, today (as of spring 2021) only 15% are certain that business flights will regain in relevance in the near future (Frost, 2020).

Due to cut-backs in flight volumes and particularly in business flights frequent-flyer programs could lose in importance due to shrinking member numbers and decreasing interest in special offers. On the other hand, FFP could become more important than ever before from an airline's perspective. In a declining market, airlines depend on FFP as a marketing instrument to attract new customers and differentiate from competing companies. Although or particularly since Covid-19 threatens airlines' survival, airlines have to design FFP even more attractively to maintain their competitive positioning.

Main results

Based on the systematic review of previous empirical studies on the impact of FFPs on consumer behavior, it is expected that mainly previous results will be confirmed. FFP programs generally contribute to enhance consumer brand awareness, booking intention, participation in FFP, customer loyalty and advocacy (Chin, 2002, Whyte, 2003; Lederman, 2004; Meyer-Waarden, 2006).

Previous studies however allow only few and partly contradictory conclusions on the impact of FFP design elements on consumer behavior. The communication of frequent flyers' VIP status has been found to increase passengers' airline loyalty (Meyer-Waarden, 2013) and advocacy (Mimouni-Chaabane &Volle, 2010). Mileage redemption limitation however have partly been disapproved by customers (Mathies & Gudergan, 2016), while on the other hand restrictions to attain the status of an elite flyer are found to encourage loyalty (Yan & Cui, 2016). Partner programs have been researched by Yan & Cui (2016) only and accordingly encourage loyalty and advocacy. Additional amenities have been found effective concerning booking consideration, FFP participation and loyalty (Orhun & Guo, 2018; Gao et al., 2018; Vilkaitė-Vaitonė & Papšienė, 2016). There are diverging results concerning the effect of time limits of premia availability (Mathies & Gudergan, 2016; Vilkaitė-Vaitonė & Papšienė, 2016).

This study explores several design elements within a homogenous framework and hopes to thus enhance the conclusiveness of results within the framework of the sketched comprehensive model.

Main conclusions and suggestions

The study accomplishes previous results on the impact of FFP design on consumer behavior by a comprehensive model, which can be applied and extended in further academic studies on loyalty programs in diverse sectors. Using a comprehensive theoretical framework, the study reconnects FFP marketing research to a more general marketing context.

Major expected practical insights of the planned study are:

1. Frequent Flyer Programs can be an effective tool to enhance customer booking behavior and loyalty.

2. However: the design of FFPs matters to reach this intended effect: FFP programs have to combine incentives in a transparent, understandable and motivating way to address lucrative target groups.

3. To match international competitive pressure, airlines have to provide FFP but should plan FFP programs sustainably to enhance their profitability objectives and at the same time keep customers loyal and engaged.

1 CONSUMER BEHAVIOR RESEARCH FROM PSYCHOLOGICAL AND MARKETING THEORETICAL VIEWPOINT

Chapter 1 develops the key theories underlying further theoretical and empirical research and focusses in the field of consumer behavior and marketing. To identify effect paths, customer behavior categories have to be specified according to task No. 2, drawing on proven marketing frameworks. The study utilizes three major frameworks to systematize potential behavioral effects:

a) Behavioral marketing psychology
b) Branding Theory
c) Consumer decision making and lifecycle theory

1.1 Behavioral psychology in consumer marketing

Objectives and functions of consumer marketing

The American marketing association sees marketing as a "process of planning and executing the conception, pricing, promotion and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives." (AMA, 1985: cited from: Ringold & Weitz, 2007, p. 251). Depending on the target of marketing activities marketing comprises consumer marketing, directed to usually private consumers of a product or service and B2B marketing, directed to companies which use or process intermediate or final products in the process of value creation (Olbrich, 2006, p. 244). This study focusses on consumer marketing and particularly on the fields of pricing and promotion in the context of airline service marketing to flight passengers. In the opinion of the author, pricing and promotion are key elements of consumer marketing. Promotion impacts consumers' pricing acceptance, in the way that consumers tend to tolerate price increases or high prices (as compared to competitive offers) more readily, if the strategy is flanked by an image and value oriented comprehensive marketing campaign.

From an economic point of view, marketing today fulfills a wide range of functions: In modern corporate management, the term marketing means much more than just marketing and advertising products, but describes a holistic and market-oriented approach that pursues two main goals and is based on targeted strategy mix: on the one hand marketing intends satisfy the interests of corporate shareholders i.e. increase turnovers and earnings and on the

other hand marketing has to meet market requirements and generate new customer needs (Meffert, 1998, pp. 10-13). This study assesses marketing objectives from the perspective of the providers, here airlines, which attempt to sustainably maximize the profitability flight services.

The marketing mix comprises totality of marketing instruments that a company uses in the target market (Kotler, 2003, p. 108). It includes the so-called 4 P's: product, price, promotion and place that is product-, price-, communication- and distribution- policy. Rottke and Werneke (2002, p. 2) also count service and contract policies as marketing activities.

- Product policy comprises all activities that help to optimally adapt the offered product to market requirements. It extends to product design, the choice of brand name and, for services, the type and concept of the service offering. To address different target groups, product diversification or product differentiation can take place (Meffert, 1998, p. 343).

- Pricing policy encompasses all decisions that shape the price of a product so that returns and profitability are maximized sustainably. Pricing includes the formation and change of prices, price differentiation, the setting of discounts and also the guarantee of additional purchase incentives, such as extended guarantees, financing or service offers (Meffert, 1998, p. 469).

- Distribution policy designs and controls the path of the product from production to the user. This includes both physical distribution and distribution channel organization (Meffert, 1998, p. 585).

- Communication policy refers to customer acquisition, the promotion of customer satisfaction and customer loyalty (Bruhn, 2001, pp. 580-585). In order to influence customers, the suitability and attractiveness of product or service, to personal requirements has to be communicated. The success of communication policy largely depends on customers' inner attitude and social environment. Communication policy thus has to consider cultural values and norms as well as social influences on the target consumer (Peters & Krafft, 2005, pp. 80-81).

Marketing activities have to be coordinated consistently to address the target market (Köhne, 2005, p. 91). Effective marketing communication must take all these policy dimension into account and design a comprehensive concept fitting with offered products and organizational culture (Meffert & Bruhn, 1997, pp. 75-86).

According to Meyer (1998, p. 1066), successful marketing is an interactive communication process between customer and provider. In the opinion of the author, this observation is more

relevant than ever before in the age of digital and social media. While in the pre-digital age, marketing activities were undertaken unilaterally by the provider mainly and consumers were above all recipients of marketing messages, today consumers intervene in the marketing process proactively: Social media enable consumers to post on, like or dislike products and services. Other consumers refer to these public peer-opinions, when taking purchase decisions and forming their attitudes on particular products. Consumer opinions and product related words-of mouth thus shape product image to a large extent. Social media are not restricted to national or geographical borders, but are available globally. Word of mouth propagates world-wide, even before official marketing campaigns reach their target. Interactive marketing requires new communication strategies involving consumers intensely in the process of communication.

This study is thus located at the intersection of the marketing policies of communication and pricing. In the opinion of the author, the integration of marketing strategies in a holistic framework is essential to make marketing succeed and realize a win-win- situation for customers and providers: Products and services meeting customers' requirements generate sustainable profit, since a stable customer base establishes. Communication policy is essential to inform customers on the quality and value of the offered products. Pricing policy is crucial to balance the utility the customer gains and the revenues the business requires. Ideally, the market price conveys to customers that the product is valuable and at the same time competitive.

Marketing is in demand to align pricing policy and communication policy so that the consumer understands the fundamental value and pricing fairness of the product. Strategies to mediate this experience to customers have changed in the recent decades and keep on evolving in the internet age.

Emergence from a neoclassical understanding

Until the middle of the last century, consumers' buying decision process was considered part of supply and demand analysis, a field of neoclassical theory and microeconomic research (Varian, 1995, p. 350).

Neoclassical theory assumes that the customer acts rationally on the basis of clearly understandable considerations and thus predicts the buyer's decisions on the basis of the Bernoulli principle (Franz, 2004, p. 13). This means that the decision-maker should choose the option with the highest expected utility value from possible future states (Schmidt & Terberger, 1997, p. 289). The model consumer is assumed to have a clear and transitive

utility function. Accordingly, decisions are based on the expected value of the benefits of the various alternatives. The prospective buyer thus maximizes his benefit as a sum function of the products of various utility values and their probability of occurrence (Arrow, 1970. pp. 52-53; Blohm & Lüder 1995, pp. 244-245). Neoclassical theory postulates a clearly defined decision space is clearly possible future states are assigned probabilities with regard to the result (Schultz, 1987, pp. 130-132). According to the Bernoulli Principle, consumers can clearly determine the expected utility of different decision alternatives and equally inculcate the risk of failure in a rational way (Schmidt & Terberger, 1997, p. 289). Neoclassical theory assumes information efficiency, rationality of decision making and a comprehensively defined decision space (Meyer & Johnson, 1995, p. 183).

Although the neoclassical model of consumers' utility maximation according to the Bernoulli principle dominated marketing research until the 1980ies (Corstjens & Gautschi, 1983, Gensch, 1987), marketing theorists finally had to understand that these model assumptions of micro economic theory do not hold in marketing practice. Consumers do not clearly understand their preferences and are unsure about the risk and utility value of future states. For this reason, they do not in practice decide rationally, but are driven by emotion, the social environment and their situational moods.

This study builds on the assumption that pure rational-cognitive models of consumer behavior are little realistic and are about to lose in relevance an age dominated by multimedia communication: Increasingly consumers' are influenced by marketing messages, which are conveyed through social media and the internet daily and minutely. The inclusion of promotional messages in virtually all consumption-related activities online, circumvents consumers' rational reflection and increasingly reaches the target audience at an emotional and implicit level. Digitalization has endowed trend marketing with growing power. New consumption options spread at increasingly rapid pace in digital media and the followership of marketing campaigns multiplies in that process. Consumers are minutely informed on and accordingly increasingly influenced by powerful social trends and cognitive distancing becomes impossible.

The failure of neoclassical theory to predict and analyze consumer behavior originates in its very restrictive assumptions founded in the model framework of microeconomics: In practice – according to the experience of the author – consumers are not fully informed on the potential decision range, i. e. do not know all product alternatives and cannot assess their true value and particularly not the personal value they attribute to different products. They

rather decide intuitively and based on prior experiences and social norms. The preference order of consumers is not transitive but ambiguous and changing depending on the purchase situation and on the range of alternatives which are at hand. Even if consumers were informed on all possible options to decide and could make out a clear preference structure, they would not apply this rational decision pattern usually, but rather choose the alternative at hand for practical reasons. Simplifications to the rational decision process save consumers transaction costs and emotional efforts to argue the optimal alternative as compared to the handy solution, they are accustomed to.

Psychological research in consumer decision making

Psychological research has established a range of theories to explain human behaviors, which clearly distinguish the prototypical consumer from a "homo oeconomicus" (Gensch & Javalgi, 1987, p. 72; Homburg & Koschate, 2007, p. 846):

Kurt Lewin (1934, p. 249) was the first to systematically examine the driving forces of human motivation and action and established psychological field theory, which assumes that field processes in the brain guide our actions. Environmental influences and individual psychological dispositions interact (Köhler, 1920. pp. 185-187) and determine human perception and decision making. Lewin investigates the motivation of volunteers to tackle a task under various intervening environmental influences and shows that individual and social factors influence people's perceptions and will to pursue goals. Lewin's socio-psychological model of human behavior has influenced later psychological research and has also been adapted to the field of marketing (Herber & Váràrhelyi, 2002, pp. 2f). Psychological research was influenced by Lewin's considerations and assumes that consumers' attitude on a product, technology or innovation is decisive for their willingness to use it (Schütz & Herzwurm, 1998, p. 28).

Human personal traits include three components (Grunert, 2013, p. 6):

- The cognitive component comprises conscious knowledge, which is mostly based on active perception and reflection. Cognitions are products of previously acquired knowledge, imagination, judgment, memory, learning and reflection (Grunert, 2013, p. 13).
- The affective component refers to conscious or unconscious feelings towards an object and indicates personal appraisal and preference (Huber, 1993, p. 4, Grunert, 2013, p.14).

- The conative component represents the intention to act (will) with regard to an object (Hale et al., 2003, pp. 2157f) and indicates an action tendency.

The psychological insight that consumers do not decide and act rationally and machine-like based on the principle of utility maximization, but are driven by moods and emotions, is both a limitation and opportunity to marketing. On the one hand, consumer marketing requires more than rational argumentation e. g. based on pricing or quality. On the other hand, marketing can utilize a much broader toolkit and psychological strategies, if consumers' behavioral responses to certain stimuli are fully understood (Meffert & Burmann, 2013, p 103).

In practice, any marketing activity – in the opinion of the author – is justified by consumers low inclination to make rational choices. If consumers would decide in a machine-like way, they would conclusively arrive at buying decisions, which would maximize their personal utility and minimize consumption risk. The attempt of marketing to bias this rational behavior would then be redundant since the mechanistic decisionmaker would recognize and discard this manipulation. Marketing could not influence the inner preference structure of a rationally deciding individual.

In practice, however, consumers are affective and emotional. They decide based on prior experiences, social expectations, best-practice simplifications and frequently even situational moods. When booking a flight, she has chosen before, hardly any consumer rationally goes through all available webpages to search the optimal alternative, but rather sticks to a proven airline and proven booking routines, for instance.

Marketing addresses all elements in the consumer decision process which are beyond pure rationality and attempts to impact these n the way that consumers change to or stay with the provider the marketing agent represents. This presupposes the psychological analysis of consumers' decision processes based on well-known paradigms.

Psychological determiners of consumer decision making

Diverse paradigms have been suggested to explain which stimuli cause or do not cause the desired consumer behavior, e.g. the purchase of the target product. Early behaviorist approaches suggested that human behavior results from the pure inner procession of stimuli, but failed to explain external impacts on consumers' decision processes, e.g. situational factors or social influences. Later neo-behavioristic models accomplished the stimulus reaction paradigm by additional intervening parameters, which change cognitive and emotional processing activities in the human brain. The S-O-R – stimulus- organism-

response paradigm holds that particular stimuli, case certain effects in the human organism (Kroeber-Riel et al., 2009, p. 34). Marketing has to control stimuli but additionally the intervening variables to succeed. E. g. the context of product representation has to fit. Products are better accepted, when consumers' social environment makes extensive use of the product (Foscht & Swoboda, 2004, 190-198).

Models of consumer behavior include a broad range of intervening variables codetermining the impact of marketing on consumer decision processes research (Bagozzi et al., 2010. p. 16). Trommsdorff (2009, p. 32) provides a rather comprehensive chart of intervening factors (interpersonal determiners, Meffert & Burmann, 2013, p. 109) by order of complexity and diminishing accessibility to rational cognition:

Involvement refers to the level of personal engagement in processes of information search, reception and processing (Zaichkowsky, 1994, p. 342). Involvement is the degree to which an individual gets engaged emotionally with an object or activity i.e. is motivated to take action on behalf of a cause (Hinterhuber, 2004, p. 29). Involvement can result from emotional, cognitive or physical stimuli (Kroeber-Riel et al., 2009, p. 79). Marketing intends to strengthen consumers' involvement with the target product in order to motivate buying action (Birbaumer & Schmidt, 2006, p. 513).

Emotions cause involvement and comprise human sentiments like anger, surprise, joy or anxiety. Emotions are central impetuses of consumer behavior and codetermine stimulus coding, processing and interpretation in the human mind. Emotions are only partly conscious, which make them viable to marketing influence. The analysis of emotions, however, require extensive psychological and neurological understanding. In my opinion, marketing has to rely on psychological insights to understand the driving forces of consumer behavior. In the marketing of frequent-flyer program the analysis of consumer involvement is of particular importance: Consumers return to a product or service if they are "involved with" i.e. engaged in the product or service personally. Frequent flyer programs stimulate this involvement, by inviting consumers to repeatedly count their mails, look out for option to redeem them or gather new miles. These activities encourage consumers to get mentally emotionally and even haptically engaged the airline brand and promotional messages. Involvement is thus a key parameter of FFP marketing from a psychological perspective involvement develops in a complex mental process as follows:

Motivation concretizes needs and desires and directs them to a particular object. Motivation contains cognitive, emotional and conative components. There are intrinsic and extrinsic

impetus to motivations, i.e. again inner individual factors as well as social and environmental factors determine form and degree of motivation (Bansch, 2002, p. 19). Marketing intends to develop consumers' motivation to buy and direct motivation to the target object (Meffert-Burmann, 2013, p. 121).

Attitude is the inner predisposition of an individual to react to certain stimuli in her environment in a consistent positive or negative manner. Attitudes can concern objects persons or immaterial issues. (Trommsdorff, 1998, p. 152) Attitudes result from own inner reflections but are equally produced by social influences. According to Triandis' (1975) three component model, attitudes concern affective, genitive and conative components. Marketing activity intends to shape human attitudes in favor of the target product (cited from Kroeber-riel et al., 2009, p. 217). Trommsdorf (1989, p. 122) defines attitudes as the "state of a learned and relatively permanent readiness to react positively or negatively in a corresponding situation. Attitudes are persistent, positive or negative evaluations of attitudinal objects, which can be persons, groups, situations, ideas, norms, objects, products, etc. Attitudes are not directly observable but shine through psychological reactions, communication, behavioral intentions and manifest themselves in observable behavior (Mangold, 2014, p. 37). Obviously, attitudes determine consumption intentions and marketing has to gain consumers' favorable cognitive, affective and conative attitudes for the offered product or service to succeed in its initially cited objectives (Faircloth et al., 2001, p. 61).

Values are located at a deeper level of personalities than attitudes and frequently produce attitude. Values are inner ideals of desirable or undesirable states (Kluckhohn, 1962, p. 395). which are characteristic for a certain social group or individuals of particular imprint. Values determine understanding, inner objectives and action strategies but are usually not open to conscious choice (Wesener, 2006, p. 45). Values frequently determine consumers' lifestyle and choice of social relationships. Marketing has to agree with fundamental values to be received successfully, but can shape the value set consumers assign to certain products e.g. sustainability, cleanness or amiability (Vinson et al., 1977, p. 44).

Personality describes the immanent and individual self, which usually is rather stable and disposes of particular individual traits. Personality determines values, attitudes and consumption patterns but can in the long run be influenced by social environment and experience (Trommsdorff, 1998, p. 197ff).

All these individual determiners – involvement, emotions, motivation, attitude, values and personality are formed by the individual herself but equally by her culture, social norm, social stratification, group and family, in sum are a product of individual perception and social impacts. In order to influence and move consumers, marketing has to permeate all conscious and unconscious levels of consumer decision making and opinion formation (Meffert & Burmann, 2013, p. 108).

This understanding is summarized in Figure 1.1 on the following page.

Consumer personality comprises a comparatively stable set of inner traits which are inherited and acquired in childhood or later life. Personality is hardly influenced by marketing activities since marketing impacts are necessarily limited in reach and timing. Values are deep inner ideals and desirable states every consumer dispose of. These are only partly accessible by marketing since social environment, education and personal experiences determine consumers' value sets. Indirectly and in the long run, equally marketing takes some effects on consumers value sets, e.g. when consumers develop a positive inner attitude towards particular brands.

Values but equally situational impacts of marketing take effect on consumers' attitudes. Consumers form their inner predisposition to buy certain products or services based on their value set and personality but are equally motivated by advertisement and special product offers for instance.
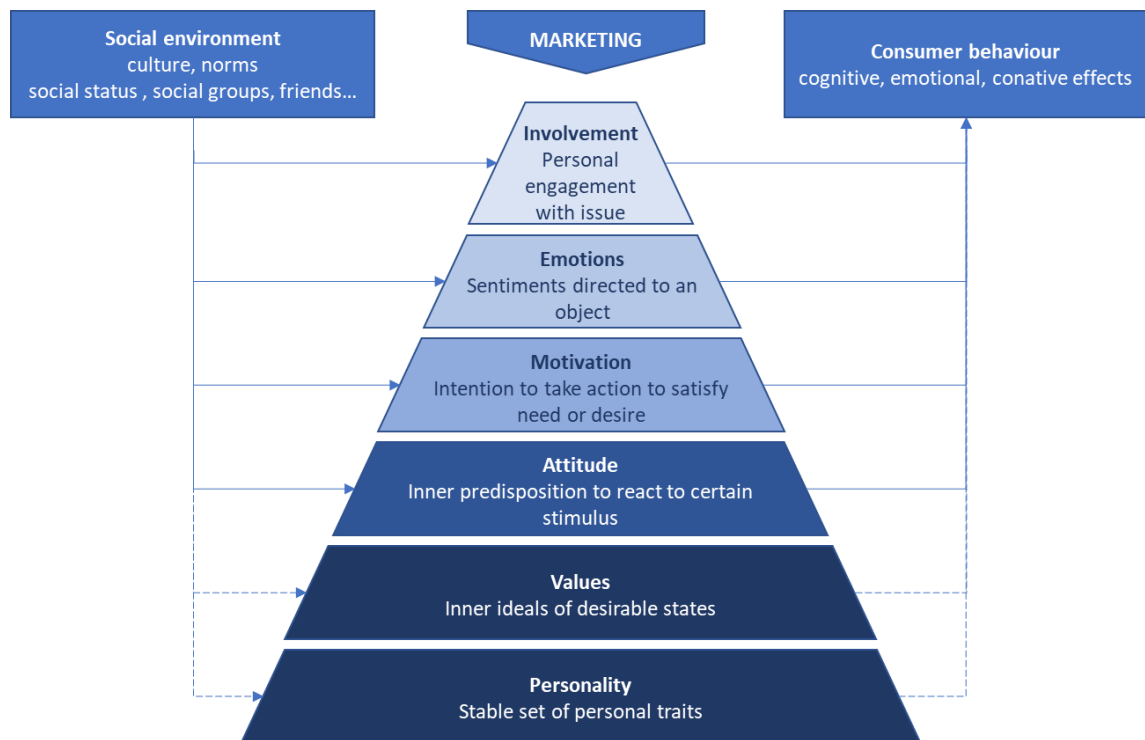
Figure 1.1 Psychological determiners of consumer behavior (own draft drawing on
Meffert & Burmann, 2013, p. 108)

Motivation is based on consumers' attitudes and describes the particular intention to take
action on behalf of a consumption activity. Marketing can be a major impetus for consumers
to proceed from inner attitudes to concrete actions, e.g. when particular campaigns motivate
to finally realize a long-planned purchase.

Emotions represent sentiments directed to some object, e.g. product or service, and result
from inner attitudes and motivations but equally are shaped by marketing activities.
Emotions result in the post-purchase phase, too, when consumers use the product or
experience the service and are satisfied or disillusioned.

Repeated positive emotions results in consumers' involvement with the product or brand i.e.
consumers show loyalty to the company, purchase again or recommend the product or
service just because they are satisfied with their own purchase and usage experience or have
received positive social feedback concerning their purchase decision.

The influence stages of marketing on consumers thus are multiple and reach from the pre-
purchase, to the purchase and post-purchase phase. Values and personality of consumers are
indirectly shaped by their social environment and indirectly take influence on consumer
behavior. Marketing in my opinion succeeds by gradually penetrating consumers' psyche
and forming consumers attitudes, emotions and bonds to the product or service.

1.2 The relevance of branding theory to consumer behavior

FFP programs are important strategies of airline branding, i.e. the creation of a recognizable and unique image at the customer. According to Keller's (1993, p. 7) brand image brand identity model customers and provider interact in creating a brand. Corporate brand identity develops due to conclusive marketing communication and strategies at the company level (Esch et al., 2003, p. 24), Brand image emerges due to brand reception and reflection at the consumer level (Wee et al., 2003, p. 213; Sommer, 1998, p. 149). The model has repeatedly been applied to assess and explain the effectiveness of Frequent Flyer Programs in previous studies (Ponnam, 2007, p. 63; Thurlow & Jaworski, 2006, p. 99; Lemon et al., 2001, p. 20)

Brands – Term and foundations in psychological research

Considering the complex set of determiners of consumers decision making, marketing has to do more than intervene in the instant of buying to succeed but has to get involved with consumers' psyche from much earlier on. Brands convey perceptions that are anchored in the memory. They appeal to feelings and attitudes as well as intentions to consume (Koerber-Riel & Weinberg, 2002, p. 554). Definitions of the term "brand" illustrate that brands are closely linked to and are the key to access consumers' psyche:

According to American Marketing Association (AMA), a brand is "a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of a seller or group of sellers and to differentiate them from those of competition" (Keller, 2003, p. 3).

While this early definition mainly refers to the factual essence of brands, Meffert's delimitation focusses on the psychological aspects of branding: "Brands are anchored in the psyche of the consumers and other reference groups. They represent a distinctive image of a product or service. Brand performance results by offering the brand in a sales area over a longer period of time with the same appearance and is based on the brand's consistent or superior quality." (Meffert et al., 2013, p. 3).

According to Esch et al. (2005, p. 3), branded products or services are distinguished from no-name competitors based on a set of unique characteristics. These can be functional or psychological attributes perceived by the consumer. Brands promise distinction in quality, endurance and utility which produces particular expectations with consumers. Established brands succeed, i.e. realized superior prices and are better accepted than no-name products

due to this image alone (Adjouri, 2013, p. 200). The brand thus turns into an indicator or sign of distinction of the consumer buying this brand. Brands substitute, condense and simplify a set of desirable characteristics of a product or service and establish consumer trust on that basis (Sommer, 1998, p. 35).

Brands take effect on consumers' psyche at the cognitive, affective and conative level (compare section 1.1). Diverse theories support this assumption (Munzinger & Wenhart, 2012, p. 151).

At the cognitive level, brands assist consumers in structuring market offer and are anchors for consumption decisions. The elaboration-likelihood model introduced by Petty and Cacioppo (1986, p. 126) systematizes the cognitive brand related decision process consumers undergo. Brands are perceived as proofs of product quality based on the experience that a broad majority of other consumers have been satisfied by the product and continue to buy it. Referring to the brand, consumers found their decision and simplify the process of decision making. Since the brand is renowned and has got a year-long tradition, they can trust in the quality promise and dispense with examining the quality and price of competitive products critically. Convinced by the quality of the brand in the phase of product application or consumption the consumer reconfirms her conviction that the branded product is superior or high quality (Baumgarth, 2014, p. 48).

Brands guide consumers from "reason to emotion": According to neuroeconomic research which uses radiographic analyses to understand brain functions, brands stimulate affective areas in the brain. By discharging the cognitive level, brands allow consumers to concentrate on the emotional perspective. This process takes place unconsciously and thus is beyond consumers' control (Esch & Möll, 2009, p. 25-27). According to a neuroeconomic analysis comparing the effects of high and low involvement brands on brain structures, strong brands establish an emotional predisposition in the consumer even before she rationally analyses brand related characteristics at the cognitive level. Strong brands induce feelings of satisfaction, joy and reward at first perception and positively bias consumers in favor of the offered product or service (Ahlert et al., 2011, p. 142).

Brands finally produce a conative effect with consumers, i.e. induce consumers' resolution to take action, orient themselves towards the brand and finally buy the branded product Branding strategies empirically improve consumers' remembrances of brand related information, increase the probability and frequency of product recognition, motivate positive

brand evaluation – factors which finally contribute to purchase activity (Zipfel, 2009, p. 153).

It is obvious that brands are powerful influence media and useful to address and keep in contact to consumers. Companies are in demand to develop a conclusive branding strategy to support marketing activities at all levels of the pyramid of consumer behavior (see

Figure 1.3). Brands of course cause consumers involvement with the product or service since they represent anchors for remembering and recalling the positive consumption experience. Brands equally cause and catalyze emotions. They stand as labels for sets of sentiments and experiences and frequently are more idiosyncratic than the product or service itself. Brands can motivate purchase behavior, even if the product itself is little noteworthy or does not fundamentally distinguish from competitive offers. The brand allows to establish associations that are beyond the reach of the product or service itself.

Consumers tend to adopt brands as part of their psyche and brands become part of consumers inner pre-dispositions and even values. Brand image transgresses from the conscious to the unconscious mind and even represents consumers inner ideals. As such brand can become an instrument of consumers' self-image and is seen as mirror of customers' inner identity. The concept of brand personality illustrates that consumers even perceive brand as own personalities they identify with.

While marketing alone remains superficial and has only got limited effect on consumers' psyche, brands enable businesses to penetrate to the inner and partly unconscious self of their customers. It is obvious that marketing relying on brand gains in efficiency and effectiveness.

In airline marketing, branding is of particular relevance: Basically, all airlines offer very similar products, i.e. transportation from location A to B at a certain price and in a certain time. Basically, the product "flight" disposes of few opportunities for differentiation, except pricing and scheduling. Airlines attempt to establish additional markers in the form of

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brands, which distinguish flights with branded airlines from "no-name" budget carriers. Branding enables brand-carriers to charge higher prices than discount airlines, since consumers reconnect an image and sentiment of superior quality and expertise with the airline's name and symbol. Frequent flyer programs take an important function in the branding process: By promising VIP passengers special services or status and additional purchase offers, the airline participating in the FFP distinguishes its brand from companies not providing this service. FFP are an important part of airlines brand message and brand image accordingly.

Brand image and brand identity

The above mechanisms of branding contribute to the development and recognition of brands, which follows an idiosyncratic mechanism: Brands are important instruments of advertising psychology and unfold cognitive, affective and conative stimuli with the consumer (Anwar et al., 2011, p. 73). According to the brand image brand identity model branding unfolds a process of interaction between consumer and provider which strengthens brand performance:

From a communication-science perspective, not only the provider creates the brand by communicating the product, but also by the product consumer participates in this process by advocating the brand. This interactive process of branding increases product value i.e. the market price the provider realizes, but equally consumer utility. Both value generation processes interact and reinforce each other (Herrmann, 2005, p. 379). For example, the higher price of a brand product as compared to a no- name product does not result (only) from the higher quality of the service, but mainly from the image embodied by the label Lufthansa, which justifies a higher price from the consumer's point of view.

Keller explains that the inner idea that connects a consumer to a brand initially results from a brand awareness, i.e. the conscious perception of a brand. Brand-specific patterns are reflected in the consumer's memory and lead to brand recognition. If a product with the same brand logo is recognized, a "brand recall" occurs, which is decisive for the purchase decision (Keller, 1993, p. 6).

Brand image represents the associations that consumers associate with a specific brand or product (Spiegel & Spiegel, 2001, p. 74). Brand image results from the brand communication, as well as consumers' previous experiences and internal evaluation processes (Sommer, 1998, p. 149). These associations are frequently abstract and related to categories like wealth, happiness and status or tangible physical characteristics of the product

or service (e.g. flight experience, punctuality of arrival, etc.). Concrete or abstract concepts of utility associated with the brand play into further purchasing decisions. Over time, the perceptions associated with the brand create inner attitudes that stand for the value of the brand itself rather than the actual performance of the product (Keller, 1993, p. 7).

Branding as a collective phenomenon

The so far analysis based in behavioral psychology and neuroeconomics has seen the consumer as an individual. Brands however multiply their effect due to their reception by the collectivity of consumers.

The interplay of brand image and brand identity in the dialogue between individual consumers and providers, brings forth a psychological cause an effect chain in consumers which is self-enforcing and advances the meaning and impact of the brand: Inexperienced consumers are willing to rely on the ability of the brand to perform a certain function (Chaudhuri & Holbook, 2001, p. 82). Trust in the brand directly and indirectly affects consumers attitudes in the brand and rises their expectations concerning the brand quality and performance (Okazaki et al., 2007). The understanding that the brand is connected to good quality and to a certain consumption pattern or attitude brings forth brand awareness in consumers:

Brand recognition and awareness are based on the cognitive embedding of the brand in the mind of members of the target group and indicates to what extent the target group is familiar and engaged with the brand. With increasing brand awareness, the target group becomes more likely to consider the product as a consumption option (Keller, 2001, p. 14).

Brand recognition and awareness influence the decision-making behaviour of consumers, but equally of existent brand owners and further external stakeholders. Brand recognition and awareness have got an impact on the diverse stages of the purchase decision process; i.e. the search for a potential consumption option, information gathering, the analysis of competitive offers, and the final product choice itself. During this process, consumers compare the expected benefits associated with either the brand to their expectations of the target product. Brand awareness is an important means to influence the decision-making process of the target group through adequate marketing measures (Stritzke, 2010. p. 18; Fryxell & Wang, 1994, p. 12).

Brand recall takes place, when addresses remember the brand over a prolonged period of time, not only during the phase of actual confrontation with the brand (Grobe, 2008, p. 121; Greven, 2008, p. 157) Brand recall echoes the overall assessment of the brand by former,

current, and potential customers (Keller, 1993; Wilkie, 1986). It indicates to what extent the target group is actually aware of the existence of employer brand attributes (Grobe, 2003; Shiv & Fedorikhin, 1999, p. 278).

The use of branded products enables social positioning and self-presentation (Kroeber-Riel & Weinberg, 2002, p. 265). Brands create a feeling of togetherness and are used for differentiation by social in-groups. Brands thus reduce psychological insecurity and social risks at the inter-human level (Biel, 2001, p. 68f).

Brands serve the purpose of identification, create values of experience, have an integrating effect in the social environment, they make a statement of personality and connect people sharing the same attitude (Schmitt, 2012, p. 7). Brands thus play an important role in the integration of the individual in the social community and have a community-building effect. Consumers, who are satisfied with a product and have internalized the brand message, will actively and indirectly recommend it to other consumers through product use(Burmann & Kirchgeorg, 2012, p. 147). They thus represent the position of the advertising company and reduce corporate marketing and advertising expenses (Luo & Homburg, 2007, p. 133).

Brands, which are accepted by a consumer collective are trusted: New consumers of an established and broadly accepted brand can additionally trust in the in-group effect of brand adoption (Chaudhuri & Holbook, 2001, p. 82). Their brand purchase will increase their social acceptance in the target group and will designate them as a member of that group (Fournier, 1998, p. 343). In their role as social identities brand become important and are perceived actively. Consumers strengthen their positive attitudes towards the brand. Trust, positive expectations, a positive brand attitude and perception are formative elements of consumers' brand attitude with directly promotes purchase intention and the readiness to pay superior prices for the branded item (Norberg et al., 2011, p. 368).

Brand users are becoming brand ambassadors in their social group and recommend the brand to other consumers by their consumption habits. Other consumers want to join this in-group and reach this by buying and communicating the brand themselves. Brands thus become constituent elements of social groups. This effect is particularly obvious or frequent flyer programs in airline marketing: Members in FFP enjoy particular advantages during and in the environment of their travels, i. e. reduced price, special offers, status privilege and additional services. These FFP members are turned into brand ambassadors: based on their satisfaction with these amenities, they recommend the airline to peers, at the same time stating their priority positioning. Peers recognize the FFP member as a privileged person and

desire to gain this status themselves by booking with the airline and possibly joining the FFP, too.

From brand image to brand personality

Due to their image brands become active relationship patterns of consumers and are perceived as individuals with an own personality, relationships and a particular character and attractiveness. Consumers perceive themselves as friend or partners to the brand and adopt the brand character traits as their own. They communicate this branded personality outside by using or consuming the brand product (Hayes et al., 2006, p. 306).

Aaker and Fournier (995, p. 393) confirm that brands obtain personality traits and can be seen as virtual persons or partners of the consumer. They evoke cognitive, affective, and conative behavioral responses - unimaginable attributions for a pure object. Brand image includes associations with concrete characters, symbols, attitudes, values and lifestyles that the consumer accepts and wants to reproduce by acquiring the branded product (Batra et al., 1996, p 321).

Brand personality and brand image include "abstract image components" (Bauer et al., 2002, p. 687). Wee et al. find emotional attachments and symbolic values critical to the emergence of a brand personality (Wee et al., 2003, p. 213). Brand success results from the projection of consumers' personal image, social expectations and ideals on the brand (Fournier, 1998, p. 368). Products and services thus become actors in a marketing story and can actively participate in an internal dialogue with the customer (Deighton et al., 1989, p. 335).

By establishing brand personalities marketers reach a de-commodization of products. In contrast to products which are manufactured, offered, consumed and disappear, brand dispose of eternal personality traits which persevere after the consumption process. They are remembered and identified with. Branding endows products human traits which are perceived as valuable and noteworthy (Holt, 2002, p. 13). Brand establish products beyond immediate necessities and anchor them in consumers' mind. As such brand reduce the risk of production since they establish a permanent demand and create an image benefit with reaches beyond the pure material characteristics of the product itself (Laforet, 2010. p. 14-15).

Brand consumers are motivated to develop a particular culture which is managed by the brand (König, 2012, p. 36). Brands even have cot the capacity to remodel consumers' perception of reality and transfer consumers to another sphere of being (Collins, 2001, p. 192). This effect is particularly obvious for luxury products. Consumers buying and using

luxury products are perceived as members of an elite no matter what their factual background may be. Luxury brands are defined by their original creators or first ambassadors and consumers adopting the brand are seen in correlation with these personalities. In the opinion of the author the brand personality model is particularly fitting for the aviation market: brand airlines service offer distinguishes from budget carriers mainly due to the better image of the brand name, which flight passengers reconnect to further service attributes, e. g. punctuality, service quality and flight safety. Consumers refer these quality criteria to a single brand name and identify with these criteria when booking with a certain brand airline, their own travel gains in perceived quality just by booking with brand carriers.

Brand value and brand equity

Based on these insights on the effect chain of branding with consumers it is obvious that brands create value that goes beyond mere product benefits by generating image, trust and thus competitive advantages. Marketing research has put effort in defining and measuring the value of brands (Kriegbaum, 2001, p. 38-39).

Brand value is defined as the purely financial value of a set of brand components. From a communication science perspective, the added value of the brand is generated not only by the provider but also by the product customer. Communication codes on both sides lead to an increase in product value in the form of the market price on the one hand and an increase in utility value from the consumer perspective on the other. Both perspectives interact and thus reinforce each other (Keller, 1993, p. 12).

The share of profits attributable to the existence of a brand, is the difference between the additional price that can be achieved due to the brand assignment as compared to a no-name product and the costs of brand management, e.g. the application of the brand. This value, known as "brand equity", describes the "specific dollar worth of a product or service beyond its physical and delivery costs, that is realized because of the impact of its branding (Keller, 1993, p. 1).

While brand value results financial benefit to the corporation, brand equity results from the customer reception of a brand and unfolds with the customer. Keller defines "customer-based bandy equity" as "differential effect of brand knowledge on consumer response to the marketing of the brand." (Keller, 1993, p. 8) Brand value presupposes consumer awareness for the brand, which arises through targeted marketing strategies. Consumers translate brand awareness into a concrete decision to consume or buy (consumer response) which makes brand equity effective as financial brand value. Brand equity in sum is the "differential

effect", i.e. the added value that is generated by purchasing the branded product instead of a no-name product (Bamert, 2005, p. 114).

To determine the capital value of brands financial and behavioral measures have been suggested:

Financial brand value approaches assume that brand value is a monetary but intangible asset, the value of which can be calculated directly. Corresponding to methods of business valuation, there are substance-based, a stock-value-oriented and a cash flow-oriented brand value measures:

Some authors suggest to assess brand value based on exchange value. This approach first determines the intangible business value based on the difference between stock exchange value and material value. The brand value is then deducted from the intangible value (Kranz, 2002, p. 442). However, the distinction of brand-related and non-brand-related values is complex. Stock value is subject to speculation, which is driven by business cycles and industry-specific trends, Stock valuation is itself no founded measure of enterprise value. Brand valuation based on the stock value is erroneous (Bekmeier-Feuerhahn, 1998, p. 74-75).

The substance value method (based on reproduction values) attempts to exclude speculative effects by defining brand value as the sum a potential buyer would have to invest in order to build it from scratch to the current state. Brand value accordingly is calculated from replacement costs (Hielscher et al., 2002, p. 209). Past costs are added up to a present value. Goodwill- the share of the brand value that exceeds the net asset value, is not taken into account in the substance value approach. The substance value method has been criticized, since not all investments made in the past are necessarily converted into today's brand value, for example when advertising messages are not accepted by consumers. Substance value does not consider prospective future earnings from the brand and the future sustainability of the present brand concept (Ballwieser, 2007, p. 190).

This critique is countered by brand market valuation which explicitly takes forecasts of future brand value development into account. A cash flow-oriented brand capital, also referred to as brand equity by Simon and Sullivan (1993, p. 28), refers to the cash value of all future payments that a brand owner can generate by using the brand. The capital value-oriented approach thus corresponds directly to the discounted cash flow model of company valuation. The future expected cash flows from a brand are discounted using a standard market interest rate. On the debit side, advertising expenses or investment costs in brand

labels have to be taken into account to determine the brand value. Positive value contributions arise from license income, additional quantities or additional sales prices achieved by branding. All positions are discounted to their present value (Heider, 2001, p. 10).

The discounted cash flow approach of brand valuation, however, has been criticized for the difficulty to find a valid discount rate that realistically reflects alternative investment opportunities. The prediction of the deposit and disbursement surpluses that can be achieved from a brand in the future is complex (Jenner, 2000. p. 946). Usually, assumptions regarding future brand development are derived from the current situation. Market-valuation is realistic only in case of continuity in the overall economic development and the competitive situation in the relevant markets. However, the capital value-based method of brand valuation is the only way to make a direct comparison between cash flows from other business areas and the cash flow attributable to brand value (Andresen & Esch, 2001, p. 1093-1095).

Behavioral concepts of brand valuation go beyond the monetary perspective and gain a more differentiated picture of brand value through customer surveys. This form of brand value assessment allows a more intensive and targeted analysis of the realized brand image and conclusions on the design of marketing campaigns with regard to specific products (Keller, 1993, p. 6-8).

The "brand iceberg" model is a representative behavioral approach, based on the S-O-R paradigm, according to which external triggers cause specific processes in the consumer's brain. The reaction, i.e. the willingness to buy, results from the mental processing of these stimuli (Foscht & Swoboda, 2007 p. 190-198). The brand value accordingly consists of a visible and an invisible proportion of value, similar to iceberg models of behavioral psychology. The so-called brand image is visible to the consumer and manifests itself through the consciously perceived marketing of the brand. This part of the brand concept can be controlled well by targeted marketing strategies. The so-called brand credit, on the other hand, arises in the long-term in the subconsciousness of consumers based on the brand image and their own experience with the brand as well as on the social communication of the product. By taking both components into account, a strength and weakness profile of the brand can be determined (Gress et al., 2009, p. 863-869).

In order to determine a specific brand value, the discounted price gap to the cheapest competitor is determined. The cost of brand maintenance is deducted from this value. The discounting factor for brand revenue is calculated based on threats to the brand, for example

from competitive products, legal conditions, market price developments and forecasts of future sales volumes (Jost-Benz, 2009, p. 151-152).

Brand value is the essence of valuating frequent flyer programs, which frequently are no profitable stand-alone profit centers but afford due to the extra revenue effects they generate with the airline brand. FFP are basically voucher systems, which allow flight passengers to receive extra service or monetary rewards as a discount on the flight expenses. Still the net effect on airlines' profitability is positive: members of FFP stay loyal to the airline, recommend it to others and book repeatedly with the same carrier, although possibly cheaper transportation options are available from competition. Based on the quality experience and future quality expectations, consumers still value the service offer of the brand and "invest" in the "relationship" with the brand airline emotionally and even financially. FFP thus create brand value, due to their image and involvement effect.

Summarizing the excursion on brand valuation, branding creates value at the level of consumers (brand equity) and the provider (brand value) which is measurable financially and by an analysis of brand image effects e. g. in consumer surveys. Brand value measurement however is erroneous, since objective performance effects are difficult to distinguish form external moderators. Brand equity and brand value models lack systematic strategies to differentiate the value impact resulting from branding activities and the effect of brands on consumers' psyche.

Customer lifetime value

To calculate the monetary value of brand equity with respect to an individual customer the concept of customer-lifetime value has been introduced. It is „The net present value of the profits linked to a specific customer, once the customer has been acquired, after subtracting incremental costs associated with marketing, selling, production and servicing over the customer's lifetime" (Blattberg et al., 2008, S. 106).

Thus, customer lifetime value is calculated from the sum of sales over the customer retention period (e.g., product sales, service sales, etc.) minus the sum of all costs for customer acquisition (e.g., costs for initial contact, marketing communication per customer, etc.) as well as follow-up costs over the course of the customer relationship (ongoing sales and administrative costs) (Blattberg et al., 2008, pp. 106-107; Meyer & Crane, 2016, p. 139). The average values resulting from past customer relationships, such as average customer retention period, average repurchase rate, average contribution margin, etc., i.e., the data of customer behavior and costs from the past, allow a future-related calculation for decision-

making in marketing and sales with regard to focusing on customer groups with higher customer lifetime value, for example, when deciding on marketing measures or with regard to sales management (e.g., calculation of the effort for specific target groups in relation to the average customer lifetime value of customers in a segment) (Zezelji, 2000, p. 10).

Thus, a multitude of different calculation models has developed from this basic logic of the customer lifetime value, which vary depending on the insight or application interest (Heidemann et al., 2009, p. 5). The customer lifetime value has the great advantage of being able to provide information about the benefits of a customer relationship with just one single indicator, whereby the recording of the indicator is reduced only to the monetizable contributions of customers, i.e., those that can be recorded in cash inflows and outflows (see Günter/Helm, 2015, p. 615). Overall, however, the main focus of the application of customer lifetime value in research and practice is still on marketing and sales management (Ferrentino et al., 2016, p. 521; Lennartz, 2017, p. 3).

The aim of using the customer lifetime value concept in marketing and sales is to increase profit over the customer life cycle (customer value management) by using customer lifetime value as a metric for managing the use of resources (Löwenthal & Mertiens, 2000, 108-110; Venkatesan, 2015, p. 283).

Within the framework of the customer lifetime value concept, the relationship cycle of a customer to a company can also be examined. However, in quite a few presentations and considerations of the relationship cycle between a company and its customers, the idea of crises and conflicts is missing, as well as a discussion of possible measures for activating inactive business relationships (sleeping relationships) (Günter & Helm, 2015, p. 619). Günter and Helm, however, advocate the inclusion of such considerations in value-oriented customer management and of considerations regarding past and future expected customer value in the analysis (Günter & Helm, 2015, p. 619).

At the level of decision-making in marketing and sales, the customer lifetime value can therefore be used, for example, to answer the question of in which customer segments the given marketing and sales resources should be invested for acquisition and upselling in order to achieve the highest imputed return (maximum principle) (Zezelji, 2000, pp. 10-13). At the same time, the determination of the customer lifetime value offers the opportunity to indirectly capture the brand equity, which is difficult to calculate, since it is represented inclusively by customer retention period and repurchase rate (Srinivasan, 2015, p. 383). The

customer value approach will be used in the empirical section to assess the impact of FFP at the customer level.

A summative model of branding mechanisms and critical outlook

The brief introduction to branding theory results a causal model of the "branding value chain". Corporate brand identity is a quality, continuity and performance promise to consumers. Brand image develops from consumers' positive experience with the product and is communicated in the consumer target group. The brand establishes as a symbol for the brand promise due to target consumers' brand awareness. New and established followers recognize the brand, recall it and recommend it to others. In result brands develop an individual personality as a prototype of the lifestyle they incorporate. Brand personality strengthens brand identity and the brand value cycle revives and gains in strength. Consumers perceive brand equity as an idiosyncratic value of the brand as compared to a no-name product. Brand equity generates grand value, the economic benefit of the brand at the level of the provider.
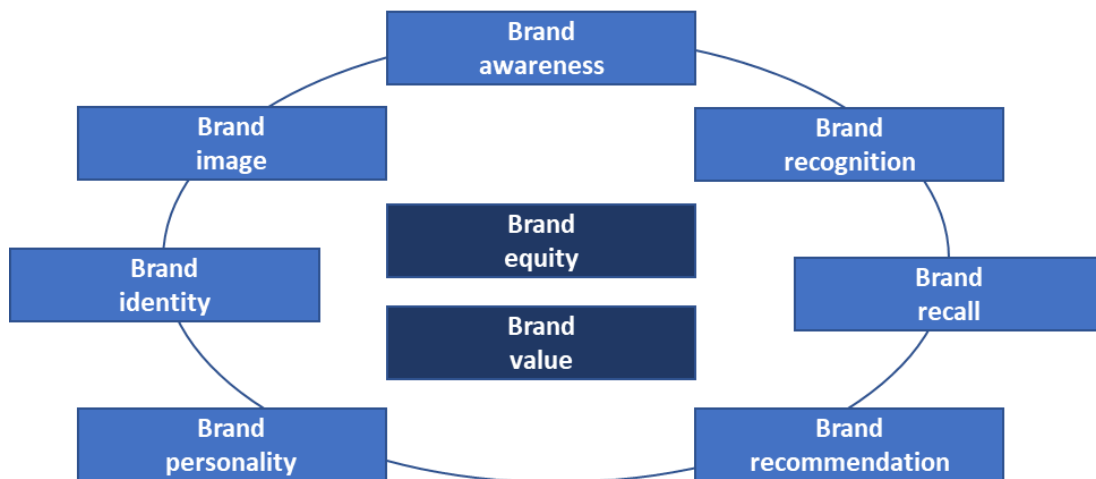
Figure 1.2 Brand value cycle (own draft drawing on above cited sources)

Branding theory, however, has got its limitations: It focusses on the relationship between provider and consumer without considering potential intervening factors. Brands are seen as a guarantee for getting access to consumers' psyche. Branding theories, however, do not recognize that consumers' decisions are limited by financial constraints in practice. Further, they do not take into account that consumers can still decide on the extent to which they react to brand appeals or prefer a no-name product for further personal reasons or just to protest against an exaggerate branding culture. Partly, brands can even deter customers,

when for instance the brand image deteriorates due to company related scandals or bad word of mouth. Brands are perceived as personalities partly and personal relationships can turn from amiability into reluctance or even hatred. Personalizing products or services by means of brands entails the danger that certain consumers or whole consumer groups turn their back on the whole product collection, when disappointed by a single branded product.

Companies, and particularly airlines, accordingly, should utilize brands diligently. The design of brand personalities should cover a possibly broad range of potential consumer groups without attracting particular animosities by an exaggerate image e.g. by boasting with financial means. Brands should be compliant with the ideals in the target society, which can be difficult when marketing a single product series in diverse cultural contexts. Marketing has to assess consumers' psyche profoundly to design and maintain brands successfully. Sustainable branding requires the cooperation of marketing experts and consumer psychologists.

1.3 Consumer decision making in the purchase funnel

Purchase funnel models

Models of the purchase funnel are closely related to branding theory. They are designed to analyze the path customers follow from their first acquaintance with a brand to purchase and after (Dieks, 2017 p. 171):

Early purchase funnel models focused on the pre-purchase phase: In 1903, St. Elmo Lewis for the first time observed that good marketing should first motivate the customer to perceive product or service-related information, i.e. develop a positive cognitive attitude on the offer. Marketing should arouse and reinforce consumers' emotional interest in the product, i.e. induce consumers to develop positive affective attitude on the target product. Advertisement works at the cognitive and emotional level, so that customers believe in and internalize the conveyed messages (Lewis, 1903, p. 124). In this way, consumers develop the desire to buy the product or use the service which eventually leads them to buy the product (Lavidge & Steiner, 2000. p. 85).

This process of developing consumers' cognitive, emotional and conative attitudes in a targeted way has later been summarized in the so-called AIDA (brief for: attention, interest, desire, action) model, which differentiates four stages in customers decision processes: the

emergence of attention, the development of interest in the product, and the desire to possess the product which finally leads to the purchase action (Kim, 2003, pp. 35-36).

Modifications of the AIDA model suggest that the consumer-provider interaction process does not end at the stage of "action" i.e. the first purchase. Marketing strategies intend to keep customers satisfied and gain their confidence in product and company (Koschnick, 1983, p. 25). Ideally, customers return to the company, buy further products and recommend the deal to their friends and acquaintances. In the terminology of Kotler (2007, p. 295) successful marketing produces loyalty and recommendation. In the post-purchase phase, the customers receive rewards for their purchase (de Pelsmacker et al., 2007, p. 75) and ideally are satisfied with the product or service.

Marketing practice has accomplished and modified the AIDA principle suggesting the purchase funnel stages awareness, consideration, transaction, loyalty, and advocacy: After the purchase decisions customers ideally remain loyal to the company and make positive recommendations to other consumers (Esch et al., 2015, p. 146).

Figure 1.3 illustrates this funnel process:

Figure 1.3 Funnel model of marketing (drawing on de Pelsmacker et al. (2007, p. 75)

The effect of this so-called purchase funnel results from an interaction of cognitive, affective and conative attitudes. At the cognitive level, consumers become aware of product and brand, and on an affective level, they develop positive emotions towards the brand and the product, and thus an inner willingness to buy. At the conative level, they ultimately choose the product, apply it, and recommend it to others (TNS Emnid, 2012, p. 18f). If a larger number of consumers react in the manner postulated by funnel models, a trend emerges, which causes more consumers to consume the product (Janson, 2011, p. 4).

Purchase funnel models have frequently been drafted in the form of a pyramid of inverted cone, to illustrate the draught customers are drawn into: Once convinced by a product or service they turn into marketing partners and recommend the product further. The cone shape equally illustrates the gradual focusing of consumers who initially dispose of a large number of alternatives, on one product due to advertising and marketing efforts (Charlesworth, 2007, p. 4). The funnel-shaped representation also implies that not all customers who take the first step on the way to buying (action) actually arrive at the following levels of decision making (Rogers, 2011, online).

In the perception of the author, the cone shaped funnel model simplifies the process of consumer attraction and loyalty formation in the shape of a linear model, while in fact consumers behave much less directionally when searching for a product or considering a buy. They frequently tend to meander from one product to the other without making a decision, delay purchases and develop the understanding of the available product range self-reliantly without allowing themselves to be significantly biased by marketing activity h. Other than the purchase funnel model suggests, marketing does not always manage to keep consumers on track, but can even deter them from buying, when advertisement is too obtrusive, for instance. In the age of the internet, consumers have gained self-reliance in their quest for products. Basically, any information concerning a particular consumption desire is available on the web and consumers document their personal experiences in the form of web-blogs or YouTube videos. Marketing has to some extent lost hold of consumers and increasingly has to trust that consumers' own positive experience propagates on the web. Marketing strategists counter the trend towards market self-liberalization by effective strategies e.g. influencer marketing, which refers to authentic consumers disposing of a large follower network to propagate their positive impressions on the web. In this way, consumers find their way in the jungle of professional and semi-professional advertisement. Predicting

consumers decision processes, however has become much more difficult recently than the AIDA model suggests:

The "AIDA" model explains the process mechanism of brand effectiveness, has successfully been applied in marketing for more than 100 years now and has frequently been referred to in FFP research (Kearney, 1989, p. 49; Smith et al., 2001, p. 37; Rhoades & Wagespack, 2005, p. 344) It suggests that consumers approach product offers in a typical way classified into several steps, i.e. progress form attention for and interest product towards desire and finally action i.e. the purchase of the product (Kim, 2003, p. 35-36). The AIDA concept has been accomplished by further funnel stages later on, which comprise satisfaction, loyalty (repeated purchase) and recommendation in the post-purchase phase (Koschnick, 1983, p. 25; Kotler, 2007, p. 295) and follow up empirical studies (Parvatiyar & Shet, 2001, S. 1; Zentes & Swoboda, 2001, S. 12; Raab et al., 2012, S. 6f) and essentially five factors have been retrieved: awareness, consideration, transaction, loyalty and advocacy. Ideally a cyclical development emerges and brand advocacy brings forth novel consumer awareness and initiates a marketing dialogue corresponding to the brand image- brand identity concept (Janson, 2011, S. 4).

To analyze FFP the extended AIDA model, including the post-purchase phase is of particular relevance, since FFP are usually initiated after consumers first or repeated flight with the brand airline. Passengers expect to gain advantages from their loyalty, i.e. repeated booking, with the airline in the form of special service, improved status and price benefits. The airline on the other hand, aims at inducing customer loyalty exactly by providing these offers. Consumers involved in the funnel of reward-based brand loyalty and advocacy are reluctant to book with other carriers even if this decision to switch would be more economic.

Customer relationship management (CRM) is an essential strategy to activate customer equity and a long-lasting customer relationship: Customer relationship management refers to the "comprehensive strategy and process of acquiring, retaining and partnering with selective customers to create superior value for the company and the customer" (Tsai et al., 2012, p. 1418). FFP are designed to enhance customer loyalty and advocacy (Griffin, 2002, p. 18). Passengers estimate airlines customer relationship efforts and investments into relationship quality (Wang, 2014, p. 58).

The customer experience model attempts to partly amend on the difficulty of the linear structure underlying the AIDA model, by suggesting a loop- like consumer movement from brand awareness towards advocacy and back to awareness. It is based on the funnel approach

but goes beyond, emphasizing the post-purchase phase and the relevance of creating sustainable customer-provider relationships (Berry et al., 2002, p. 85).
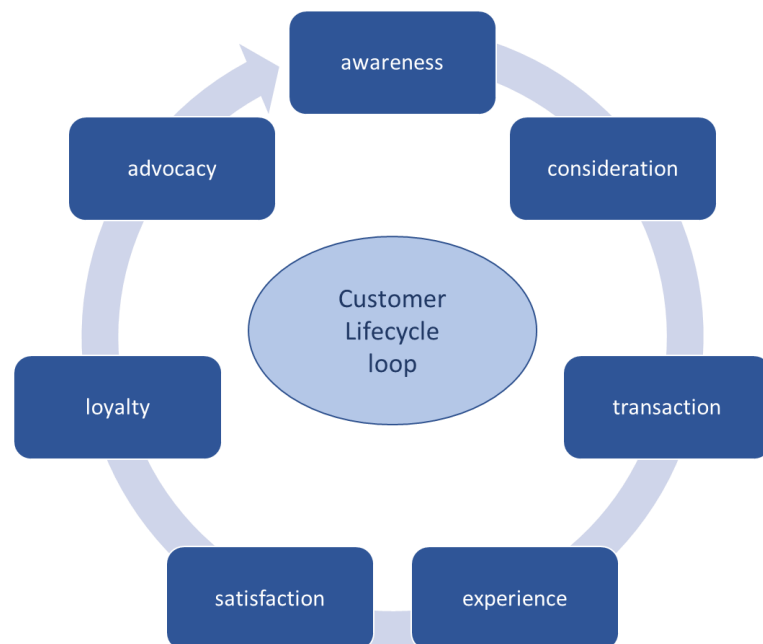
Figure 1.4 Customer Lifecycle Model (own chart referring to Sterne, 2016, online)

Customer Experience - describes the inner and subjective attitudinal response customers feel towards brands or branded products (Meyer & Schwager, 2007, p. 2). Customers' experience of product quality and performance and consecutive customer satisfaction are crucial for the emergence of customer loyalty. Marketing success depends not so much on the factual characteristics and advantages of a product (such as price), but on the extent to which the customer can satisfy his personal needs and desires (Berry et al., 2002, p. 85). The purchase environment, supplier's service, product selection and price determine customer experience (Verhoef et al., 2009, p. 32). In customer experience, cognitive, affective and conative parameters interact and create an inner bond between customer and brand, which ultimately contributes to the purchase and repurchase (Puccinelli et al., 2009, p. 17).

Customer experience is gaining in importance especially in markets for little differentiated products and services concerning price or quality. Here, companies have to rely on intangible aspects such as brand image to get customers involved, motivate purchases and maintain customer loyalty (Meyer & Schwager, 2007, p. 3). The customer lifecycle approach, illustrates the purchase funnel concept as a circular model (Figure 1.4, previous page) to

illustrate that customer satisfaction, is crucial to retention, loyalty and advocacy. Only satisfied customers will return and buy products and services again.

The presentation of the purchase decision process as a circle emphasizes that, in order to ensure marketing success in the long term, a feedback loop from brand advocacy to the level of attention is necessary. This repetition of the purchase loop is realized by recommendations of established customers to new customers, image development and repurchase, for instance. A closed purchase cycle develops customer equity, which represents the value loyal and frequent customers bring to the company. Businesses are in demand to develop strategies to develop customer equity continuously. Lemon et al. (2003, p. 2) explain that in sectors involving products and services, like the aviation business, customer equity is relationship equity a large extent. Customers, who cherish the relationship with the provider and indulge in the individual services, they have received, will stay loyal and won't switch to competitors easily. Like the AIDA model, the customer lifecycle loop faces the difficulty that consumers partly do not enter the loop process, but switch between product alternatives without taking a definite purchase decision. Neither the AIDA nor the lifecycle loop model mirror factual consumer behavior adequately. Still funnel-based purchase and loyalty models are in the opinion of the author adequate to understand the effect of FFP on consumer behavior, since FFP are directed to establish a funnel process: By promising customers material or immaterial rewards for membership in the FFP and re-booking with the airline and FFP members, typical purchase funnel behavior is encouraged: consumers tend to neglect financially more attractive external offers, just to make use of their membership advantages. Customer relationship management (CRM) is an essential strategy to activate customer equity and a long-lasting customer relationship and in the understanding of the author classifies FFP effectiveness in the airline sector: Customer relationship management refers to the "comprehensive strategy and process of acquiring, retaining and partnering with selective customers to create superior value for the company and the customer" (Tsai et al., 2012, p. 1418). CRM includes the alignment of all business processes to the creation of long-term customer value and requires systematic customer data and information management as well as the comprehensive coordination of any customer related communication (Wilde et al., 2001, p. 167). According to Ang & Buttle (2006, p. 5) "CRM is the core business strategy that integrates internal processes and functions and external networks, to create and deliver value to targeted customers, at a profit." CRM intends to establish a long-lasting customer relationship to mutual benefit: Customers develop loyalty to the corporation since products

and services fulfill their requirements and desires. Providers benefit from a stable and transparent customer base, which saves transaction costs for new customer acquisition and advertising and contributes to stabilize sales. Satisfied and loyal customers are brand advocates i.e. strengthen the corporate brand image by participation in marketing communication (Parvatiyar & Shet, 2001, p. 1-5).

The purchase funnel model and the customer lifecycle model as an extended version fit well with branding theory. Both models elaborate the cause- and- effect chain postulated by the brand image- brand identity model at the level of consumers. Brands make customers return, keep them loyal to company and product and supports customer advocacy i. e. the engagement of customers for the brand and participation in marketing activity. The purchase funnel model can thus be seen as a generalization of branding theory since it is applicable to all purchase processes. Without the concept of brands, the postulation of the purchase funnel, that consumers strictly follow the path prescribed by marketing from attention towards loyalty, however appears arbitrary and lacks logical foundations. Branding theory endows the purchase funnel approach with a logical explanation: Consumers feel attracted by the broad acceptance and quality promise of brands and thus do not deviate from the funnel pathway.

Like the branding model equally purchase funnel and customer life cycle approach do not consider secondary influences on consumer choice that could deduct potential buyers from the path of the purchase decision process. All so far discussed models of consumer decision making consider the consumer – brand or product relationship only but ignore potential further external influences (moderators) in that process. With the theory of reasoned action psychological research introduces further external parameters e.g. social influences, situative conditions and consumers predispositions as potential moderators of the consumer-brand relationship.

Theory of reasoned action

The Theory of Reasoned Action explains consumer behavior based on attitude and involvement research (Venkatesh & Bala, 2008, p. 273). It essentially finds that attitudes and subjective norm i. e. die traces of social influences in our mind, determine to what extent consumers intend to use or buy a product and finally take action to use or buy it.
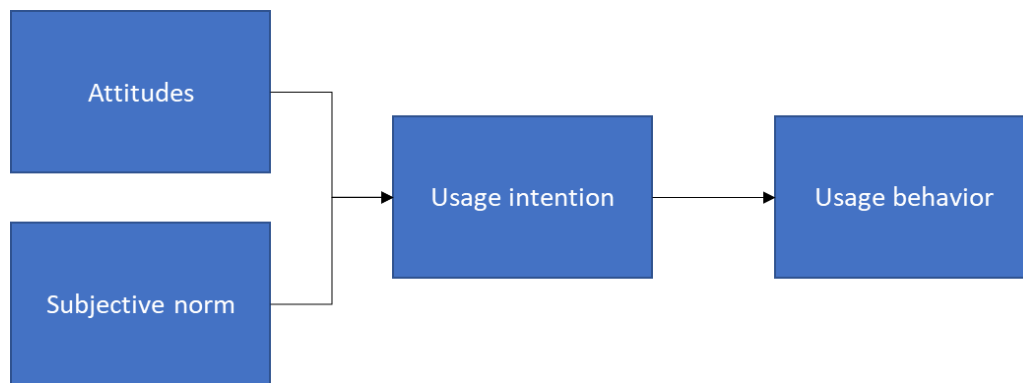
Figure 1.5 Theory of reasoned Action (own draft drawing on Madden et al., 1992, p. 4)

Fishbein & Ajzen (1975, p. 8) draw on the conception that previous information determines attitudes and beliefs, which again determine the reception and reflection of new data: They argue that "reasoned action" concerning the usage of a product or service results from a behavioral intention which results as the interplay between individual attitudes and subjective norms. That means, individuals decide on their consumption intention and consumption behavior based on personal perception and reflection and social influences, rather than based on the objective attributes of the product itself.

According to Ajzen & Fishbein, attitudes usually originate in a variety of opinions that represent the information individuals have got concerning a particular target product. Referring to set opinions, objects are associated to certain attributes and judged accordingly (Montano et al., 2008, pp. 70-77). Fishbein & Ajzen (1975, p. 8) assume that these attitudes are the result of learning processes, which comprise direct observation, outside information input or personal mental deductions. These cognitive elements (Wetzels, 2003, p. 6) are conceptually distinguished from affections and emotions. Attitude according to the authors is "a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object". Subjective norms originate in expectations that the social group, an individual belongs to, has got concerning individual behavior. Individual intentions are formed from these expectations (Fishbein & Ajzen, 1975, p. 6). Behavioral intentions are the result of the interaction between subjective norm and attitude and motivate behavior (Montano et al., 2008, 73, Ajzen & Madden, 1986, pp. 454-455).

The Technology Acceptance Model

The Technology Acceptance Model (TAM), which was developed by Davis in 1986, applies Ajzen's and Fishbein's theory of reasoned action to marketing, innovation, and technology research (Wetzels, 2003, p. 5). The TAM evaluates the level of user acceptance of

technologies and innovative products and refers to two central determinants: the parameters 'perceived usefulness' and 'perceived ease of use' (Monsuwé et al. 2004, S. 105-106; Davis, 1993, p. 475-476).

Davis defines perceived usefulness as "the degree to which a person believes that using a particular system would enhance his or her life or job" (Davis, 1985, p. 25) and perceived ease of use as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1985, p. 25).
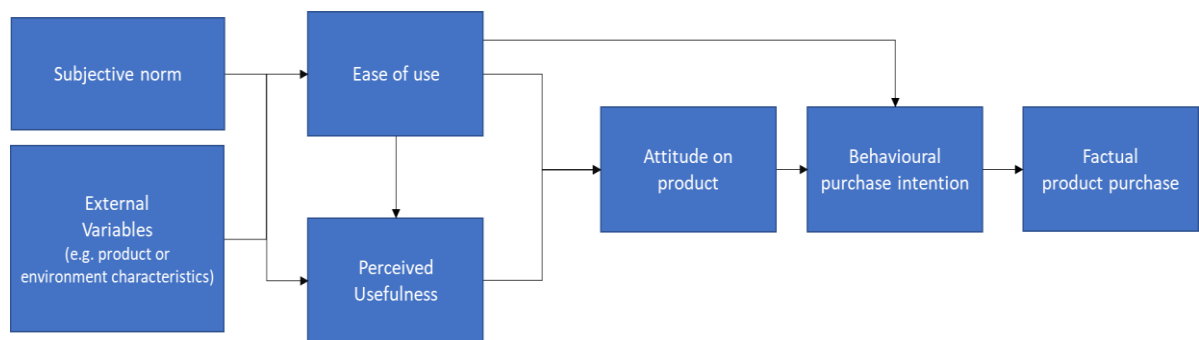
Figure 1.6 Technology Acceptance Model (own illustration drawing on Davis et al., 1989, p. 985)

Perceived usefulness and ease of use stimulate an emotional reaction and personal attitudes (Davis, 1993, p. 475-476). Inner attitude defines to what extent individuals actually make use of the system (Davis, 1985, p. 24-25). According to Davis et al. (1989, p. 985), perceived ease of use and usefulness depend on external factors, e.g. technological product features but equally social expectations, the availability of further information, service or other factors.

In contrast to the earlier TRA, the TAM sees subjective attitudes and social norms as central to the formation of product related attitudes and usage intentions (Legris et al., 2003, p. 191). The so-called confirmation-disconfirmation paradigm, explains the mechanism of attitude formation:

Consumers assess their personal satisfaction by comparing their subjective state or the perceived level of product performance to the state before using the service or product (King & He, 2006, p. 741). Experience, ideals, individual norms but equally recommendations, personal emotions needs or promises become part of this evaluation process. Repeated product usage originates in satisfaction with previous usage activities (Schepers & Wetzels, 2007, p. 91). Similar or equal products or services frequently are rated depending on the

consumer and his/her previous experience and attitude (Homburg & Koschate, 2007, p. 846). According to Davis et al. (1989, p. 987) „…positively valued outcomes often increase one's affect towards the means to achieving those outcomes".

In sum, according to the TAM, user value of product design results as a compound of perceived quality, usefulness, personal reflections and emotions of the supplied service or product. Perceived usefulness and ease of use are codetermined by external e.g. product specific or environment variables and subjective norm. Product designers, intending to influence factual system usage dispose of a single access to user perception and attitude: external product specific variables. The design of product features takes influence on perceived ease of use and usefulness, which again interact to determine usage attitude, intention and behaviour.

As concerns FFP the cause- and effect chain of the technology-acceptance model is particularly fitting, to describe conditions under which consumers tend to embark on and rely on FFP. FFP represent a new technology, which require consumers product-related orientation and behaviour: consumers have to evaluate their milage status, assess consumption option and select their flights and destinations so that bonus point redemption is "economic" and status and service awards are optimized. Consumers are ready to get involved with the FFP if they expect positive rewards of their engagement. The TAM explains that the design of FFP is essential to consumers' attitude on the program, their behavioural intention to use it. This understanding guides the argumentation in the reminder of this study.

The theory of reasoned action and the technology acceptance model thus accomplish classical marketing funnels models by important moderators of to consumer producer relationship, social norms and previous consumer attitudes. Other than pure marketing models, which are focussed on the brand and its image effect mainly, the TRA and the TAM pull attention to factual product characteristics, particularly technical features, which impact consumer perception and rational reflection (perceived ease of use and usefulness). TRA and TAM however are usually applied in the context of new technology acceptance and have rarely been used in the context of general consumer marketing so far.

1.4 Summary of key concepts and critical outlook

Summarizing the major points of marketing theory as developed in chapter 1 an initial causal model describing marketing and branding impacts on consumer decision processes is developed:

Marketing comprises all business policies directed to target markets in the intention to sell products or services (Meffert & Bruhn, 1997, pp. 75-86). Insights from behavioral psychology suggest that marketing should involve consumers in a participative and continuous process of interaction with the provider in order to sustainably maximize shareholder value (Meyer, 1998, p. 1066).

Consumption processes comprise cognitive, affective and conative components (Grunert, 2013, p. 6). Ideally marketing addresses all three mental levels, engages consumers to think about the offered product, evokes positive emotions on the product and stimulates activities directed to buying the product (Trommsdorff, 1998, p. 152). Marketing attempts to influence consumers' attitudes and finally align consumers' inner values and personality with the marketing message (Meffert & Burmann, 2013, p. 108).

Branding is a valuable strategy in that process. Brands symbolize the key product characteristics and focus consumer thought, emotion and action on the target product. Corporate brand identity stands for quality, endurance or simply image and by condensing the product features in the form of signs and symbols. They simplify and abbreviate purchase decision processes (Keller, 1993, p. 7). Consumers relying in the brand turn into brand ambassadors and communicate the brand image in their social group (Burmann & Kirchgeorg, 2012, p. 147). Collective brand reception and re-communication establishes brand awareness, brand recall, brand trust and loyalty and finally a brand personality, which incorporates the traits and values represented by the brand image.

Consumers' purchase decision process which has frequently been modelled as a "purchase funnel" directing the consumer from awareness, consideration to purchase and later brand loyalty and advocacy in a deterministic spiral (Meyer & Schwager, 2007, p. 2). The insights of behavioral research, Fischbein's and Ajzen's (1975) Theory of Reasoned Action and he Technology acceptance Model (Davis, 1993) however suggest that the purchase funnel process is moderated by further external factors, e. g. situational circumstances, consumers' previous experience, mental reflection and social norms, which codetermine whether the marketing activity will succeed or not.

In essence, chapter 1 has shown that marketing activity initiates a brand funnel process directing the consumer from attention to brand loyalty. But this process is not deterministic but moderated by a set of further parameters. The following chart illustrates this observation in the form of a non-deterministic brand funnel model.
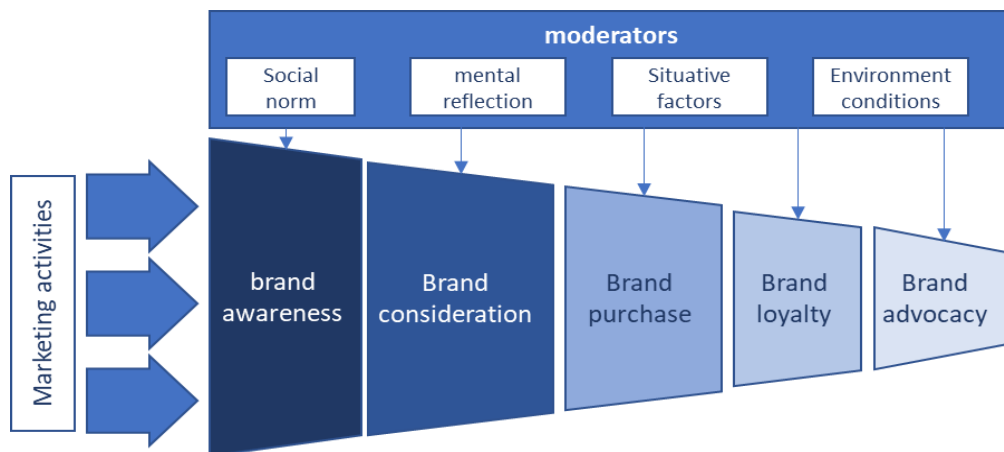
Figure 1.7 Theory based work model of a non-deterministic branding funnel process
(own draft)

This model represents a novel integration of two existing concepts and amends on the shortcoming of both approaches:

Branding theory as well purchase funnel/customer life cycle model focus on the relationship of provider and consumer and do not take external moderating factor into account. The consumer is seen as a playball at the hands of marketing.

The theory of reasoned action and the technology acceptance model endow the model consumer with own decision power and introduce external factors, e.g. social norms, personal considerations, situational aspects and environmental conditions which moderate the impact of marketing and more specifically branding. These models have so far been limited to innovation and technology products.

The analysis in chapter 1 has integrated both approaches and amended on their difficulties. The model of a non-deterministic branding funnel process (Figure 1.7) recognizes that marketing activities influence consumers brand awareness and attempt to induce a funnel leading consumer to brand purchase, loyalty and advocacy. However, the novel model equally considers moderators to this process which in accordance with the TAM and TRA can be social norm, consumers' personal reflection, situational factors or environmental constraints. The non-deterministic branding funnel model will provide a fundamental

structure to the analysis of frequent flyer program effect on consumer behavior from chapter 3 onwards.

2 FREQUENT FYLER PROGRAMS IN MARKETING PRACTICE AND THEORECTICAL UNDERPINNINGS IN PSYCHOLOGICAL AND MARKETING RESEARCH

Chapter 2 of the dissertation introduces to concept and rationale of frequent flyer programs, provides a market overview on FFP as an instrument of airline marketing and concludes on the effects of these programs with airline customers referring back to psychological and marketing theory as introduced in chapter 1.

2.1 The evolution of Frequent Flyer Programs in marketing practice

Competition in the airline business

Airlines interconnect people and businesses worldwide, enable international trade and tourism. European air transportation realized turnovers of 700 billion Euro annually and employs 11.9 million people in 2016 (IATA, 2017, p. 5). Due to Covid-19 the turnovers are down to 300 billion Euros in 2020 (EC, 2021). The European Airline business however is under significant competitive pressure. Since the 1990ies the aviation industry has undergone significant structural changes: most flag carriers have been privatized i.e. been transferred from state-owned to private, exchange traded companies. At the same time the quasi-monopoly of these flag-carriers has been abandoned (ECA, 2017, p. 4). According to IATA calculations, European and particularly German air carriers lag behind international competitors in growth and profitability. While airlines from the Near East and the Asian-Pacific Region have grown by 10% and 8.6% in 2016, European aviation has realized a growth of 6.1% only and German air carriers, almost stagnate with just 1.9% turnover increase. (BDL, 2016, online). Until 2019, passenger numbers grew to 4.6 billion passengers but dropped to 1.9 billion in the Covid-year of 2020 (IEA, 2020).

According to Alderighi et al. (2012, S. p. 223) low-cost carriers dump prices in the leisure and business segment, while the established players have to maintain regular flight schedules and face significant bureaucratic effort, which is not compensated by flight prices. While low-cost carriers have shown turnover growths of 6.9% in Germany in 2016, German flag-carriers have attained a growth of 0.6% only (BDL, 2016, online). In 2019, due to the Corona crisis passenger flights in German were down 67% on the previous year with a total of 58 million bookings only. In 2020 volumes were won 58% on 2018 and in the first quarter of

2021 67% (BDL, 2021). Even beyond the Corona-crisis, European airlines face significant competitive pressure from international flight corporations, especially from the Middle East and Asia, offering transport in the EU. The European Union's trade policy basically admits the access of further competitors to Inner-European Markets (Mitusch & Mendes De Leon, 2017, p. 14). The market share of these international airlines and low-cost carriers in the European flights market is expected to become more competitive due to overcapacities of all airlines (BDL, 2021, online).

Between 2006 and 2016, the prices of air-tickets remained stable, but due to rising administrative, regulatory and airport charges airline base fares per passenger decreased from 176 to 138 € per passenger (IATA, 2017, p. 10). Strong competition among European airlines is the reason for stagnating consumer prices in spite of increasing aviation costs and fees. In the face of the Corona crisis and high overcapacities further fare reductions are imminent (BDL, 2021). Several factors drive the costs of European airlines in particular:

The EU emission trade system heavily burdens airlines cost functions. In order to curb emissions from aviation, EU regulations, demand airlines to acquire emission certificates in an auction market in proportion to their annual CO_2 emissions. Since technologies to reduce emissions significantly are not yet available, airlines cannot at short term reduce this additional regulatory burden (Nava et al., 2018, p. 20). German airlines additionally complain the German air traffic tax, and fear disadvantages in international competition due to high bureaucratic efforts. The eminent Brexit, i.e. Great Britain's phase-out from the European Union, is another bureaucratic and organizational cost factor for European airlines, which have to reschedule their flights and split up their corporations in order to avoid losing flying rights in Europe or the UK (O-Mara, 2019, online).

Term and concept of Frequent Flyer Programs

In order to enhance their attractiveness to passengers, most airlines take recourse to so-called frequent-flyer programs (FFP) (Klophaus, 2005, p. 348). FFP are incentive programs which encourage customers flying with an airline to collect credit points (equally called miles, kilometers or segments). The term "miles" is used synonymously to "bonus points" or "credit points" in the following. These miles can be redeemed as gratifications for later air travel or other products from the airline itself or affiliated aviation partners. Equally outside partners, e.g. hotels, outlets, car hiring companies or other businesses, can award credit points to their customers who then recollect these bonuses with other partners or the airline itself. Bonus points are equally used by credit card companies. They buy miles from the

airlines and customers are awarded by credits when using a credit card linked to the system (ECB, 2012, p. 5).

Frequent Flyer Programs are based on technologies to scrutinize the behavior of airline customers, which reach back until the 1950ies. Only after the deregulation of the US aviation business in 1978, however, frequent flyer programs were established to enhance customer attraction and loyalty in the face of increasing competition and performance pressure in the airline sector (DeBoer & Gudmundsson, 2012, p. 19).

The regional aviation companies Texas International Airlines and Western were the first to introduce customer loyalty programs in the late 1970ies (Knorr, 2019, p. 2414). American Airline pioneered the system at an international level in 1981 and soon other international airlines copied the concept to compete on an equal basis (Araujo & Kjellberg, 2015, p. 92). These first programs were simple in design and just assigned a discount per flown mile on consecutive flights as a "loyalty fare" (de Boer & Gudmundsson, 2012, p. 19)

Initial FFP in the late 1970ies were structured very simply as pure rebate systems based on flown miles, for which price reduction were granted when customers booked follow-up flights later on. Digitalization has allowed airlines to introduce more refined and complex bonus schemes. FFP have continuously increased in complexity: Already in 1982 American airlines introduced its "Gold Tier" (De Boer & Gudmundsson, 2012, p. 19): Based on the total number of flown miles passengers listed on the system were additionally granted access to additional amenities for instance particular lounges, priority check-in, waiting list priority and extra baggage sizes (Knorr, 2019, p.41).

FFP thus basically comprise two columns: the status miles system, based on the total amount of miles traveled and consumptions made in a certain period (e.g. the recent year), and the bonus miles system, as a rebate for previous booking, which can be retrieved once. Both components of FFP are summarized in Figure 2.1 (following page).
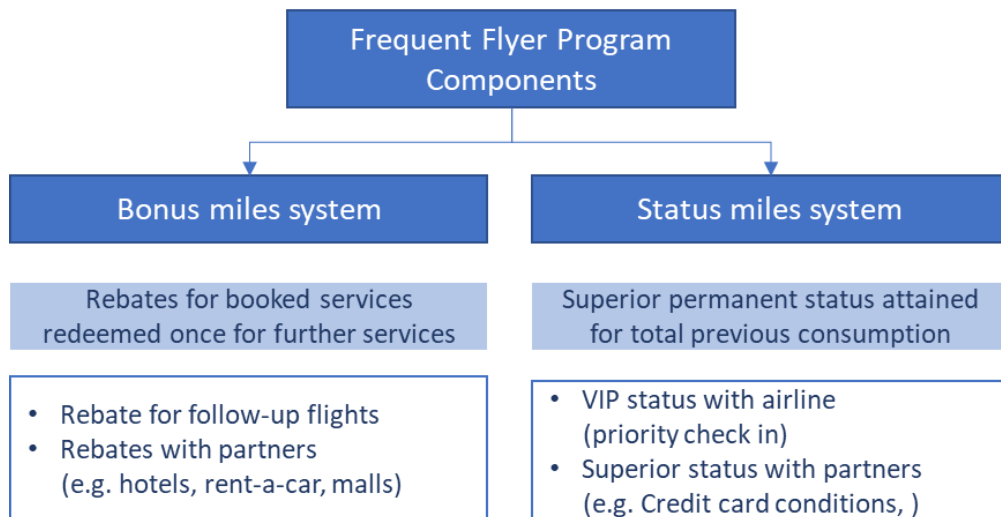
Figure 2.1 Components of FFP

In the 1980s, airlines started to share the FFP system with external partners, which buy miles from the emitting airlines and then redistribute them to their own customers for loyalty. American Airlines pioneered this concept in 1982 when sharing the program with the rental car company Hertz and Holland America Cruises (de Boer & Gudmundsson, 2012, p. 20). Services linked to travel and flight, like the hotel business, rent-a-car- and credit card companies, offer themselves for participation in FFP. These partners increase the reach and recognition of the system and contribute to market flights with the airline among their own customers (Mankin & Jewell, 2015, p. 15). The broad expansion of the network increases its prominence and international acceptance. The introduction of co-branded credit cards pushed the system further. All credit card partners can now award bonus points for buying with them, which greatly expands the FFP network, its attraction and revenues for airlines (DeBoer & Gudmundsson, 2012, p. 19).
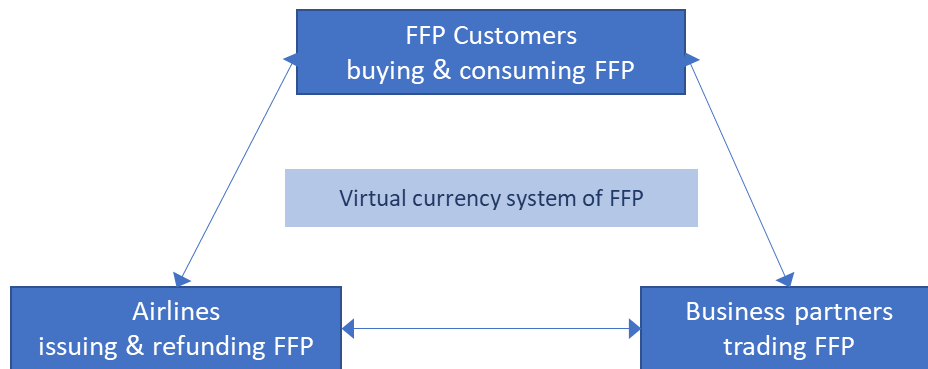
Figure 2.2 FFP Currency System

As Figure 2.2 illustrates, FFP have developed to some form of virtual currency today, in which the airline takes the function of a central bank and issues credit points which are acquired by customers for previously booked services as well as by business partners for further distribution to customers. Customers in practice buy miles as rebate and VIP coupons together with the service and redeem the bonus for further consumption. Consumers can acquire or redeem the miles with partners as well as airlines (Vinod, 2011, p. 472). The resulting virtual currency can however not be refunded in national currencies (ECB, 2018, p. 15-16).

Spread of FFP: From inflation to deflation

In the 1990ies and early 2000s, the number of miles and benefits customers had accumulated with international airlines grew exponentially due to the growing popularity of FFP. Some sort of incentive competition among airlines developed and companies continuously launched new campaigns and incentive systems to make the FFP world always more attractive and to oust competitors. By 2015 more than half of the revenues of FFP was earned in affiliate partner companies (Pandit, 2015, p. 3)

The increasing network of agreements between participating companies worldwide however contributed to "miles inflation": Bonus points were awarded by external members of the system which multiplied the total count. Credit card companies' participation in the FFP systems brought revenues of 4 billion of USD to US airlines in 2008 (from partners buying credits to award their customers) but equally contributed to inflation, since credit points are assigned of every usage of the credit card (Knorr, 2019, p. 45).

Airlines soon noticed that the effectiveness of the FFP system was consolidating, while the number of accumulated miles was not refundable by airlines themselves in practice:

In 2005, the total number of accumulated but not yet retrieved miles had grown to 14 trillion. That meant 700 bn USD of accountable obligations for airlines worldwide. Had all FFP members tried to redeem their credits from airlines at once, these would have used all their capacities for FFP clients for years (Knorr, 2019, p. 40). Increasing numbers of status miles holders brought the elite system to its limits and caused crowds in the priority check-ins and VIP lounges. These tendencies again impaired the incentive effect of the system.

Growing competition among airlines due to the entry of low-cost carriers and regional airlines to the market in the 2000s (compare section 1.1.1) put additional pressure on the FFP model: While low-cost carriers frequently do not use FFP but price additional service separately, flag-airlines have to inculcate the cost of FFP rebates and amenities in the ticket price (Knorr, 2019, p. 40). These additional costs impair the attractiveness of their offer in increasingly transparent and competitive markets. Particularly customers who will never redeem FFP, i.e. occasional business flyers and tourists, tend to decide for low-cost carriers. Diminishing effectiveness of FFP again reduces customer loyalty with flag companies (Vinod, 2011, p. 471).

Consolidation processes among flag-airlines led to the integration of regional companies into the framework of larger operators. For instance, Lufthansa integrated the members of today's star-alliance group. Croatia Airlines and Eurowings today participate in Miles & More. Tomová & Ramajová (2014, p. 789) observe that equally low-cost carriers have gained access to FFP between 2005 and 2013 by allying with larger flag-airlines. All these new partners now participated in the frequent flyer schemes and the distribution of bonus-points grew and became increasingly costly for flag-corporations (Knorr, 2019, p. 40).

At that time, classical low-cost carriers equally introduced FFP and by 2005 already 20% of the low-cost carriers offered similar loyalty models to their customers and started to compete with flag-airlines in this segment. These thus lost the distinction of offering FFP programs to their customers (Klophaus, 2005, p. 359).

To cover the costs of FFP, airlines started to change FFP conditions and handle benefit assignment more restrictively from the late 1990ies onwards and at large scale after 2005 (Tomová & Ramajová, 2014, p. 790-793). Pandit (2019, p. 3) calls this system shift from a model of pure legacy to a restricted access concept, "advanced FFP". In recent year airlines have partly separated FFP, which previously had been departments of their corporations, and have established individual profit centers.

The followings major restrictions were established:

- Most international airlines, e.g. Lufthansa, Air France/ KLM and major US airlines have converted the distance-based assignment approach into a price-based assignment of bonuses (DeBoer & Gudmundsson, 2012, p. 20). This means that customers in the long-distance low-cost segment are excluded from the collection of significant amounts of miles.

- Extra costs contributing to the ticket price, e.g. airport fees and taxes, which had previously added to the ticket price and mileage bonus, have been excluded from the FFP assignment scheme (Tomová & Ramajová, 20154, p. 791).

- Access limits to status miles are handled more restrictively, to avoid the crowding of these programs, retain their effectiveness and limit provision costs. Equally status bonuses are usually awarded based on the amount of money spent on flights today. Singapore Airlines for instance awards the top tier status only to passengers having spent more than 22,5000 USD on flights in the recent twelve months (DeBoer & Gudmundsson, 2012, p. 20).

Opportunities and risks of FFP

The history of FFP illustrates the opportunities but equally risks the programs entail, from the perspective of the airlines offering these programs.

It is evident that Frequent Flyer Programs are highly effective marketing strategies. They are explicitly aiming at the creation of "frequent flyers" by offering bonuses if customers return to the airline or its business partners. FFP let customers participate in the airlines' reduced transaction costs for customer acquisition, if they stay loyal. At the same time customers are induced to return to redeem the promise FFP make (Araujo & Kjellberg, 2015, p. 93). FFP have been found more profitable than most other marketing initiatives in a Bain & Company study. Airlines save acquisition and marketing efforts to acquire new customers when existing customers return by themselves due to the incentive. Additionally, FFP encourage customers to upgrade their travel (e.g. to business or first class) in order to achieve bonus points. The upgrade means high additional revenues for airlines (Pandit, 2015, p. 4).

Implicit tax advantages have contributed to the popularity of the mileage system: Business flights are usually paid by employers but booked via employee's private credit cards, which results in an assignment of miles to the private account of the card holder. These benefits are hard to track and remain untaxed in some countries. Businesses participating in the bonus point system benefit from the additional turnovers these semi-legal tax-free gratifications generate for employees (Mankin & Jewell, 2015, p. 15).

Zuo et al. (2015, p. 1) assign FFP a "gamification effect". High program complexity keeps participants engaged with the brands involved and motivates them to make additional purchases just to utilize indirect future awards. Airlines build their brand image by offering VIP customers additional visible amenities, e.g. lounges and purchase points in airports (Pandit, 2015, p. 4)

FFP have emerged from airlines market research scheme and in fact support market analysis and customer transparency: Airlines' marketing benefits from FFP by retrieving large amounts of customer data which reveal travel behavior and consumption habits. This information supports the design of new individualized marketing campaigns (Knorr, 2019, p. 41-42).

The broad network of frequent flyer programs has converted the bonus points into some form of virtual currency: Miles can be used for the payment of certain goods and services and can be interchanged between participants. This currency network is based on a relationship of trust, that is partners in the network implicitly show their mutual trust, which reassures customers and mediates the feeling of an intimate club, which again increases FFP attractiveness (ECB, 2012, p. 5). Finally, the independent exchange listing of profitable FFP as profit-center awards ailing airlines additional stock market income (Pandit, 2015, p. 4)

However, recent alternations in FFP schemes have to some extent shattered the trust of customers in the system and play into the hands of low-cost carriers: The strategy of billing additional services per flight is partly perceived more transparent. Customers are disappointed if mileage redemption patterns are changed and customers flying irregularly abandon their loyalty to the FFP and switch to low-cost carriers. FFP then face the problem of profitability: The provision of additional amenities has to be matched by additional revenues. If miles are accrued but not redeemed the system loses in attractiveness for is cooperation partners (Pandit, 2015, p. 11).

Market Overview on international Frequent Flyer Programs

In spite of critique with FFP, today almost all flag-airlines offer their customers loyalty programs. Today there are more than 220 FFP worldwide. Since enrollment is usually for free or inexpensive, most frequent travelers are members in several FFP (Global Flight, 2019, online).

In order to identify available characteristics of FFP, a market overview is provided, which describes the elements of the most prominent FFP. Although the empirical section of the

study refers to German FFP, the market overview considers the major international programs to identify all potential design options comprehensively.

A representative selection of important FPP is made referring to Forbes (2018, online) which presents the twenty largest international airlines based on a list of the largest public companies by business sector. These airlines which are most important from an economic perspective, cover most international flights and thus are a representative sample for FFP analysis.

According to annual surveys of J.D. Power, frequent flyer programs differ in their quality, reach and customer satisfaction levels (J.D. Power, 2017, online). Airlines websites and several independent comparative webpages inform travelers on available programs and specificities. To obtain topical information and data of the respective FFP, several sources are consulted: The analysis starts from list of Globalflight.net (2019, online) to identify the selected airlines' FFP. The programs are assessed referring to information on airlines websites. Further information on terms and conditions is retrieved from Bortz (2019, online), Peacock (2017, online) Finder (2019, online), which offer comparative data on Anglo-Saxon FFP mainly. Airlines themselves mainly describe terms of credit point accumulation and redemption. Independent websites are more critical on practical conditions and limitations of FFP usage.

Previous evaluations mainly compare access conditions, options to earn and redeem miles, credits assigned per booking, credit expiration, partners and available status options. A Wallet Hub (2019, online) survey on customer satisfaction with FFP differentiates US airlines' FFP quality assesses customer perception of airlines general conditions and finds significant differences across the companies concerning the following major points: Reward value by status level; miles expiration time after last flight; Black-out dates for award travel (dates on which certain award travels are not available); number of partnerships with external companies to earn or redeem bonus points; cost of purchased miles above their redemption value.

The market overview in Table 0.1 in the appendix includes all these data but suggests a simpler scheme to integrate the available information into a comprehensive table.

- The major descriptive characteristics of FFP are airline, airline nationality, and program name. These are summarized in column 2 to 4.
- Column "earning miles" summarizes information on mileage or credit point assignments. The calculation-bases for miles or points differ strongly across the

airlines and partly refer to dollars spend or miles flown but sometimes also include ticket category and flight type.

- Column expiry indicates the number of months, after which accrued miles expire after the recent flight with the airline, if available from the above research sources.

- Column "spending miles" names the possibilities customers have to make use of gathered credit points with the airlines its flight partners or affiliated companies. The reach of airlines networks differs.

- Limitations or special conditions of miles redemption or accrual are partly hidden in the general terms and conditions of the airlines. These are listed in column "limitations and spec. conditions".

- Column "status rewards" summarizes the benefits customers obtain after reaching a certain mileage status. Conditions to attain these status points are indicated in the first item, if available from the above sources

The following discussion summarizes the indicated observations for the major 20 international airlines' FFP.

a. Earning miles

Airlines provide different schemes for earning miles in the process of booking flights. Further mile attributions by airline partners are not considered here, since these are no direct airline products.

For all but one airline the assignment depends on the customer's status level attained in the program, which usually is calculated as a factor on the mile allocation in the lowest frequently flyer level. Only Alaska Air group does not assign miles based on passenger status. The column "earning miles" in 3 table indicates a span of credit assignments for passengers depending on their status. E.g. 5-10 m/$ indicates that passengers in the lowest FF-status rank obtain 5 miles per USD spent, while those in the highest rank obtain 10 miles for the same expense.

Mile allocation can depend on diverse product-related factors:

In Europe and the USA, the assignment of credit points, equally called miles, per dollar or respectively Euro spent on the flight earning the miles, is the most common assignment scheme. Delta Airlines, American Airlines, United Continental, Lufthansa, Air France-KLM, South West Airlines and Qantas Airlines use this scheme. Star Alliance (Lufthansa Group) adds a factor classifying the participating airline into this calculation. Qantas guarantees a minimum number of points assigned per booking.

Asian Airlines use a booking-class (indicated as class in table 3) and flight-category-based mile (or point) allocation scheme usually: China Southern, China Eastern, All Nippon Airways, China Eastern Airlines, Cathay Pacific, Turkish Airlines, Singapore Airlines, Korean Airlines and Hainan Airlines use this scheme. The number of miles is calculated in a table indicating the flight category factor (e.g. long distance, continental), the fare class factor (e.g. business or first class) and of course the status of the passenger.

Few airlines, connected to both Asian and Anglo-Saxon culture, use a mixed model: They assign miles or credit points according to money spent and flight type: Air Canada allows customers to choose either system. Cathay Pacific calculates club points by adding up miles flown and price category. Alaska Air Group calculates the miles per flight class and fare class.

b. Expiry

Column "Expiry" indicates the number of months the miles stay valid when no further flight is booked. All but two airlines (Alaska Air Group and Japan Airlines) use expiry periods. European and US airlines use homogenous expiry periods of 18 months (American Airlines, United Airlines, Qantas airways) or 24 months (Delta Airlines, Deutsche Lufthansa, Air France/KLM). Most Asian providers or providers frequenting Asia often, use longer expiration periods. 36 months are most common and used by Hainan Airlines, Singapore Airlines, Turkish Airlines, China Eastern Airlines, All Nippon Airways and equally by the Southern American Latam Airways. Air Canada and Korean Air grant longer expiration periods of 84 and 120 months respectively.

Some airlines make exemptions to expiration periods, which are indicated in column "limitations & spec. conditions" if available clearly from the above-mentioned sources: China Southern Airlines differentiate and cut half of the points after 12 months and all points after 24 months of non-booking. Similarly, Hainan prolong credits to 36 months under certain conditions. Several airlines allow to prolong credit point validity upon payment of a forfeit of for instance 10 USD per 1,000 miles (Turkish Airlines) or 12 miles per 10,000 miles (Singapore Airlines) on usual expiry. American Airlines charges reactivation fees under certain conditions.

c. Spending miles

Airlines indicate multiple options to spend collected miles. The value of the miles per spending option can differ, depending on the provider of the offer (airline or partners) and product availability.

All airlines of course allow to spend the miles on follow-up flights with the own company. Some airlines impose restrictions, however. For instance, Delta Airlines indicates "black out days" of very high general flight demand on which no miles can be redeemed. United Continental avails only a limited number of seats for award redemption. Since these can vary depending on flight availability and demand the list in table 3 is incomprehensive.

Most airlines operate within a network of airline partners, which equally refund the miles gathered with the emitting airline. Star Alliance (2019, online) is a broad network comprising 27 companies which share diverse frequent flyer programs.

Virtually all FFP cooperate with travel-related external partner companies, particularly hotels and rent-a-car companies. Most FFP offer credit cards by the airline itself or an airline partner company. All airlines using credit cards in their FFP equally cooperate with shops, physical or/and online which grant reductions on purchase prices as a refund for miles or credit points. The number of available partners differs. The largest FFP disposes of more than 1,000 external partners. Singapore Airline's Krisflyer however has only got 130 partner shops. Latam Airlines, All Nippon Airways and China Eastern Airlines do not indicate the availability of a credit card or partner shop on their webpages, but only offer own or partner Airlines' rebates on flight and travel.

Several airlines offer additional non-air-based services to FFP customers directly on their website. Delta Airlines provides vacations and cruises, Air France and KLM award experience points for particular adventures or events. Cathay Pacific Airways and Qantas Airways offer finance and insurance services, potentially attractive contracts with telecommunication partners, dining events and professional advice for journey related problems.

Some airlines allow to transfer credit points or miles accrued with their company to other persons or institutions: Japan Airlines and Turkish Airlines offers family member credits or pooling, which allow other members of the family, up to a certain degree of relationship to participate in the bonus system when booking flights. Lufthansa Miles & More, Air Canada and American Airlines allow customers to donate their credits for environmental causes (CO_2 tax) or listed organizations or even to whoever they like (only American Airlines).

d. Status awards

Status rewards are homogenous in type across airlines. The following chart classifies benefits by flight state and comprises offers provided by most examined airlines to elite FFP members:

Table 2.1

Elite members benefit catalogue available with most airlines

Booking Services	• Simplified booking • Priority booking • Seat selection • Priority on waiting list
Airport services	• Priority or economy check in • Lounge access • Press reader
Luggage services	• Priority luggage transfer • Extra luggage • Heavier luggage allowed
Flight services	• Priority boarding • Cabin class upgrade • Comfort seat • Upgrade on meal and drink
Partner services	• Elite status in hotels and • Elite status in rent-a-car companies
Promotional offers	• Additional flight promotions • Premia and gifts of partners

All airlines differentiate among elite passengers and dispose of at least three of four elite member scales e.g. from bronze to platinum grade. The restrictions to reach elite member status and the respective levels differ. Column "status rewards" indicates the conditions from which the lowest elite member status is granted.

There is no airline which assigns status rewards after a certain period of membership or a certain total amount of acquired miles. Rather status awards usually have to be regained annually by booking new flights and are assigned for the recent accomplished booking period. Most airlines and all Western companies, tie access to elite status directly to their mileage point system and allow passengers access from a level of 20,000 (Delta) to 40,000 credit points (China Eastern Airlines) or miles upwards.

Some airlines have got additional or substitute conditions to attain elite member status, which are les transparent. Cathay Pacific Airways, allows access to lounges and some benefits from a payment of 100 USD or 300 credit points annually. Qantas Airways, calculate access based on booked fare types and credit card type and apparently access can be gained by buying the respective credit card. Hainan Airlines selects elite passengers based on a 50% mix of paid fare price and distances flown. Latam Airlines passengers collect flights granting them access to elite status by destinations flown.

Based on the above analysis the design options for FFP practiced by the 20 largest international airlines are summarized in an illustrative chart.

Design elements of International Airlines' Frequent Flyer Programs	
Earning Miles Schemes	• Factor depending on customer status • Assignment by flight price • Assignment by booking class • Assignment by flight category
Expiry Schemes	• Limited months of validity after recent flight booking • Gradual decay • Annual payment to prolong miles
Spending Miles Options	• Rebate for follow up flight with airline or partner • Travel related external partners (Hotel, car rental) • Credit card for external shopping • Additional non airborne services (holidays, insurance, advice) • Transfer of bonuses to family • Donation of bonuses
Status Awards	• Levels of elite differentiation • Access restriction: credit points, distance, other • Booking services • Airport services • Luggage services • Flight services • Partner Services • Promotional offers

Figure 2.3 FFP design options according to market analysis

Section 2.1 has thus provided an overview on the concept of FFP from airlines' marketing practice. Extensive academic research has been done in the field of FFP, which systematizes the effects of FFP referring to marketing theory.

2.2   Coding the studies and structuring the review

Section 2.2 uses a systematic review of academic studies to classify the effects of FFP design on consumer behaviour and develop an empirically founded research model of FFP effects on consumer behaviour.

A systematic literature review is an academic method to summarize diverse empirical studies concerning the same research question. It intends to draw new insights comparing the results. A literature review accordingly should go beyond a summary and bring together primary and secondary studies in a structured way to come to a novel perspective and research concept (Drinkmann, 1990. p. 12). A systematic approach following established rules is essential to ensure the quality of the results. Referring to Eisend (2006, p. 6), Webster & Watson (2002, p. xiii ff) and further sources the analysis progresses as follows:

The definition of content criteria is essential for the comprehensive choice of primary studies (Webster & Watson, 2002, p. xv). Exclusion and inclusion criteria have to be defined unequivocally, to retain reference to the original research objective (Urbach, 2009, p. 365-366). In accordance with the objective of this study (compare introduction, section purpose), this study intends to assess the effect of the design elements of frequent flyer program on consumer behaviour. The review provides an overview on previous empirical insights.

The process of literature identification is limited to studies with an empirical background (qualitative and quantitative studies), which have appeared in academic journals, have been presented at conferences or in a university context in German or English in the period 2001 to 2019. The starting point of 2001 is chosen in accordance with the insights of the introduction: With the spread of the internet among consumers globally at the beginning of the new millennium FFP gained in reach and attraction. Electronic technologies on the Web 2.0 enabled airlines to launch new and more comprehensive marketing strategies. Publications after 2001 reflect this novel design of FFP and the change of marketing paradigms with the emergence of Web 2.0.

Coding the retrieved studies by referring to common issues takes a central function to come to new conclusions (Eisend, 2004, p. 6). Webster & Watson (2002, p. xvii) suggest to progress from an author-centric to a concept-centric perspective i.e. first classify the articles by order of author, identify available concepts and then arrange the results by order of concepts. Accordingly, first an author-centric overview table, which sorts the studies by

publication year and author is developed, which classifies the studies in the context of the research questions according to the following issues:

- Sample & method,
- Design elements/characteristics of FFP
- Further moderating factors to the effect of FFP on customers
- Measured effects with consumers
- Observed relationships

Evaluating the author-centric overview by determinants, concept matrices are developed which assign the design elements (input factors) and the consumer effects (output factors) to categories to verify and further develop the work model and derive concrete research hypotheses.

A study overview is provided in the appendix. Altogether 21 Studies assessing the impact FFP design strategies on consumer behavior empirically are retrieved. To structure the review and develop the research model systematically, concept matrices of the input factors (design elements of FFP), moderators and output factors (consumer behavior reactions) are derived, by classifying the results listed in columns four and five of the author-centric table in major and sub-categories. The concept matrices determine the pace of analysis, which progresses from an evaluation of design elements (section 2.3) to an analysis of the cause and effect chain of FFP effectiveness (section 2.4.) and considers moderators of the effects of FFP (section 2.5) and. The concept matrices presented at the beginning of each section structure the course of argumentation.

2.3 Design elements potentially impacting FFP effectiveness

The previous sections of chapter 2 have shown that Frequent Flyer Programs are instruments of marketing and as such designed to develop and satisfy consumer needs, support the sales of airline services and increase the profitability of airline business operation (Bidlingmeier, 1983, p. 13-14). Referring back to the psychological and marketing models introduced in chapter 1, branding, models of the purchase funnel and customer relationship management, section 2.3 explains the mechanisms that make airlines' frequent flyer campaigns work, derives research hypotheses and integrates these into a comprehensive research model.

Concept matrix of empirical results on the effect chain of consumer behavior

Previous empirical studies provide support that the initially identified consumer behavior effects of marketing activity (chapter 1) are important for frequent flyer program effectiveness and allow to formulate testable hypotheses on their basis. A concept matrix (Webster & Watson, 2002, p. xiff) (**Table 0.3**, Appendix) is used to classify effects observed in previous empirical studies in the airline business.

The textual evaluation combines the points to examine and concretize the observations derived from established marketing theories:

FFP determine customer attitude to brand (H1)

Airlines make extensive use of brands: they communicate brands in the form of logos on aircrafts and all public documents referring to the corporation. The construction of a distinctive brand image is of particular relevance in the aviation sector, which is characterized by a broad range of competitors, which basically advertise the same products and services (Ponnam, 2007, p. 70-71). Quality differences become perceivable during the flights only and customers depend on recommendations and public perception of the airline brand, when taking their booking decision. The targeted construction of a favorable a brand image is thus decisive to motivate booking:

FFP programs are designed to support this process of generating brand image from positive customer attitudes: The market overview of airlines' FFP has shown that airlines' FFP gain their strength by alliance partnerships. FFP are derivative networks, which extend the reach of the brand and strengthen airlines brand image (Gudmundsson et al., 2002, p. 409). Kalligiannis et al (2006, p. 4) conduct a survey among airlines' alliance management departments to assess the perceived impact of alliance partnership on airlines brand image. 78% of the participants feel that alliance partnerships and particularly FFP enhance the brand image of their corporation. Reward elements in FFP schemes convince customers of the quality of the brand and contribute to the formation of a positive brand image in FFP customers' mind. Frequent Flyers will communicate their positive experience to fellows and possibly in online networks and in this way contribute to establish and spread the airline's positive brand image (Tanford, 2013, p. 285).

The impact of customer experience and attitude on brand image has been assessed in several FFP studies: Australian consumers' future behavioral intentions of booking with an airline are determined by their satisfaction with the airline, which results from perceive pricing and service quality during recent flights (Park et al., 2006, p. 375). Frequent travelers and

business travelers develop a positive brand attitude dur to loyalty programs in the hotel and airline industry and return to the companies they follow. Incentives contribute to enhance customer attitude on the brands and in the long run members get convinced of the brand image (DeKay et al., 2009, p. 7). Customer satisfaction with FFP results from perceived high relationship investments of the airline, which customers experience by monetary savings, service advantages, status and social benefits (Mimouni-Chaabane & Volle, 2010. p. 2).

Ma & Li (2017, p. 300) relativize the potentially positive effect of FFP on customer attitude and brand image: Status rewards can produce customer entitlement, i.e. exaggerate expectations in status confirmations, which can easily be disillusioned, with the result that brand image is impaired.

Summarizing these empirical results, the insights gained from brand image theory are condensed into a first proposition:

P1: Positive customer attitudes enhance airlines' brand image.

FFP build customer loyalty and advocacy in the purchase funnel (H2)

Based on a review Uncles (2003, p. 12) supposes that FFP enhance customer loyalty and advocacy partly due to habituation to using the airline and partly due to the conviction that the FFP offers superior service. Having flown with the airline several times customers perceive that they can progress to superior status when they book with the group again. This perspective increases the barrier to switch to a cheaper provider and which would mean dispensing with the advantages of VIP status. Customers' habituation with airline booking standards services and convenience plays into these considerations. Incentives for frequent flyers which increase with every booking e.g. by progression in VIP status level. The provision of additional rewards heightens customers' switching barrier with every booked flight. The impending decay of credit points in case of non-usage over one to three years additionally motivates customers to stay loyal just in order to not lose the premium acquired over several years (Woisetschlager, 2008, p. 484).

FFP customers become brand advocates through two channels: Satisfied by the superior services, they actively communicate their conviction of the airline brand and FFP status with friends and colleagues and perhaps share bonus points with them (Rapp, 2000. p. 317). The second, perhaps even more powerful path of customer advocacy is passive: Other passengers observe that FFP members obtain superior service from VIP status premia, e.g. at priority check ins, luggage disposal, in airport lounges, and on convenience. Conventional

passengers are likely to develop the desire to attain the same superior treatment and will equally stay loyal to the airline to progress to VIP status (Zins, 2001, p. 269).

These considerations on the relevance of FFP to brand management suggest that the focus of FFP is on the post-purchase stage of the funnel model. FFP guide passengers from experiences in the pre-purchase and purchase phase to repeat-purchase, loyalty as well as active or passive brand advocacy.

The impact of FFP on the stages of the purchase funnel are assessed in a series of empirical studies. The studies agree that effective FFP design contributes to guide customers from pre-purchase stages to loyalty and brand advocacy.

Most travelers with Australian Airlines are interested in using the status and service amenities of FFP and are even ready to pay a price premium to benefit from the advantages. FFP grant airlines a competitive advantage on low-cost (and low image and service) carriers particularly among frequent and long-distance travelers (Gao et al., 2018, p. 12). As soon as passengers have attained some premium level with an airline, they make efforts to progress on the VIP ladder even if the airline is less attractive in pricing or services than other airlines. FFP make customers return just to belong to a perceived elite (Orhun & Guo, 2018, p. 1). Rewards offered by FFP motivate passengers to book with the respective airlines and the promise of further (extrinsic) rewards makes customers return, in order to establish and develop their status (Meyer-Waarden, 2013, p. 183). Customers choose airlines with FFP since they perceive these fair and attractive. They return to the company due to initial fairness perception and in the conviction that this prior treatment will repeat in the framework of an FFP (Mathies & Gudergan, 2016, p. 3).

FFP have been found to contribute to airlines economic success, since they push booking figures, returns per booking (Hossain et al,, 2016, p. 361), (due to higher realized booking prices) and market shares (Orhun & Guo, 2018, p. 19) factors which finally contribute to increased profitability (Vilkaitė-Vaitonė &Papšienė, 2016, p. 114).

According to purchase funnel models purchase behavior ideally is repeated which means customer loyalty. Empirical studies confirm this effect for FFP. Different loyalty measures are applied:

FFP customers show attitudinal and behavioral loyalty. Attitudinal loyalty comprises the conviction that the chosen brand/ program is best, which results in recommendation behavior and personal trust in the brand. Behavioral loyalty is customers' readiness to repeatedly book with the airline, reuse the FFP program and equally utilize further branded offers (Colakoglu

& Artuger 2012, p. 34). Most previous studies mix attitudinal and behavioral loyalty to define a comprehensive loyalty construct:

FFP increase the loyalty of passengers of South African Airlines, in the sense that they intend to fly again with the airline, recommend it to friends and relatives and do not intend to switch to other airlines. Loyalty increases when passengers feel reassured concerning safety and are convinced by service quality (Sandada & Matibiri, 2016, p. 45-47). Loyalty is a complex effect which according to Whyte (2003, p. 272) does not result from the mere existence of FFP alone. Satisfaction after repeat purchases brings attitudinal loyalty to the airline brand, in the sense that passengers trust in the company, and keep committed to marketing offers. Loyal customers at air Berlin are attracted by FFP. They recommend the airline and repeatedly book flights to benefit from the bonus program (Hossain, 2016, p. 364). International FFP passengers show their loyalty by repeated booking with the airline. Customers future behavioral intentions of booking with the airline improve when FFP are offered and customers develop trust in the airline brand (Park, 2006, p. 359).

Inversely, repeated purchase activity, increases FFP customers' commitment to remain with the brand. This commitment is partly extrinsic (since the airline promises FFP advantages) but increasingly turns intrinsic: Repeated purchase activities increase customers' conviction that the company is the best choice (DeKay, 2009, p. 5-6). FFP participants buy flights more frequently, consume more services and display shorter inter-purchase times than non-FFP members (Meyer-Waarden, 2008, p. 87). The minor group FFP passengers constitute the majority of turnovers of Singapore Airlines, due to their more extensive purchase behavior (Chin, 2002, p. 70), since these passengers return regularly. Airlines holding FFP dispose of higher passenger numbers than those without an FFP, since FFP attract new customers and make established customers return (Vilkaitė-Vaitonė & Papšienė, 2016, p. 109).

Summarizing these insights, loyalty is a complex construct and results from repeat purchase activities. Loyalty entails the inner conviction of the brand trust in the airline and recommendation behavior. These observations are concretized in a research proposition (Colakoglu & Artuger, 2012, p. 34):

P2: Customer booking (purchase) behavior contributes to customers' loyalty.

FFP contribute to brand equity and a sustainable customer-provider relationship (H3)

FFP are designed to enhance customer loyalty and advocacy. Griffin (2002, p. 18) explains that average American businesses lose 20 to 40% of their customers annually, which prevents many businesses from earning sustainable revenues and generating stable profits.

Particularly in the service cost intensive and cyclical travel industry the establishment of a permanent customer base is essential to survive in the face of highly competitive markets. International airline customers estimate airlines customer relationship efforts and investments into relationship quality. They combine structural, social and relational bonding elements: FFP memberships dispose of clear but complex structural regulations, which get customers engaged. FFP passengers are awarded a superior status and enjoy the social community with an elite in-group (Wang, 2014, p. 58). Frequent flyer programs are apt to convince customers of airlines' engagement for quality and passenger care Frequent Flyer programs are intended to build and stabilize this customer group: Choosing between airlines of equal flight schedule and availability, passengers prefer companies offering additional amenities and services (Law, 20178, p. 13). Airlines grant frequent flyers gratifications and premia to avoid airline switching. Passengers feeling cared for well and earning privileges by frequent bookings will pay a price premium to enjoy these benefits.

Several studies assess the impact of FFP and of repeated customer booking behavior on the customer value perception and trust in the airline:

Airlines relationship investments in customers realized by FFP significantly contribute to enhance relationship quality and a long-lasting trusting customer partnership (Mimouni-Chaabane & Vole, 2010. p. 26). Attractive FFP, in the sense that customers dispose of a high number of redemption options and numerous partners, contribute to high program popularity and tie customers to the company (Yan & Cui, 2016, p. 1). Satisfied customers believe in the sustainable service and quality orientation of the airline and are ready to accept remote rewards instead of instant gratifications. Sustainable care for customer service contributes to establish customer lifetime value (Keh & Lee, 2006, p. 128). FFP establish intense customer relationships, since FFP passengers fly more frequently. Frequent flyers in FFP feel that their membership generates personal status, service and monetary value (DeKay et al., 2009, p. 2).

Customer loyalty programs according to Kreis & Mafael (2014, p. 592) do not only augment airlines' brand value, but create value for the customers. Monetary incentives and superior treatment induce the perception of economic, psychological and interaction value with customers. Improvements in FFP attractiveness contribute to customers loyalty to the airline and ensure a long-lasting partnership with the customer (Ledermann, 2007, p. 49).

Based on these results a proposition P 3 results:

P3: Sustainable customer relationships contribute to high customer lifetime value.

FFP brand image is correlated to high passenger loyalty (H4)

According to Park et al. (2006) airlines image is essential to customers' quality perceptions during the flights and codetermine their satisfaction and future booking intentions. Perceived fairness of FFP supports customer loyalty in the purchase funnel: Customers return to the airline since they cherish the advantages of the bonus program and feel esteemed as customers. Airlines brand image turns into a symbol of quality and generosity and keeps customers loyal to the brand (Mathies & Gudergan, 2016, p. 3). These observations are cast into proposition P4:

P4: High airlines brand image is correlated to high loyalty of FFP passengers.

Customer lifetime value is correlated to customers' behavioral loyalty (H5)

Among Chinese customers loyalty programs establish a profound customer relationship, which is based on repeated purchase bonuses, status and service privileges. Customers remain loyal to the airline since awards can only be maintained by loyalty and continued booking (Ma & Li, 2017, p. 300). Lin et al.'s (2016, p. 39) survey among Chinese flight passengers proves that perceived personal economic, emotional and social value attributes of FFP increases customers loyalty towards the program itself and beyond that to the airline. Program loyalty increases airline loyalty. Customer loyalty to the airline. According to Mimouni-Chaabane & Volle (2010. p. 27) is the result of perceived high relationship quality, which is measured by regular satisfaction with the airline's service, trust in the company and commitment to future bookings. Perceived high customer value significantly strengthens Australian passengers' behavioral intentions to return to the company for further bookings and recommend the airline (Park, 2006, p. 375). Chinese customers' high perceived emotional value of the FFP contributes to loyalty to airline and program and is more important than economic value, which only increases customers program loyalty (Lin et al., 2016, p. 30). These results are condensed in proposition P 5:

P5: High airlines customer lifetime value is correlated to high attitudinal and behavioral loyalty of FFP passengers.

Core model overview

Referring back to the theories presented in chapter 1, the effects described by H1 to H5 obviously interact:

FFP influence customers' cognitive, emotional and conative attitudes on the airline. Customers get informed on available offers, find the offered services and campaigns attractive at an emotional level and are induced to book flights with the airline. The positive

attitude customers develop is propagated by personal and online communication and enhances airlines' brand image (proposition 1).

New customers are attracted to the purchase funnel by airlines FFP. In the pre-purchase stage FFP create interest and desire, which motivates initial booking activities. The major effect of FFP however is in the post-purchase phase, when the growing rewards FFP offer to loyal customers, induce customers to book again and again. FFP clients turn into brand advocates by communicating their satisfaction and exemplify the advantages of VIP awards to other passengers (proposition 2).

Customer relationship management relies on frequent flyer programs to keep contact with regular and loyal customers and increase their bond to the airline. Loyal and satisfied customers represent an important value base for airlines: As reliable bookers they stabilize airlines revenue basis and are ready to pay a premium on the market price to keep or build their status. A broad FFP customer base means a sustainable competitive advantage to businesses in the aviation industry (proposition 3).

Interlinking the theory of brand image and brand identity to the purchase funnel, brand image contributes to consumers loyalty and advocacy. Attracted by renowned and existing brand customers will stay loyal to the product and company after initial purchases and recommend the brand to their peers (proposition 4).

Customer lifetime value contributes to sustained customer loyalty and brand advocacy (proposition 5). Customers' keep engaged in the relationship to the brand for a prolonged period of time by for instance joining the brand on virtual media and keeping informed on new products and services. FFP keep customers in touch with the airline and motivate them to return for further flights in order to progress in the FFP reward system.
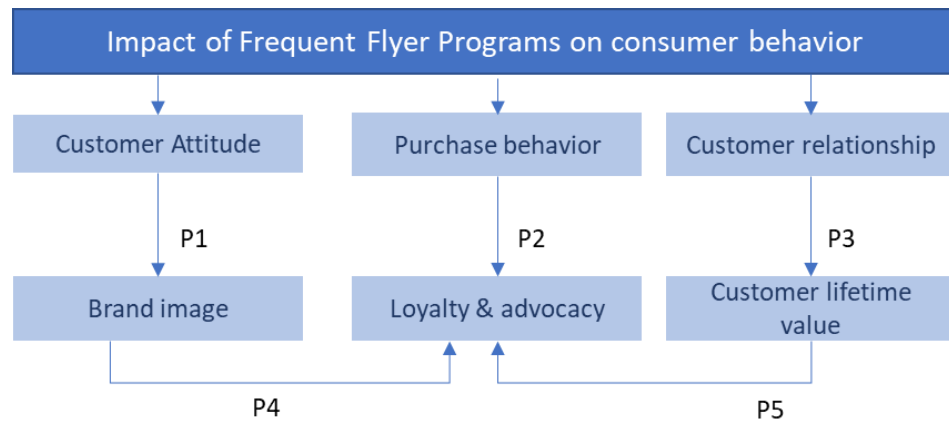
Figure 2.4 Theoretical model of FFP effectiveness

Referring back to the design instruments of FFP as derived from the market overview (section 2.1), the effects founded in marketing theory can now be differentiated.

2.4 Previously observed effects of FFP design principles on consumer behavior

To explain how FFP produce this effect on consumer behavior, major design elements of FFP are extracted from the reviewed studies and are categorized. These are used for further empirical analysis of the appeal of FFP design elements to customers in the empirical section. **Table 0.4** (appendix) contains matrix of the design elements of frequent flyer programs as assessed in previous studies results.

The matrix contains four major categories describing FFP design options comprehensively. These are offered material rewards, offered service rewards, offered status rewards and factors concerning the quality of the program. The studies partly assess several categories and aspects per category and the results are detailed in the following paragraphs.

Material rewards

Material rewards, i.e. pricing benefits and rebates offered to customers of FFP are central issues of discussion in six of the retrieved studies:

So called "tangible rewards" i.e. material benefits from repeatedly booking with and airline, enhance customers' relationship quality with the brand (Ma & Li, 2017, p. 306). Ma & Li's assumption that customers who have previously been granted rebates on the ticket price tend to expect further pricing advantages from airlines and otherwise reduce their loyalty however is not confirmed (Ma & Li, 2017, p. 307). Price rebates enhance perceived airline fairness among all passenger groups analyzed in a mixed hotel and airlines customer survey, price

increases impair fairness perception (Mathies & Gudergan, 2016, p. 37). Tangible benefits enhance the loyalty of customers of Turkish airlines but are not as effective as intangible rewards (compare following paragraphs). The utility perception of the economic customer value of customer loyalty program participants is determined by the amount of money saved for the bookings and the availability of the reward redemption (Kreis & Mafael, 2014, p. 592). Monetary savings significantly contribute to airlines' relationship investment. French passengers perceive and enhanced customer relationship quality. Monetary savings outweigh service and social benefits, only recognition benefits are more effective (Mimouni-Chaabane & Volle, 2010. p. 25). Monetary reward preference is codetermined by customer satisfaction: Satisfied customers are ready to accept (higher) delayed monetary rewards, while dissatisfied customers want to redeem (lower) rewards early (Keh & Lee, 2006, p. 133).

From these results follows another proposition:

P6: The impacts of FFP on customer behavior increase with availability and height of monetary rewards.

Service rewards

The term "service rewards" refer to additional services FFP passengers can receive free from charge or only against credit points and which differentiate FFP passengers from conventional travelers.

Among Chinese passengers, preferential treatment significantly enhances perceived relationship quality, but does not increase undesired customer entitlement (Ma & Li, 2018, p. 306). Further studies however suggest, that the preference for and perception of service rewards depends on the passenger type:

Mathies & Gudergan (2013, p. 37) assess the effectiveness of a series of service options to the fairness perception of different passenger segments (all-purpose, leisure, business). Refundable cancellations contribute to high fairness perceptions of leisure and all-purpose travelers mainly, while business-travelers prefer short term ticketing. Exploration and entertainment amenities enhance the perceived relationship investment of French FFP passengers and contribute to relationship quality. Both service rewards are less effective than social and monetary rewards however (Mimouni-Chaabane & Volle, 2010. p. 26). Treatment-based design-elements of FFP e.g. additional contact amenities are particularly valuable to passengers who estimate interaction value according to Kreis & Mafael's (2014, p. 594) study among airlines and hotels. Service attributes are of particular importance to

passengers on long-haul journeys (Whyte, 2003, p. 278). Most members of the Singapore Airlines FFP "Krisflyer" prefer the airline due to more convenient scheduling on the program (Chin, 2002, p. 74).

From these results another proposition on the effectiveness of service rewards in FFP is derived:

P7: The impacts of FFP on customer behavior increase with the availability and range of service rewards.

Status rewards

Status rewards for FFP passengers are discussed most controversially in literature. Status rewards refer to immaterial benefits, which are based on the classification or status on of the passenger alone, not on rebates or additional services. Mimouni-Chaabane & Volle (2010. p. 21) classify recognition and social benefits in this category. The feeling of recognition implies the impression of having a special status, being distinguished or treated better. Social benefits refer to the belonging to a certain (desired) group of persons, which share the same values or attributes. The separation from service rewards is not always clear (e.g. in the case of VIP lounges, which mainly distinguish due to limited access conditions) and some studies do not differentiate status and service rewards at all (Colakoglu & Artuger, 2013; Keh & Le, 2006) but speak of intangible or indirect rewards.

Perceived status of passengers stands in causal relationship with other treatment and monetary reward incentives (Ma &Li, 2018, p. 305) but is a separate category according to Ma & Li's factor model. Among Chinese passengers perceived status is the most effective tool to enhance relationship quality, but equally contributes to (undesired) customer entitlement, which reduce relationship quality if customer expectancies are not met (Ma & Li, 2018, p. 306). Turkish airline customers prefer intangible to monetary benefits and loyalty development depends on intangible benefits to a large extent (Colakoglu & Artuger (2013, p. 1).

Recognition is the most significant factor of perceived relationship investment and significantly enhances perceived relationship quality among French members of flight loyalty programs (Mimouni-Chaabane & Volle, 2010. p. 26). Social benefits however do not significantly contribute to perceived relationship investment. Customers on their way to elite status prefer the airline if this effectuates access even if the company offers worse service or is more expensive than competitors (Orhun & Guo, 2018, p. 1). Previous efforts customers have made to attain privileged status, motivates them to make additional investments on the

maintenance and further development of their VIP status even beyond the market price of conventional tickets. Rapid previous advancements are correlated to strong effort to further develop the FFP status (Orhun & Guo, 2019, p. 2). Equally Australian passengers pay a price premium just in order to attain the premium status (Gao et al., 2018, p. 11).

These results support that status rewards have got a positive impact on consumer behavior and are even more important than service or monetary rewards:

P8: The positive impact of FFP on customer behavior increases with the availability and range of status rewards.

P9: Status rewards outweigh monetary and service rewards concerning the impact on customer behavior.

Program quality

Additional quality characteristics of FFP have been assessed in previous studies concerning their impact on consumer behavior.

Two studies include the number of partner companies to airlines' FFP. Yan & Cui's (2016, p. 7) meta-analysis on publications in the hotel and airline sector finds the number of partners a highly significant positive regressor on FFP popularity. A comparison of loyalty programs in the Baltic States confirms that customers prefer programs with high numbers of affiliated partners with the result that the respective airlines realize higher profits (Vilkaitė-Vaitonė & Papšienė, 2016, p. 113).

The threshold required to attain financial, service or status related rewards is another factor that determines program marketing effectiveness: High redemption requirements for top tier levels negatively affect the popularity of hotel and airline sector loyalty programs, on the other hand general redemption entry requirements and entry thresholds to lower or top tiers increase popularity, since these distinguish program participants from the broad mass of passengers (Yan & Cui, 2016, p. 7). Vilkaitė-Vaitonė & Papšienė's (2016, p. 113) comparative study among Baltic airlines' revenues confirms this observation: airlines with higher thresholds are more successful.

On the other hand, obscure conditions are sanctioned negatively by passengers: Validity limits to monetary advantages as well as additional payable upgrades, for which miles are required are perceived unfair and reduce airline popularity among customers in the airline and hotel sector. (Mathies & Gudergan, 2016, p. 37). Passengers facing difficulties in redeeming rewards due to limited availability in spite of FFP status lose their commitment to the airline (Whyte, 2003, p. 9). Passengers accept delayed reward redemption (at a price

premium) if satisfied with the airline, are skeptical however in case of dissatisfaction (Keh & Lee, 2006, p. 128).

Three further assumptions on the effectiveness of side-conditions determining the perceived quality of FFP result:

P10: High numbers of FFP partners increase the positive impact on customer behavior.

P11: Transparent redemption thresholds distinguishing FFP members unfold a positive impact on customer behavior.

P12: Obscure validity and redemption constraints impair the impact of FFP on customer behavior.

2.5 Moderators to the effect of frequent flyer program design on consumer behavior

Previous studies identify diverse factors moderating the impact of the FFP design on consumer behavior. These are passenger related, flight-related, travel-related and airline/industry related factors.

Concept matrix of moderators

Using Webster's and Watson's (2002, p. xi) method of classifying the review results for moderators to the impact of FFP design on consumer behavior, a moderator concept matrix (**Table 0.5**, appendix) results:

The textual evaluation of these relationships progresses according to this schedule as follows:

Passenger-related moderators

With progressing age and income passengers and hotel guests are more frequently member in loyalty programs. DeKay et al. (2009, p. 6-8) explain this observation by the fact that older and richer people travel more frequently. Equally, Park et al. (2006, p. 372) and Gao (218, p. 14) consider age and income as moderating factors of customer impact of FFPs. In a structural equation model, they do not find any significant relationships. Surprisingly top-tier members in Australia are willing to spend significantly more on extra services and amenities during flights than budget or low-tier customers, which indicates that top tier customers show a more hedonic personality than other clients (Gao et al., 2018, p. 9). Passengers' purchase orientation determines to what extent customers are motivated by

intrinsic or extrinsic rewards and to what extent loyalty programs in fact unfold a loyalty effect.

Kreis & Mafael (2014, p. 594) confirm that FFP incentives should correlate with customer value perceptions in order to be effective with a particular customer group. Money saving customers appeal to economic incentives. Customers with high interaction value are addressed by affiliation related rewards and customers with distinct psychological value conceptions are attracted by status rewards.

In sum, customers' purchase motivations depend on their consumption motivations. These are codetermined by age and income. These observations provide another assumption:

P13: Customer age, income and consumption motivations control the impact of FFP design on customer behavior.

Travel related moderators

Further moderators identified in previous empirical research are flight and travel related. These factors stand in relationship with consumers' choice: Consumers decide for travel and flight options depending on their requirements and preferences.

Business travelers have got different preferences than leisure travelers: Business travelers are frequently less price sensitive than leisure travelers since their company pays for the travel expenses (Mathies & Gudergan (2016, p. 26). Business traveler are more willing to pay for additional amenities in the frame of an FFP than leisure travelers, since businesses frequently pay for their employees' travel expenses and do not impose clear restrictions on the budget. Business travelers are subject to moral hazard and prefer advancement in the FFP instead of booking more economic flights with other airlines (Orhun & Guo, 2018, p. 34). The availability of FFP programs is more important to long haul and business travelers than leisure and short haul travelers (Chin, 2002, p. 68).

Travel frequency and enrolment on FFP determines the design preferences of passengers. In accordance with Gao et. al., Meyer-Waarden (2013, p. 192) find heavy flyers most social-relational but equally functionality oriented, while rare flyers are mostly budget-optimizing. Frequent travelers are more often registered on FFP than occasional travelers. Frequent travelers usually use airlines for business purposes (partly). Existing enrolment on an FFP motivates passengers to keep on the program, particularly if status advancements are ahead or if status credits are lost in case of switching. Frequent travelers registered on an FFP mainly thus tend to remain with the airline, even if this is more expensive or less attractive (Orhun & Guo, 2018, p. 13). Since frequent travelers are often registered on one or the other

loyalty program already, they are open to join further programs, if those cooperate or offer joint reward systems, for instance hotel and airline loyalty programs (Ledermann, 2007, p.1; DeKay et al. 2009, p. 6-7).

From these previous insights another proposition on the relevance of travel-related moderators results:

P14: The characteristics frequent flyer, business traveler and registry on affiliated programs positively moderate the impact of FFP design on customer behavior.

Airline related moderators

According to Yan & Cui's meta-analysis (2016, p. 7), consumers' preferences for airlines' loyalty program design differs from the preferred design in the hospitality business. The fact that industry specific factors moderate consumer preferences suggests that equally airline specific factors are of relevance, which has been confirmed in further empirical studies: Airlines schedules and flexibility increase the attractiveness of FFP to passengers (Ledermann, 2007, p. 49). Airlines' service quality and safety positively moderate consumers satisfaction and loyalty with the airline as a whole and with FFP programs (Sandada et al., 2016, p. 48). Service quality and safety equally enhance passenger satisfaction and airline image (Park et al., 2006, p. 1). From these insights follows a final proposition on moderators:

P15: Airline safety and service quality positively moderate the impact of FFP design on customer behavior.

2.6 Comprehensive research model and overview on propositions derived from the systematic review

Overview of propositions

Summarizing the propositions derived from the review, a comprehensive research model is developed. **Table 0.6** in the appendix lists the 15 propositions found in section 2.5, and previous research they are based on:

Comprehensive research model

Integrating the hypotheses and the underlying theories a comprehensive research model founded by previous empirical research results. It expands and details the theoretical model of FFP effectiveness on consumer behavior derived in the theoretical chapter 2 (Figure 2.4). The complete model is illustrated in Figure 2.5 on the following page.
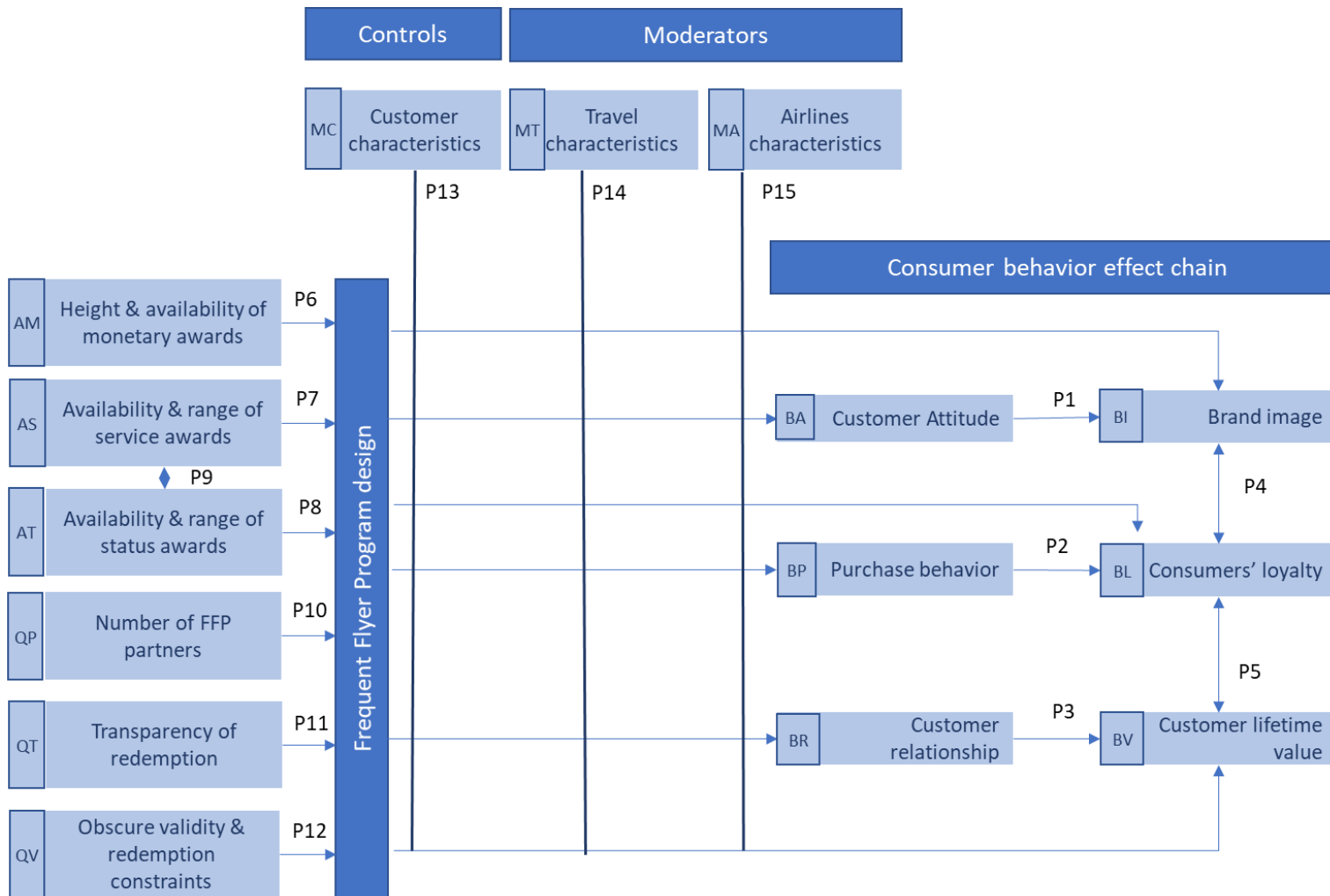
Figure 2.5 Comprehensive review-founded research model FFP Design

Independent variables:

AM   =   height and availability of monetary awards

AS   =   availability & range of service awards

AT   =   availability & range of status awards

QP   =   number of FFP Partners

QT   =   transparency of redemption

QV   =   obscure validity & redemption constraints

Moderators:

MT   =   travel characteristics

MA   =   airline characteristics

Controls:

MC   =   consumer characteristics

Dependent Variables

BA   =   customer attitude

BI   =   brand image

BP   =   purchase behavior

BL   =   consumers' loyalty

BR   =   customer relationship

BV   =   customer lifetime value

The work model is applied for the empirical study among Miles & More customers but refers
to general definitions of brand image and consumers' loyalty corresponding to earlier

studies. The code of the survey questions, constituting the model categories in the statistical evaluation, are detailed in section 3.4, section Fundamental Categories and Coding.

- Customer attitude has been coded by Park et al (2010. p. 6), who test several measures of consumer attitudes on brands and find a coherent construct of brand-self-connection

- The concept of customer loyalty is based on Colakoglu & Artuger (2012, p. 12) and Meyer-Waarden (2013, p. 189) who confirm of behavioral and attitudinal air passenger loyalty in a survey on FFP effectiveness.

- The concept of customer relationship is based on Ma & Li (2017, p. 304) and a scale adopted from Wulf et al. (2001).

- Customer lifetime value refers to a scale of Kreis & Mafael (2014, p. 599).

- To measure brand image the study relies on Bauer et al.'s (2008, p. 218) non-product specific and reliability tested brand image scale which is based on Keller (1993, p. 7) and Aaker (1996, p. 118).

The behavioral effects of FFP on target parameters are examined by testing H1 to H5

The model comprises three blocks: Design elements of frequent flyer programs (left area), moderators of effectiveness of FFP programs (top area) and consumer behavior effect chain (right area). Propositions P6 to P12 refer to the impact of design elements on consumer behavior and the relevance of the design elements to consumer behavior has to be tested for all potential behavioral effects. These are effects on customer attitude, brand image, purchase behavior, attitudinal and behavioral loyalty, customer relationship and customer lifetime value.

The moderating impact of customer, travel and airline characteristics on the impact of FFP design on customer behavior is examined by testing P13 to P15.

Limitations of previous studies and further research needs

Although the review of previous studies has provided a plausible and comprehensive model of the way FFP take effect on consumer behavior, several research gaps remain:

None of the retrieved studies considers Europe or Germany explicitly. Although diverse empirical studies in particular nations, namely in an Australian (Gao et al., 2018; Whyte, 2003) and Chinese (Ma & Li, 2017; Lin et al., 2016) and even a Baltic (Vilkaitė-Vaitonė & Papšienė, 2016), South African (Sandada & Matibiri, 2016) and Turkish (Colakoglu & Artuger, 2013) context are available, none of the papers considers German passengers or German airlines FFP or the context of travelers in Germany. Although Hossain et al. (2016)

refer to the FFP of Air Berlin, the study is not empirical as to the analysis of the impact of FFP, but rather descriptive concerning the program details. This is surprising, since European airlines face particular competitive pressure from Asian and US companies (Mitusch & Mendes De Leon, 2017, p. 14).

None of the previous empirical studies integrates the whole cause and effect chain of customer behavior. Most studies focus either on customer attitudes and perception ((DeKay et al., 2009; Mathies & Gudergan, 2016; Keh & Lee, 2006) branding (Park et al., 2006), purchase theory (Gao et al., 23018, Orhun & Guo, 2018; Meyer-Waarden, 2013), customer loyalty (Sandada & Matibiri, 2016; Lin et al., 2016; Mimouni-Chaabane & Volle, 2010. DeKay et al., 2009) or customer relationship management but do not integrate these theoretical perspectives.

Most studies do not differentiate on the design of FFPs (loyalty programs), but assess the impact of pure FFP availability only (Chin, 2002, Whyte, 2003, Lederman, 2004; Meyer-Waarden, 2006, Keh & Lee, 2006; Meyer-Waarden, 2012, Colakoglu & Artuger, 2013, Mathies & Gudergan, 2016, Sandada & Matibiri, 2016). Only Vilkaitė-Vaitonė & Papšienė (2016), Yan & Cui (2016), Gao et al. (2018), Mimouni-Chaabane & Volle (2010) and Orhun & Guo (2018) consider the design of FFP strategies in more detail, but the behavioral patterns those studies research are incomprehensive. The above model which rests on the integration of insights of 21 prior empirical studies has not been validated as a whole empirically yet.

Only few studies use regression analysis or structural equation modeling (Orhun & Guo, 2018; Yan & Cui, 2016; Mimouni-Chaabane & Volle, 2010; Sandada & Matibiri, 2016; Kreis & Mafael, 2014) and thus assess the cause-and-effect chain systematically avoiding the bias of unbalanced distributions of moderating factors which is relevant for ANOVA.

To close this research gap, an empirical study of FFP effectiveness on consumer behavior for the German airline market based on the above developed comprehensive research model is required.

3 MODEL DEVELOPMENT AND RESEARCH METHODOLOGY FOR THE COMPREHENSIVE CAUSE AND EFFECT MODEL EXPLAINING THE EFFECT OF FFP ON CONSUMER BEHAVIOR

Chapter 3 describes the empirical research concept and drafts the methodology to validate the research model derived from the systematic review.

The implementation of an empirical research strategy comprises several steps, which have extensively been discussed in literature. The hypothetico-deductive method comprises the definition of the problem field, the problem statement and hypothesis development, steps which have already been done in chapter 2. To test the hypotheses, the research design has to be developed, a representative data sources have to be defined, the information has to be coded, data have to be collected, analyzed and interpreted (Sekaran & Bougie, 2016, p. 23). Empirical analysis can basically be qualitative or quantitative. Qualitative research offers itself when the research field is little defined and open and hypotheses are still unavailable. Quantitative research however builds on clearly defined hypotheses and tests these referring quantitative data and statistical methods (Yin, 2017, S. 2).

The review section (chapter 2) of this study has already elaborated detailed hypotheses and a comprehensive work model, referring to previous empirical studies. All but one (Hossain et al., 2016) of the studies in the review are quantitative already. They provide a range of empirically proven categories for further examination within a more comprehensive framework. The focus of analysis will thus have to be quantitative.

3.1 Development of empirical research objective and overview on research methodology

Empirical research objectives

However, so far empirical analyses concerning the German aviation market are missing completely. The empirical study requires triangulation to first reassess the aptitude of the hypotheses for the research question, possibly adapt the hypotheses to business and practice standards in the German aviation sector and then evaluate these in the form of a quantitative survey. The empirical study thus represents a combination of qualitative and quantitative methodology.

Chapter 2 has shown that previous empirical FFP research lacks a comprehensive validated model and so far, has not explored FFP effectiveness to consumer behavior for the German aviation market. The empirical part of this study closes this research gap and conducts a quantitative empirical study among members of frequent flyer programs with German airlines in order to assess to what extent design elements of FFP impact consumer behavior and to identify moderators to this effect. The empirical survey is based on the research model developed in chapter 2, which has been systematically founded by previous empirical studies. The evaluation validates the model categories and assumed causal relationships for German FFP, and pursues two principal objectives:

1. At an academic level, the empirical study substantiates a comprehensive cause and effect model explaining the mechanisms of FFP effectiveness on consumer behavior and for the first time integrates three theoretical research strands, which so far stand alone in FFP research: branding theory, purchase funnel model and customer relationship management.

2. At the practical level, the empirical study provides German airlines with an in-depth understanding of the mechanisms that make FFP effective. Particularly, the analysis explains which elements in airlines frequent flyer programs contribute to enhance customer brand attitude and image, motivate consumers booking behavior and loyalty and establish a sustainable customer relationship based on perceived customer value. External moderators to these relationships at the level of customers, travel design and airline standards are assessed concerning their relevance to these causal relationships. The interactions of brand image, loyalty and customer value are explored systematically. Airlines obtain comprehensive advice who to develop or change the design of their FFP in order to effectively address customers, stimulate booking and sustainably enhance customer value and loyalty.

The following key question summarizes these objectives:

Which FFP design elements and which moderators determine the consumer behavior effects of this marketing instrument in the German Aviation market?

The following chart (Figure 3.1) provides a preliminary overview on the planned research methodology. Detailed descriptions of the individual research steps are made in the following sub-chapters:

Overview on Research Methodology

Overview on Research Methodology

Research question	Which FFP design elements and which moderators determine the consumer behavior effects of this marketing instrument in the German Aviation market?

Research Field: FFP design elements + Moderating factors → Consumer behavior effects

Type of Research: Qualitative Research / Quantitative Research

Triangulation

Method of Data Collection:
- Secondary Data analysis of German aviation market
- Qualitative survey Expert interviews
- Quantitative survey Among FFP customer

Method of Statistical analysis:
- Textual and tabular evaluation of public data on FFP
- Comparative Textual evaluation
- Statistical evaluation using regression models

Hypothesis based design and comparative evaluation

Hypotheses:
- FFP design elements determine customer attitude, purchase behavior & customer relationship.
- Customer characteristics, travel characteristics and airline characteristics moderate this relationship
- Customer attitude, purchase behavior and customer relationship determine brand image, consumers' loyalty and customer lifetime value..

Variables:

FFP design elements	Moderating factors	Consumer behavior effects
• Monetary awards • Service awards • status awards • Number of partners • Transparency • Obscure conditions	• Consumer type • travel characteristics • Airline characteristics	• Consumer behavior • Consumer attitude • Brand mage • Purchase behavior • Attitudinal loyalty • Customer relationship • Customer lifetime value

Population: 30 million FFP participants at German Airlines

**Sample:** 502 Members of the Miles & More Program (only German FFP)

Figure 3.1 Overview on Research Methodology

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3.2 German aviation market and relevant FFP - an overview on the FFP sector

Chapter 2 has provided an overview on FFP in the international aviation market in order to classify relevant design elements in marketing practice. The German aviation market however has not been given particular consideration so far. An analysis of FFP in the German airline business has to first classify major Airlines and then classify FFP schemes offered by these airlines, to identify a research sample for the empirical analysis of FFP in the German airline market

The German aviation industry and its customers

The following tabular overview lists German passenger airlines offering charter and regular passenger flights in the international public aviation market. These airlines dispose of an IATA label:

Table 3.1

German airlines (sources: corporate profiles in text below)

Airline	IATA	owner	Passengers 2018 million	Turnover BN €	EBIT %	Aircrafts
Condor	DE	Thomas Cook	8.0	1.7	3.3%	59
Lufthansa German airlines	LH	Lufthansa AG	70.1	15.9	5.0%	365
Eurowings Germanwings	EW 4U	Lufthansa AG	38.5	4.2	-5.5%	205
TuiFly	X3	TUI AG	8.3	n.a.	n.a.	36

Condor was established in 1955 as a merger of three earlier German airlines (Condor, 2019, online). It is a charter airline doing holiday-flights mainly. It has been in the ownership of Thomas Cook UK (travel operator) since 2007, when the former owner Air Berlin went insolvent. Thomas Cook filed for insolvency in summer 2019, too. The Condor Airlines however are still in operation. Condor operates 59 aircrafts and holds 4 % of the German aviation market (Airliners, 2019, online). Condor realized a moderately positive EBIT of 3.3% in 2018 i. e. profits of 57 million Euros and turnovers of 1.7 billion Euros (Condor, 2019, online).

Deutsche Lufthansa AG is the major German flight corporation and owns the German airlines Lufthansa German Airline, Eurowings and Germanwings and additionally the

foreign corporations SWISS and Austrian airlines. Lufthansa AG employs 135.534 people and realized a turnover of 35.84 billion Euros in 2018 (Lufthansa Group, 2019, p. 15-19).

Lufthansa German Airlines is the largest German airline. It realized a turnover of 15.9 BN Euros in 2018 (down 3% from 2017), an adjusted EBIT of 5% and employs 34.7 thousand people (up 3% on 2017). 142 million passengers were counted in 2018 (up 7% on 2017) on 582,000 flights (Lufthansa Group, 2019, p. 44).

Eurowings (Lufthansa Group, 2019, p. 48) comprises the carriers Eurowings, Germanwings Brussels Airlines and the inner-German Luftfahrtgesellschaft Walter LGW. Eurowings is in the majority ownership of the Lufthansa Group and the Eurowings business segment has taken over the insolvent Air Berlin fleet. Eurowings count 205 aircrafts and employs 9255 people. Eurowings welcomed 38.5 million passengers in 2018 and has grown by 18 % on 2017 (due to the acquisition of Air Berlin). Turnovers are 4.23 billion Euros. Adjusted EBIT in 2018 are negative (-5.5%) in 2018 after a positive result of 1.5% in 2018 due to realignment costs.

TUI Fly GmbH the airline of the German touristic corporation TUI AG. TUIFly emerged in Summer 2007 by a merger of Hapag-Lloyd Express and Hapagfly and is a 100 % daughter TUI AG, which operates altogether 7 airlines, which are restructured at the moment to form a comprehensive virtual airline (TUI Group, 2019). TUI Fly GmbH owns 36 aircrafts and brings TUI guests to their holiday destinations via chartered flights. TUI fly transports 87.3 million passengers annually (TUI Fly GmbH, 2019, online). TUI Fly GmbH does not publish its performance data.

These data reveal that the German aviation market is strongly centralized and dominated by Lufthansa AG, which together with its 100% daughters Germanwings and Eurowings transports 86.9 % of passengers booking with German Airlines. While Lufthansa AG does line and charter flights, the competitors Condor and TUI Fly operate in the charter business only.

FFP of German Airlines

Due to this strong concentration in the German aviation sector, the range of FFP is limited: Lufthansa AG provides the program Miles & More and shares this with the other German Charter Airlines (Miles & More, 2019, online): TUI fly does not offer an own FFP any more (until 2009 there was a program called Blue Miles). Today TUI Fly participates in the Lufthansa Miles & More program (TUIfly.com, 2019, online). Equally, Condor has joined

the Miles & More Program. Credits can be collected with most Condor Flight Booking. There are restrictions for some non-European destinations (Condor, 2019, online).

Details on the Miles & More program are provided in the following sections. These are structured into miles earning schemes, expiry of credits, spending miles and status awards.

Earning miles

Miles & More is Europe's largest FFP and includes diverse partners, 37 international airlines thousands of hotels, travel, mobility, entertainment shopping and finance providers. Miles can be earned with every partner of Miles & More for instance when booking flights, hotels, rented cars or for shopping with partner corporations (Lufthansa, 2019, online). Hotels award 250 to 1,000 miles per night or 1-2 miles per Euro spent. Globally more than 300.000 hotels partner in the Miles & More Program (The luxury Travel Expert, 2019, online). Finance partners award miles for recommendations to friends and buying investments or insurances. Miles are earned automatically with every payment made with the miles & more card or with its online code with partner companies. Points from other award programs can be converted into Miles &More awards. Previously booked services can be awarded miles up to six months after the purchase (Miles & More, 2019, online).

Miles expiry

Miles expiry can be delayed to 36 months after the recent activity on the mileage account using the Miles & More credit card (Extended miles scheme). Expiry dates are fixed quarterly. At least 500 miles have to be collected to delay expiry. In order to prevent expiry, miles can be pooled with partners, who can be transferred up to 35,000 miles per year for a fee. Miles however cannot bet traded by third parties, which differentiates them from a currency (Miles & More, 2019, online).

Spending miles

Miles can be spent with every partner shop from an accumulated sum of 3,000 miles (at some partners). They are used most effectively for free flights on airlines of the Lufthansa Group or its partners. A mileage calculator is provided to calculate the collected miles and rebates for each flight (The Luxury Travel Expert, 2019, online). Airlines offer special destinations at reduced prices and regular miles awards for most flights. The Miles & More credit card automatically awards and spends miles. It is valid in more than 20 countries. It provides a welcome bonus of 4,000 miles and 15% discount voucher in the Miles-&More World shop. The number of miles which can be spent on service, purchase or flight depends on the current mileage (gratification) table available from the partners. For flights it depends

on the award zone of the destination. Under certain conditions flight category upgrades are available in exchange for miles (Miles & More, 2019, online).

Miles can equally be donated in order to help people via help Alliance (from 3,000 award miles onwards) or to reduce CO_2 emissions with the partner Myclimate (investing in sustainable projects) or Compensaid, which provides sustainable aviation fuel at 80 % lower emissions than kerosene (Miles & More, 2019, online).

Status awards

Miles & More differentiates (general) award miles and status miles of different categories: Award miles are simple bonus points which can be redeemed for rebates with partner company. Miles & More additionally awards travelers certain status miles which qualify these as Frequent Traveler, Senator or HON Circle Member. These are only valid to attain these status positions, when accumulated within one year and decay afterwards (unless for HON members, who enjoy 24 months expiry periods for status miles) (The Luxury Travel Expert, 2019, online). The number of miles necessary to earn this status has to be reached in a certain time and additional service and status benefits, not clearly specified in the General conditions are granted to the status holders.

According to "luxury Travel Expert (2019, online). The status of frequent Traveler is reached on 35,000 status miles or 30 scheduled flights with Star Alliance airlines in one calendar year. This target group benefits of 50% more award and 25% more status miles per flight, business class check-in, additional free luggage, exclusive reservation service and access to Star Alliance Business Class lounges. The Senator status is reached after 100.000 status miles within one calendar year and "Senators" additionally are welcomed in Star Gold Class lounges, can book any flight 48 hours before departure, receive priority luggage handling and a 50% companion award as well as a senator premium reward of 150% of regular miles. HON circle members hat to reach 600.000 miles in two consecutive calendar years to be accepted and benefit from senator status plus additional limousine and transfer services, personal assistance and a senator partner card for their partner.

Summing up the results of the analysis of the German aviation market and available FFP the Miles & More scheme is the only relevant FFP for travelers with German Airlines. Miles & More terms and conditions are general and make no definite commitments on the height of miles accumulated by value of purchased good or service and neither on the value of miles or redemption (Miles & More, 2019, online). No objective judgement on the economic value of Miles & More miles, e. g. in comparison to other rebate systems is possible on that basis.

3.3 Expert interviews to adjust and refine the review-based research model

To verify the applicability and validity of the research model for the German FFP market a qualitative pretest of the study has been conducted on the basis of interviews with leading executives at Aviation Companies and Professors in this field.

Choice of expert interview method

Qualitative research offers a wide range of methods (Mayring, 2016, p.57). Interview-based field research is a practical, compact and easily viable choice. Here the researcher is an external observer, e. g. the interviewer. By means of comparative interview evaluation, various comparable perspectives in several entities can be analyzed time-efficiently. Yin sees interview-based research as "an empirical inquiry that investigates a contemporary phenomenon in its real-life context; when the boundary between phenomenon and context are not clear; and in which multiple sources of evidence are used" (Yin, 2017, p. 23). There are some important methodological restriction to the interview approach, however: In interviews, only a limited range of information about the object of study is disclosed to the outside researcher. Interviewees are biased and subjective and frequently are not willing to provide complete or founded information (Mayring, 2016, p. 57-58). This study uses interviews as a starting point for further quantitative analysis only and triangulates the results of document analysis, interviews and survey to validate the results.

Interview Design

The study uses a problem-centered and semi-structured interview type which offers interviewees a set of open questions which can be answered but do not have to. In semi-structured interviews, the interviewee still has got room for his own representations (Mayring, 2016; Witzel, 1985). The semi-structured interview is particularly suitable for the analysis of diverse understandings of individuals at different levels and in different contexts, since semi-structured interviews invite participants to classify themselves as actors on the scene of the research object (Wilkren, 2005, p. 11).

To reach comparability of results the interviews are presented the same set of questions. The questions are designed to critically reflect and possibly extend the categories of the research model derived from the review of previous empirical studies in chapter 2 (Figure 2.5). The following questions are planned:

Table 3.2

Interview schedule

Issue	No.	Question
General information on participant:	1	What is your current position and to what extent are you involved in FFP design or evaluation on your job?
Design parameters of FFP:	2	Which parameters of FFP do you find effective or less effective and why? Present Behavioral effects of FFP:
Planned Behavioral effects of FFP	3	How do you currently develop your FFP to be more effective and what do you hope to achieve?
Moderators of FFP effectiveness	4	Do you think that the effectiveness of FFP depends on further parameters?
	5	Do you think that the effectiveness of FFP differs by customer type, travel type and airline type and in what respect?

The interviews are conducted via telephone and are recorded. All personal information is deleted and the results are anonymized. The interview results are transcribed in Appendix 0. The answers to the above questions are evaluated comparatively in textual form.

The results are interpreted in the context of the suggested research model and based on the results the model is verified and - if necessary - amended.

Interview Participants

The following leading experts have been recruited for participation in the interviews. Their data are summarized in Table 3.3:

Table 3.3

Overview of interview participants

	Name	Position	responsibility	Time in position
1	Christian Klick	Board member of Star Alliance	Information on Star Alliance airlines but no direct access to FFP data	2-3 years
2	Horst Findeisen	Part time advisor for Airlines former vice president commercial at Star Alliance	Strategy and commercial issues FFP information from earlier VP position	VP: 4 years
3	Jörg Schwingeler	Advisor in Airline Business	Strategy consultation Lectures on loyalty sales and E-Commerce	

		Lecturer at International University at Bad Honnef, Germany.		
4	Prof. Dr. Sven Reinecke	Professor at university of St. Gallen Marketing	Research in strategic marketing and CRM programs Referent for Swiss Air formerly	
5	Dr. Andreas Wittmer	Leader of airline competence center at university of St. Gallen	Major research issue: loyalty and formerly loyalty programs	

As available from the overview one participant (Christian Klick) is employed as a board member at Star Alliance. Two participants are advisors in the Airline business, where one was a former employee of Star Alliance and the other additionally is a lecturer at the University of Bad Honnef in Germany. Two participants are experts from the University of St. Gallen in the fields of marketing and airline management.

This selection of interview partners is balanced between a professional practice and academic context. Three participants are particularly involved in Star Alliance, and accordingly insiders concerning FFP in the German aviation sector. The participants cover special qualifications in airline management and marketing equally. The selection of interview participants accordingly is representative with regard to the issue of the impact of FFP in the airline sector on consumer behavior.

In the evaluation the interviewees are referred to by citing their participation number.

3.4   Quantitative survey design: survey among FFP members

The quantitative survey builds on the results of the interview pretest and assesses the research model in a quantitative way based on a representative survey among participants of the Miles & More program. Based on a multiple-choice questionnaire an explanatory factor analysis and regression model is drafted to test the propositions derived as detailed in chapter 2.

Sample definition

Quantitative research requires a data set, which is apt for statistical evaluation. This can be previously collected business data e. g. balance sheet or stock prices or data collected for the purpose of the respective analysis in an empirical survey e. g. among companies or

customers. Most previous empirical studies in FFP rely on customer surveys, which explore customers attitudes and effects of the incentive scheme (e. g. Gao et al., 2018, ma & Li, 2017; Sandada & Matibiri, 2016; Lin et al., 2016; Mathies & Gudergan, 2016; Kreis & Mafael, 2014; Colakoglu & Artuger, 2013). Business data from airlines e. g. booking records as used by Orhun & Guo (2018), are hardly published and rarely available for academic evaluation. Choosing a customer survey, this study avoids the problem of data access and is directly comparable to many earlier publications.

To assess the effect of the FFP design of German airlines on consumers in a consumer survey, an adequate target group, which represents the collective of concerned individuals i.e. consumers have to be defined (Fricker, p. 196). Target groups should be involved in the issue of analysis and know what they speak of (Wyatt, 2000. p. 425).

Chapter 2 has shown that FFP designs are complex and comprise several elements which frequently are explicitly defined in a marketing slang while the factual performance of the program from an outsider perspective remains open. As section 3.2 has shown, the Miles & More Program fully meets this generalizing description: The assessment of the value of miles depends on customers subjective perception of the attractiveness of the Miles & More program.

Consumers not involved in the Miles & More scheme can hardly understand, the complex mechanisms of premia acquisition and redemption within the framework of a survey alone and are usually not competent to assess to what extent a potential participation would change their behavior. That means that only Miles & More Members can mediate a representative impression of the impact of Miles & More membership on consumer behavior. A customer survey has to explicitly target at Miles & More members.

Addressing a representative sample

For efficient data collection the survey has to be conducted electronically via a Web protocol. This study uses the Website Survey Monkey (2019, online) for data collection. The survey questions are placed on the website and Survey Monkey generates a weblink that can be sent to potential participants. Data are collected anonymously for download on the portal.

The surveyor contacted the managing directors of three networks for frequent flyers.

The managing directors asked their members to fill out this survey by providing the link. The survey includes the initial question for Miles & More membership and ends if "no" is checked.

Which sample size is required to reach a representative result? To calculate the necessary sample size Survey Monkey (2019/2, online) provides an online tool, which uses the population size and the required confidence level (probability that the sample correctly identifies the characteristics of the population) and error margin (range of allowed deviation of results for population and sample). The sample size SS is calculated as follows:

$$SS = \frac{\frac{z^2 \cdot p(1-p)}{e^2}}{1 + \left[\frac{z^2 \cdot p(1-p)}{e^2 N}\right]}$$

N is the population size e is the margin error and z the z-score, i. e. the number of standard deviations of a given proportion from the mean.

The analysis is done at a confidence level of 95% (resulting z-score 1.96) and accepts a margin of error of 5 %. The population size is the total number of Miles & More members. Miles & More currently has got 30 million members (Luxury Travel Expert, 2019, online). According to the sample size calculator **385** completely filled in survey forms are required to reach representativeness.

Fundamental Categories and Coding

In order to assess the propositions within the framework of the research model (Figure 2.5) derived from previous empirical studies, the categories of the model have to be coded in the form of research questions. All survey questions are enclosed in the appendix in the mentioned tables.

The model requires three categories of questions:

1. Design elements of frequent flyer programs (input factors): 6 categories
2. Moderators of consumer behavior effects (moderating factors): 3 categories
3. Behavioral effects of FFP at consumers (target factors): 6 categories

To assess each construct ideally several contingent research questions are used. The study takes recourse to constructs validated in previous studies if possible, to ensure that the part questions in fact load on a coherent category. The survey questions are formulated in the form of test statements and participants indicate their level of agreement to each question. To ease statistical data evaluation, items for design elements (1) and behavioral effects (2) are coded on a five level Likert scale, i.e. on an ordinary scale which is organized as follows:

Table 3.4

Coding of preference related research questions

Code	Level of Agreement
1	I do not agree at all.
2	I hardly agree.
3	I partly agree.
4	I agree to a large extent.
5	I fully agree.

The differentiation of five levels is differentiate enough to allow various answers but limited in complexity considering the rather narrow time range participants dispose of to decide on their choice (given a set of about 70 survey questions). The choice of an irregular number of possible answers is useful for participants as well as statistical analysis to identify an unequivocal mean value (Nardi, 2017, p. 80-84).

Moderating factors are coded according to the requirements of the item and the codes are described in the following paragraph.

Surveying moderators of FFP impact on customer behavior

Moderating effects of customer behavior are assessed first since these are related to customer demographics and travel patterns. Moderators of FFP effects comprise customer characteristics, travel characteristics and airlines characteristics. An initial question rechecks Miles & More Membership. If "no" is checked the test ends since only Miles & More customers are surveyed.

Customer characteristics according to the review and hypothesis H8 comprise customer age, income and consumption motivations. Age and income categories are adopted from Park (2006, p. 372).

As available from the concept matrix of moderators (**Table 0.5**, appendix) previous research assesses four major travel characteristics: preferred type of travel (leisure or business), usual length of flights, frequency of travel, usage of further loyalty programs.

Preferred type of travel assessment is adopted from Orhun & Gao (2018, p. 32), who assess the percentage of business flights. The questions on flight length and frequency and loyalty program usage are adopted and simplified from Orhun & Gao (2018, p. 32) and Chin (2002, p. 60).

Airline characteristics are assessed in a compact way by Sandada & Matibiri (2016, p. 45) and equally checked for reliability. This study adapts general questions on flight safety and quality to the assessment of Miles & More partner airlines. The questions are coded on the 5 level Likert scale described in

Table 3.4.

Surveying FFP design elements

FFP design elements have been classified into monetary rewards (H1), service rewards (H2), and status rewards (H3) in the review section. The concept matrix (**Table 0.4**, appendix) lists authors who have measured these categories. Some authors describe their surveying and coding system.

Ma & Li (2018, p. 304) lists survey questions to describe material rewards (tangible rewards), service rewards (preferential treatment) and status rewards (perceived status) coherently and referring to earlier sources (Shi et al, 2015, De Wulf et al., 2001, Wetzel et al., 2014), which have validated the category system. Ma & Li formulates the questions to compare several category systems. The questions are adjusted to test customers perception of a single program (Miles & More) here to realize contingent results:

The review has found three key design parameters describing quality characteristics of FFP beyond promised rewards. Yan & Cui (2016, p. 6) describe some of the items they have formed by reliability testing and use them for meta-analysis. These are adapted to the Miles & More scheme and transformed into test questions as follows:

Surveying consumer behavior outcomes

According to the research model (Figure 2.5), five factors referring to behavioral outcomes of FFP design at the consumers have to be considered. These are customer attitude, brand image, purchase behavior, customer loyalty, customer relationship and customer lifetime value. The concept matrix of behavioral effects (**Table 0.3**, appendix) summarizes authors who have used corresponding categories for earlier empirical research. Some scales are available from these FFP related studies.

Colakoglu & Artuger (2012, p. 12) and Meyer-Waarden (2013, p. 189) confirm the composite reliability of self-designed scales of behavioral and attitudinal air passenger

loyalty in a survey on FFP effectiveness. These scales are adopted for the target category of loyalty as attitudinal loyalty and purchase behavior (=behavioral loyalty).

Ma & Li (2017, p. 304) assess relationship quality on a validated scale adapted from Wulf et al. (2001). This scale is used for the category "customer relationship" in this study.

Kreis & Mafael (2014, p. 599) indicate a reliable scale of perceived customer value measures. A selection of several general part questions related to psychological and interaction are adopted to assess customer lifetime value in this survey.

Measures of customer attitude, purchase behavior and brand image are scattered and not tested for reliability in FFP related studies. This survey relies on more coherent scales published in general marketing literature:

Park et al (2010. p. 6) test several measures of consumer attitudes on brands and find a coherent construct of brand-self-connection which is valid across three different products (Oatmeal, IPOD, university). This scale is adopted to assess customer attitude on the Miles & More brand here.

To measure brand image the study relies on Bauer et al.'s (2008, p. 218) non-product specific and reliability tested brand image scale which is based on Keller (1993, p. 7) and Aaker (1996, p. 118).

3.5 Methods of statistical analysis: Explorative factor analysis and regression for hypotheses tests

Section 3.5 develops the statistical methodology to empirically validate the model and test the hypotheses.

Explorative factor analysis and construct formation

The survey structure illustrates, that each construct of the work model is explored using several research questions. To integrate these to coherent constructs the study uses reliability analysis corresponding to the prior studies from which the questions have been deducted. Reliability analysis calculates the standard loading of the part questions on the assumed underlying construct using the measure of sampling adequacy (MSA), which ranges from 0 to 1 and should be above 0.5 to assume construct coherence. The Cronbach Alpha Value assesses the contingency of the construct as a whole. According to Nunally (1978, p. 245) Cronbach Alpha values above 0.7 are acceptable.

Using factor analysis, the constructs are formed, which are used for further examination. These are displayed in the appendix.

Descriptive analysis, normality and outliers

All synthetic constructs are metrically scaled, travel characteristics, age and income represent the original survey results and are ordinally scaled. The constructs (**Table 0.13**, appendix) are analyzed descriptively by determining the sample moments. Potential outliers are determined and eliminated. Constructs redrived by factor analysis are tested for normality with the Kolmogorov-Smirnov and Shapiro-Wilk test. The variables of regression models should be normally distributed.

Correlation analysis

Correlation analysis according to Bravais Pearson is applied, which examines the reliability of the binary relationships between the target parameters, customer attitude, brand image, purchase behavior, customer loyalty, customer relationship and customer lifetime value. Bravais-Pearson correlation is adequate since the variables derived by factor analysis are metrically scaled (Brosius, 2011, p. 517). The hypotheses are accepted from a p- significance level of 95%.

Hierarchical regression modeling

Hierarchical multiple linear regression is a statistical method to assess the impact of several explaining factors on a single target factor. A multiple regression model has got the form:

$$Y = a_i + X1 \cdot b + +X2 \cdot c + X3 \cdot d + \cdots + \varepsilon$$

The regression-coefficients b, c, d… are calculated by minimizing the distance of the n-dimensional regression line from the individual data vectors.

The total model fit is determined from the coefficient of determination R^2, the ratio of the distribution of results explained by the model from the total distribution. R^2 is between 0 and 1, when 1 indicates an optimal model fit (coincidence of data and regression line). To examine the model as a whole an ANOVA Test is conducted.

To examine the hypotheses for the regression model, the individual model parameters are tested for significance in a t-test. Values from a significance level of 95% ($p <= 0.05$) are accepted. For each hypothesis six regression models have to be examined, to assess to what extent FFP design elements and moderators impact the consumer behavior effect chain. The hypotheses are accepted if at least one effect is significant.

The input factors are classified in four sections, which are analyzed by hierarchical regression models, i. e. adding one factor package with each regression step. The packages

comprise a) controls b) the moderator airline safety & interaction variable, c) the moderator airline quality and interaction variable, and c) independent variables. The interaction variables are necessary, to examine the reliability of the moderator effects and are formed as the product of standardized independent variable and standardized moderator. Here the inputs and moderators are standardized anyway as a result of their factor analytical determination. The impact of the interaction variable on the target variable should be significant according to the t- test for the interaction variable to assume moderation. To assess the significance of the independent variables, an inclusion model, which contains all controls, factors and moderators is used. (Backhaus et al., 2012, p. 63ff).

Validity and Reliability Checkup

Construct validity refers to the fact that a measuring instrument actually measures what it was designed for in practice. This means that the systematic measurement error is minimized. Validity ultimately results from a well-founded selection of the categories of the measurement model itself and cannot be conclusively checked mathematically. It is based on a logically correct selection of model structures (Hildebrand & Temme, 2006).

It is recommended to check research methodology for construct validity, internal validity, external validity, and reliability. Self-control by reflection and guided check-ups is essential to attain representative results (Bisman, 2010. p. 3; Kempster & Parry, 2011, p. 106).

External validity assesses to what extent the empirical findings may be generalized for other samples (Cooper & Schindler, 2006). In order to ensure external validity, Weiber & Mühlhaus (2014, p. 134) recommend the use of appropriate theory or theoretical propositions. The external validity of this study is provided since the whole concept rests on a profound theoretical framework, a synopsis of branding theory, the purchase channel model and customer relationship theory. The hypotheses to be tested are directly derived from previous empirical research in determinants of the effectiveness of FFP on consumer behavior.

Construct validity refers to the exactness of the construct-related measures and potential biases caused by systematic measurement errors (Cooper & Schindler, 2008). In order to enhance construct validity, Weiber & Mühlhaus (2014, p. 137) suggest the use of a variety of different data sources, the establishment of a chain of proof, its inclusion as well as a review of the case study report by the key informants. This study refers to a representative sample of (at least) 385 data sets resulting from a survey of Miles & More members, which due to their affiliation with the Miles & More Program are informed on the program details.

Their attitudes and behavioral patterns represent the collectivity of Miles & More Members. Construct validity may thus be assumed.

Internal validity evaluates the correctness of the conclusions and the corresponding causal relationships (Cooper & Schindler, 2006, p. 240). Internal validity in this study is ensured by the survey method. The survey questions have been compiled from previous comparable research, which has proven their internal validity based on other samples. The questions are partly adapted to the Miles & More scheme but remain unchanged content-wise. The selection of several sources for the constructs avoids author specific biases for this study. Internal validity may thus be assumed.

Reliability refers to the avoidance of systematic measurement errors in data evaluation (Cooper & Schindler, 2006, p. 384). This study ensures reliability by statistical reliability tests of all constructs using Cronbach Alpha and further liability measures (compare previous paragraph).

The checkup of validity and reliability based on Weiber & Mühlhaus (2014, p. 134) reconfirms the conformity of the approach with established research norms.

Empirical research overview

The following overview summarizes the research design steps, indicating their implementation as well as the results of the representativeness, validity and reliability check-ups.
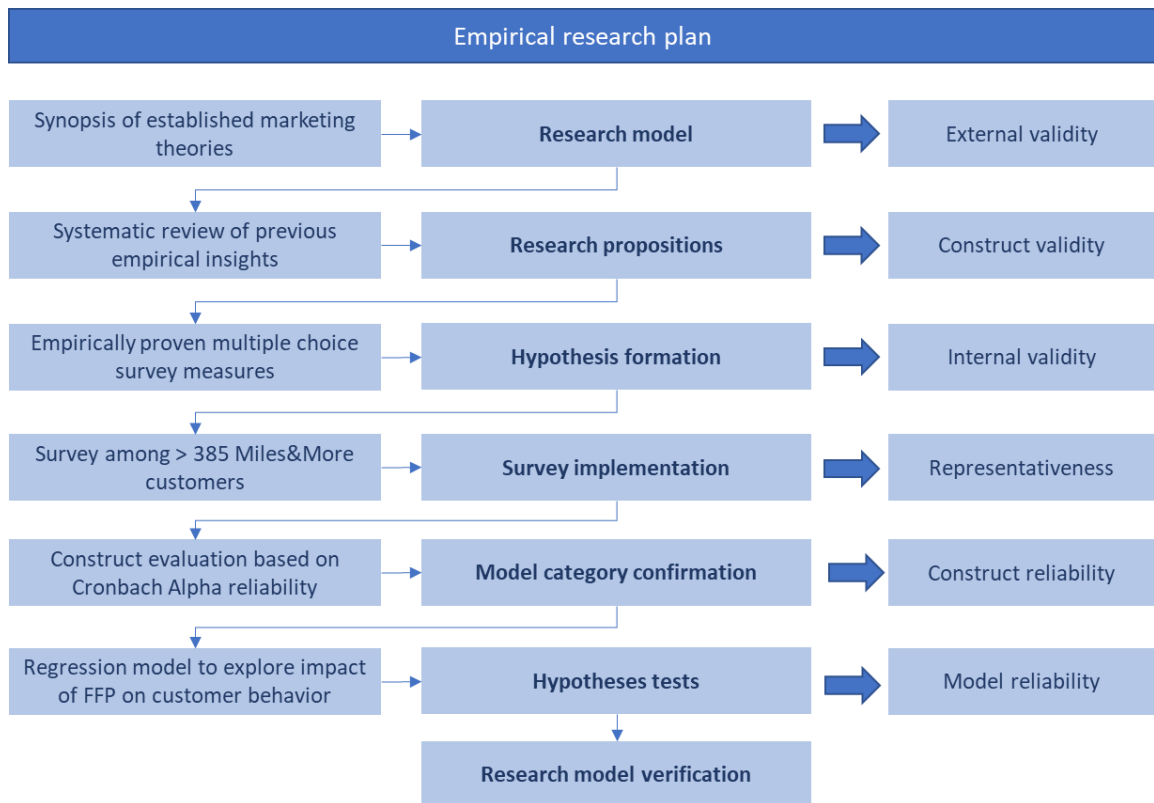
Figure 3.2 Empirical Research plan

(Slightly changed to sharpen the term "hypotheses")

Setting off from a synopsis of established marketing theories – branding theory, customer relationship theory and the purchase funnel. In this way, an externally validated research model of consumer behavior effects of FFP has been developed.

The model has been verified in a systematic review of previous empirical studies on the effectiveness of FFP on consumer behavior, which ensures construct validity. Relevant FFP design elements and moderators of their impact have been identified to develop adequate research hypotheses.

Referring back to research question sets validated in previous empirical studies an own empirical multiple-choice survey has been developed and coded, which ensures internal validity.

The survey collects data from 502 Miles & More members, which are competent to judge on FFP design elements and are representative for the population of Miles & More members concerning their consumption behavior. The data set is condensed to the categories of the research model by Cronbach Alpha reliability test, to ensure construct reliability. The validated constructs become input and output factors of regression models which are tested

for factor and model significance using ANOVA and T-Test, in order to confirm model reliability. A verified quantitative research model describing the impact size of FFP design elements and potential moderators on consumer behavior results.

Summary of Propositions

Integrating these three theories into a comprehensive framework, the following summative propositions on the effect chain of customer behavior resulting from effective FFP design have been derived from previous empirical research as follows:

Preliminary hypotheses overview – consumer behavior effect chain

	Consumer behavior effect chain	
1	Positive customer attitudes enhance airlines' brand image.	• Park (2006) • DeKay et al. (2009) • Mimouni-Chaabane & Volle (2010) • Ma & Li (2017)
2	Customer booking (purchase) behavior contributes to customers' loyalty.	• Orhun & Guo (2016) • Gao et al. (2018) • Meyer-Waarden (2013, 2008) • Mathies & Gudergan (2016) • Vilkaitė-Vaitonė & Papšienė (2016) • Colakoglu & Artuger (2012) • Sandada & Matibiri (2016) • Hossain (2016) • Whyte (2003) • DeKay (2009)
3	Sustainable customer relationships contribute to high customer lifetime value.	• Mimouni-Chaabane & Volle (2010) • Keh & Lee (2006) • Yan & Cui (2016) • DeKay et al. (2009) • Kreis & Mafael (2014) • Ledermann (2007)
4	High airlines brand image is correlated to high loyalty of FFP passengers.	• Park et al. (2006) • Mathies & Gudergan (2016)
5	High airlines customer lifetime value is correlated to high loyalty of FFP passengers.	• Ma & Li (2017) • Lin et al. (2016) • Mimouni-Chaabane & Volle (2010) • Park (2006) • Lin et al. (2016)

On the input side and according to task No. 1 (Table 1) design elements of frequent flyer programs have to be defined. Typical elements of frequent flyer programs are extracted from form previous empirical research as follows:

Table 3.6

Propopsitions overview – determinants of FFP impact

	Determinants of FFP impact	
6	The positive impact of FFP on customer behavior increases with the availability and height of monetary rewards.	• Ma & Li (2007) • Mathies & Gudergan (2016) • Kreis & Mafael (2014) • Mimouni-Chaabane & Volle (2010) • Keh & Lee (2006)
7	The positive impact of FFP on customer behavior increases with the availability and range of service rewards.	• Ma & Li (2007) • Mathies & Gudergan (2016) • Kreis & Mafael (2014) • Whyte (2003) • Chin (2002)
8	The positive impact of FFP on customer behavior increases with the availability and range of status rewards.	• Mimouni-Chaabane & Volle (2010) • Orhun & Guo (2018) • Gao et al. (2018)
9	Status rewards outweigh monetary and service rewards concerning the impact on customer behavior.	• Gao et al. (2018) • Orhun & Guo (2018)
10	High numbers of FFP partners increase the positive impact on customer behavior.	• Yan & Cui (2016) • Vilkaitė-Vaitonė & Papšienė (2016)
11	Transparent redemption thresholds distinguishing FFP members unfold a positive impact on customer behavior.	• Vilkaitė-Vaitonė & Papšienė (2016) • Yan & Cui (2016) • Keh & Lee (2006)
12	Obscure validity and redemption constraints impair the impact of FFP on customer behavior.	• Mathies & Gudergan (2016) • Whyte (2003)

These design characteristics of FFPs are assumed to determine customer behavior. However, further moderators could be of relevance: Attitude research holds that human behavior is determined by environmental characteristics (here FFP design elements) and personality traits (Lewin, 1934, p. 249; Köhler, 1920. p. 185-187). Previous research finds support that FFP acceptance is co-determined by customers' characteristics, travel choice and airline safety and quality.

Table 3.7

Propositions overview – moderators of FFP impact

	Moderators of FFP impact	
13	Customer age, income and consumption motivations moderate the impact of FFP design on customer behavior.	• DeKay et al. (2009) • Park et al. (2006) • Gao et al. (2018) • Kreis & Mafael (2014)
14	The characteristics frequent flyer, business traveler and registry on affiliated programs positively moderate the impact of FFP design on customer behavior.	• Mathies & Gudergan (2016) • Orhun & Guo (2018) • Chin (2002) • Meyer-Warden (2013) • Ledermann (2007)
15	Airlines safety and service quality positively moderate the impact of FFP design on customer behavior.	• Ledermann (2007) • Park et al (2006) • Yan & Cui (2016)

Referring to the theory-based classification of input and output factors of the preliminary research model the approach has now been concretized. The theoretically founded research model contains essentially three categories: Design elements of German airlines' FFP on the input side, moderating factors with customers, airlines and travel planning and the output factors describing the effect chain of consumer behavior based on three marketing theories.

4 EMPIRICAL RESULTS OF INTERVIEWS WITH EXPERTS AND MILES & MORE MEMBER SURVEY

4.1 Results of the qualitative expert interviews on FFP design, its customer impact and potential moderators to this relationship

Section 4.1 evaluates the interviews with the five participants. As specified in section 3.5 the interviews are evaluated comparatively by research question and as detailed in the interview schedule (

Table 3.2) refer to

- Design elements of FFP the participants find particularly effective
- Development requirements for FFP
- Airline related moderators of the efficiency of FFP
- Customer and travel specific moderator of FFP

The following paragraphs are structured accordingly.

Effective design elements of FFP

FFP have changed significantly in their form and effect since the time of their establishment, which has contributed to a loss of attraction from a customer perspective: While twenty years ago airlines intended to maximize the booking quotas of their aircrafts, today customers struggle to obtain seats at all. Today VIP seats are frequently not available, while miles have to be used to obtain seats partly. Airlines have further changed their FFP from miles- based to value-based incentive systems, i.e. today, miles are granted only when price premia as compared to budget flights are paid.

Rare flyers will not find FFP attractive and would possibly prefer systems like "buy 10 get one free", which are not offered any more today. FFP mainly address customers who are not "price-triggered" abut desire convenience, classical tourists and people traveling to see friends and relatives are usually interested in getting a bargain flight. Although discount airlines offer these just to acquire budget tourists more easily major airlines do hardly benefit of price rebates.

Price rebates are not efficient in the FFP segment anymore. The conventional complimentary services like travel insurance and rented car or hotel service, however, are no ideal incentives

for business travelers either since most companies have got own regulations on such travel related issues. Highly complex external partnerships are difficult to place in the business segment.

The most important element about FFP is that miles can be redeemed in the form of other consumer products than flights, which means that miles become sort of a currency. While the required flights are frequently unavailable for the collected miles consumers can at least buy products at a lower redemption basis.

Status rewards are the most effective impetus for customers to utilize FFP. Lounge access, fast tracks and extra bags are of interest to the major target group of status-oriented frequent business flyers.

FFP incentives directed to "vanities" and image appeal a lot to business travelers. These do not mainly aim at collecting credits but at boasting with the personal advantages they obtain, e.g. being driven from the airport to the aircraft in a luxury, to make all other passengers understand, who they are. Further effective and more practical convenience amenities are having a shower during airport stays, getting tasty lunch during the flight and avoiding security checks. These amenities are of particular relevance to people traveling for business purposes a lot and who just have to arrive well rested and on time. These special services are provided to inner circle members only, but these are ready to pay additional fees to maintain that status. For those status members, free flights are not of interest since they travel permanently anyway. They only want to keep their status and amenities, no matter at what price.

Development requirements for FFP

The interviewees opinions on development requirements to ensure the survival of FFP inform on which development paths the incentive system could take in future:

The transformation of FFP from miles-based to value-based systems will continue since flights are usually fully booked (or have been before the Corona-crisis). Airlines could expand their programs to further partners e. g. banks, which to date is only partly successful. Collecting miles is fascinating consumers no matter which mechanism is used.

The reach and number of partners of FFP has to be expanded. The cooperation of banks would enable frequent flyers to utilize their FFP card for daily bank transactions for instance. Bonus payments could be redeemed more easily if the FFP would be aligned with regular banks.

FFP could be designed more effectively, if the companies would refer to further customer data as stored by online media like Google for instance. Joint ventures with information pools could be helpful to explore individual customers requirements in more detail. The expansion of mile redemption schemes could be another option to make FFP more attractive. To date the number of products and brand, FFP can be utilized for is limited. Coalition programs e.g with cinemas, filling stations and restaurants for instance could contribute to spread FFP and be used for the collection of consumer data.

FFP should be directed to frequent flyers and offer amenity incentives to an even larger extent, which will ensure the future of FFP. True frequent flyers estimate amenity and status rewards, airlines cannot offer to all passengers. To make FFP more effective it is important to distinguish from the broad market by particular details e. g. personal service and convenience, just price rebates are not enough.

FFP bonus points are not ideal for conventional consumer goods: These are bought on the basis of best prices online rather than by using miles credits. He adds that the great years of loyalty clubs and incentive communities of the 1990ies has passed with the establishment of a bargain culture in consumer shopping.

The future of FFP seems questionable since in effect all airlines offer the same service: transportation. According to him, all that counts is scheduling and logistic performance. With the transition from miles to credits similar to an alternative currency, these credits have become taxable, which questions the whole miles concept and possibly the effect of FFP on consumer behavior could be lost. Airlines have to develop mileage scheme to differentiate from competitors since in fact every airline offers the same product and to date the competition is by pricing miles. Loyalty programs could turn into value drivers by keeping customers loyal to the provider. FFP should focus on the flight domain in future rather than substitute currencies. The true value of miles lies in time, status and convenience advantages during travel and these benefits should be elaborated and extended. Possibly alternative systems than mileage programs should be developed to equally address non-frequent flyers and gain these as loyal customers.

Airline related moderators of the efficiency of FFP

The attraction of mileage systems largely depends on the size and reach of the partner network, which offers customers extensive options to utilize their miles. He, however, complains that in recent years there has been the inverse trends towards stand-alone

programs. The range of external partnerships of FFP determines their attractiveness for customers.

The airlines' network and reach and its correspondence to the requirements of the traveler is the most essential decision criterion for airline selection from a customer perspective and the most important moderator of FFP effectiveness. The programs gain in effectiveness with their reach and applicability. With the number of network participants, the range of offers increases, which attracts further members and increases the impact on customer loyalty. Far reaching networks enable partners worldwide to benefit of travelers.

The major quality characteristics of airlines are punctuality, logistic convenience and pricing. FFP are a secondary incentive to book with the airline only, the adequacy of the major quality characteristics accordingly is essential to gain FFP participants.

FFP are particularly effective when the reputation of the airline concerning the major quality criteria is not perfect. FFP can compensate travelers for other short comings. Discount carriers for instance can grant additional rebates through FFP, while for Swiss Airline, which enjoys an excellent reputation, FFP hardly have brought additional customers.

Customer and travel specific moderators of FFP

The attraction of mileage systems depends on customer and travel type. FFP are attractive to frequently flying business customers mainly. Private holiday flyers on the other hand are rather budget-oriented and utilize mileage systems to a much lower extent. Finally, the effectiveness of FFP largely depends on the customer, FFP should be designed for a special target market.

True frequent flyers can still benefit from discount miles no matter for what purpose they travel. When job-related commuters travel home to their family every weekend FFP could be attractive, since they book the same flight with the same airline repeatedly. Leisure travelers of course collect miles, but rarely will be able to redeem them, since they do not reach the required amounts of miles.

Employees usually are paid their business flights by the company and accordingly do not have to observe strict budge restrictions and thus could benefit from FFP in particular (participant 1). FFP are effective when the traveler, who benefits from the bonus system does not have to pay for it, but his company is charged with the costs while she herself benefits. Private travelers and self-employed business men do not enjoy mileage systems so much since they are aware that it is them who pay for the benefits after all. If companies restrict miles access for their employees the attraction of booking with an airline due to the

availability of FFP programs diminishes greatly. Most companies have abolished personal benefits during flights anyway, which has reduced the attractiveness of such incentives. Customers' interest in FFP depends on their nationality and their consumption behavior. FFP are an instrument targeting local markets to a large extent since international travelers enjoy little opportunity to redeem the credits in other countries or collect enough credits, when they go with the airline not regularly. In effect, for customers that FFP program is most effective which enables them to retrieve, rather than gather the maximum number of miles. Since customers book in their local markets most frequently, they usually benefit most of those FFP their local airlines offer. Miles & More for instance is targeted to the German market and German travelers mainly.

Summary of interview results

The following tabular overview summarizes the results of the interview evaluation and refers the points to the FFP design and moderator categories of the work model (Figure 2.4):

Table 4.1

Overview of interview results

Code	Category	Interview results
AM	Height & availability of monetary awards	• Change from miles- to value-based reward scheme (P1) • Price is not enough to distinguish (P4) • Miles as currency (redeem products) (P5)
AS	Availability & range of service awards	• Convenience incentives are estimated & worth extra payment for frequent flyers & should be expanded (P4) • Service awards save time and money (5) • Too complex partnerships impair attractiveness to business flyers (P4)
AT	Availability & range of status awards	• Status rewards are most effective for target group of frequent business flyers (P2) • Incentives appealing to vanity & image are most effective (P3 &4)
QP	Number of FFP participants	• Growing number of member businesses increases FFP attraction (P2) • Larger variety of shops, filling stations & restaurants (P2)
QT	Transparency of redemption	• Partnerships with banks ease redemption, currency like function (P1) • Easier access to bonuses if not tied to flights (P2)
QV	Obscure validity & redemption constraints	• Storage of customer data to explore consumption habits (P2)
MC	Customer characteristics	• Only frequent flyers (since otherwise no redemption) (P1 & P5) • Nationality (P4) • Consumption behavior (P4)

		• Customers in local market of airline (P3) (more often frequent flyers)
MT	Travel characteristics	• Business flyers (benefit but don't pay themselves (P1 & P5) • Holiday flyers (paying themselves) are rather budget oriented (P4)
MA	Airline characteristics	• Size & reach of partner network (P1 & P4) • Major performance aspects: punctuality & logistic quality (P3) • Airlines network & Reach (P3 & P5) • Airline reputation (compensated by FFP) (P4)

The interview results accordingly confirm the categories of the work model. All categories have been addressed by the interviewees and have been found relevant to the consumer behavior effect of FFP.

- Monetary awards in FFP have lost in importance, since price discounts are increasingly a domain of discount airlines. The financial incentive could be made more effective if miles were increasingly accepted as a currency.

- Convenience and service incentives are of high relevance to the major target group of FFP (frequently flying business travelers). These depend on service during their long journey. Service incentives could be used to differentiate from competitors increasingly. Complex partnerships find low acceptance with businesses.

- Status rewards have got the highest potential to impact on consumer behavior, since these a visible and enhance travelers image status.

- A high number of FFP participant companies enhances the programs impetus and consumer value.

- Transparency of mile-redemption should be improved e.g. by cooperating with banks and establishing miles as a more widespread pseudo-currency.

- Obscure conditions are hardly addressed by the participants. The possibility to store and evaluate consumer data is useful for providers.

Customer, travel and airline characteristics have been confirmed as potential moderating factors:

- FFP appeal to frequent flyers mainly. There could be differences depending on passengers' nationality and consumption habits. Passengers with residences in the airlines home country benefit more of their FFP since they book with the airline regularly.

- FFP mainly appeal to business flyers and to passengers in business related contexts, while holiday flyers hardly benefit since these are rather budget than service and status oriented.

- Airline FFP partner network size and reach is essential to the popularity of the program. Airlines could compensate low general reputation by FFP. The major performance aspects punctuality and logistics quality are probably more important determiners of consumer behavior than the FFP itself.

Research model adaptation based on interview results

The interview results mainly confirm the propositions retrieved from the review. But some model adjustments have to be made. The comprehensive interview founded model is displayed in Figure 4.1 (following page).
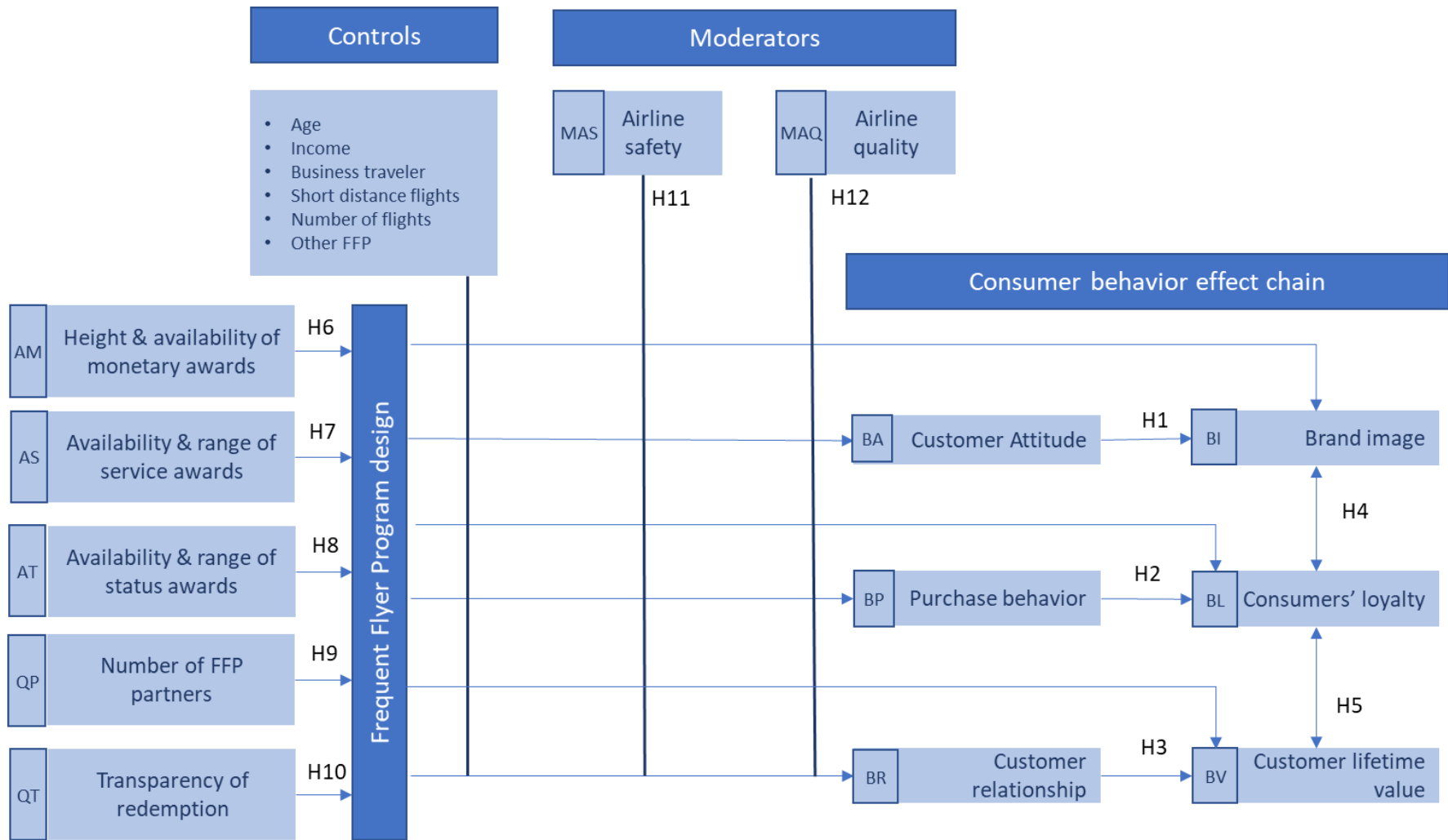
Figure 4.1 Interview founded research model and hypotheses

The following changes have been made to the research model based on the interview results: The impact of "obscure validity and redemption conditions" has not been addressed explicitly in the interviews. The interviewees value this point in a positive way as transparency of redemption only. Proposition P12 is dropped accordingly.

The comparative impact of service and status awards has not been addressed by the interviews. Rather it has been found that all awards take a comprehensive effect. P9 is dropped, too.

The major moderators at the level of airlines according to the interviewees are airline quality and airline safety. Multiple possible effects of travel and customer characteristics have been mentioned, which due to their diversity, however, are rather controls than moderators. The research model thus is concertized to consider the moderators airline safety and perceived quality and the following control variables concerning customer and travel. The following items have been retrieved: customer age, income, traveler type, distance of flights, number of annual flights and membership in one or several FFP.

Based on the interview results the research propositions derived from the review now are transformed into a set of hypotheses for the quantitative study as follows. The propositions concerning the model of target factors – effect chain of FFP at the customer level have been confirmed. The hypotheses result as follows:

H	Hypotheses concerning customer behavior effect chain
	Consumer behavior effect chain
1	Positive customer attitude increases airlines' brand image.
2	Customer booking (purchase) behavior increases customers' loyalty.
3	Sustainable customer relationships increase customer lifetime value.
4	High airline brand image is positively correlated to high loyalty of FFP passengers.
5	High airlines customer lifetime value is positively correlated to high loyalty of FFP passengers.

Propositions 6 to 11 have been confirmed based on the interviews an P12 is deleted, due to complementarity to P11. The following hypotheses result.

H	Determinants of FFP impact
6	Availability and height of monetary rewards in FFP positively impact customer behavior.
7	Availability and height of service rewards in FFP positively impact customer behavior.
8	Availability and height of status rewards in in FFP positively impact customer behavior.
9	High range and reach of FFP partner networks positively impact customer behavior.

| 10 | Transparent redemption conditions in FFP positively impact customer behavior. |

The moderating effects are airline quality and airline safety. Customer and travel related aspects are considered as controls (no hypothesis), due to the diversity of possible impacts.

H	**Moderators of FFP impact**
11	Perceived airline safety positively moderates the impact of FFP design on customer behavior.
12	Perceived airline quality positively moderates the impact of FFP design on customer behavior.

The survey questions (enclosed in appendix 0) are selected so, that only the relevant determiners and moderators are considered. Questions deleted upon the interview results are marked in red.

4.2 Descriptive analysis of Miles & More member survey results

The analysis results are evaluated in SPSS and illustrated in Excel. The complete results are included in appendix 0 and a summary of the distribution table in Table 0.1 (appendix 0) the data are anonymized and IP addresses are deleted.

Participants

Altogether 699 participants started the survey. 192 did not finish it, where almost all of them ended after the first part question. Five participants were no FFP members and had to stop after the first part question for that reason. 502 valid FFP members remained and completed the survey. Only these valid data are used for further analysis and saved in the SPSS dataset.
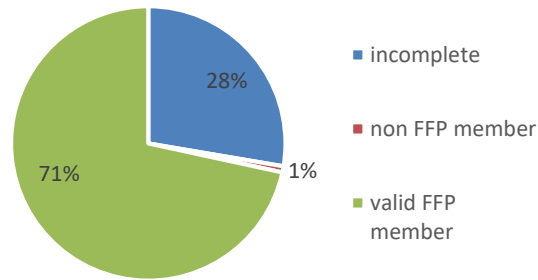
Figure 4.2 Survey participants by valid results

55% of the participants are between 30 and 49 years of age. Only 7% are younger than 20 or older than 60 years. Obviously, the study has addressed customers in their business life mainly (see Figure 4.3).

Figure 4.3 Participants by age groups (Question MC1)

The majority of the participants indicate to earn more than 81,000 Euros per year, while only 15% earn 40 TEUR or less. On average the participants are in income group 5 (mean 5.11) which indicates an average income of 61 to 80 TEUR. The distribution is strongly left skewed, however, i.e. the majority of participants earns more than average (see Figure 4.4). The addressed target group is above the German average which is 3,770 euros per month or 45 TEUR per year (Statista, 2019), in its salary structure.

Household income
distribution of frequencies (n = 502)

- <=20 TEuro
- 21-40 TEuro
- 41-60 TEuro
- 61-80 TaEuro
- >=81 TEuro
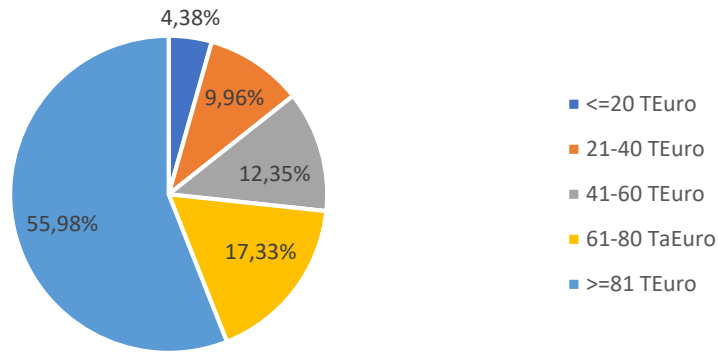
Figure 4.4 Participants by annual income (question MC2)

The majority of participants travel mainly for private reasons. Most (45%) book less than 10 % of their flights for business reasons. Only 19% book more than 50% business flights.

Business travels
distribution of frequencies (n =502)
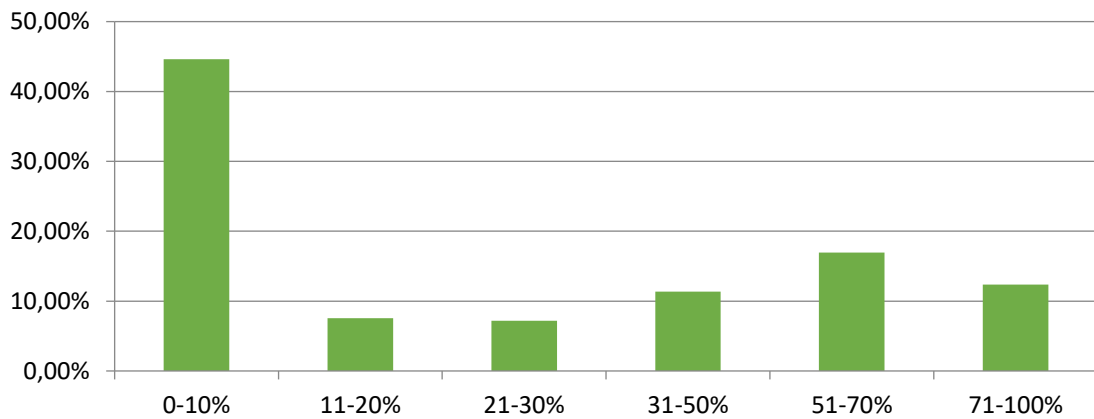
Figure 4.5 Share of business travel from participants' total flights (question MT1)

The participants partly book short term trips mainly (30%), another 29% however books less than 20% short term trips. The distribution of short-term trip shares by participant is rather even (see Figure 4.6).

Share of short-distance flights
distribution of frequencies (n =502)
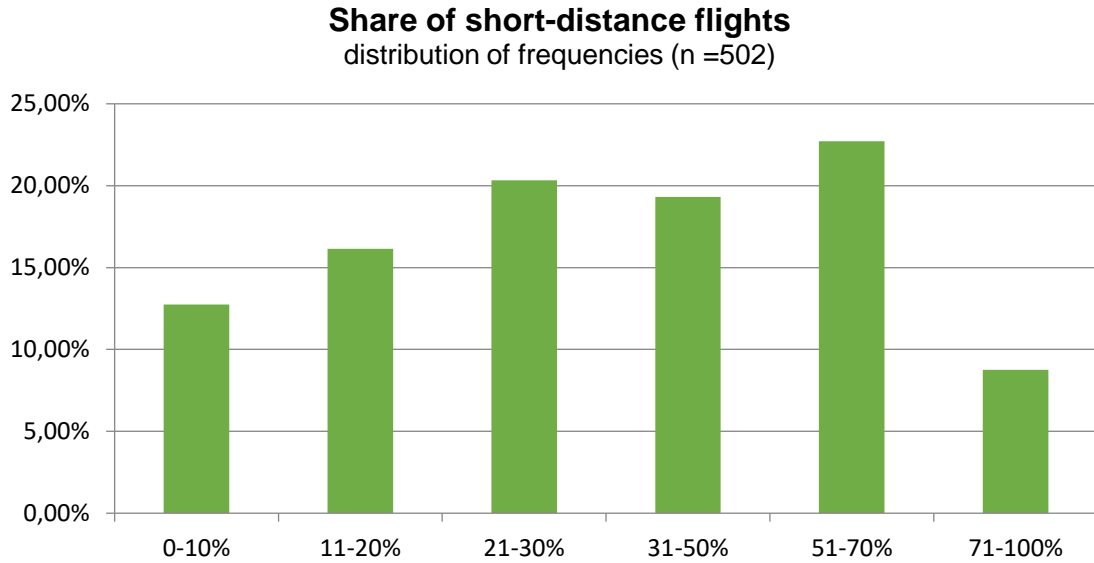
Figure 4.6 Share of short-distance flights from participants' total flights (question MT2)

Most participants (39% or 197 persons) fly more than 25 times per year. Only 0.8% or 84 persons fly once or twice a year only. 75% fly at least seven times per year. The survey accordingly has in fact reached frequent flyers mainly, by admitting only members of frequent flyer programs for participation.

Yearly number of flights
distribution of frequencies (n = 502)
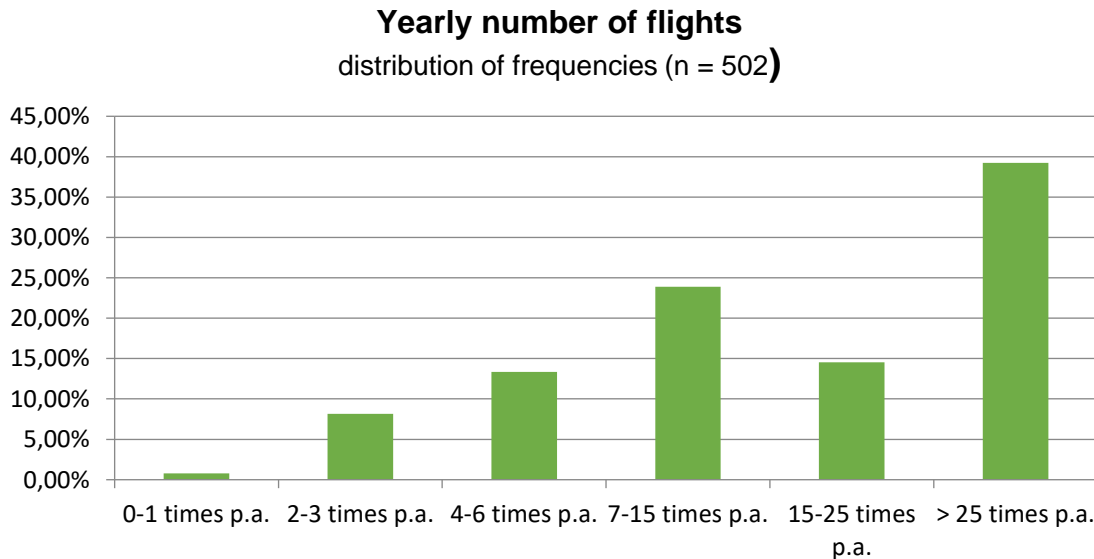
Figure 4.7 Distribution of number of flights per year (question MT3)

Correspondingly most (47%) of participants are members in several FFP. Only 12 % have always been Miles & More members only. Another 14 % do not keep any further FFP beyond Miles & More right now (see Figure 4.8).

FFP apart from Miles & More
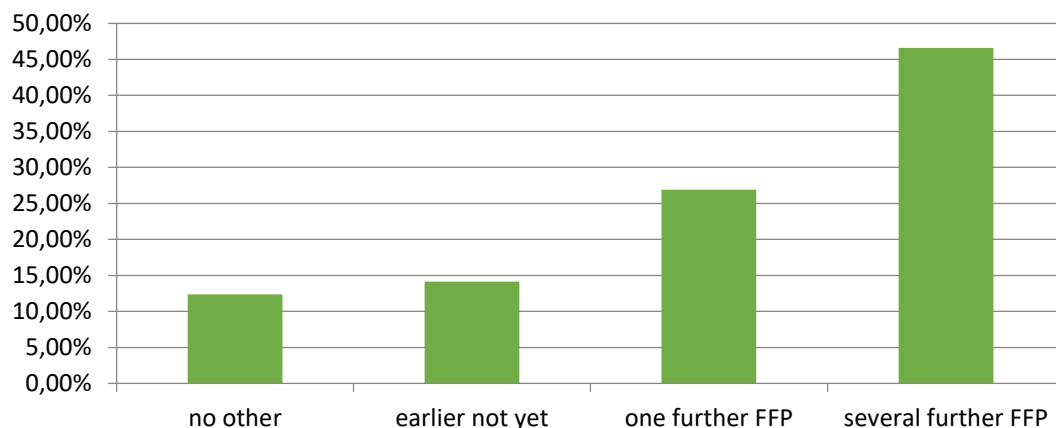
Figure 4.8 FFP apart form Miles & More (question MT4)

Summarizing the personal and travel related information gained from survey participants, all Miles & More members, the study has addressed a specific and the intended target group of typical frequent flyers of above average income and in their best ages.

Using cross-tabs the interactions between the controls MT1 to MT4 (items for share of flights booked for business reasons) are assessed in more detail. The extent to which flights are booked for business reason stands in correlation with the number of FFP the participants use (Chi² test = 0.002).

Table 4.2

Crosstabs for relationship of MT1 and MT4

		MT1: Share of flights booked for business reasons					
		1 < 10%	2 11-20 %	3 21-30 %	4 31-50%	5 51-70 %	6 > 70 %
MT 4: other FFP	1 never	31	2	1	1	15	12
	2 I did earlier	24	8	3	7	14	15
	3 one other	60	11	10	20	27	7
	4 several others	109	17	22	29	29	28
Gesamt		224	38	36	57	85	62

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People, who hardly book for business reasons, tend to dispose of more FFP connections than those who frequently book business flights. These passengers rely on single FFP more frequently.

There is no significant relationship between the tendency to book short-distance flights and the number of FFP memberships (Chi² = 0.3) and number of flights however (Ch² = 0.387).

Design elements of FFP

The design elements of FFP comprise premia height and availability (AM), availability and range of service awards (AS), and status awards (AT), perceived range of partner networks (QP) and perceived transparency of redemption (QT). All 502 participants answered the respective questions. The distributions of frequencies by part question are illustrated in bar charts and discussed in the following by target category.

Participants' perception of height and availability of premia (AM) is mixed. The majority (41%) find the FFP premia and redemption options partly attractive. Most, however, do not find available upgrades particularly attractive (41%). Most are not content at all on non-flight purchase and booking options (40%).
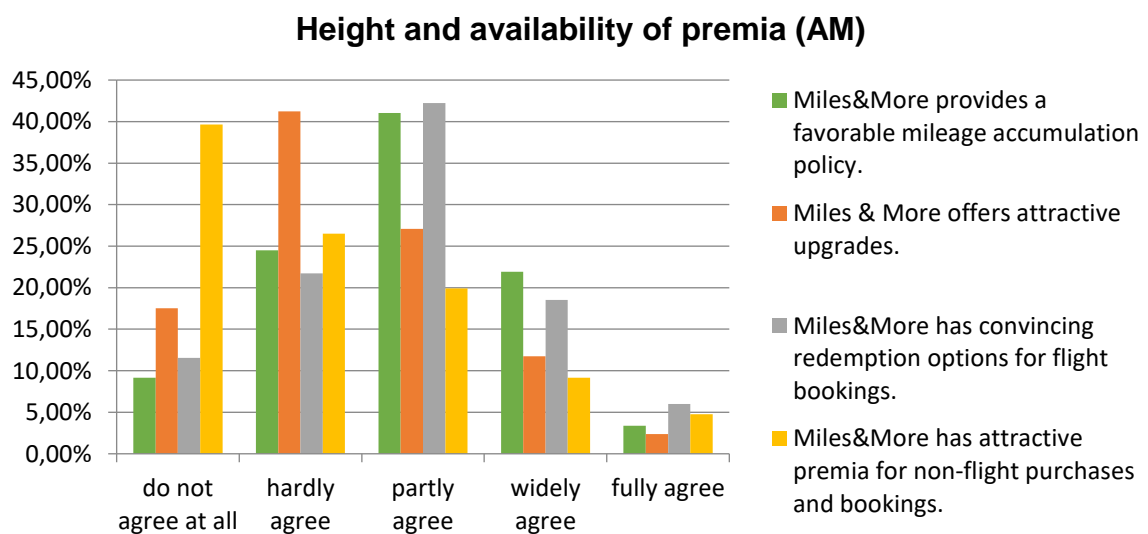
Figure 4.9 Perceptions on height and availability of premia (AM)

Most participants are not particularly satisfied on FFP services, about 25% do not agree to the respective test statements at all (see Figure 4.10).

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Availability and range of FFP service awards (AS)

Figure 4.10 Availability and range of FFP service awards (AS)

Similarly, about a quarter of the participants do not at all feel any superior or important status as FFP members, another 35 % hardly agrees to the respective test statements. Only about 12% widely or fully feels a positive impact of status awards (see Figure 4.11).

Perception of Status Awards (AT)
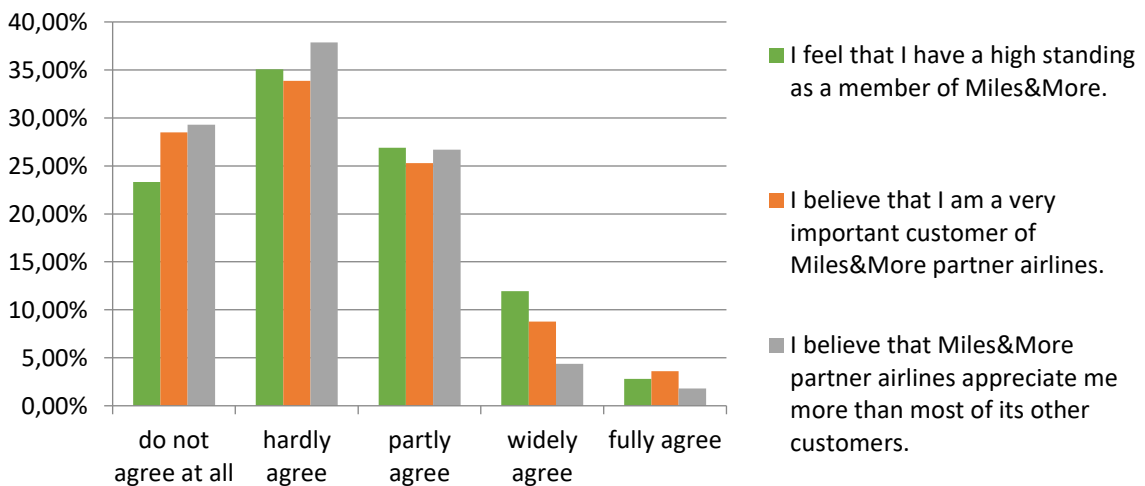
Figure 4.11 Availability and range of FFP service awards (AT)

However, the majority of participants estimates the advantages of the comprehensive partner network with other airlines and is partly satisfied with the range of partnering hotels and shopping options world-wide (see Figure 4.12)

Perceived range of partner networks
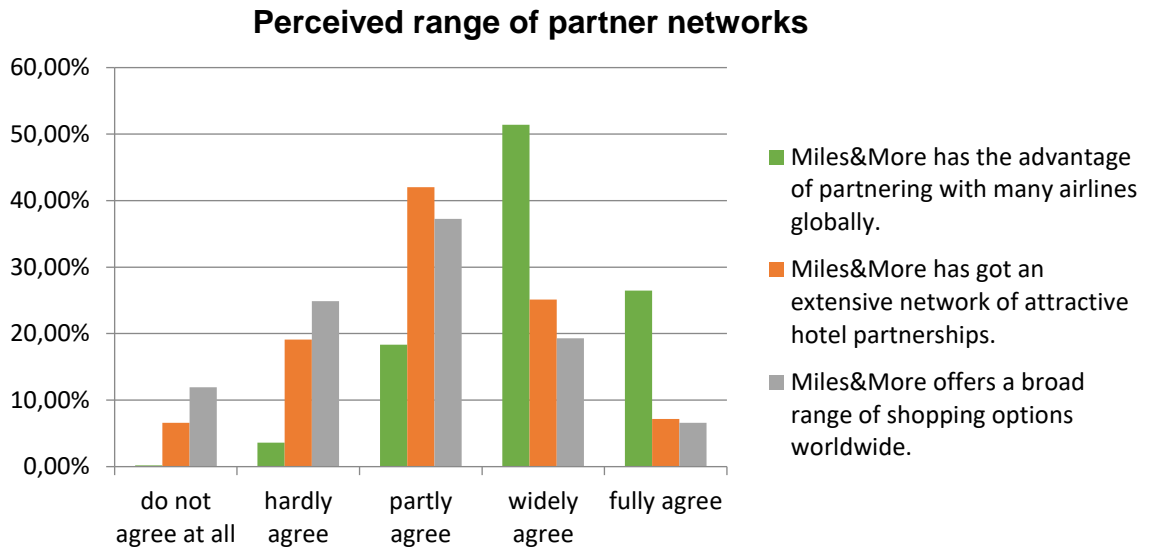
Figure 4.12 Perceived range of partner networks (QP)

The majority of participants are only partly satisfied on transparency of redemption and the flexibility of acquired miles. About 10 % each, are very satisfied or not satisfied at all.

Perceived transparency of redemption (QT)
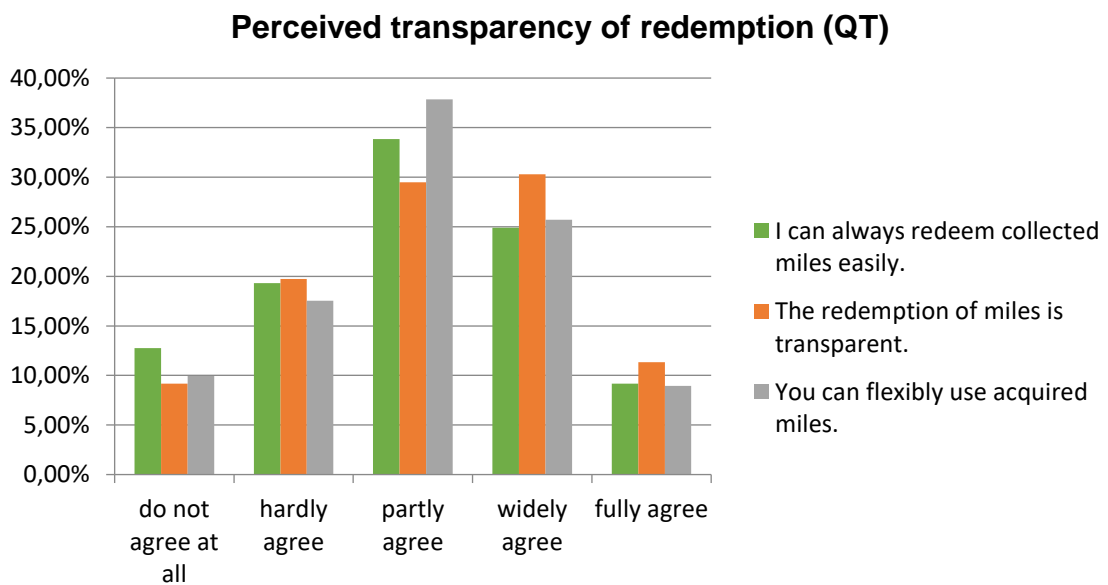
Figure 4.13 Perceived transparency of redemption (QT)

Moderators at the customer level

Items assessing moderators of FFP impact comprise perceived airline safety (MAS) and general airline quality (MAQ).

The participants are widely or fully satisfied on airline safety on average. The distribution is significantly left- skewed (Figure 4.14):
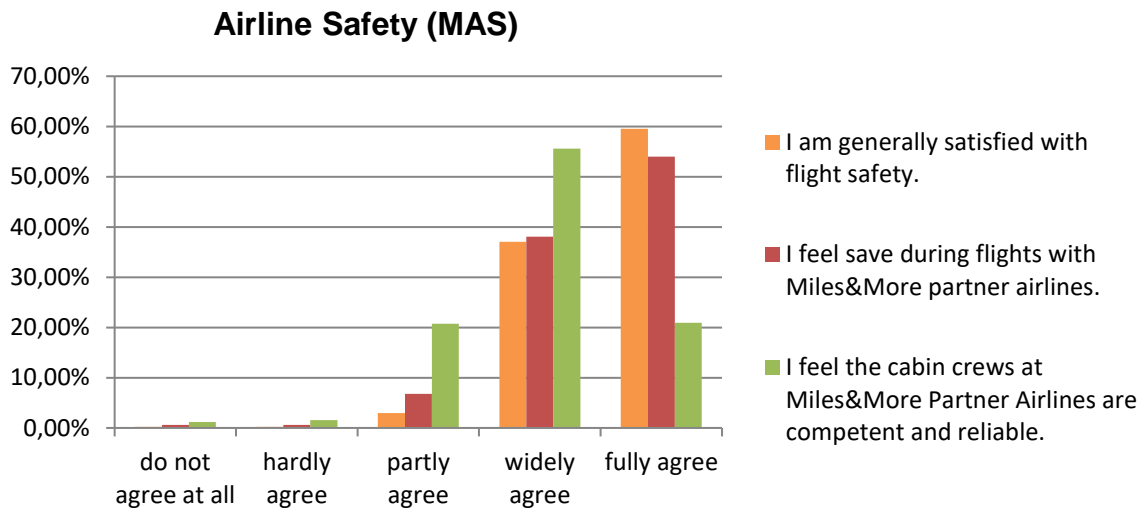
Figure 4.14 Perceived airline safety (MAS)

Airline quality perception is mainly positive, but only 3 to 9% of the participants are fully satisfied (Figure 4.15).
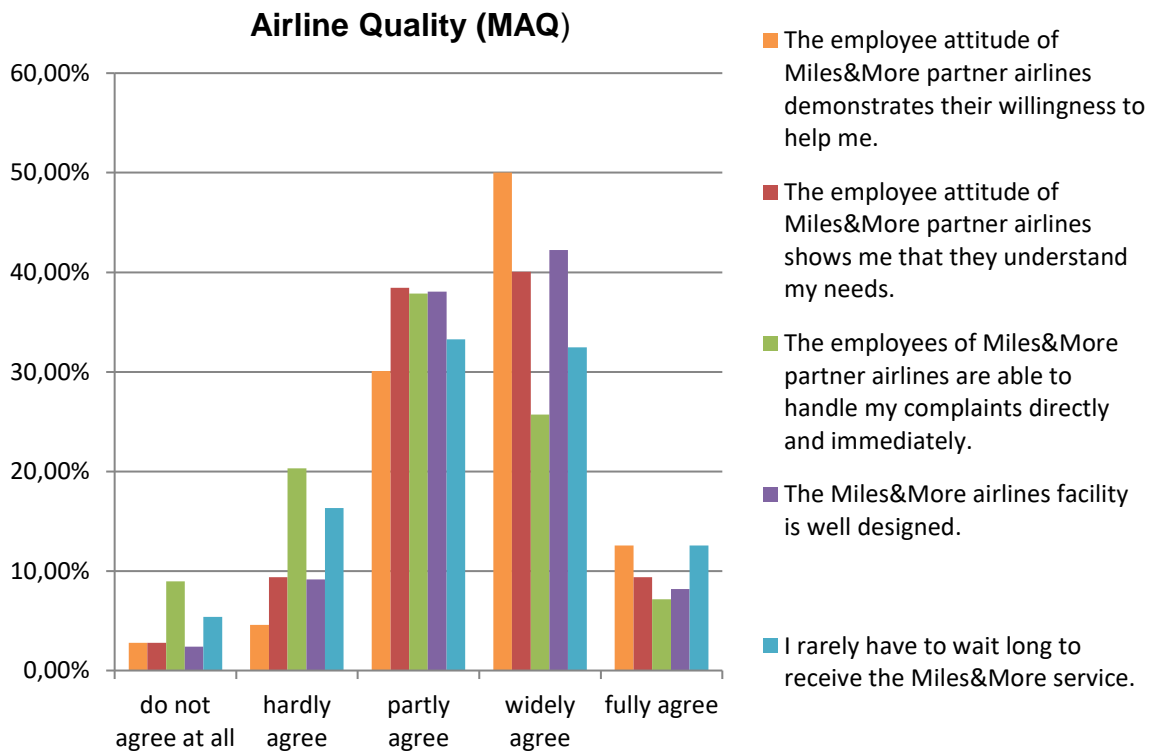
Figure 4.15 Perceived airline quality (MAQ)

Consumer behavior patterns

The target parameters describing consumer behavior comprise customers attitude on the FFP (BA), brand image (BI), purchase behavior (BV), brand loyalty (BL), customer relationship (BR) and perceived customer lifetime value (BV).

Most participants dispose of a moderate brand attitude. While most agree that the FFP is "part of their travel), the personal connection and emotional bond to the brand is moderate or weak to average (Figure 4.16).

Attitude on Miles & More
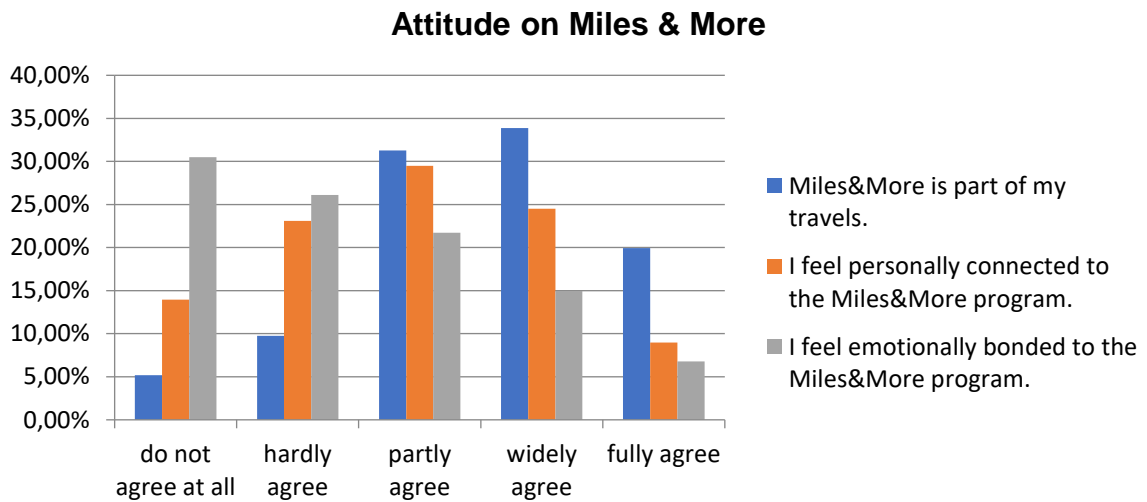
Figure 4.16 Attitudes on FFP

The distribution of the item results for brand image is close to normal for brand opinion and acceptance, but 34% of the participants do hardly or not agree, that the brand mediates a positive image (Figure 4.17).

Brand image of Miles & More
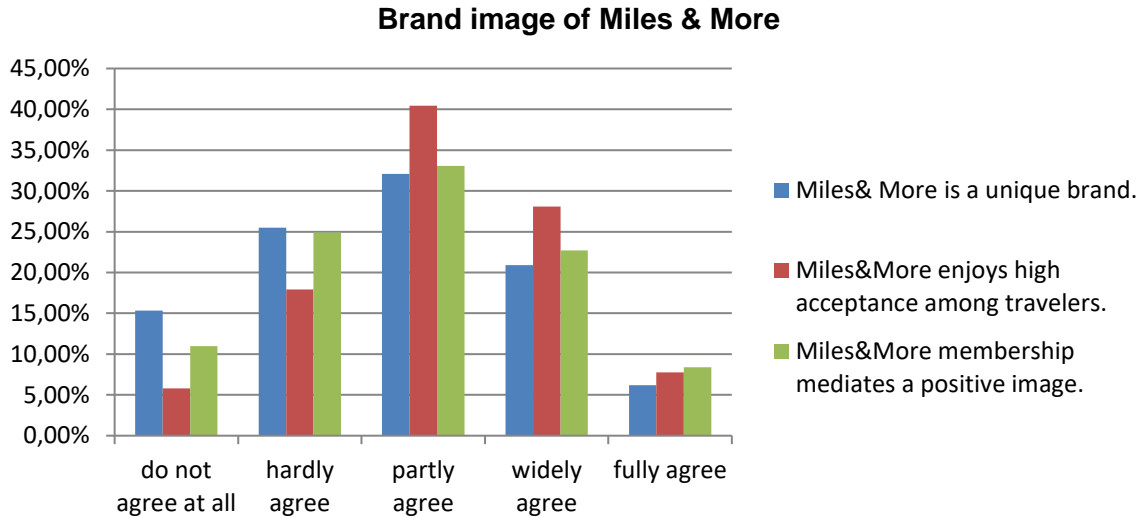
Figure 4.17 Image of FFP

The surveyed FFP members however mainly indicate that they will use their program again (55%), but only 34 % intend to use the program or its partners more frequently again in future.
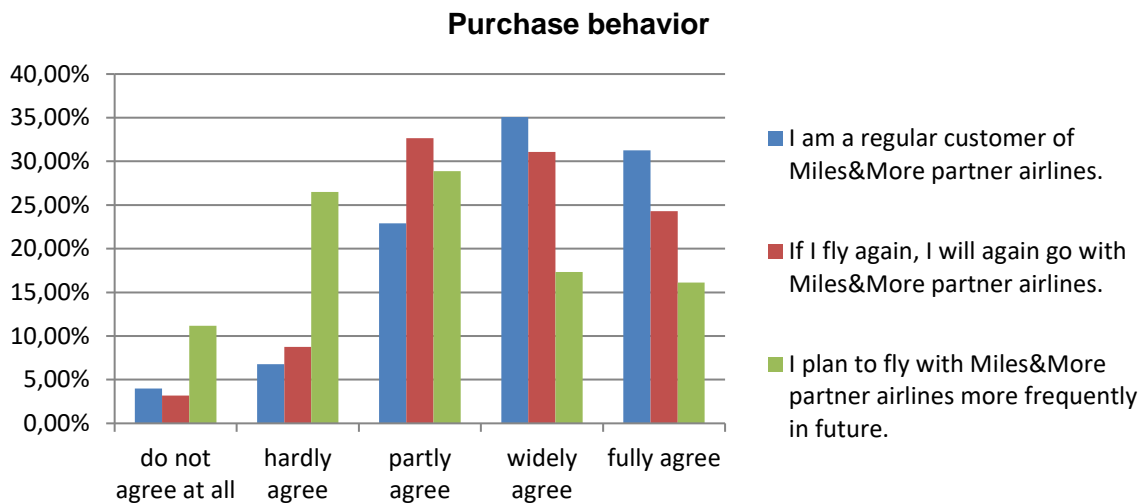
Purchase behavior

Figure 4.18 Purchase behavior

The customers partly would encourage family and friends or their company to use the FFP, but the majority (53%) would not or hardly be reluctant to book with other airlines, in spite of their membership (see Figure 4.19).

Figure 4.19 Customer loyalty

Although the majority trusts in the FFP member airlines (60%), about 34 % do not or hardly perceive their relationship with the partner airlines "high-quality". Still more than 60% of the surveyed FFP customers widely or fully intend to stay a member of the program (see Figure 4.20).
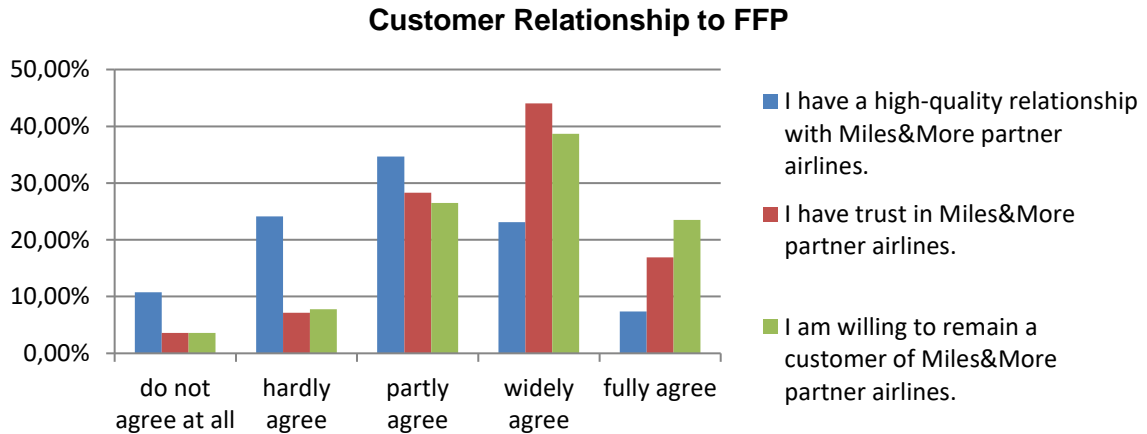
Figure 4.20 Customer relationship to FFP

Asked for items concerning customer lifetime value, most participants rather do not agree that the FFP makes them feel better about themselves (51%). However, the majority find the FFP useful for their purposes (48%) (see Figure 4.21).

Customer lifetime value
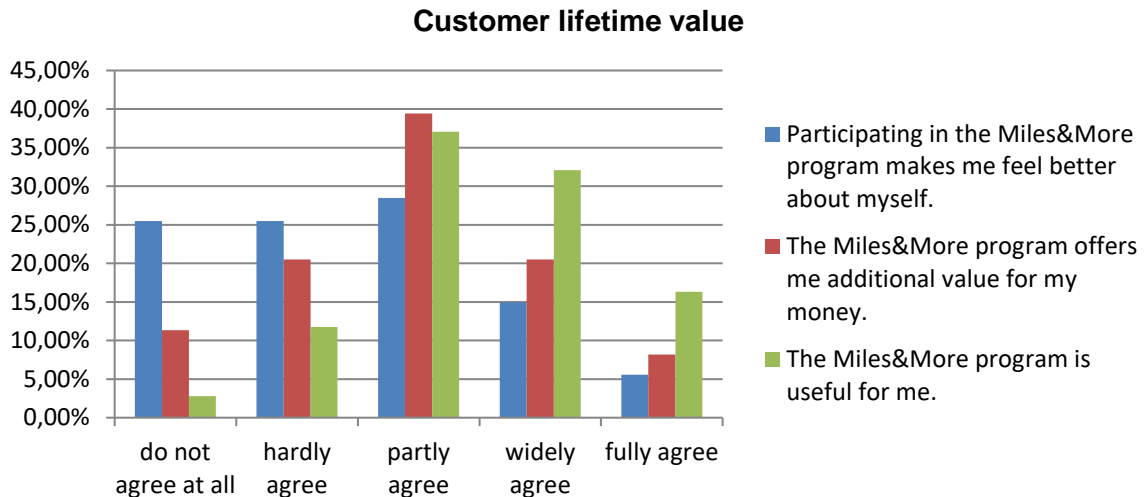
Figure 4.21 Customer lifetime value

Summarizing the results for the target factors concerning the impact of FFP, the participants are rather positive on the usefulness of the program, however see its brand value and image as comparatively low. This does not impair their intention to make further use of the program, but possibly their recommendation behavior.

4.3 Construct formation from FFP member survey results by explorative factor analysis

To assess the coherence of the constructs formed from the items, a reliability analysis using Cronbach Alpha has been conducted and a summative table is included in appendix 0., Table 0.2.

The Cronbach Alpha values for all constructs, but MAS (moderator airline security) are above 0.7, and thus are fully acceptable. For MAS, Cronbach Alpha is 0.657, which according to Nunally (1978, p. 245) is equally tolerable for a three items scale. All constructs are used in this original version for further evaluation.

The Kolmogorov-Smirnov and Shapiro-Wilk tests for normality distribution of the constructs are all significant (see Table 0.3). The constructs are formed by factor analysis and accordingly are all standardized. Distributions of the constructs are indicated in Table 0.4.

The constructs are all eligible for regression analysis accordingly.

4.4 Regression models and hypothesis tests using data of FFP member survey

To test the hypotheses, correlation analysis and hierarchical regression models as described in section 3.5 are used.

Consumer behavior effect chain (correlation analysis to test H1 to H5)

To examine H1 to H5 on the interrelationships of the target parameters, consumer attitude, brand image, purchase behavior, customer loyalty and customer relationship and customer lifetime value the correlations between these constructs are calculated.

All correlations are significant at the 99% level (see appendix 0, Table 0.5). Accordingly, H1 to H5 are all accepted:

- H1 Positive customer attitude increases airlines' brand image (corr.=0.643).
- H2 Customer booking (purchase) behavior increases customers' loyalty (corr.= 0.734).
- H3 Sustainable customer relationships increase customer lifetime value (corr.= 0.604).
- H4 High airlines brand image is positively correlated to high loyalty of FFP passengers (corr.= 0.584).
- H5 High airlines customer lifetime value is positively correlated to high loyalty of FFP passengers (corr.= 0.600).

Impact of monetary rewards (AM) on consumer behavior (H6)

H6 assumes that the availability and height of monetary premia (AM) impact the consumer behavioral effect chain positively. Regression models are drafted to evaluate the impact of AM on each of the target factors. The models additionally consider the controls and the moderators. The results for H6 are enclosed in appendix 0.

Brand attitude: Availability and height of monetary premia significantly contribute to enhance brand attitude (total model sig = 0.000). The change in $R^2 = 0.2$ is equally significant at 99% level. The regression coefficient of AM (premia height and availability) in the inclusion model including moderators and controls is 0.39 and significant at the 99% level. Only the control MT4 (membership in other FFP) is significant in this model and has got a negative impact on brand attitude (beta stand = - 0.226). Airline safety is significant with beta 0.167, sig. = 99%). Airline quality has got a direct positive but no moderating impact due to lacking significance of the interaction variable.

Brand image: The availability and height of monetary premia increases brand image significantly and delivers an AM (premia height and availability) model significant at the 99% level ($R^2 = 0.255$, change in R^2 du to AM = 0.201). Only a single control parameters MT 4 (utilization of other FFP programs) is significant at the 0.00 level and has got a negative impact on brand image (beta stand. = - 0.179). Perceived airline safety has got a highly significant positive impact (sig. = 0.00. beta stand = 0.178. However, the impact is not a moderating, but a direct one due to lacking significance of the interaction variable. Perceived airline quality has got a true moderating impact on the relationship of AM (premia height and availability) on BI (behavioral intention to go with the airline) since both MAQ (airline quality) (sig. 0.105) and its interaction variable are significant.

Purchase behavior: The availability and height of monetary premia (AM) significantly increases customers purchase behavior (change in $R^2 = 0.081$, sig. = 0.000). The ANOVA model containing AM (premia height and availability) and BP (purchase behaviour) is significant at the 99% level. The regression model containing AM (premia height and availability), all moderators and controls is highly significant too (beta stand = 0.115). In this model MT3 (number of flights per year) is positively significant at the 99% level with a standardized beta of 0.133. MT 4 (usage of other FFP) again is negatively significant (sig. 0.000; beta stand. = -0.192). Airline security has got a true moderating impact at the 95% level and airline quality a direct impact significant at the 99% level (beta stand. = 0.265).

Brand loyalty: The availability and height of monetary premia (AM) significantly increases customers loyalty to the airline (change in $R^2 = 0.126$, significant at 99% level). Regression models containing AM (premia height and availability) & controls as well as AM and the moderators are all ANOVA significant with sig. 0.000.

In the inclusive model, AM (premia height and availability) is a highly significant factor (beta stand. = 0.179). The control variable MT3 (number of flights per year) (beta stand = 0.141) is equally important. MT 4 (usage of other FFP programs) is a highly significant negative control again (beta stand. -0.233). Airline safety has not got a significant moderating impact on customer loyalty. Airline quality has got a direct impact but is not a moderator of the relationship of AM on BL due to its insignificant interaction variable.

Customer relationship: The availability and height of monetary premia (AM) significantly improves customer relationships. A regression model containing AM (premia height and availability) and controls only disposes of an R^2 of 0.222 and the change in R^2 due to AM (premia height and availability) is 0.19 and significant at the 99% level. The ANOVA

significance of all regression models containing AM is 99%. In an inclusive model containing all moderators, controls and AM, AM disposes of standardized beta of 0.236 (significant at the 99% level). Airline safety and airline quality have got additional direct positive impacts of 0.227 and 0.290 (standardized betas) but are no true moderators due to insignificant interaction variables.

Customer value: The availability and height of monetary premia (AM) significantly improves customer value and it enhances R^2 of the total model with target BV by 0.311 (significance level 99%). All tested models including AM are significant according to ANOVA at the 99% level.

In an inclusive model containing all controls and moderators, AM is highly significant with a standardized beta of 0.41. The controls MC 1 (age), MT3 and MT4 are significant at the 95% level. Where young age (beta stand. = - 0.062), high number of flights per year (beta stand = 0.066) increase customer value while the usage of other FFP diminishes customer value (beta stand. = -0.094). Airline safety and quality are direct impacts, but no true moderators due to lacking significance of the interaction variables, where airline safety has got a beta of 0.107 and airline quality of 0.238.

Summative test of H6: The following overview (Table 4.3') summarizes the significant results of standardized beta values for H6 only and shows that AM (height and availability of monetary premia) takes a highly significant positive effect on all target factors in the customer behavior chain. **H6 is fully accepted.** The number of flights per year is a positive and the usage of other FFP a negative control of the impact of monetary premia. Airline safety has got a significant moderating effect on customer attitude, brand image and purchase behavior. Airline safety and quality unfold direct impacts on customer loyalty, relationship and customer value but are not moderators concerning the effect of AM (premia height and availability) on the customer behavior chain.

Table 4.3
Significant beta coefficients in inclusion models using AM – test of H6

H6 Sig. Beta stand.	AM monetary premia	MC1 age group	MT3 number of flights p.a.	MT4 other FFP	MAS airline safety	MAQ airline quality
BA	0.39			-0.226	0.167	
BI	0.179			-0.179	0.178	0.105
BP	0.115		0.133	-0.192	0.118	D: 0.265
BL	0.179		0.141	-0.233		D: 0.333
BR	0.236				D:0.227	D: 0.29
BV	0.41	-0.062	0.066	-0.094	D: 0.012	D: 0.238

Impact of service rewards (AS) on consumer behavior (H7)

To assess the impact of service rewards of the evaluated FFP on consumer behavior further regression models are examined. These are enclosed in in appendix 0, Table 0.12 to Table 0.17.

Consumer attitude: The impact of service rewards on customer attitude (BA) is highly significant according to the model summary, which shows an increase in R^2 of 0.209 by adding AS (service range and availability) to the controls, which is significant at the 99% level. All models including service rewards dispose of ANOVA significance of 99%. The inclusion model comprising all controls and moderators, shows that only MT4 (availability of other FFP), has got a significant negative controlling impact of a standardized beta of -0.209. Airline quality is a highly significant determiner (as seen for H6 already) but no significant moderator, since the interaction variable is insignificant. AS (service range and availability) disposes of a standardized highly significant beta of 0.308 in the inclusion model.

Brand image: AS ((service range and availability) contributes significantly positively to brand image (change in R^2 = 0.188 for the total model). The ANOVA significance of all brand image related models including AS is 99%. MT4 (usage of other FFP) is a significant negative moderator (stand. beta = -0.104) in the inclusion model. Here AS (service range and availability) disposes of a standardized beta of 0.349, which is highly significant, too. Airline quality is a significant moderator to brand image at the 95% level in this model with a standardized Beta of 0.120.

Purchase behavior: Customers satisfied with FFP related service awards, show an improved booking behavior of flights. The respective model with target BP (purchase behaviour), increases in R^2 by 0.096 (which is highly significant) by adding AS. All models

with target BP and determiner AS (service range and availability) are highly significant according to ANOVA. In the inclusion model, MT2 (share of short distance flights) and MT3 (number of flights per year) are highly significant positive controls with standardized betas between of 0.076 and 0.097. Again MT4 (availability of other FFP), is a highly significant negative moderator with a standardized beta of -0.185. The positive impact of availability of service awards on purchase behavior is represented by a beta factor of 0.170. Airline quality is an additional determiner but not a moderator of purchase behavior which is more important than AS with a beta of 0.252 in this model, while airline safety is not significant here.

Customer loyalty: The availability and satisfaction with service awards offered by the FFP increases the model fit of a regression model with target customer loyalty (BL) significantly at the 99% level (change in R^2 = 0.185). All BL (brand loyalty) -models including AS are highly significant according to ANOVA. The tendency to book short distance flights is a significant positive control (stand. beta = 0.054) and – again – the number of further FFP is a negative control of customer loyalty (stand. beta = -0.218). Airline quality codetermines the relationship but is not a moderator (stand. beta = 0.291). The impact of service awards is the most important factor in the BL-model with a standardized beta of 0.301.

Customer relationship: The availability of service awards (AS) has a significant positive impact: A regression model with target customer loyalty and improves R^2 by 0.167 by adding AS, which is highly significant. The ANOVA significance of all BL (brand loyalty) models including AS is 99%. In the BL model none of the controls is significant. AS (availability of service awards) disposes of a highly significant beta of 0.228. Further, airline safety and airline quality are important co-determiners with standardized betas of 0.236 and 0.304, but none is a moderator to the relationship of AS (availability of service awards) and BL (brand loyalty).

Customer Value: Perceived availability and quality of service awards of FFP equally improves customer value significantly. The respective regression mode results a highly significant change in R^2 of 0.274. The total model is significant according to ANOVA at the 99% level. In this model MT 4 (membership in further FFP) is a negative but significant control with a standardized beta of -0.084. The beta factor of AS (availability of service awards) is 0.384, which is 99% significant. Airline safety is a highly significant moderator to the relationship of AS (availability of service awards) and BV (customer value), while

airline quality is a highly significant co-determiner but not a significant moderator (beta = 0.255).

Summative test of H7: Summarizing the results of the six individual regression models, Hypothesis 7 is clearly accepted. AS is a highly significant positive determiner in all six models and more important than all other determiners, controls and moderators and accordingly impacts consumer behavior positively. The following

Table 4.4 reports significant standardized beta factors for each model only:

Table 4.4

Significant beta coefficients in inclusion models using AS – test of H7

H7	AS	MT2	MT3	MT4	MAS	MAQ
sig. Beta stand.	service award	short distance flights	number of flights p.a.	other FFP	airline safety	airline quality
BA	0.385			-0.209		D: 0.165
BI	0.349			-0.104		0.120
BP	0.17	0.076	0.097	-0.185		D: 0.252
BL	0.301	0.054		-0.218		D: 0.291
BR	0.228				D:0.236	D: 0.304
BV	0.384			-0.084	0.140	D: 0.255

Impact of status rewards (AT) on consumer behavior (H8)

H8 assumes that the availability and extent of status awards (AT) take positive effect on the consumer behavior chain. Again, the six elements of the consumer behavior chain are tested in regression models. Analysis summaries are enclosed in appendix 0,Table 0.18 to Table 0.23.

Consumer attitude: Status awards contribute to a change in R^2 of 0.177, which is highly significant. All regression models containing the factor AT are highly significant according to ANOVA. In an inclusion model containing all controls, moderators and determiners, AT is a highly significant factor (beta stand. = 0.325). The control MT4 (additional FFP apart from Miles & More) is a highly significant negative control variable (beta stand. = -0.220). Airline quality has got a beta coefficient of 0.208 and accordingly is a significant co-determiner, but not a moderator due to insignificance of its interaction variable.

Brand image: Status awards (AT) significantly enhance the brand image of FFP, which is obvious from the change in R^2, AT (status awards) accounts for (dR^2 =0.211, Sig = 99%). Again, all ANOVA tests of BI models are highly significant. An inclusion model of all

moderators and controls, results the only highly significant factor AT (status awards) (beta stand = 0.384). The controls MT2 (share of short distance flights) (beta stand = 0.058) and MT4 (usage of further FFP) (beta stand. = - 0.105) are significant at the 95% level. Airline safety is a co-determiner with beta stand. of 0.122, Sig. = 0.011 and airline quality equally takes some positive effect (beta stand. = 0.117; Sig. = 0.017.

Purchase behavior: The availability of status awards increases purchase behavior as available from the change in R^2 of 0.150 (99% sig.) that AT effectuates. ANOVA tests of all BP models are highly significant. In an inclusion model containing all eligible moderators and controls AT (status award range and availability) is highly significant with a standardized beta of 0.288. Additional highly significant positive factors are MT2 (share of short distance flights) (beta stand = 0.087) MT3 (number of annual flights) (stand. Beta = 0.094) and airline quality (stand. beta = 0.201). Airline safety is significant at the 95% level (beta stand. = 0.104) and MT4 (beta stand. = -0.177) (FFP apart from Miles & More) takes a highly significant negative effect on purchase behavior.

Customer loyalty: Status awards equally increase consumer loyalty highly significantly. The change of R^2 by adding AT (status award range and availability) to a model of control parameters is 0.189. The respective ANOVA regressions are all highly significant for BL (customer loyalty) models including AT (status award range and availability) in an inclusion model of all controls and moderators AT is the most important determiner with a standardized beta of 0.315. MT 4 (membership in other FFP) has a highly significant negative impact of stand. Beta = -0.221, while MT2 (short distance flights) (beta stand. = 0.295) and Airline quality (beta stand = 0.064) are positive determiners.

Customer relationship: Customer relationship benefits of the perceived availability and extent of status awards. In BR-models, AT (status awards) changes R^2 by 0.233, which is highly significant. All ANOVA tests of BR (customer relationship) -models including AT are highly significant. Status awards (beta stand. = 0.326), airline safety (beta stand. = 0.217) and airline quality (beta stand = 0.278) are the only significant co-determiners in the inclusion model.

Customer value: Customers see status awards as valuable in their relationship with the airline. AT increases R^2 of a regression model with target BV (customer value) by 0.257 (sig. = 99%). Equally the ANOVA tests of BV (customer value) models containing AT are all highly significant. In the inclusion model containing all controls, AT (beta stand. = 0.360), airline safety (beta stand. 0.113) and airline quality (beta stand. = 0.288) are all

highly significant determiners. MT4 (membership in other FFP) has a negative beta coefficient of -0.09, which is significant at the 95% level.

Summative test of H7: Summarizing the results of the six individual regression models, Hypothesis 8 is fully accepted. The availability and height of status awards in FFP, influences consumer behavior positively. AT (status award range and availability) is a highly significant determiner in all six models and more important than all other determiners, controls and moderators. The following

Table 4.5 reports significant standardized beta factors for each model only:

<div align="right">

Table 4.5
</div>

Significant beta coefficients in inclusion models using AT – test of H8

H8	AT	MT2	MT3	MT4	MAS	MAQ
sig. Beta stand.	status award	short distance flights	number of flights p.a.	other FFP	airline safety	airline quality
BA	0.325			-0.220		D: 0.208
BI	0.384	0.058		-0.105	D: 0.122	D: 0.117
BP	0.288	0.087	0.094	-0.177	D: 0.104	D: 0.201
BL	0.315	0.064		-0.221		D: 0.295
BR	0.326				D: 0.217	D: 0.278
BV	0.360			-0.090	D: 0.113	D: 0.288

Summarizing the results for all customer behavior targets, H9 is clearly accepted.

Impact of number of FFP partners on consumer behavior (QP) (H9)

Hypothesis H9 assumes that the reach of partner networks (QP) in FFP positively impacts customer behavior. Six further regression models with targets BA (brand attitude), BI (brand image), BL (customer loyalty), BP (purchase behaviour) BR (customer relationship) and BV (customer value) test this and are summarized in appendix 0, Table 0.24 to Table 0.29.

Customer attitude: QP is a highly significant factor in a regression model with target BA (brand attitude) and increases its R^2 value by 0.092. All ANOVA models containing QP (range and reach of partner networks) and target BP (purchase behaviour) are highly significant. An inclusion model comprising all potential controls, moderators and AT contains three highly significant determiners: MT4 (membership in other FFP) (beta stand. = -0.232), QP (beta stand. = 0.201, and airline quality (beta stand. = 0.264). MT3 (number of flights per year) (beta stand = 0.073) is significant at the 95% level.

Brand image: Range and quality of partner networks equally improve the image of the FFP brand significantly. The factor QP (range and reach of partner networks) increases R^2 of a

model of controls by 0.143 and models including QP (range and reach of partner networks) are all significant at the 99% level according to ANOVA. Four regression coefficients indicate factor significance at the 99% level in an inclusion model. MT4 (membership in other FFP (beta stand. = -0.122), number of FFP partners (beta stand. = 0.297), airline safety (beta stand. = 0.130) and airline quality (beta stand. = 0.166). Neither MAQ (moderator airline quality) nor MAS (moderator airline safety) are moderators.

Purchase behavior: QP (range and quality of partner networks) is equally highly significant in regression models with target BP (purchase behavior) and results in a highly significant R² change of 0.103 and highly significant ANOVA models. MT 3 (number of flights per year) (beta stand. = 0.142), MT 4 (membership in other FFP) (beta stand. = -0.919), QP (range and quality of FFP partners) (beta stand. = 0.218) and airline quality (beta stand. = 0.250). Airline safety (beta stand. = 0.09) and MT2 (number of short distance flights) (beta stand. = 0.069) are significant at the 95% level.

Customer loyalty: Customer loyalty benefits of a large range and reach of partner networks. QP (range and reach of partner networks) contributes 0.121 to R² in respective regression models and all the models including QP (range and reach of partner networks) as an input and BL as a target are highly significant according to ANOVA. Apart from QP (range and quality of partner networks) with a beta of 0.220. The controls MT3 (number of flights per year) and MT4 (membership in other FFP) as well as airline quality as a co-determiner are highly significant with standardized betas of 0.11, -0.236 and 0.347.

Customer relationship: Customer relationship benefits of a broad range of high-quality partners. QP increases R² by 0.181in respective models. All BP regression models including QP are highly significant according to ANOVA. Apart from QP (range and reach of partner networks) (beta stand. = 0.270) only the factors airline safety and airline quality are relevant co-determiners at the 95% level with betas of 0.223 and 0.317.

Customer value: QP (range and quality of partner networks) increases customer value (BV) significantly at the 99% level (change in R² due to QP = 0.100). All corresponding ANOVA models are significant at the 99% level. The beta coefficient of QP in an inclusion model of all potential controls and moderators is 0.161. Further highly significant controls are MT4 (membership in other FFP) (beta stand. = -0.104), airline safety (beta stand. = 0.119) and airline quality (beta stand. = 0.378). MT3 (number of flights per year) is significant at the 95% level with beta stand. = 0.076.

Summative testing of H9: In sum, H9 is fully assumed, the range and quality of partner networks takes a significantly positive effect on consumer behavior. All beta factors of QP (range and quality of partner networks) are highly significant and all regression models show highly significant fits. The following

Table 4.6 shows only significant beta coefficients for all models applied to test H9:

<div align="right">Table 4.6</div>

<div align="center">Significant beta coefficients in inclusion models using QP – test of H9</div>

QP	MT2	MT3	MT4	MAS	MAQ
range of partner networks in FFP	short distance flights	number of flights p.a.	other FFP	airline safety	airline quality
0.201		0.073	-0.232		D: 0.264
0.297			-0.122	D: 0.130	D: 0.166
0.128	0.069	0.142	-0.191	D: 0.090	D: 0.250
0.220		0.111	-0.236		D: 0.347
0.270				D: 0.223	D: 0.317
0.161		0.029	-0.105	D: 0.119	D: 0.378

Impact of transparency of redemption on consumer behavior (QT) (H10)

Transparency of premia redemption, according to H10, takes a significant positive effect on consumer behavior Six regression models are applied to test this assumption and the results are available from appendix 0, Table 0.30 to Table 0.35:

Customer attitude: Transparency of premia redemption (QT) amends the quality of a model with target BA by a delta of R^2 of 0.120. Which is a highly significant effect. ANOVA regressions for BA-target models including QT (transparency of premia redemption) as a determiner are all highly significant. Four significant regression coefficients result: QT (transparency of premia redemption) and airline quality are most important with betas of 0.246 each. MT4 (other FFP apart from Miles & More) has a negative coefficient of -0.244 and MT3 (number of annual flights) is significant at the 95% level (beta stand. = 0.070).

Brand image: Transparency of redemption is highly significant to brand image. QT accounts for a change in R^2 of the total inclusion model of 0.124 and corresponding models are ANOVA significant at the 99% level. Apart from QT, which disposes of a beta coefficient of 0.262, equally MT4 (membership in other FFP) (beta stand. = -0.134) and airline safety are highly significant co-determiners of this relationship. Airline quality (beta stand. = 0.174) has got a true moderating effect due to significance of the interaction variable.

Purchase behavior: FFP customers prefer to purchase with the airline, when FFP are transparent concerning redemption conditions. The factor QT (transparency of premia redemption) contributes a change in R^2 of 0.071 to a corresponding BP-model and all BP models including QT are highly significant in ANOVA tests. MT2 (short distance flights, beta stand. = 0.078), MT3 (flights per year, beta stand. = 0.138) MT4 (membership in other FFP, beta stand. = -0.199) and airline quality (beta stand. = 0.272) are highly significant controls apart from QT (transparency of premia redemption) with a beta of 0.140. Airline safety is a significant moderator (sig. = 95%) in this model with a standardized beta of.0.113 for MAS.

Customer loyalty: Transparency of redemption contributes to customer loyalty and significantly changes R^2 of a model of controls by 0.1 when added. ANOVA significances in BL-models containing QT (transparency of premia redemption) are all 99% significant. Apart from the highly significant QT, (stand. Beta = 0.174), MT2 (beta stand. =0.058), is 95% significant and MT3 (beta stand. = 0.111, MT4 (membership in other FFP) (beta stand. = 0.242) and airline quality (beta stand. = 0.357) are highly significant co-determiners. No moderator effects are observed due to insignificant interaction variables.

Customer relationship: Transparency of redemption QT, enhances customer relationships highly significantly by a change in R^2 of 0.173. ANOVA significance of all relevant BR-models and the highly significant beta coefficient of 0.231 confirms the relevance of transparency of redemption to customer relationship management. Apart from QT (transparency of premia redemption), only airline safety and airline quality are highly significant co-determiners – not moderators, with regression coefficients of 0.231 and 0.319, but insignificant interaction variables.

Customer Value: Transparency of premia redemption significantly contributes to customer value augmenting R^2 in a model of controls by 0.212. All ANOVA significances of BV models including QT (transparency of premia redemption) are significant at the 99% level and the beta coefficient of QT (transparency of premia redemption) in an inclusion model is 0.323 and highly significant. MT3 and MT4 and airline safety are significant controls and co-determiners with standardized betas of 0.078 (95% level), -0.115 (99% level) and 0.093 (95% level). Airline quality is a true and highly significant moderator here with significant interaction variable and a beta coefficient of 0.322.

Summary of H10: A synopsis of the regression models comprising QT (transparency of premia redemption) illustrates that transparency of redemption (QT) in fact is an important determiner of desirable customer behavior.

Table 4.7

Significant beta coefficients in inclusion models using QT – test of H10

H10	QT	MT2	MT3	MT4	MAS	MAQ
sig. Beta stand.	transparency of redemption	short distance flights	number of flights p.a.	other FFP	airline safety	airline quality
BA	0.246		0.049	-0.244		D: 0.246
BI	0.282			-0.134	D: 0.143	0.174
BP	0.14	0.078	0.138	0.14	0.113	D: 0.272
BL	0.174	0.058	0.111	-0.242		D: 0.357
BR	0.231				D: 0.231	D: 0.319
BV	0.323		0.078	-0.115	D: 0.093	0.322

Table 4.7 comprises significant beta coefficients in models containing QT (transparency of premia redemption) only. Since transparency of redemption is highly significant in all models, **H10 is fully accepted.**

Impact of moderators airline quality and airline safety (H11 and H12)

By evaluating Table 4.3 to

Table 4.7 with regard to the potential moderators MAS (airline safety) and MAQ (airline quality) now equally hypotheses H11 and H12 are tested in a summative way:

H11 assumes that perceived airline safety positively moderates the impact of FFP design on customer behavior. Only few models find a true moderating effect in the way that both airline safety as a factor and the interaction variable with the determiner are significant. This is the case for four from twenty-four models (H6- BA (brand attitude), H6-BI (brand image), H6-BP (purchase behavior), H7 – BV (customer value)) only. For most models, airline safety is itself a highly significant determiner, but not a moderator of the consumer behavior target. This is the case in 14 of 24 cases.

H11 accordingly is rejected: perceived airline quality does not moderate the impact of FFP design on customer behavior usually, but mostly is an important co-determiner of customer behavior. This observation is plausible. When considering to fly with an airline, customers do not at first think of the FFP, but of airline safety without evaluating the FFP first. Only when safety conditions are met, they assess the attractiveness of the FFP.

H12 assumes that perceived airline quality positively moderates the impact of FFP design on customer behavior. Similarly, airline quality rarely is a moderator of the impact of FFP on consumer behavior. This assumption is only confirmed for four out of 24 models. In 21 cases, airline quality is a significant co-determiner of customer behavior, since the respective interaction variables are not significant. **H12 accordingly is rejected in is original version.** Customers do not think about airline quality in the context of assessing the FFP above all but evaluate airline quality before considering a flight with the airline at all.

Although H11 and H12 are rejected, the modified observations are important to adjust the research model: Apart from FFP program attractiveness, perceived airline safety and quality are important positive co-determiners of customer behavior in the aviation business.

4.5   Triangulation and interpretation of empirical results

Based on the quantitative insights gained from the FFP customer survey, the research model which has been developed from the review and adjusted referring to the interview results is now finalized.

Research model adaptation

Additional insights concerning relevant controls have been gained from the survey, which are useful to concretize the model draft: customer related (customer age and income) and travel related co-determiners (relevance of business travels, short distance flights, number of annual flights and participation in other FFP) have been considered as potential control factors, to the impact of FFP design on consumer behavior.

Customer related controls are widely insignificant in the altogether 24 regression models only in Model H6-CV (customer value), customer age has got a minor negative impact. From this observation follows that customer related factors are generally not relevant to the analysis of the effectiveness of FFP programs.

However, three travel-related factors have been found relevant: The frequency of short distance flights is a significant positive control in eight of 24 models. The number of flights

of a customer per year, is positively significant in 13 models. Membership in other FFP takes a negative effect on customer behavior. i. e. reduces customers' positive attitude to Miles & More, its brand image, flight purchase behavior, customer loyalty and perceived value of Miles and More in all models. There is no impact of MT4 (membership in other FFP) on customer relationship.

Summarizing the results for controls, the share of short distance flights and the number of flights per customer positively impact customer behavior, while membership in other FFP has got a negative controlling effect. As evaluated in section "Impact of moderators airline quality and airline safety (H11 and H12)" airline safety and airline quality are positive determiners of customer behavior.

The final model (Figure 4.22) accordingly comprises five elements of FFP design, which have all been confirmed concerning their positive impact on all stages of the customer behavior chain. These are height and availability of monetary awards, service awards, status awards number of FFP partners and transparency of redemption. Three controlling factors impact the effectiveness of FFP design: Customers with a high share of short distance flights and a high number of annual flights, appeal better to FFP design elements, while membership in other FFP programs impairs customers reaction to FFP design. Two external factors codetermine customer behavior: High perceived airline safety and quality stimulate the customer behavior effect chain, i.e. improve customers' attitude on the airline, enhance brand image, encourage purchase behavior and customers' loyalty and finally build stable customer relationships and customer value.
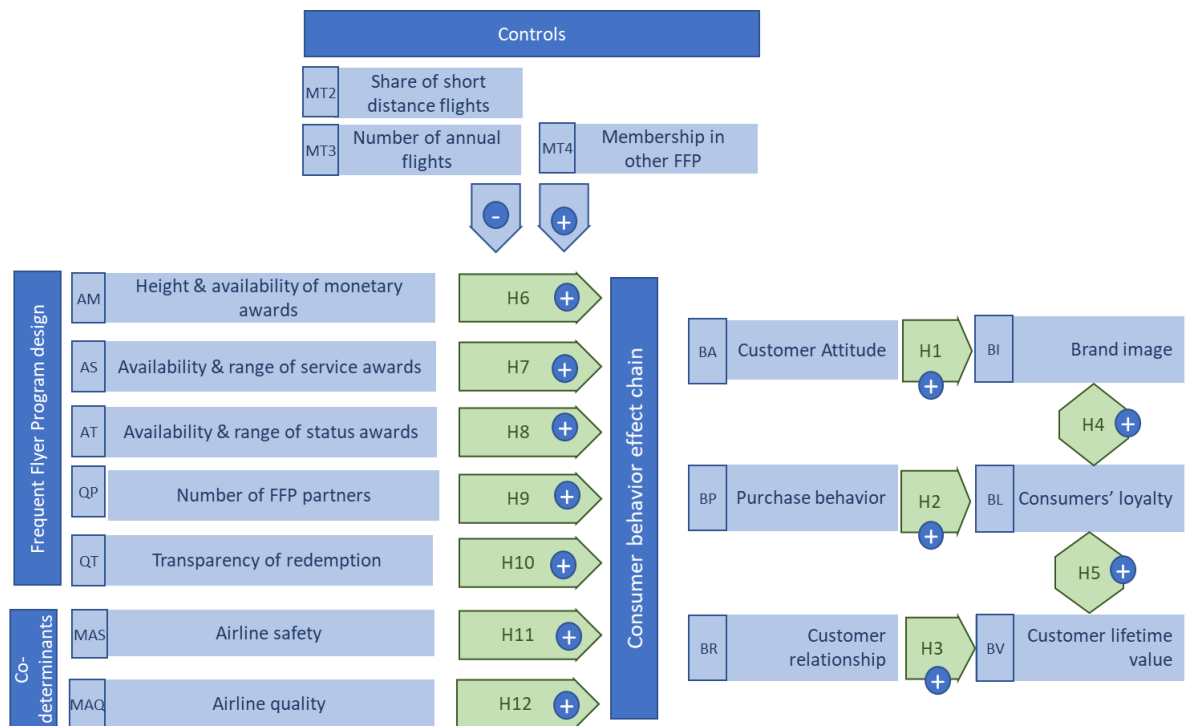
Figure 4.22 Final confirmed causal model

Linking the quantitative results to the interviews

Triangulating the qualitative research results of the interviews and the quantitative survey results the validity of both research strands is finally confirmed:

Asked for the effectiveness of FFP design, the interviewees have explained that individual monetary FFP design elements are not as effective as they used to be any more since they the opportunities for business travelers to redeem these monetary premia have diminished. A combination of service and particularly status awards enables customers to distinguish visibly and strengthens their self-esteem and recognition. This customer survey has confirmed the interview results, finding that all three award factors – monetary premia, service and status awards explain part of the customer behavior effect chain. Each of the FFP determinants is important. The survey however has equally shown that monetary, service and status awards have each got an individual and idiosyncratic impact on customers. Replacing monetary premia by status or service awards accordingly would impair the effectiveness of FFP. FFP incentive elements accordingly are partly interdependent and interactive but they are equally independent building blocks of the programs and each of them is relevant by itself.

The interviewees have asserted that the reach of FFP networks makes out their attractiveness. Interviewees complain that there is a tendency to draft stand-alone FFP programs in recent years. Equally the survey has found that customer attitude, perceived FFP image, flight purchase behavior, loyalty and the perceived relationship to the airline and value of the program depend on the reach of the partner network to a large extent. Since Miles & More, which has been a broad partner network according to the perception of the participants, has been in the focus of the quantitative survey, the positive impact of a broad range of FFP partners has clearly been shown in the statistical evaluation.

Finally, interviewees have criticized that transparency of redemption of available FFP programs is frequently doubtful since regulations have become more restrictive due to airlines' tighter budget policies. The survey has confirmed that transparency of redemption in fact is essential for customers, who base their attitude to the airline, brand image perception, purchase and loyalty behavior as well as their personal sentiment of relatedness to the airline and perceived customer value on their perception of program transparency.

The interviews have turned the researcher's attention to the moderating impact of airline quality and safety as possible moderators of FFP effectiveness. As FFP insiders, the interviewees see customers' airline directed behavior through the FFP lens and understand airline quality and safety as moderating facts mainly, while the FFP is central to airlines attractiveness. The customer survey, however, has shown, that airline quality and safety usually are independent determinants consumer behavior rather than moderators of the impact of FFP design on consumer behavior. First of all, consumers consider airline quality and safety, when deciding on which flight to book or whether to stay loyal to an airline. Only then they consider the attractiveness of the FFP. The consumer survey accordingly has adjusted the perspective of the interviews with insiders and has lifted airline safety and quality on one level with FFP design.

Potential customer and travel specific moderators of FFP design have been retrieved from the interviews mainly. The interviewees have observed that the attraction of FFP to customers depends on their flying habits. True frequent flyers which predominantly use short distance flights regularly depend on FFP and find these particularly valuable. The survey has partly confirmed this observation: In fact, the share of low distance flights and the number of annual flights are important control factors in many of the causal models explaining the impact of FFP design on customer behavior.

Interviewee 3 explained that FFP programs usually appeal to local customers to a larger extent but has not detailed the reason for this potential effect. The survey however has clarified this observation and has found an additional important negative determinant of the attraction of Miles & More, which was not clear from the interviews: Participation in further FFP. Customers who are members in several FFP feel less connected to Lufthansa and Miles & More, less prone to book with Lufthansa and find less customer value in the FFP although their customer relationship to Lufthansa is not impaired. This explains the interviewees' observation that local customers react better to particular FFP: They feel a stronger bond to particular programs since they do not use others.

Triangulation has shown that the results of interviews and survey correspond and are complementary, which proves the validity of the research insights and the final model as a whole.

4.6 Empirical implications on generalizability, novelty of empirical results and further research requirements

Approach & Intention

The study refers to the Miles and More Program only. However, as detailed in chapter 2.1, FFP resemble each other to a large extent. To counter doubts on the potential generalizability of the above quantitative results, and particularly the comparability of Lufthansa's Miles-and-More to other FFP programs, an additional mixed method study is conducted. It combines a cluster analysis and an interview-based study. The full-text results of the interview-based study are comprised in Appendix 5 and 6.

The cluster analysis groups different airlines' FFP into groups to assess to what extent the programs correspond or differ and to what extent Miles-and-More is comparable.

The interview study asks experts to a) compare Miles and More to other programs and b) to generally details differences between the FFP of different airlines.

By triangulating the cluster analysis and interview results, the extent to which Miles and More corresponds to other FFP and to which FFP correspond generally is assessed.

Cluster analysis for airline comparison

A cluster analysis is a statistical method to group objects according to certain criteria. It is based on a description of relevant criteria concerning which the objects are similar or different. It then organizes the objects according to their traits as to the criteria and in a third

step arranges clusters containing objects corresponding in certain criteria sets. For large samples this process can be done using statistical coefficients. For small samples as this process can be done manually (Backhaus et al., 2016, p. 400-401).

The intention of the cluster analysis here is to assess in what respect different FFP differ and in how far the Miles and More Program corresponds to other programs. To implement the analysis the study refers to table 1-1 in the appendix and attempts to cluster FFP programs quantitatively by the described items using a ranking coded as follows:

<div align="right">

Table 4.8

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<div align="center">

Classification scheme of FFP across airlines

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Category	Rank 1	Rank 2	Rank 3
Earning miles	High transparency: Points by money spent	Medium transparency: Points by flight type& class	Further unconventional miles earning systems
Expiry	Validity >= 24 months	Validity Y 18 – 23 months	Non-transparent validity or less than 18 months
Options for spending miles	Broad range of spending options: Reimbursement with diverse partners even beyond traveling	Intermediate range of spending options: Reimbursement limited to travel related services	Limited range of spending options: Only airline related reimbursement
Status rewards	Broad range of status rewards: More than 3 amenities	Intermediate range of status rewards: 2 or 3 amenities	Limited range of status rewards: 1 or less amenities
Specified limitations on mileage usage	No limitations indicated	Transparent limiting conditions	Non-transparent or changing limiting conditions

The classification of the airlines and arrangement to clusters can be done manually here, since the sample of 21 available programs is very small.

The 21 airlines (compare table 1-1) in appendix are classified concerning their performance based on the ranks based on the information collected in the table. To determine a definite

rank per airline the ranking points are added up. Airlines with lowest ranks outperform concerning FFP quality from a customer perspective. The airlines are assigned to three quality clusters (red, yellow, and green) based on their ranks. The following results are calculated:

Table 4.9

Results of FFP cluster analysis

No.	Airline	Country	Program	Earning miles	Expiry	Spending miles	Status rewards	Limitations Spec. conditions	Sum
8	China Southern Airlines	China	Sky pearl club	3	3	2	2	1	**11**
11	Cathay Pacific Airways	Hong Kong	Marco Polo Club	3	3	1	1	2	**10**
13	Japan Airlines	Japan	JAL Mileage Bank	2	3	1	1	3	**10**
15	Qantas Airways	Australia	Qantas FF	3	2	1	2	2	**10**
16	Singapore Airlines	Singapore	Krisflyer	2	1	2	2	3	**10**
18	Hainan Airlines	China	Fortune wings Club	3	1	2	3	1	**10**
4	United Continental	USA	Mileage Plus	1	2	1	3	2	**9**
9	All Nippon Airways	Japan	ANA Mileage Club	3	1	2	2	1	**9**
10	China Eastern Airlines	China	Dynasty Flyer	3	1	3	1	1	**9**
19	Latham Airlines	Chile	LATAM Pass	3	1	3	1	1	**9**
3	Deutsche Lufthansa	Germany	Miles & More	3	1	1	2	1	**8**

12	Air Canada	Canada	Aeroplan	2	1	1	3	1	**8**
17	Korean Air	Korea	SKYPASS	2	1	3	1	1	**8**
21	Alaska Air Group	USA	Mileage Plan	2	1	2	2	1	**8**
1	Delta Airlines	USA	SkyMiles	1	2	1	2	1	**7**
2	American Airlines	USA	AAdvantage	1	2	1	2	1	**7**
5	Air France/KLM	France	Flying Blue	1	1	2	2	1	**7**
14	Turkish Airlines	Turkey	Miles & Smiles	2	1	1	1	2	**7**
7	South West Airlines	USA	Rapid Rewards	1	1	1	2	1	**6**

The results of the cluster analysis (table 4.10) indicate that the evaluated FFP differ in quality from a customer perspective. Basically, three quality clusters result. Six (red section) airlines offer their customers comparatively few amenities and rather non-transparent standards. Five airlines rank top (ranks 6 and 7) and are highly transparent on almost all points and dispose of a broad FFP advantage portfolio (green section). Eight further airlines (yellow section) are intermediate) reach intermediate ranks of 8 or 9 points. Miles & More is in the intermediate section.

These results are based on the author's evaluation of quality characteristics and the presentations on websites and thus are not necessarily reliable. Further validity issues could result due to the calculation method of the quality rank which weights all quality criteria equally and purely quantitatively.

Method of interview-based generalizability analysis

To further explore and validate

   a) in what way Miles-an-More corresponds to other airlines and

   b) in what respect FFP generally differ,

Three additional semi-structured interviews with airline insiders are conducted. These are evaluated comparatively. The following participants have been gained.

Table 4.10

Generalizability - Interview Participants

MRS	Present functions
	1.CEO & Founder of Loyalty Data Co a travel loyalty research agency
	2.Specialist on data commercialization, one-world FFP
	3.Public speaker & Industry thought leader at aviation events
	Previous roles:

	head on loyalty and enrich at Malaysia airlines
PG	Present functions:
	Founder and Principal, New World Loyalty
	1.Designed, built and managed Virgin Australia's FFP
	2.Worked with over 20 FFPs as a consultant
	Previous roles:
	1.Managing Director, Velocity Frequent Flyer, Virgin Australia
	2.Head of Loyalty & Rewards, American Express Australia
SD	Present Functions:
	Associate Consultant, New World Loyalty
	Expertise on rewards program, my specific focus is loyalty financials
	Previous roles:
	1.Managing Director, Elevate FFP, Virgin America
	2.Head of Commercial, Velocity FFP, Virgin Australia

The interviews comprise 11 questions to assess correspondence of Miles and More to other FFP, which are available from appendix 5.

The results are evaluated text-analytically applying the method described in chapter 3.3. the full-interview protocols are added in appendix 5 and 6:

Comparability of Miles and More to other FFP

The comparative analysis of interview questions 1 to 6 delivers the following results:

The participants agree that FFP have converged in the recent decade: two experts agree that since the start of FFP in the 1990ies as individual incentive programs of particular airlines, alliancing across brand carriers has increasingly been practiced since the 2000s in response to discount carriers' budget offers. FFP convergence has since 2012 lead to an increase in FFP reach and comprehensiveness but a unification of offers for cooperating partners. FFP programs differ in their design details e.g., as to the admission of VIP status, way of earning points and reward "currencies", but basically contain the same major elements (SD). Large airlines e. g. Quantas, Miles & More FFP programs are largely the same, some smaller airlines however still follow more traditional programs (PG), like basic must have benefits or limited partnerships. Next generation programs tend towards revenue accrual rather than distance and dynamic rewards (SD).

Asked for program elements available in most FFP, the major features relevant in this study on Miles and More are addressed by all three participants: All major programs enable members to earn points or miles while flying and through participation in partners' activities e.g. credit cards, hotels stays, car hire, e-shopping etc. The ability to move up or down an award or VIP program is a further main constitutive factor in virtually all FFP. These status levels are usually classified as Silver, Gold or similarly. Redemption conditions are similar for all FFP: Most airlines offer a form of virtual currency to apply in travel related services (statement of MRS and SD). Few additional performance attributes are not included by all but most FFP, these comprise tiering of VIP status services, point earning options with partners and additional gift cards (PC), family pooling, non-expiry agreements, pause on elite status (MRS). The interviewees agree however, that FFP equal in conception and major design elements around the globe.

Asked for special design elements of Miles and More, SD explains that

> "Lufthansa's program is not extraordinarily better or worse than any other airline frequent flyer program globally. There is nothing that makes it a stand-out from any other airline loyalty program worldwide for me as a frequent flyer. Its key benefit will be for locally based frequent flyers that fly with Lufthansa regularly across Europe is that it also offers access to the Star Alliance network when travelling globally."

Miles & More is European in design and marketing and made for its major customers, however, has not got any "stand out benefits" that would clearly make it a good or bad FFP (SD). Miles and More contains all the features a global FFP is expected to have and as such representative for other large FFP. It is not particularly innovative or different (PG).

Family pooling programs of Virgin Australia are special features of other FFP diverging from Miles and More (PG). Some national FFP bear local cultural imprints of (SD). Special VIP status options offered by other airlines (MRS), which comprise automatic platinum access to spouses of platinum members at Malaysia Airlines, special concord room access at British airways, flight simulator entertainment at Quantas and recognition brochures at S7 Airlines. These features are well designed marketing gags but do not make the program different to Miles & More in conception.

The final interview question 6 asks for distinguishing traits of individual FFP customers of FFP might search for. Frequent flyers cherish priority check-ins, boardings and free luggage or priority seats (SD), which are offered by virtually all FFP. Airlines usually target their

home markets mainly (MRS), since most FFP customers book from home locations, however airlines hurry up to cover all the design elements their competitors introduce in order to compete in attractiveness globally. This trend leads to a convergence of FFP designs and special offers (MRS, PG).

Comparability of FFP in general

Interview results concerning questions 7 to 11 reveal details concerning FFP schemes and their comparability:

Potential differences in earning miles schemes

The key structures for earning miles resemble each other globally. But from the past to today there have been some changes (SD): While earlier most programs were based on the distance flown, today most are on the money spent on flights. Some hybrid models are available, although there is little difference on the basic scheme. Several airlines collaborate closely on mile-interchange, which is why programs increasingly converge. To ensure international compatibility, some airlines differ in miles earning schemes between domestic and international flights.

Miles earning schemes largely fall into two groups spending-based and distance-based systems (PG). Distance based systems were the traditional standard, and are still used today by several airlines, but the scheme is disappearing slowly due to growing airline expenses. Spending based earning systems have become increasingly popular with large airlines in recent years to avoid price dumping. There is growing convergence on earning schemes although there are some minor differences e.g. tier based bonus systems and alternative options to earn miles with external partner programs.

All loyalty programs are designed to offer marketing and financial benefit to the host airline, their design depends on the market requirements in the main area of activity of the respective airline (MRS). In the USA systems based on earning-systems miles are most useful since many travelers fly many miles, in South-East Asia, mixed systems and in Europe spending-based systems dominate, since here the number of low-cost carriers competing in price is high.

Potential differences in miles expiry schemes

Miles-expiry policies are common practice since the 1980ies when airlines began to face increasing competitive pressure and thought to keep passengers flying regularly (MRS). There has been a shift from time-stamped to activity-based expiry schemes. Expiry is partly

time stamped, i. e. points expire after a fixed number of months from being earned and partly activity-based, i. e. points expire somewhen after the last activity.

Basically, most programs dispose of system limitations as part of business policy (SD). Usually, airlines combine both systems to keep passengers booking and make them return to flying regularly. Non-expiry policies are very rare and applied only if airlines cannot keep up with redemption options.

Mile expiry can be time-based, or activity based. Most airlines at least partly use an activity-based scheme, since passengers are meant to keep active on the program and not just arbitrarily book trips (SD). Only few programs have switched to non-expiry recently e. g. due to Covid-19 (MRS), when passengers were unable to redeem their miles on-time.

Potential differences in spending miles schemes

Airlines have collectively developed their mile redemption schemes from flights only to an increasing variety of products including offers of external partners (MRS). Today most airlines use their miles as virtual currencies in the travel process and with external partners. Although not all airlines offer external partner programs this is little relevant in practice. According to the experience of MRS most redemptions ("99%") take place with the airline itself anyway.

Most airlines want to motivate their customers to redeem miles with the airline itself and particularly motivate customers to spend points gained from external partners with the airline (SD). They use a variety of amenity offers to encourage customers to spend their miles e. g. priority seats and cash-discounts which however usually require spending at least some extra cash on the amenity. Usually, FFP also include the option of redeeming miles with partners e. g. hotels, car rentals and shopping vouchers. A new trend is to offer things money can't buy in exchange against miles, e. g. ancient airline seats.

There are two main types of airline rewards: table-based and dynamic rewards (PG). Table-based rewards indicate the number of points required for a certain service or benefit. Dynamic rewards vary with the cost of the ticket and are e. g. higher in low season. Most airlines offer both reward types, some do not disclose on the redemption details or offer varying attractions with external partners.

Potential differences in status rewards

All status rewards schemes pursue the same key objective: bring up ticket sales (MRS). The customer lock-in realized by status rewards is more effective than by financial incentives alone. If switching to a competing airline for cost reasons, the customer does not retain her

amenities, even loses them after a certain period of disloyalty. MRS does not mention differences been status reward programs.

The double motivation to introduce FFP was similar with most airlines: move experienced travelers through the airport more efficiently and appeals to travelers' ego and make them develop a sense of branding (SD). Most FFP are "are exactly the same in core structure and design elements" and differ on the details, i.e., status proofs and the currency to pay for the status only. Most airlines define status expiry at some point of time after the recent flight. Some status offers of larger airline alliances differ between the partners, e. g. a frequent flyer is downgrades by some partners of the same program.

There are three main stratus earning structures depending on the time of decay (PG): Rolling window programs check status every day, calendar year programs decay with the expiry of the year. Anniversary data programs check status on the birthday of the member each year. Except for the status expiry mode status programs do not basically differ.

Potential differences in limiting conditions

Some elite status conditions are highly restrictive (MRS). Some, particularly US, airlines offer special reward programs to their employees, which offer more convenient advantages not tied to further conditions e. g. high spending or high number of flights.

Airlines differ significantly on their limiting conditions for non-member passengers, e. g. some are more transparent and customer friendly than others (PG). Sometimes tiers are adjusted while the program is running and are hard to fully understand from the outside.

Virtually every airline changes its program over time and the development of the program results in low transparency and limiting conditions to members (SD). Although most FFP are plain vanilla and offer little distinguishing elements, there is a growing trend to introduce innovations, sometimes at the cost of earlier FFP members.

Tabular overview on interview results

The following tabular overview summarizes the interview results on the comparability or difference of FFP:

Table 4.11

Overview on interview results on comparability of FFP across airlines

Participant	SD	PG	MRS
Earning miles schemes	• Two major schemes: spending and distance	• Two major schemes: mileage and spending based, hybrid systems	• Mileage earning system depends on country: in US

	• based, hybrid schemes • Increasing importance of earning based earning	• Increasing importance of earning-based schemes • Minor differences on alternative mileage earning systems	more distance-based, in Europe more spending-based systems, in SE-Asia mixed systems. l • Low-cost carrier competition invites spending based systems
Miles expiry schemes	• Most airlines combine time & activity-based expiry, with a tendency to activity-based expiry, to keep customers on track	• Most airlines combine time & activity-based expiry, with a tendency to activity -based expiry, to keep customers on track • Increasingly non-expiry programs during Covid-19	• Expiry schemes are common practice since the 1980ies • Partly non-expiry programs recently due to Covid-19.
Miles redemption schemes	• Most airlines motivate customers to spend earned miles with the airline and induce some extra payment to redeem the miles.	• Airlines usually combine table based and dynamic rewards. • Some airlines do not disclose their schemes at all.	• Trend to an increasing number of redemption options including external partners • Most redemptions are made with the airlines anyway, • little strategic difference
Status reward schemes	• Most programs offer similar status awards, expiry periods differ i.e. are rolling, anniversary based or end of the yar based.	• Most programs offer similar status awards, expiry periods differ i.e. are rolling, anniversary based or end of the yar based.	• All status rewards programs serve the purpose of tying customers to airline • No differences mentioned.
Limiting conditions	• Most airlines offer similar limiting conditions, all programs show the tendency to diminishing transparency over the years	• Airlines differ significantly on limiting conditions, many are not transparent	• Some offer very restrictive elite conditions • Extra conditions for airline members

Conclusions from generalizability-research

Comparing the results of the interviews concerning potential differences between FFP, the following points shine up.

1. Earning miles schemes are classified into mileage based, spending based and hybrid schemes. Airlines use different schemes (compare also **Error! Reference source not found.**). However, there is a tendency towards spending-based schemes since airlines face increasing operation costs. Reward schemes without spending based factors are becoming increasingly expensive to maintain. Although to date airlines differ on earning miles schemes concerning the calculation basis, there is a trend of convergence. Basically, the principle of point collection systems is the same: they are an incentive to acquire customers and keep them loyal to the FFP brand.

2. Miles expiry-schemes usually combine time and activity based expiry for most airlines. There is a growing tendency to activity-based expiry, to keep customers on track with new bookings. In the situation of Covid-19 airlines have frequently paused expiry periods.

3. Miles redemption schemes are designed in the same intention for all airlines: customers are motivated to collect points and ideally spend them with the airline itself at some (smaller) extra payment. Most airlines partly disclose their redemption schemes but also maintain dynamic reward systems. There is a common trend to combine different reward strategies.

4. Status reward schemes are largely the same for all airlines and mainly differ in expiry period calculation.

5. Airlines differ on limiting conditions and the transparency of conditions, although SD observes a tendency towards growing complexity for all FFP.

Summing these points on FFP up, the discussed FFP are largely comparable. There are differences on contract details like expiry periods and the range of partner companies, transparency and limitations, however all in all the Miles and More scheme is typical and comparable to most other global FFP in its design principles and incentive mechanisms.

The results of the study accordingly are generalizable to a large context. FFP are increasingly international and drafted by large airline alliances, which leads to homogenization. Passengers' homogenous preferences motivate airlines to globally offer similar incentives with a local cultural imprint. Finally, competition drives airlines to imitate design elements, which induces further convergence.

The theoretical part confirms this interview-based observation: The theoretical chapter 1 roots the study in behavioral consumer psychology and branding theory. It has been shown that consumer behavior decision processes are relevant to virtually every marketing activity

in the goods and service sector. Consumers decide based on their prior experience, patterns predominant in their social environment and experiential situational parameters. This concerns their decision to fly with a particular airline but equally the consumption of other services like hotels or medical treatments and even consumer goods. The mechanisms keeping customers loyal to a certain provider or brand correspond across products and services: Initial positive experiences with a particular brand contribute to shape consumers' attitude on the brand and contingent products. The attitude deepens in repeat contracts and buying processes and consumers develop brand loyalty and believe in the positive image of the brand, which is equally communicated in their social proximity. Customer lifetime value results due to consumers' own recommendation behavior.

FFP effectiveness is based on this long-lasting purchase funnel. But equally other services depend on brand image development, consumer recommendation and the loyalty of a broad clientele. Most branded luxury products are sold due to their high public image and luxury customers tend to stick with particular renowned brands. The mechanisms explored for FFP in this study can thus basically be transferred to other services and consumer goods marketing.

Based on a comprehensive review for the FFP sector, which draws on a broad range of corresponding from around the globe (chapter 2) and a series of interviews with representatives of several airlines and airline consultants (chapter 4.1), a causal model has been developed, which has been tested for Miles- & More customers. This approach is certainly transferable to other FFP since the data basis the primary approach was built on is rooted in a much broader contest. The quantitative study has also shown that 45% of survey participants use further FFP. The behavioral attitudes and patterns of the surveyed target group do thus equally concern other FFP, which implies that the causal model is directly transferable to these programs.

4.7 Novelty of results and further research requirements

Chapter 4.7 discusses in what respect the results of this dissertation are novel, i. e. distinguish it from earlier research. Further research requirements are outlined.

Novelty of results

Although the issue of FFP effectiveness on consumer behavior has frequently been discussed earlier as to specific effects on consumer behavior prices (Orhun & Guo, 2018, Gao et al.,

2018; Vilkaitė-Vaitonė & Papšienė, 2016; Colakoglu & Artuger, 2013; Mayer-Waarden, 2012) and the general effectiveness of FFP (Sandada & Matibiri, 2016; Keh & Lee, 2006; Whyte, 2003), this study has added important aspects to academic FFP research:

It has shown that design elements of FFP each take an individual role in addressing consumers. The interaction of FFP design elements, however, is what attracts and keeps consumers loyal to the programs and hence to booking with a particular airline. The study has provided a comprehensive model explaining the cause-and-effect chain of FFP effectiveness with customers. In that process three crucial marketing theories; branding, attitude research and purchase funnel research, have been merged.

The study has developed a comprehensive model a comprehensive model explaining the cause-and effect-chain of FFP effectiveness with customers based on three crucial marketing theories (cf. section "Theoretical Novelties": Novelty No. 1 in introduction). The resulting model is the first to integrate branding theory, the purchase funnel model and customer relationship management to come to a comprehensive explanation of the formation of brand impact, customer lifetime value and customer loyalty by FFP as announced as practical novelty No. 1 in the Introduction.

This study is the first to analyze FFP effectiveness on consumer behavior for the German aviation market, particularly the Miles & More program, which is the only dominant FFP in the DACH-countries (cf. theoretical novelty 2 announced in introduction). Due to its close embedding in earlier FFP research the research model is still transferable to FFP in general and equally adaptable to related incentive systems. The complimentary interviews have shown that the gained results for Miles & More are a) generalizable to the FFP market and that b) the discussed FFP are comparable in their mechanisms and incentives in principle although some contractual details e. g. expiry periods and transparency differ across the companies.

The study supports marketers of German airlines in the development of a comprehensive FFP design which appeals conclusively to the target group of Germany-based flight customers and ensures loyalty and customer life-time value of this target group sustainably, as announced as practical novelty No. 2 in the Introduction. Marketers in FFP and related customer incentive systems can participate in the results and adopt the found causalities to further consumption contexts.

The complimentary interviews have shown that although all FFP utilize the same marketing principles and are devised in a conceptually similar way, there are small contractual

differences that account for the attraction of FFP from a customer perspective and accordingly are apt to differentiate airlines from their competitors. The study has identified FFP design details that particularly attract or deter customers and accordingly should be applied or dismissed from airlines FFP concepts. Transparency is an urgent customer requirement: Frequent flyers are unnerved if program contents change repeatedly and access to acquired miles is restricted for budgeting reasons. Passengers prefer an extensive partner framework and attractive premia which are easy to retrieve without significant access barriers. Airlines should thus maximize program transparency, stability and expand their network to successfully compete in the FFP market. In this respect, the study complies with "Theoretical Novelty No. 3 announced in the Introduction.

The complementary cluster analysis of 21 international FFP has found the Miles and More program located in the upper middle cluster as measured by system attractiveness form a customer standpoint. Especially American airlines but equally Air France/ KLM and Turkish Airlines, partly outperform Miles & More concerning the ease of earning miles (based on miles flown), as well as the range of options for spending miles. To sustainably compete in an increasingly internationalized FFP market Miles- & More should consider bringing the miles collection scheme back to a calculation basis of distance flown and extend the attraction of miles redemption options e. g. by extending the partner network and offering a larger variety of options to use the miles during the travel.

Finally, the study has detailed a major problem of mileage schemes of classical airlines: Dumping prices of low-cost carriers diminish the attraction of mileage schemes and put classical providers under cost pressure to the extent that FFP can hardly be financed any more. To maintain the attraction of FFP airlines should focus on distinguishing their services by quality and draw a clearer line between true frequent flyers and once-upon a time holiday flyers. The first group as a major revenue carrier has to be addressed more effectively by placing a clear quality and transparency focus in FFP. As indicated under in section "Practical Novelties" under No. 3 in the Introduction, the results thus support marketers in FFP to develop effective customer incentive systems.

Further research requirements

Follow up studies in the field should amend on the limitations of limited reach, potential low validity and limited reliability of this study: So far, no study is available that compares the effectiveness of several different FFP on consumer behavior systematically. This study has focused on the German Miles & More program and thus has not amended on this research

limitation. Further studies could systematically evaluate the acceptance of diverse FFP by asking customers experienced with each of them. Future comparative studies could build on the market analysis of 21 FFP programs available in section 2.1 in the appendix, to retrieve and evaluate the design elements of diverse FFP programs.

The qualitative research section of follow-up studies should be expanded as compared to the interview section presented here, to collect more comprehensive and valid information on FFP design in the target sectors. To this end a broader range of interview partners should be addressed and the interviews should be more comprehensive, to possibly gain additional information on FFP design strategies beyond data gathered from a review. Researchers should make sure that the interviewees are in fact involved with the practical design of FFP and are not mainly in advisory functions (as interview participants 3, 4 and 5 in this study).

Finally, further studies in FFP impact analysis should use a more complex and comprehensive statistical approach, e. g. structural equation modeling, to grasp the interactions of all relevant input and target factors comprehensively. The conclusive question catalogue developed for this study could be a useful starting point, since the constructs gained here have proven highly reliable according to Cronbach Alpha.

In sum, this study has laid the foundations for furthermore extensive FFP research, by developing a founded framework of categories and testing a mixed method approach, which of course should be refined further.

CONCLUSIONS

The conclusions summarize the theoretical and empirical contributions of this study:

Theoretical conclusions:

1. The empirical study has been developed on the basis of an extensive review of previous empirical research in FFP and the customer behavior effects of FFP design. The research model initially has been drafted as a synopsis of the review results (see Figure 2.5 on page 80).

2. Precisely the consumer behavior constructs and the design elements of FFP have conclusively been derived from earlier models and have gradually been refined in the process of own empirical research.

3. Based on the literature review the study provides a comprehensive model explaining the cause-and effect-chain of FFP effectiveness with customers based on psychological insights from consumer marketing on consumers' purchase decision process, branding theory and technology acceptance theory.

4. Referring back to the available earlier empirical studies in the field of FFP and related incentive systems, the study develops a theory-founded research model, explaining the consumer behavior effect chain by the design of FFP and further moderator (Travel and airline characteristics) and customer characteristics as controls. Research propositions are derived from earlier findings is, which are novel concerning their comprehensiveness and interaction.

Empirical conclusions

The empirical section tests the research model derived from the literature review empirically for a sample of FFP consumers. The major new empirical conclusions as compared to earlier studies are summarized in the following:

1. This study has for the first time analyzed FFP in the European and German market comprehensively. Although more than 20 similar studies have reviewed, not a single study has referred to European or German FFP explicitly, while other nations like Australia China, the Baltics, South Africa and Turkey have been given extensive consideration. This study has filled this void in FFP research by focusing on the Lufthansa Miles & More program and Germany based customers who are members in that program. Research in this only German FFP is important since it is of global reach

and comprises extensive partner networks and as such counts among the most important FFP worldwide.

2. The study has developed a comprehensive system of design elements of FFP and their effect on consumer behavior. Earlier studies have addressed select target factors of consumer behavior only, i.e. have focused on customer attitude, purchase theory customer loyalty or customer relationship management. None of the reviewed studies, however, has integrated these customer related target factors to a comprehensive customer value chain.

3. This study has derived potential causal interactions between the targets referring to established marketing theories (purchase funnel models and customer lifecycle models) and has derived a comprehensive customer behavior chain for the airline sector. The correlations of the elements of the value chain are plausible from marketing research but have empirically been analyzed for the sample of German FFP members based on hypotheses 1 to 5. The confirmation of Hypotheses 1 to 5 shows that customer behavior effects are strongly interdependent. Customer attitudes contribute to develop brand image. Brand image motivates customers to buy. Positive purchase experiences result in customer loyalty and repeat purchase. Sustainable customer relationships create customer value and establish a life-long customer provider interaction, if cherished sustainably.

4. Hypotheses 6 to 10 of the empirical analysis have projected FFP design elements on this customer behavior cycle, have analyzed the impacts of FFP design elements on the identified six coherent stages in the customer behavior chain systematically and have found that the FFP design elements impact all stages of the customer behavior chain. This result supports the frequent observation in marketing research, that all stages of the consumer behavior cycle are interdependent. The analysis has thus concretized marketing models of consumer behavior for the German airline sector and validated the assumptions empirically.

5. Previous empirical studies have discussed and researched several design elements of FFP but none of the retrieved studies has evaluated a comprehensive set of FFP incentives and premia. While some studies focus on rewards, others put perceived program reach and quality in the focus of attention. This study has considered all design elements of FFP mentioned in previous research, i.e. monetary awards, service awards and status awards, reach of the FFP network and transparency of redemption and has assessed the

contribution of each element to customer behavior at every level of the identified customer behavior chain. The analysis has shown that each factor of FFP design takes a significant impact on consumer behavior. To devise effective FFP a comprehensive conceptualization considering all these aspects is necessary.

6. Earlier studies in FFP effectiveness have evaluated several and differing moderators of consumer behavior among them passenger-, travel- and airline- related factors. Based on expert interviews and the quantitative consumer survey, this study has shown that mainly travel related parameters determine whether customers appeal to FFP, especially the number of annual flights, the share of short distance flights and membership of other FFP have been found highly significant controlling factors.

7. Airline related parameters namely airline security and quality, which in earlier studies have been identified as moderators of the appeal of FFP to have been found to take a direct determining role in this study. The impact of airline security and quality is essential to customers' airline related behavior directly, but rarely as a moderator of FFP effectiveness. This new observation, which has required more detailed methods of statistical analysis (including interaction variables in the regression models) than earlier studies have done is plausible: Airline quality and safety are preconditional for customers to consider flying with the airline at all. Only if these fundamental requirements are met, the FFP program is given attention at all. FFP design does not moderate the perception of airline safety and quality according to this study. The study has thus applied a novel more comprehensive research model than earlier studies, focused on the novel domain of German FFP and has gained additional and novel insights on the effectiveness of FFP design.

8. The empirical findings of this study provide comprehensive effect chain of important design elements of FFP on consumer behavior and potential moderators to this causal relationship. The empirical survey among a representative number of Miles and More Members has shown that essentially five major design factors decide on the effectiveness of FFP to consumer attitude, purchase behavior and the sustainable customer relationship between airlines and their flight customers. These design elements are height & availability of monetary awards, availability & range of service awards, availability and range of status awards, the number of FFP partner businesses and the transparence of redemption conditions. FFP programs built their customer success on the combination of monetary, service and status incentive, which are particularly effective, when the

premia (miles) can be redeemed with a large number of FFP partners and if redemption conditions are clear and stable.

9. FFP accordingly are an important element in airlines marketing strategy, however airline safety and quality are important co-determiners of FFP effectiveness. Beyond FFP attractiveness customers choose airlines offering comfort and renowned for their high security standards.

10. The quantitative study has shown that positive customer experience builds long term customer relationships. Customers developing a positive attitude on the airline and FFP assign high image value to the airline brand. These customers stay loyal after first positive flight experiences and unfold significant customer lifetime value, due to own affirmative recommendation behavior. FFP contribute to develop sustainable customer relationships and transform flight passengers into brand advocates.

11. The analysis of control factors to these relationships characterizes customers as FFP prone according to their flying habits. Individuals with a high share of short distance flights and a high number of flights per year are more involved with FFP, while membership in several FFP reduces the appeal and loyalty effect of individual FFP from a customer perspective.

12. The study makes important contributions to business practice and particularly supports airlines, specifically, marketing FFP design, strategic planning, social network marketing and quality management in jointly developing and adjusting FFP design, communication and customer policy, but equally to academic research an airlines customers.

PROPOSALS

Proposal to airline marketing departments

Airline marketing departments benefit of the results of this study: Section 2.1 has provided a detailed competition analysis in the European airline sector and a comprehensive FFP market overview. While customer prices for aviation are stagnating due to the intrusion of low-cost carriers in both business and leisure travel (Mitusch & Mendes De Leon, 2017; IATA, 2017), airlines' operation costs have increased due to emission taxes and bureaucratic efforts (Nava et al., 2018; O-Mara, 2019). FFP programs have existed since the 1970ies but critics explain that the apex of FFP has passed, due to the lowering relevance of status and service from a customer perspective and the growing desire for increasing transparency of flight prices (Knorr, 2019; Vinod, 2011). The necessity to reduce aviation costs has moreover induced airlines to cut back amenities connected to FFP (DeBoer & Gudmundsson, 2012) and avoid arbitrary rebate schemes (Klophaus, 2005). Low-cost carriers have forced brand airlines into an overt battle for blunt dumping prices and customers increasingly doubt the honesty of FFP.

From results important suggestions to airline marketing departments can be derived:

1. FFP programs have to be marketed more effectively. Information on FFP structure and content and the particularities of the programs as compared to competitive programs should be summarized in a flyer and on airlines websites online in order to provide transparency to customers.

2. FFP programs should be integrated more effectively in airlines' marketing. All customer touchpoints e. g. waiting lounges in airports, touchpoints in the aircraft as well as providers' virtual and social media should refer back to the FFP and thus generate a comprehensive touchpoint system. By repeating the brand name and opportunities of using the FFP, customers are gradually influenced to develop brand consciousness and adopt the brand identity of the program as an integral part of their flying habits in an increasingly homogenous FFP market programs with best brand marketing excel.

Proposals to designers of FFP Programs

Designers of FFP programs are informed on the ideal design of FFP programs: To enable airlines to tailor FFP to customer requirements and thus ensure higher customer acceptance

of FFP, this study has scrutinized the effectiveness of FFP design elements from the perspective of 502 Miles and More customers based on a comprehensive statistical analysis. The study has found that all levels of the customer behavior cycle are addressed by FFP. FFP take effect on customer attitude, contribute to develop airlines' brand image, motivate flight bookings and keep customers loyal to the airline. They build a sustainable customer relationship based on mutual valuation. FFP thus are still an effective strategy of gaining, developing and retaining customers.

Designers of FFP programs should adjust their programs to customer requirements and marketing competition in a more differentiate way, since to date FFP programs hardly differ fundamentally, the following amendments to FFP should be made:

1. FFP should appeal to customers' emotions rather than only address financial factors and physical requirements (like lounge access). FFP users should be provided visible image advantages to a larger extent, in order to make the program more attractive. FFP seats in airline waiting areas and priority check in facilities, for instance, should be differentiated more clearly and visibly and really offer higher comfort.

2. The interlink between airlines' FFP offers and other joining provider companies (e.g. hotels, car agencies) should be more transparent and better structured. FFP users frequently do not know or have difficulty to find out which amenities e.g. in hotels or shops are connected to the FFP program. These offers should be structured more clearly, and participants on the supply side should be available from the programs' websites. Via social media or marketing E-mail systems customers could regularly be informed on new offers.

Proposals to strategic airline management

Airline strategic planning is informed by the study: airlines should not reduce the comprehensive draft of their FFP, in order to save costs at short notice: the analysis has shown that price premia, service and status awards are integral elements of FFP and together contribute to impact customer behavior. It is not a single FFP element, that is effective by itself or redundant. FFP are rather defined as comprehensive service and premia concepts. Customers perceive FFP as a compliment for their trust and loyalty. If airlines reduce one or the other benefit for budget reasons, they undermine the credibility of the whole program. Formulated positively, the strategic management of airlines should:

1. Integrate the activities of FFP designers and marketing departments more effectively to create a transparent, commonly known and stable FFP brand.

2. The FFP should be designed to offer customers a comprehensive service around their travel including aviation, car rental, other transport, hotels and shopping abroad.

3. The statistical analysis of the customer survey has further shown that network reach, i.e. the number of available partners and redemption transparency are highly significant determiners of FFP effectiveness with customers.

4. In order to increase the attraction of FFP and impact on consumer loyalty and customer relationship management, airlines should build the reach of their FFP network and gain other airlines, hotels and shops around the world to participate with attractive and transparent offers.

5. Redemption guideless should be kept possibly simple and easily inform customers on premia height and expiry.

6. Hidden conditions and repeated changes of redemption conditions while the program is running should be avoided, in order to maintain customer trust.

Proposals to airline quality management

After all, airlines quality management gains important information from the study:

1. Beyond the development of FFP, airlines should keep general quality and safety standards in mind. These are the probably most important determiners of customer booking behavior trust and loyalty. So far, brand airlines still enjoy an advance of trust concerning safety and quality criteria. But budget carriers could in the mid-term catch up on these points. FFP thus remain an important strategy to maintain the attraction of brand airlines but should be designed honestly and sustainably.

2. Airlines should ensure that all customers but particularly FFP clients truly perceive the advantages of the program e.g. in the degree of servicing and the friendliness of treatment.

3. The FFP should be designed to differentiate the joining airlines and companies visibly and distinctly form other competitors, which means that the FFP should bear special brand traits corresponding to the marketing strategy of the airline as a whole.

Proposals to academic research

From a researcher's perspective, the study has provided a comprehensive analysis of the impact of FFP on consumer behavior using multiple methods of academic analysis, market analysis, systematic review, expert interviews and a customer survey with 502 Miles & More customers. A comprehensive research model has been developed, refined, validated and tested for statistical reliability. The study has gained three important new insights on FFP customer impact:

1. The major design elements of FFP are financial premia, service and status awards. The reach of the FFP network and transparency of redemption take significant positive effect on customer acceptance and airlines' brand image.

2. FFP impact the whole customer behavior chain, which comprises customers' attitude on the airline, brand image, customers' booking behavior, customer loyalty, sustainable customer relationship and perceived customer value of airline and FFP.

3. There is no single FFP design element which is of individual or unique importance, but FFP gain their attraction due to the harmonious interaction monetary, service and status awards. Customers estimate the transparent availability of this package with a possibly broad range of partners around the globe.

Proposals to airline customers

Finally, the study has contributed to clarify customers' perspective on airlines FFP: For customers the availability of FFP remains an important distinguishing feature of brand airlines on budget carriers. Brand airlines should enhance FFP so that customers understand the premia system easily and can trust in the continuity of the mileage concept. A broad network of partnering airlines, hotels and other businesses worldwide is essential to the attraction of FFP.

The study informs customers on the features and elements of different FFP globally, and advises customers to:

1. Scrutinize different FFP programs before choosing one of them. Choose a provam available for most of your flights and offers optimum service, financial profitability and – if wanted - status.

2. Choose a single FFP: Participation in several FFP programs is redundant since most FFP require minimum flight miles to be maintained or advance. Choosing a single program enables customers to draw most benefits.

3. Keep on track with the programs' evolution. Some FFP have changed significantly in recent years and offer more or less attractions than earlier. Consider phasing out early if the FFP deteriorates and step on a more attractive program.

By bringing together academic research expertise and practitioner experience in the evaluation, design and amendment of FFP programs, this incentive concept has the potential to distinguish brand airlines effectively now and in the future.

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WORDS OF GRATITUDE

APPENDIX

Appendix 1: Tables

Table 0.1

Overview on major international FFP

No.	Airline	Country	Program	Earning miles	Expiry	Spending miles	Status rewards	Limitations Spec. conditions
1	Delta Airlines	USA	SkyMiles	5-10m/$	24	• Flight booking with Delta or partners • Sky Miles Credit card • Sky Miles partners • Delta vacations and cruises	• From 20.000 m • Elite status with hotels and rent-a car • Million miles status	• Black-out dates • 900 award destinations
2	American Airlines	USA	AAdvantage	5-11 m/$	18	• Flight booking with AA or partners • Saver or any-time flight • Special prices • > 1,000 partners • Donate to anybody	• Elite Status Airport services • Upgraded luggage terms • Lounge etc.	• Reactivation fees
3	Deutsche Lufthansa	Germany	Miles & More	m/€ depending on partner airline + status	24	• 40 Partners • Shopping • Hotels	• 35,000 status miles or 30 flights required • Easier booking • Privilege status	• Mileage bargains for cheaper flights
4	United Continental	USA	Mileage Plus	5-11 m/$	18	• Star Alliance & Mileage plus • Economy plus purchases • Credit card	• Status premier customer	• Limited number of seats for awards
5	Air France/KLM	France	Flying Blue	4 -8 m/€	24	• free luggage & seats • shopping • hotels • experience points	• 25,000 miles or 15 flights • Free lounges from gold status	•
7	South West Airlines	USA	Rapid Rewards	6-12 ct/$	24	• Flight and partners • 850 online stores • Credit card	• 110.000 pt = companion pass	•

No.	Airline	Country	Program	Earning miles	Expiry	Spending miles	Status rewards	Limitations Spec. conditions
							• (free flights for partner)	
8	China Southern Airlines	China	Sky pearl club	Fare class & status	24 (full) 12 (half)	• Flights with partners • Discount with Hertz rent a car • Partner with American Airline	• Advance seat selection • Lounge service	•
9	All Nippon Airways	Japan	ANA Mileage Club	Flight type & class	36	• Flight awards/ products • Hotel sty/ car rental	• Lounge, • concierge, • seat awards	•
10	China Eastern Airlines	China	Dynasty Flyer	Booking class, trip weight, accrual ratio	36	• Flights with airline • Sky team partners	• Special senior members • Priority check in, • guaranteed seats • free luggage • VIP lounge	•
11	Cathay Pacific Airways	Hong Kong	Marco Polo Club	Miles + Category = club points	12	• Flight with CP or partners • Asia miles premia • Finance & insurance • Telecom partners • Dining • Professional advice	• Better seats • Economy check in • Additional luggage • Lounge access • Press reader	• Annual renewal 100-600 $ turnover
12	Air Canada	Canada	Aeroplan	Choose basis: fixed mileage per flight or market price	84	• Flight with star alliance • Purchase of products • Mile promotions • Credit Car (Aeroplan & AMEX) • Environment spending/ donation	•	•

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No.	Airline	Country	Program	Earning miles	Expiry	Spending miles	Status rewards	Limitations Spec. conditions
13	Japan Airlines	Japan	JAL Mileage Bank	Miles by ticket class, fare, flight sector	-	- Flight with JAL & 21 Partner airlines - Online shopping - Credit card - Premia exchange - Bus Tokyo shuttle - Family member credits	- Fly on program: travel benefits from 30.000 pt.: - reservation desks, - lounge, - priority waitlist	1,000 miles registration fee paid after pint accumulation - Expiry on withdrawal from program
14	Turkish Airlines	Turkey	Miles & Smiles	Dep on: Class continent	36	- Airline & star alliance members premium tickets - Hotel - Car rental - Health care, training - Insurance - Shopping with miles & Smiles card - Family miles pooling	25,000 miles/ 12 month - Premium tickets - Passenger lounge - Free add. luggage	Extend validity at 10 USD/1,000 m
15	Qantas Airways	Australia	Qantas FF	0.5 pt./$ & status but minimum points guarantee	18	8 External airlines - Flights, hotels, car hire - Shopping, dining - Phone, movies etc. - Several hundred partners - Several credit cards	- Priority boarding - Qantas lounge	100 $ join up fee
16	Singapore Airlines	Singapore	Krisflyer	Points by class & tariff	36	- Flights with airline & partners 130 partner shops - Partner credit cards	- Club lounge - Premia	- No own credit cards - pay 12 m/10.000 miles to extend

No.	Airline	Country	Program	Earning miles	Expiry	Spending miles	Status rewards	Limitations Spec. conditions
17	Korean Air	Korea	SKYPASS	Miles by class & flight type	120	• Airline and sky team member airlines	• 5,000 m / 40 flights • Priority check in • Free luggage • Priority luggage • Lounge • Premia gifts • First class seat	•
18	Hainan Airlines	China	Fortune wings Club	Points by class & flight & status	24/36	• Flights with airline • Fortune wings club points • Hotels • Car rental	• Fortune wings club	•
19	Latham Airlines	Chile	LATAM Pass	-	36	• One world product catalogue • Flight reductions	• Cabin upgrade • Seat selection • Priority check in • Free luggage	•
21	Alaska Air Group	USA	Mileage Plan	Flight class & fare class	none	• Flight reductions & partner airlines • Hotel stays • Rent a card service • Credit card	• Flights benefits • Airport benefits • Service benefits	•

Table 0.2

Previous empirical publications on the impact of FFP on consumer behavior, publication date: 2002-2018

Year	Author	Method, sample	Input factors/ moderators	Output factors	Observed relationships
2018	Orhun & Guo	Airline booking records 2010/11 regression	• Status attainment • Price rebates • Demographic factors • Flight type & date • Leisure/business	• Airline Market share • Rel. price difference • Price differential per mile • Av. Booking differential	• FFP members pay higher prices and choose airline more often • Business & leisure travelers more prone due to moral hazard
2018	Gao et al	Passenger survey from Melbourne airport, 2016, n =136 ANOVA	• characteristics • premium status	• Passenger spending per flight on premium and extra benefits	• Passengers pay price premium above the value of extra benefits • Income, number of trips and travel reasons are insignificant • Passengers with frequent flyer status spend more on extra benefits+ premium benefits
2017	Ma & Li	152 FFP Members China SEM	• Tangible rewards • Preferential treatment • Perceived status	• Relationship quality (positive) • Customer entitlement (negative)	• Status benefits increase customer expectations on rebates & privileges • Enhancement of customer loyalty for rewards
2016	Yan & Cui	Meta-analysis on loyalty programs in Hotel and airline business Logistic regression	• Number of partners • Number of redemption options • Threshold to obtain elite status • Industry type	• Popularity of loyalty program	• Redemption requirement (-) • Number of partners (+), difficulty of reaching elite status (+)
2016	Vilkaitė-Vaitonė & Papšienė	9 Baltic airlines Airline analysis Comparison of means	• Customer loyalty program: availability, program principle, base of reward, type of reward, time of reward usage • Number of partners •	• Passenger numbers • Airline performance	• Loyalty program (+) passenger figure • Loyalty program (insig.) airline revenue, profit

Year	Author	Method, sample	Input factors/ moderators	Output factors	Observed relationships
2016	Sandada & Matibiri	South African Airline customer survey, SEM	• Service quality • Safety • Frequent flyer programs	• Customer loyalty • Customer satisfaction	• service quality (+) satisfaction • Satisfaction (+) loyalty • Loyalty program (+) loyalty
2016	Lin et al.	195 Chinese air passengers SEM	• Perceived passenger value (economic, emotional social)	• Passenger loyalty (Brand, program)	• Emotional value (+) program & brand loyalty • Economic value (+) program loyalty • Social value - no impact
2016	Hossain et al.	Air Berlin loyalty Program- single case	• Customer loyalty program of air Berlin	• Customer retention • Customer engagement • Revenue generation	• No empirically proven results
2016	Mathies & Gudergan	Airline & Hotel business (N = 565 airline) customer survey, regression	• Price, route cancellation, Frequent flyer program • Terms of availability	• Fairness perception • Purchasing choice	• (+) FFP available ad-hoc upgrades • (-) limited availability, limited free flight, route limitations, high price
2014	Kreis & Mafael	Mixed loyalty programs (stores, community, airlines compared SEM, regression	• Customer motives for participation • Monetary based (points/, discounts • Treatment based (status, affiliation)	Perceived customer value: • economic value • interaction value • Psychological value	• FFP are less effective concerning economic, value, interaction value and psychological value than the other programs • Consumers' motives determine effectiveness of incentives
2013	Colakoglu & Artuger	Turkey Member of FFP (n=551), correlation	• Intangible/ tangible benefits	• Customer loyalty • Behavioral loyalty • Attitudinal loyalty •	• FFB (+) behavioral, attitudinal, customer loyalty
2013	Mathies	Impact of pricing schemes and other incentives on consumer preferences Hotel and Airlines regression	• Pricing and Service Features • Membership in FFP as moderator for acceptance of additional pricing	• Perceived fairness of offer • Readiness to pay	• Passengers Fairness judgement determine acceptance of offer • negative utility deviations are judged more important than positive deviations • FFP members are less ready to pay for additional service than standard passengers

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Year	Author	Method, sample	Input factors/ moderators	Output factors	Observed relationships
2013	Meyer-Waarden	FFP Members of an airline (n = 659), 2007 SEM	• Reward personalization • Purchase orientation (motives) • Customer motivation	• Perceived program value • Customer loyalty: purchase intensity, resistance to counter persuasion	• Effect of reward personalization depends on purchase orientation • Intrinsic rewards strengthen loyalty of intrinsically motivated customers • extrinsic rewards appeal to extrinsically motivated customers
2010	Mimouni-Chaabane & Volle	French members of flight loyalty programs survey N = 367 SEM	• Monetary savings • Exploration • Entertainment • Recognition • Social benefits	• Satisfaction with program • Loyalty to program • Perceived relationship investment of firm	• Relationship investment (+) relationship quality • Recognition, monetary savings, exploration (+) relationship investment (in this order)
2009	DeKay et al.	Survey on comparative notability of hotel LP and FFP, means comparison	• Passengers: age, income, travel frequency • Usage of hotel and airline loyalty programs	• Travelers preferences • Travelers' knowledge of programs • Travelers membership	• Airlines programs are better known than hotel programs • Frequent travelers join both • Guest prefer program combination
2006	Park et al.	Customer survey SEM	• Passenger demographics & income • Perceived price • Airline service quality • Perceived value •	• Passenger satisfaction • Airline image • Future behavioral intentions	• Value and service quality (+) satisfaction (+) image (+) behavioral intentions • Price and satisfaction are not correlated
2008	Meyer-Waarden	Retail outlets Card-holders vs non-members survey N = 800 ANOVA	• Loyalty programs	• Customer purchase behavior: Total and average purchase, share of purchases, purchase frequency, inter-purchase time	• Loyalty program holders (+) purchase factors
Year	Author	Method, sample	Input factors/ moderators	Output factors	Observed relationships
2006	Keh & Lee	Restaurant customer survey (n = 205) ANOVA	• Direct vs indirect • Delayed or instant reward • Customer satisfaction	• loyalty	• Satisfied consumers are more loyal for delayed direct rewards • Dissatisfied consumers are more loyal for immediate direct rewards

2007	Lederman	Change of small airlines attractiveness after adoption of FFP of larger partners 1996-2000. 3 US airlines Passenger survey Time series	• Effect of loyalty programs controlling for other perceived airline advantages	• Value of airline fights •	• Flight volume increases with FFP introduction • Effect is stronger for frequently used airports
2003	Whyte	9 coherent FFP studies in Australia ANOVA	• Membership type • Duration of membership • Rewards and other products/services	• Number of trips • Commitment to airline	• FFP (-) switching behavior (switching costs of losing points)
2002	Chin	Singapore airline passenger survey 2000 N = 192; ANOVA	• FFP participation/ non participation • Long/short distance • Business/leisure	• flight choice Singapore or another airline	• FFP, schedule quality (+) preference for Singapore airline

Table 0.3

Concept matrix of effect chain of desirable consumer behavior due to FFP design

Output factors (customer behavior)	Sub-categories	Authors
Customer Attitude	• Customer program knowledge	• DeKay et al. (2009)
	• Positive relationship quality • Perceived relationship investment of airline	• Ma & Li (2017) • Mimouni-Chaabane & Volle (2010)
	• Customer entitlement (-)	• Ma & Li (2017)
	• Fairness perception • Perceived Fairness of offer	• Mathies & Gudergan (2016) • Mathies (2013)
	• Customer satisfaction	• Keh & Lee (2006)
Brand image	• Airline image	• Park et al. (2006)
Purchase behavior	•	•
Passenger spending	• Spending per flight (incl. Premium & benefits • Realized Price difference per mile of FFP vs. non-FFP customers	• Gao et al. (2018) • Orhun & Guo (2018)
Booking frequency	• Purchase intensity • Purchase frequency • Interpurchase time	• Meyer-Waarden (2013) • Meyer-Waarden (2008)
Airline choice	• Purchasing choice • Purchase behavior • Share of purchase • Booking differential of FFP vs. non-FFP customers	• Mathies & Gudergan (2016) • Meyer-Waarden (2008) • Orhun & Guo (2018)
Airline economic success	• Revenue generation • Airlines' market share • Airline performance	• Hossain et al. (2016) • Orhun & Guo (2018) • Vilkaitė-Vaitonė & Papšienė (2016)
Advocacy & Loyalty		
Customer attitudinal loyalty	• Loyalty to airline	• Sandada & Matibiri (2016) • Lin et al. (2016)
	• Commitment to airline	• Whyte (2003)
	• Customer retention/ engagement	• Hossain et al. (2016)
	• Passenger loyalty to program • Loyalty to program • Travelers' membership	• Lin et al. (2016) • Mimouni-Chaabane & Volle (2010) • DeKay et al. (2009)
Behavioral loyalty	• Behavioral/attitudinal loyalty • loyalty	• Colakoglu & Artuger (2013)
	• Resistance to counter persuasion	• Meyer-Waarden (2013)

	• Flight choice (airline or other)	• Chin (2002)
	• Passenger numbers	• Vilkaitė-Vaitonė & Papšienė (2016)
	• Future behavioral intentions	• Park et al. (2006)
Customer Relationship	• Program popularity • Satisfaction with program • Traveler preference	• Yan & Cui (2016) • Mimouni-Chaabane & Volle (2010) • DeKay et al. (2009)
	• Customer satisfaction with airline • Passenger satisfaction	• Sandada & Matibiri (2016) • DeKay et al. (2009) • Keh & Lee (2006)
Customer lifetime value	• Economic, interaction, psychological value	• Kreis & Mafael (2014)
	• Perceived value	• Park (2006)
	• Perceived program value	• Meyer-Waarden (2013)
	• Value of airline flights • Perceived price	• Lederman (2004) • Lin et al. (2016)
	• Readiness to pay	• Mathies (2013)

Table 0.4

Concept matrix of design elements of Frequent flyer programs

Design elements of FFP	Sub-categories	Authors
Material rewards	• Price rebates • Pricing features • Tangible rewards • Monetary based rewards • Monetary savings • Direct/indirect monetary reward	• Orhun & Guo (2018) • Ma & Li (2018) • Mathies (2013) • Colakoglu & Artuger (2013) • Kreis & Mafael (2014) • Mimouni-Chaabane & Volle (2010) • Keh & Lee (2006)
Service rewards	• Preferential treatment • Treatment based reward • Service features • Exploration • Entertainment • Rewards/other Products	• Ma & Li (2018) • Kreis & Mafael (2014) • Mathies (2013) • Mimouni-Chaabane & Volle (2010) • Mimouni-Chaabane & Volle (2010) • Whyte (2003) • Chin (2002)
Status rewards	• Premium status • Status attainment • Perceived status • Intangible benefits • Recognition • Social benefits • Membership type	• Orhun & Guo (2018) • Gao et al. (2018) • Ma & Li (2018) • Colakoglu & Artuger (2013) • Mimouni-Chaabane & Volle (2010) • Mimouni-Chaabane & Volle (2010)
Program Quality	• Number of partners	• Yan & Cui (2016) • Vilkaitė-Vaitonė & Papšienė (2016)
	• Threshold to attain elite status • Base of reward • Problems of redemption	• Yan & Cui (2016) • Vilkaitė-Vaitonė & Papšienė (2016) • Whyte (2003)
	• Time of reward usage • Terms of availability • Delayed/instant reward	• Vilkaitė-Vaitonė & Papšienė (2016) • Mathies & Gudergan (2016) • Keh & Lee (2006)

Table 0.5
Concept matrix of moderators of the impact of FFP design on consumer behavior

Moderators	Sub-categories	Authors
Passenger related moderators	• Age • income	• DeKay et al. (2009) • Park et al. (2006) • Gao et al. (2018)
	• Tier status	• Gao et al. (2018)
	• Purchase orientation	• Meyer-Waarden (2012)
	• Motives for participation • Customer motivation	• Kreis & Mafael (2014) • Meyer-Waarden (2012)
Travel related moderators	• Leisure or business • Long/short distance flight	• Mathies & Gudergan (2016) • Orhun & Guo (2018) • Chin (2002)
	• Travel frequency	• DeKay et al. (2009)
	• Usage of other loyalty programs • Existing participation in FFP	• DeKay et al. (2009) • Orhun & Guo (2018) • Chin (2002) • Ledermann (2007)
Airline/Industry related	• Service quality • Safety • Airline specific advantages • Industry type	• Sandada & Matibiri (2016) • Park et al. (2006) • Lederman (2004) • Yan & Cui (2016)

Table 0.6

Summary of research hypotheses derived from the review

P	Propositions	Authors
	Consumer behavior effect chain	
1	Positive customer attitudes enhance airlines' brand image.	• Park (2006) • DeKay et al. (2009) • Mimouni-Chaabane & Volle (2010) • Ma & Li (2017)
2	Customer booking (purchase) behavior contributes to customers' loyalty.	• Orhun & Guo (2016) • Gao et al. (2018) • Meyer-Waarden (2013, 2008) • Mathies & Gudergan (2016) • Vilkaitė-Vaitonė & Papšienė (2016) • Colakoglu & Artuger (2012) • Sandada & Matibiri (2016) • Hossain (2016) • Whyte (2003) • DeKay (2009)

3	Sustainable customer relationships contribute to high customer lifetime value.	• Mimouni-Chaabane & Volle (2010) • Keh & Lee (2006) • Yan & Cui (2016) • DeKay et al. (2009) • Kreis & Mafael (2014) • Ledermann (2007)
4	High airlines brand image is correlated to high loyalty of FFP passengers.	• Park et al. (2006) • Mathies & Gudergan (2016)
5	High airlines customer lifetime value is correlated to high loyalty of FFP passengers.	• Ma & Li (2017) • Lin et al. (2016) • Mimouni-Chaabane & Volle (2010) • Park (2006) • Lin et al. (2016)
	Determinants of FFP impact	
6	The positive impact of FFP on customer behavior increases with the availability and height of monetary rewards.	• Ma & Li (2007) • Mathies & Gudergan (2016) • Kreis & Mafael (2014) • Mimouni-Chaabane & Volle (2010) • Keh & Lee (2006)
7	The positive impact of FFP on customer behavior increases with the availability and range of service rewards.	• Ma & Li (2007) • Mathies & Gudergan (2016) • Kreis & Mafael (2014) • Whyte (2003) • Chin (2002)
8	The positive impact of FFP on customer behavior increases with the availability and range of status rewards.	• Mimouni-Chaabane & Volle (2010) • Orhun & Guo (2018) • Gao et al. (2018)
9	Status rewards outweigh monetary and service rewards concerning the impact on customer behavior.	• Gao et al. (2018) • Orhun & Guo (2018)
10	High numbers of FFP partners increase the positive impact on customer behavior.	• Yan & Cui (2016) • Vilkaitė-Vaitonė & Papšienė (2016)
11	Transparent redemption thresholds distinguishing FFP members unfold a positive impact on customer behavior.	• Vilkaitė-Vaitonė & Papšienė (2016) • Yan & Cui (2016) • Keh & Lee (2006)

12	Obscure validity and redemption constraints impair the impact of FFP on customer behavior.	• Mathies & Gudergan (2016) • Whyte (2003)
	Moderators of FFP impact	
13	Customer age, income and consumption motivations moderate the impact of FFP design on customer behavior.	• DeKay et al. (2009) • Park et al. (2006) • Gao et al. (2018) • Kreis & Mafael (2014)
14	The characteristics frequent flyer, business traveler and registry on affiliated programs positively moderate the impact of FFP design on customer behavior.	• Mathies & Gudergan (2016) • Orhun & Guo (2018) • Chin (2002) • Meyer-Warden (2013) • Ledermann (2007)
115	Airlines safety and service quality positively moderate the impact of FFP design on customer behavior.	• Ledermann (2007) • Park et al (2006) • Yan & Cui (2016)

Table 0.7

Survey questions to assess customer demographics

No.	Code	Question on Moderators of FFP effects on consumer behavior – part 1	
		Customer characteristics	Codes
1	MC0	Are you a Miles & More member?	1 = yes (continue; 2 = no (end of survey)
2	MC1	Pleas indicate your age category (Park et al., 2006, p. 372)	<20 =1; 20-29 =2; 30-39 =3, 40-49 =4;50-59 =5;> =60 =6
3	MC2	Please indicate your income category. (Park et al., 2006, p. 372	<=20 TEUR = 1; 21-40 TEUR = 2; 41-60 TEUR = 3; 61-80 TEUR =4; > 81TEUR = 5

Table 0.8

Survey questions to assess travel characteristics

		Travel characteristics	Code
22	MT1	I book about…. % of flights for business purposes.	1<10%; 2 = 11-20%; 3 = 21-30%; 4 =31-50%;5 =50-70%; 6 > 70%
23	MT2	I book short distance flights of less than 2 flight hours in about … % of my bookings.	1<10%; 2 = 11-20%; 3 = 21-30%; 4 =31-50%;5 =50-70%; 6 > 70%
24	MT3	I fly… times per year.	1 = once or less 2 = 2-3 times; 3 = 4-6 times; 4 =7-15 times; 5 = 15 to 25 times; 6 = more than 25 times.
25	MT4	I additionally use other loyalty programs apart from Miles & More.	1 =never; 2=I did earlier; 3 = one other; 4= several others

Table 0.9

Survey questions to assess airline characteristics

		Airlines characteristics (adapted from Sandada & Matibiri, 2016, p. 45)	
	MAS	**Airline Safety**	
26	MAS1	I am generally satisfied with flight safety.	
27	MAS2	I feel save during flights with Miles & More partner airlines.	
28	MAS3	I feel the cabin crews at Miles & More Partner Airlines are competent and reliable.	
	MAQ	**Airline quality**	
29	MAQ1	The employee attitude of Miles & More partner airlines demonstrates their willingness to help me.	
30	MAQ2	The employee attitude of Miles & More partner airlines shows me that they understand my needs.	
31	MAQ3	The employees of Miles & More partner airlines are able to handle my complaints directly and immediately.	
32	MAQ4	The Miles & More airlines facility is well designed.	
33	MAQ5	I rarely have to wait long to receive the Miles & More service.	

Table 0.10

Survey questions to assess monetary, service and status awards (H1 to H4)

No.	Code	Question on Design elements of FFP Part 1
		(adopted from Ma & Li, 2018, p. 304)
	AM	**Height & availability of monetary awards**
34	AM1	Miles & More provides a favorable mileage accumulation policy.
35	AM2	Miles & More offers attractive upgrades.
36	AM3	Miles & More has convincing redemption options for flight bookings.
37	AM4	Miles & More has attractive premia for non-flight purchases and bookings.
	AS	**Availability and range of service awards**
38	AS1	I feel that Miles & More gives me better treatment than it gives customers who do not join the program.
39	AS2	I feel that Miles & More gives me faster service than it gives customers who do not join the program.
40	AS3	I feel that Miles & More does things for me that it does not do for most other customers.
	AT	**Availability and range of status awards**
41	AT1	I feel that I have a high standing as a member of Miles & More.
42	AT2	I believe that I am a very important customer of Miles & More partner airlines.
43	AT3	I believe that Miles & More partner airlines appreciate me more than most of its other customers.

Table 0.11

Survey questions to assess FFP quality

No.	Code	Questions on design elements of FFP – Part 2
		(adapted from Yan & Cui, 2016, p. 6)
	QP	**Number of partners**
44	QP1	Miles & More has the advantage of partnering with many airlines globally.
45	QP2	Miles & More has got an extensive network of attractive hotel partnerships.
46	QP3	Miles & More offers a broad range of shopping options worldwide.
	QT	**Transparency of redemption**
47	QT1	I can always redeem collected miles easily.
48	QT2	The redemption of miles is transparent.
49	QT3	You can flexibly use acquired miles.

Table 0.12
Survey questions to assess behavioral effects of FFP with customers

No.	Code	Questions on FFP behavioral effects with customers
	BA	**Customer attitude** (adopted from Park et al., 2010. p. 6)
53	BA1	Miles & More is part of my travels.
54	BA2	I feel personally connected to the Miles & More program.
55	BA3	I feel emotionally bonded to the Miles & More program.
	BI	**Brand Image** (adopted form Bauer et al., 2008, p. 218, Keller (1993, p. 7)
57	BI1	Miles& More is a unique brand.
58	BI2	Miles & More enjoys high acceptance among travelers.
59	BI3	Miles & More membership mediates a positive image.
	BP	**Purchase behavior** (Colakoglu & Artuger, 2012, p. 39)
61	BP1	I am a regular customer of Miles & More partner airlines.
62	BP2	If I fly again, I will again go with Miles & More partner airlines.
63	BP3	I plan to fly with Miles & More partner airlines more frequently in future.
	BL	**(Attitudinal) Loyalty** (Colakoglu & Artuger, 2012, p. 39/ Meyer-Waarden, 2013, p. 189)
65	BL1	I would encourage my family and friends to go with Miles & More partner airlines.
66	BL2	I would be reluctant to book with non-Miles & More partners.
67	BL3	I would encourage my company to book with Miles & More partner airlines.
	BR	**Customer relationship** (adopted from Ma &Li, 2017, p. 304)
69	BR1	I have a high-quality relationship with Miles & More partner airlines.
70	BR2	I have trust in Miles & More partner airlines.
71	BR3	I am willing to remain a customer of Miles & More partner airlines.
	BV	**Customer lifetime value** (adopted from Kreis & Mafael, 2014, p. 599)
72	BV1	Participating in the Miles & More program makes me feel better about myself.
73	BV2	The Miles & More program offers me additional value for my money.
74	BV3	The Miles & More program is useful for me.

Table 0.13

Constructs for model and hypothesis test

Constructs for hypothesis tests	Abbreviation
Consumer characteristics (controls 1)	
Age	MC1
Income	MC2
Budget optimization	MCB
Hedonism	MCH
Social-relational orientation	MCS
Functional-time optimization	MCF
Travel characteristics (controls 2)	
% of business flights	MT1
% of short distance Flights	MT2
Number of flights per year	MT3
Membership in other FFP	MT4
Airline Characteristics (moderators)	
Airline Safety	MAS
Airline Quality	MAQ
Design of FFP	
Height & availability of monetary awards	AM
Availability and range of service awards	AS
Availability and range of status awards	AT
Number of partners	QP
Transparency of redemption	QT
Behavioral effects	
Consumer behavior	CB
Consumer attitude	BA
Brand image	BI
Purchase behavior	BP
Attitudinal loyalty	BL
Customer relationship	BR
Customer lifetime value	BV

Appendix 2: Transcription of interview Results

Interview 1

Name der Audio-/Videodatei: Interview Christian Klick - Final cut

Dauer der Aufnahme: 00:06:31-0

Datum der Aufnahme: 20.03.2020

Besonderheiten: per Telefon durchgeführt

Datum der Transkription: 01.04.20

Ersttranskription: audiotranskription.de Transkriptionsservice

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I: Was ist Ihre derzeitige Position und in welchem Umfang beschäftigen Sie sich mit Kundenbindungsprogrammen in der Airline-Industrie? #00:00:07-1#

B: Ich war bis vor zwei, drei Jahren Mitglied der Geschäftsleitung der Star Alliance und habe da im Rahmen der Arbeit direkt, ja, Zugang zu den Informationen, die von den Star Alliance-Airlines mit uns geteilt wurde, gehabt. War aber nie direkt in der Verantwortung für Kundenbindungsprogramme. #00:00:33-7#

I: Hm. Welche Parameter von Frequent-Flyer-Programmen halten Sie für wirksam oder weniger wirksam und warum? #00:00:42-8#

B: Also dazu muss man, glaube ich, kurz ausholen, weil die Frequent-Flyer-Programme haben sich, seitdem sie geschaffen wurden, in den letzten Jahren doch erheblich auch verändert in ihrer Natur und Wirkungsweise. Das lag daran oder liegt daran, dass die Fluggesellschaften anders als noch vor zwanzig Jahren doch sehr stark damit beschäftigt waren, die Auslastung ihrer Flugzeuge nach oben zu treiben. Und dementsprechend WURDEN die Meilenprogramme weniger attraktiv dadurch, dass nämlich nur noch wenige Sitzplätze für Meilenprogramme überhaupt zur Verfügung standen. Zum anderen ist es so, dass die Preissituation in der Luftfahrt sich auch geändert hat und dementsprechend das rein

eilenbasierte System von vielen Fluggesellschaften, insbesondere denen, die von dem Erfolg dieser Systeme weiterhin überzeugt sind, umgewandelt wurden in wertbasierte Systeme. Also weg von den entfernungsbasierten hin zu wertbasierten Systemen auf der einen Seite. Und was auch hinzu kam, kam dann die Einführung der sogenannten dynamischen Sitzplatzvergabe auf der anderen Seite, das heißt: wenn man denn noch einen Sitz ergattern möchte, dann muss man notfalls auch mehr Meilen dafür einsetzen, wenn es sich um einen hoch ausgelasteten Flug handelt. Dadurch ist aus Sicht der Konsumenten das System doch stark verändert worden und hat, wie man immer wieder auch gehört hat, ja zum Verlust an Attraktivität geführt. #00:02:33-2#

I: Hm, okay. Wie würden Sie Frequent-Flyer-Programme weiterentwickeln, damit sie effektiver werden und was würden Sie hoffen zu erreichen? #00:02:43-4#

B: Ja gut, also den Airlines, die das bisher noch nicht gemacht haben, wird wohl nichts anderes übrig bleiben/ Gut, jetzt mal abgesehen davon, wie wir erstmal sehen müssen, wie diese Krise sich entwickelt, aber aus/ Gehen wir mal davon aus, dass wir dieses Gespräch führen, als WÜRDE es noch viele Strecken und zu 90, 95 Prozent ausgelastete Flugzeuge geben. Dann ist an einen solchen Schritt hin zu wertbasierten Systemen und hin zu dynamischen Sitzvergaben/ führt kein Weg dran vorbei. Denn nur so kann man diese System auch in Zukunft/ oder konnte man sie bis vor vier Wochen auch in Zukunft nur sinnvoll managen. Viel ist versucht worden über die Ausweitung in der Zusammenarbeit mit Banken, mit anderen Kundenbindungssystemen. Meines Wissens oder nach meinen Beobachtungen sind diese Versuche aber eher an der Peripherie erfolgreich. Das aktive Meilensammeln ist nach wie vor aus Sicht des Kunden ein spannendes Thema und wird auch nach wie vor häufig genutzt. #00:04:02-8#

I: Hm. Sind Sie der Meinung, dass die Wirksamkeit von Frequent-Flyer-Programmen von weiteren Parametern abhängt? #00:04:11-2#

B: Können Sie mir dazu, zu der Frage, mal noch bisschen mehr Hintergrund geben, was Sie da sehen würden als weitere Parameter? Also auf Anhieb kann ich das so nicht bewerten, also weil/ Was Sie mit Parametern meinen. #00:04:32-5#

I: Ja, Parameter könnten ja sein die Verfügbarkeit von, sagen wir, Meilentickets, Fast Track/ #00:04:42-6#

B: Ja, also gut, wenn wir das/ Wenn wir also praktisch auf die Status-Thematik da angehen, das ist nach wie vor natürlich ein ganz wichtiger Parameter. Ich würde im Übrigen auch sagen, dass die Verwendung der angesammelten Meilen in einem größeren System, zum Beispiel im System der Allianzen, sich über die Jahre hinweg als sehr, sehr großer Benefit herausgestellt hat, auch für die Meilensysteme der unterschiedlichen Airlines. Also das heißt, in dem Maße, in dem man mehr Angebot zur Verfügung stellt, wächst auch die Attraktivität des Systems. Leider war es in den vergangene Jahren aber so, dass das eher umgekehrt dann passiert ist. #00:05:28-0#

I: Hm. Und letzte Frage: Glauben Sie, dass die Wirksamkeit von Frequent-Flyer-Programmen je nach Kundentyp, Reiseart und Fluggesellschaft unterschiedlich ist? Wenn ja: in welcher Hinsicht? #00:05:40-8#

B: Eindeutig ja. Also der Kunde, der nur ein-, zweimal im Jahr in Urlaub fliegt, der hat andere Parameter für seine Entscheidung, Kaufentscheidung, als der, der das Flugzeug als häufiges Reisemittel wählt. Auch der, der für seine eigenen Kosten nicht selber aufkommen muss, sondern der das Ticket vom Arbeitgeber bezahlt bekommt, ist leichter gewillt, dann auch seine Reiseentscheidung eher an solchen Systemen wie Frequent-Flyer-Programmen auszurichten, anstatt rein betriebswirtschaftlich zu denken. Auch diese Beobachtung gibt es seit Anbeginn der Systeme. Und hat auch zum Erfolg dieser Systeme beigetragen. #00:06:28-2#

I: Hm. Gut, vielen Dank.

Interview 2: Representative of Miles & More GmbH

Name der Audio-/Videodatei: Interview Horst Findeisen - Final cut

Dauer der Aufnahme: 00:06:38-7

Datum der Aufnahme: 24.03.2020

Besonderheiten: per Telefon durchgeführt

Datum der Transkription: 01.04.20

Ersttranskription: audiotranskription.de Transkriptionsservice

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I: Erste Frage: Was ist Ihre derzeitige Position und in welchem Umfang beschäftigen Sie sich mit Kundenbindungsprogrammen in der Airline-Industrie? #00:00:07-4#

B: Derzeit bin ich Teilzeit-Berater im Airline-Umfeld. Da mache ich alles, was Strategie- und Commercial-Dinge angeht. Aber meine Beziehung zu FFP-Programmen stammt aus meiner vorhergehenden Tätigkeit. Ich war auch wie der Christian Klick bei Star Alliance, dort als Vice President Commercial. Und hatte/ Also mein Portfolio wuchs immer und ich kriegt dann irgendwann auch Marketing und Loyalty hinzu, da war ich etwa, ich schätze mal, vier Jahre verantwortlich. Bis 2016. #00:00:51-2#

I: Hm, vielen Dank. Welche Parameter von Frequent-Flyer-Programme halten Sie für wirksam oder weniger wirksam und warum? #00:00:58-8#

B: Ja, das ist so eine Frage, die/ Ich habe Ihre Fragen schon mal durchgelesen, da kommt dann bei der letzten nochmal hinzu: Je nach Zielgruppe sind die unterschiedlich wirksam. Der Seltenflieger, sage ich mal/ Na, der Seltenflieger ist für Frequent-Flyer-Programme sowieso nicht interessant. Aber der, der nicht so häufig fliegt, der lässt sich vielleicht reizen von Punkten oder Meilen oder wie auch immer die Währung genannt wird, um eben einen Discount auf einen günstigen Flug einzuräumen oder einen Freiflug. Es gibt ja so ganz simple: Buy ten, get one free. Die gab es auch in der Airline-Branche mal ganz am Anfang von einzelnen Local Carriern. Also die Infrequently Flyers, die sind davon angesprochen. Aber die wirklich vielfliegenden in meiner Erfahrung sind viel mehr über die Status und Benefits loyal zu bekommen. Darf ich in die Lounge rein? Kriege ich einen Fast Track? Kriege ich eine Extrabag oder so. Das sind die Benefits, die wirklich ziehen bei DER Zielgruppe, die zumindest wir bei Star Alliance hauptsächlich im Blick hatten. #00:02:22-1#

I: Hm. Wie würden Sie die Frequent-Flyer-Programme weiterentwickeln, damit sie effektiver werden und was würden Sie hoffen zu erreichen? #00:02:30-2#

B: Ich glaube, das Potential, das in den Daten liegt, wird bei Weitem noch nicht ausgeschöpft. Google weiß ja viel mehr über Sie und über mich als die Lufthansa, sage ich mal. Und dabei könnten die Airlines einzeln und insbesondere in Kooperation zum Beispiel

in so einer Allianz, für die ich tätig war, deutlich mehr Daten generieren und dann auch intelligent ausnutzen. So würde ich es weiterentwickeln. #00:03:08-7#

I: Hm. Sind Sie der Meinung, dass die Wirksamkeit von Frequent-Flyer-Programme von weiteren Parametern abhängt? #00:03:15-4#

B: Die habe ich nicht ganz verstanden, die Frage. Können Sie ein bisschen erläutern? #00:03:22-2#

I: Ja, eventuell gibt es ja noch weitere Parameter, die jetzt über die genannten halt hinausgehen oder Benefits, die den Frequent Flyern offeriert werden, die, ja, auf die Wirksamkeit einzahlen? Oder sie/ Ja. #00:03:40-3#

B: Okay. Bleiben wir mal bei Airline-Frequent-Flyer-Programs. Es gibt gar nicht so viele Airline-Frequent-Flyer-Programs, die auch so einen Shop dranhängen haben, dass man seine Meilen also einsetzen kann für Smartphones oder sowas. Also davon gibt es NICHT so viele und die, die es gibt, die sind nicht besonders effektiv. Weil wenn man da einen Preisvergleich anstellt für das iPad, das halte ich auf dem freien Markt/ Häufig ist das gar nicht so attraktiv. Das wäre ein Parameter, wo man sich weiterentwickeln kann. Gibt auch, keine Ahnung, ich glaube, in UK (Neck da?) welche, die den Bereich des Flugs viel mehr verlassen, wo man eben seine Meilen dann auch aufstocken kann, indem ich tanke oder in der Apotheke kaufe oder ins Kino gehe. Also das sind, wie heißen die, Coalition Programs, die viel, viel, viel breiter gefasst sind. Und auch da, komme ich wieder zurück auf das, was ich vorher gesagt habe, kann ich Daten sammeln, die ich, wenn ich nur Airline bin und nur Airline-Transaktionen auswerte, gar nicht wissen könnte. #00:04:59-7#

I: Hm. Kommen wir schon zur letzten Frage: Glauben Sie, dass die Wirksamkeit von Frequent-Flyer-Programme je nach Kundentyp, Reiseart und Fluggesellschaft unterschiedlich ist? Wenn ja, in welcher Hinsicht? #00:05:12-3#

B: Ja, wie ich eingangs schon gesagt habe: Kundentyp, also DER Geschäftsreisende, der permanent die ganze Zeit im Flugzeug unterwegs ist, der will gar keinen Freiflug haben, der ist froh, wenn er mal zu Hause bleiben kann. Ganz anders der Tourist, der eben zweimal Langstrecke fliegt und dann Punkte gesammelt hat, die er für irgendwas einsetzen kann. Reiseart habe ich ja auch gerade angesprochen, Geschäftsreisen deutlich anders als

Privatreisen, gibt es noch diese dritte Kategorie "VFR", Visiting Friends and Relatives, die sind nochmal ganz anders motiviert, aber eher wie Touristen zu betrachten in dem Zusammenhang. So, Fluggesellschaft ja. Da haben wir die Kategorien der Full Service Network Airlines und die andere große Kategorie Low Cost Airlines, die anfangs gar nicht sowas eingeführt haben. Und, ich glaube, Air Asia hat dann angefangen, auch ein Frequent-Flyer-Programm aufzusetzen. Auch DORT gibt es wiederkehrende Kunden, aber die sind in erster Linie, wenn man das so pauschal sagen kann, alle über den Preis getriggert und erst in zweiter Linie über irgendwelche Loyalty-Programme. #00:06:33-0#

I: Hm. Gut, alles klar. So viel zu den Fragen. Vielen Dank.

Interview 3

Name der Audio-/Videodatei: Interview Jörg Schwingeler - Final cut

Dauer der Aufnahme: 00:11:09-8

Datum der Aufnahme: 26.03.2020

Besonderheiten: per Telefon durchgeführt

Datum der Transkription: 01.04.20

Ersttranskription: audiotranskription.de Transkriptionsservice

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I: Was ist Ihre derzeitige Position und in welchem Umfang beschäftigen Sie sich mit Kundenbindungsprogrammen in der Airline-Industrie? #00:00:06-2#

B: Da muss ich zwei Teilantworten geben. Das eine ist, ich bin als Berater in der Luftfahrtbranche unterwegs. Insbesondere mit den Schwerpunkten Strategie und Prozesse und so weiter. Da gibt es natürlich eine ganze Menge Aspekte, die da Überschneidungen und Anknüpfpunkte zum Thema Kundenbindung haben. Und zum Zweiten bin ich im Moment auch tätig als Gastdozent an der IOBH und lese da unter anderem Sales und E-Commerce und auch da gibt es natürlich die Frequent-Flyer-Programme als einen wesentlichen Inhalt. #00:01:00-5#

I: Hm. Zur zweiten Frage: Welche Parameter von Frequent-Flyer-Programmen halten Sie für wirksam oder weniger wirksam und warum? #00:01:10-3#

B: Was definitiv sehr stark wirkt, ist das Element, was letztlich die Eitelkeiten anspricht. Sprich: Wenn man jetzt einen gewissen Status hat über gesammelte Statusmeilen, egal bei welcher Firma, also bei welcher Airline, bei welcher Allianz, das ist was, wo die Geschäftsreisenden schon ganz gerne mit kokettieren nach meiner Beobachtung. Was die/ wie soll ich sagen, den eigentlichen Ansatz angeht, also Kunden dazu zu bringen, möglichst eine Airline zu benutzen, das sieht schon ein bisschen kritischer aus, weil da gibt es durchaus den Effekt, wenn die Leute für eine Firma unterwegs sind, sprich: Die Firma zahlt, der Karteninhaber sammelt aber die Meilen für sich persönlich, da funktioniert es auch ganz gut. Weil die Benefits letztendlich dann nachher bei dem Reisenden liegen. Wenn aber das Zahlen für eine Reise mit der Entscheidung, wen nutze ich, unmittelbar zusammenfällt, dann wird die Kundenbindung nicht mehr so gut, weil dann zählt doch letztendlich unterm Strich: Was kostet ein Ticket? Und wie viel kostet es bei Wettbewerbern und da sind also die, wie soll ich sagen, ist die Sogwirkung eines Sammeln von Meilens nicht mehr ganz so groß. Also gerade so diese kleinen quasi inhabergeführten Geschäfte, wenn der Inhaber dann selber fliegt, dann/ Und das geht sowieso in die gleiche Kasse rein, dann trifft er seine Entscheidungen nach Preislage. #00:03:15-7#

I: Hm. Okay, vielen Dank. Wie würden Sie Frequent-Flyer-Programme weiterentwickeln, damit sie effektiver werden und was würden Sie hoffen zu erreichen? #00:03:24-7#

B: Also ich glaube, ehrlich gesagt, dass die Weiterentwicklung im Bereich der Airlines eher schwierig sein wird, denn letztendlich verkaufen wir da ein Produkt, das zum einen ein bisschen ähnlich ist wie Waschmittel. Also alle erzählen, dass es ganz unterschiedlich/ also Riesenunterschiede gibt. De facto geht es um den Transport von A nach B und die Qualitätsparameter, die sind in der Regel solche wie: Passt der Flugplan? Ist die entsprechende Leistung, der Transport, dann auch pünktlich und zuverlässig und werde letztendlich nicht nur ICH dann pünktlich da sein, sondern mein Gepäck auch? Und da ist der Unterschied zwischen den Airlines de facto relativ gering, sodass die Frequent-Flyer-Programme in der Regel auch, wie soll ich sagen, im Wettbewerb unter den Airlines zwar immer wieder als starkes Wettbewerbselement verkündet werden, de facto funktionieren sie aber vor allen Dingen im Heimatmarkt einer Airline sehr, sehr gut, um da die Bankposition

gegenüber den anderen noch, den Wettbewerbern außerhalb des Heimatmarktes dann massiv Anteile abzunehmen, aber das gleicht sich dann über die, wie soll ich sagen, so über den Gesamtwettbewerb aus. Also in Deutschland funktioniert Miles and More sehr stark für Lufthansa. Mit Miles and More in Frankreich wird es allerdings schon deutlich schwieriger. Da ist es eher so, dass eben in Frankreich dann eben das Kundenbindungsprogramm der Air France überproportional wirkt. Und das von Lufthansa und British Airways und wer da sonst noch so unterwegs ist, eben eher unterproportional. #00:05:28-2#

I: Hm. Okay. Sind Sie der Meinung, dass die Wirksamkeit von Frequent-Flyer-Programmen von weiteren Parametern abhängt? #00:05:36-7#

B: Ja, letztendlich muss man sagen, die anderen/ Also ich habe ja vorhin schon genannt: Pünktlichkeit, Regelmäßigkeit, passt der Flugplan, ist der Preis einigermaßen erträglich für Geschäftsreisende, das sind eigentlich die Faktoren, die die Basis legen. Und dann wird das Meilensammeln quasi noch als Benefit oben drauf gesehen, also das Kundenbindungsprogramm ist sicherlich nicht das primär Ausschlaggebende für die Kaufentscheidung. #00:06:12-9#

I: Hm. Und letzte Frage: Glauben Sie, dass die Wirksamkeit von Frequent-Flyer-Programmen je nach Kundentyp, Reiseart und Fluggesellschaft unterschiedlich ist? Wenn ja in welcher Hinsicht? #00:06:25-6#

B: Ja, das ist definitiv unterschiedlich und da gibt es ganz, ganz viele Aspekte, die man betrachten kann. Also das eine ist sicherlich das, was ich vorhin schon gesagt habe. Kundenbindungsprogramme wirken im Heimatmarkt einer Airline ganz massiv FÜR sie und in anderen Märkten muss man dann aber mit unterproportionalen Effekten rechnen. Letztendlich ist DAS zurückzuführen ja auf die Frage oder, sagen wir mal, auf den Ansatz, dass es für einen Kunden gar nicht so sehr entscheidend ist, wie viele Meilen bekomme ich denn pro Flug. Sondern wenn ich Kunde bin, dann habe ich ein bestimmtes Flugportfolio, Reiseportfolio, und wenn ich das dann zugrunde lege, dann stellt sich für mich die Frage: Bei wem bekomme ich denn am ehesten eine Prämie? Und DAS ist eben in der Regel der Carrier, der bei mir vor der Haustür der stärkste ist. Denn wenn jemand anderes für eine Strecke 5.000 Meilen gibt, aber diese Airline tatsächlich nur die eine Strecke anbietet, ich aber ganz viele Strecken brauche und dann ist unter Umständen jemand, der für diese eine Strecke nicht 5.000, sondern nur 500 bietet, aber dafür ein entsprechendes

Meilensammelangebot auf ganz, ganz vielen Strecken zur Verfügung steht, dann werde ich diese Airline nehmen. Also es ist tatsächlich so: Es wirkt immer für den Heimatcarrier, für den, der vor Ort besonders stark ist. Dass es dann auch natürlich von den Carriern, abhängig ist, ist ein Meilensammelprogramm jetzt nun attraktiver oder weniger attraktiv, ist sicherlich auch ein Punkt. Wenn ich eben ein eingeschränktes Streckennetz habe, zum Beispiel nur innereuropäisch fliege, dann habe ich schon deutlich weniger Attraktivität in meinem Streckennetz, wenn das dann dort viele Kunden gibt, die dann da auch Intercom-Strecken brauchen und so weiter.

Ein weiterer Punkt ist sicherlich auch das Thema: Um welche Kundengruppe handelt es sich? Denn so richtig spannend ist das Meilensammeln ja vor allen Dingen, wenn ich viel fliege. Heißt ja oft auch Vielfliegerprogramm. Und wer macht das? Das sind in der Regel nicht die Urlauber, sondern das sind die Geschäftsreisenden. Das heißt, da wirkt das besonders gut, wenn die Firma die Kosten trägt für die Reise und der Reisende dann letztendlich davon profitiert. Also die Meilen gesammelt hat und dann irgendwelche Prämien privat nutzen darf. In dem Moment, wo das NICHT der Fall ist, gibt ja eine Reihe von Firmenkunden auch, die gesagt haben: Unsere Mitarbeiter dürfen die Meilen nicht/ dürfen von den gesammelten Meilen nicht selber profitieren. Da ist dann die Wirkung oder die Intensität der Wirkung von Frequent-Flyer-Programmen doch sehr eingeschränkt. Im Privatreisebereich, ja, ich kenne ganz viele, die nur privat reisen, die auch Meilen in irgendeiner Form sammeln, aber ich kenne eigentlich (lachend) keinen, der/ wo das so wahnsinnig große Effekte hat, weil die dann irgendwann auch verfallen. Man macht im Jahr, also selbst, wenn man VIEL, viel Privatreisen unternimmt, in der Regel nicht mehr als, was weiß ich, drei bis vier Trips und die müssen ja dann auch nicht alle mit dem Flugzeug stattfinden. Also das ist schon im Privatreisebereich eher die Ausnahme. Es sei denn, da spreche ich jetzt über so ein Mittelding zwischen Privat- und Geschäftsreisen, diejenigen, die mit dem Flugzeug zur Arbeit fliegen, also so Berufspendler, die irgendwo arbeiten und ganz woanders leben mit ihren Familien, wenn die dann eben eine Woche/ jede Woche einmal hin- und zurückfliegen, dann haben die natürlich ein relativ hohes Reiseaufkommen und dann lohnt sich für die auch ein Meilenprogramm oder die Teilnahme daran, dann können die auch irgendwann davon profitieren, dass sie irgendwie mal einen Freiflug bekommen oder vielleicht mal irgendwie noch einen bestätigten Flug, der eigentlich voll ist oder so. Aber das ist eher die Ausnahme. #00:11:06-9#

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I: Hm. Gut. Alles klar. Ja/

Interview 4

Name der Audio-/Videodatei: Interview Prof. Dr. Sven Reinecke - Final cut

Dauer der Aufnahme: 00:13:04-9

Datum der Aufnahme: 27.03.2020

Besonderheiten: per Telefon durchgeführt

Datum der Transkription: 01.04.20

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I: Was ist Ihre derzeitige Position und in welchem Umfang beschäftigen Sie sich mit Kundenbindungsprogrammen in der Airline-Industrie? #00:00:07-0#

B: Also grundsätzlich/ Also Position ist: Ich bin hier an der Universität St. Gallen Titularprofessor und geschäftsführender Direktor des Instituts für Marketing. Das sind ungefähr 30 Leute, die hier beschäftigt sind und unterrichte natürlich auch Marketing. Strategisches Marketing. Unter anderem auch Kundenbindung. Und Kundenbindungsprogramme habe ich bereits auch/ zu Loyalitäts- und Kundenbindungsprogrammen schon seit langer Zeit immer einen Artikel geschrieben, der sich damit beschäftigt hat. Hat sich natürlich stark geändert, also, sage ich jetzt mal, das Thema Kundenbindung so klassisch war ja in den 90ern extrem aktuell. Und jetzt geht es natürlich eher in Richtung Communities und online und, sage ich mal, die meisten dieser klassischen (Cults?) und Clubs lösen sich so ein bisschen auf. Das gilt jetzt nicht unbedingt für die Airline-Industrie. Da ist es ja eher so, dass Winner takes it all, dass die eher so zum Megaprogramm im Laufe der Zeit werden, das heißt, dass die so ein bisschen die Plattform sind für alle anderen, damit man, wenn man kein eigenes Kundenbindungsprogramm betreiben möchte, dass man sich dann da dranhängen kann. Ne? Das machen ja manche auch. Und mit der Airline-Branche, also wir hatten damals mit der Swiss Air noch, als die noch existierte, mit (unv.), da #00:01:28-6# immer intensiven Austausch. Ich habe ab und

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zu Referenten von der Swiss bei mir auch im Unterricht, die die Kundenbindungsprogramme darstellen und habe auch Doktoranden zu dem Thema gehabt. Also nicht spezifisch auf die Airline-Industrie, aber allgemein Kundenbindung, zu dem Thema. #00:01:43-5#

I: Hm, alles klar. Vielen Dank. Ja, zweite Frage: Welche Parameter von, ja, Frequent-Flyer-Programmen halten Sie für wirksam oder weniger wirksam, ja, und warum, ja? #00:01:58-4#

B: Für mich ist bei den Frequent-Flyer-Programmen eben immer wichtig, also wie bei allen Kundenbindungsprogrammen, auf welches Ziel sie ausgerichtet sind. Das heißt, was man damit tatsächlich bewirken MÖCHTE. Und ganz, ganz wichtig, bei welcher Zielgruppe man das bewirken möchte. Ich unterscheide immer zwei Programme, also dass ich auf der einen Seite sage: Es gibt so manche Kundenbindungsprogramme, das sind die Billig-Kundenbindungsprogramme, die macht man in erster Linie nur, damit man irgendetwas macht, ja? Und das sind dann/ kriegt man eben so ein paar Meilen oder Bonuspunkte, und dann kann man damit nachher irgendetwas machen, weil es einfach marktüblich ist. Und so, dass man sagen kann: Okay, man ist dabei. Aber bei den Frequent-Flyer-Programmen und gerade bei den großen Airlines, glaube ich, ist das ganz klar, dass/ Die Zielgruppe sind ja wirklich die Frequent Flyer oder im Fall von der Star Alliance beziehungsweise der Swiss, da ist es natürlich die (On Circle?) oder zumindest die Senatoren, die man angeht. Und für DIE ist es natürlich das Allerwichtigste nicht, wie viele Pünktchen ich da kriege, wie viele Flüge ich dort kriege, sondern das ALLERALLERWICHTIGSTE ist da die persönlichen Leistungsvorteile, die die bekommen. Also dass sie mit dem Cayenne von Flugbase zu Flugbase geflogen werden, dass der (Mensch in der Kabine?) immer genau weiß, welche Person er vor sich hat, dass er einen begrüßt, dass das Essen dementsprechend auch dann servieren und ausrichten kann, dass die duschen können, dass die eine individuelle Sicherheitskontrolle haben und, und, und. Und das ist EXTREM wichtig. Das ist ja nur für die (On Circle?)-Mitglieder zwar, aber da wirkt das. Also ich kenne auch die ehemalige Leiterin vom (On Circle?) bei der Swiss. Die hat gesagt, wenn sie im September diese Briefchen rauslassen und sagen: Sie brauchen noch so und so viele Meilen, damit Sie nächstes Jahr den (On Circle?)-Status behalten, dann wirkt das dramatisch. Die Leute wollen das behalten. Und diese Zielgruppe, die Frequent Flyer, sind ja auch nicht an Freiflügen mehr interessiert. Das heißt, die wollen ja nicht zusätzliche Flüge machen können. Das heißt, die wollen natürlich Upgrades haben. Das heißt, denen geht es um Convenience, um

Bequemlichkeit. Und alles, was, ich sage jetzt mal ganz jovial, was denen hilft, Mister oder Misses Wichtig zu sein, und, sage ich mal, tatsächlich persönlich bedient zu werden, das ist nachher brutal wirksam. #00:04:26-4# Aber ich glaube, um die Rabatte geht es nicht. Natürlich hat man das, dieses untere Segment, das ist aber immer wieder reduziert, und dann macht man etwas. Das macht/ Man könnte auch ohne/ Also man braucht die Information der Frequent Flyer Card nicht, also ich weiß zumindest von einigen Airlines, die könnten auch allein mit Data Mining zuordnen: Welcher Passagier ist geflogen, ohne dass man die Frequent Flyer-Nummer eingegeben hat. Das wäre technisch überhaupt kein Problem. Ob man es darf, ist eine andere (lachend) Sache. Aber man könnte das theoretisch. Das heißt, Zusatzinformationen, das darüber zu kriegen, darum geht es eigentlich gar nicht, sondern es geht in erster Linie tatsächlich um das Segment der Vielflieger, der richtigen Vielflieger. #00:05:07-5#

I: Hm. Ja, vielen Dank. Wie würden Sie Frequent-Flyer-Programme weiterentwickeln, damit die effektiver werden und was würden Sie hoffen zu erreichen? #00:05:16-9#

B: Ja, also ich finde, sie machen es sehr gut. Ich würde es tatsächlich auf diese Zielgruppe weiter ausrichten, dass man denen tatsächlich einen Vorteil bietet. Ich glaube auch, bei Kundenbindungsprogrammen ist es tatsächlich so: Winner takes it all. Die Leute wollen nicht in 20, 30, 40 verschiedenen Kundenbindungsprogrammen sein, sondern sie wollen gerne in einem haben und fokussieren dann alles dadrauf. Das heißt, in der Schweiz merkt man das zum Beispiel sehr stark, dass dann die Leute auch versuchen, ihre Kreditkarte auf Miles and More umzustellen statt auf die klassische Hausbank einfach, dass man in einem System ist. Und weil, wenn man in einem System ist, dann kriegt man auch alles in diesem gutgeschrieben und das ist dann natürlich ein Vorteil. Alles, was zum Thema Convenience, alles, was zum Thema what money can't buy, würde ich sagen, (macht?). #00:06:16-3# In die Richtung würde ich es für das Segment weiterentwickeln. Für das andere Segment glaube ich gar nicht mal so, dass es so stark wirkend ist. Also weil da ist tatsächlich das aktuelle Preis-Leistungsverhältnis, da ist die Transaktion viel, viel wichtiger, im preissensitiven Bereich. Also ich glaube NICHT, dass da die Kundenbindungsprogramme einen Rieseneffekt auf das Buchungsverhalten haben werden. Sondern da ist es viel, viel wichtiger, wie das aktuelle Preis-Leistungsverhältnis ist und da kann man vielleicht eine Analogie zu Dell ziehen, die schon immer gesagt haben: Okay, wenn Sie Business to Consumer haben, dann versuchen Sie keine Geschäftsbeziehung zu haben, sondern da versuchen Sie die beste

Transaktion zu gewährleisten. Und im Business to Business, wenn Sie gegenüber Firmen ein Geschäft machen, dann versuchen Sie so richtig Geschäftsbeziehung aufzubauen. Und hier ist es aus meiner Sicht auch so. Airlines müssen im preissensitiven Bereich das beste Preis-Leistungsverhältnis bieten. Da, glaube ich NICHT, dass die Frequent-Flyer-Programme, sage ich mal, sehr, sehr stark wirken. Man muss etwas haben, weil alle anderen auch was haben, dass man einfach sagen kann, man macht mit, dann kann man so ein Billigprogramm in irgendeiner Form machen, aber für die Oberen, geht es tatsächlich um das Thema Convenience und persönliche Betreuung. #00:07:32-1#

I: Hm. Alles klar. Vielen Dank. So. Sind Sie der Meinung, dass die Wirksamkeit von Frequent-Flyer-Programmen darüber hinaus von weiteren Parametern abhängt oder ist das im Prinzip schon durch die Frage 3 hatten wir das jetzt schon (unv.)? #00:07:48-6#

B: Von welchen weiteren/ Also pff/ Also das müssen Sie natürlich immer optimieren. Also es geht jetzt um strategische oder operative Optimierung, also operative Optimierung wäre solche Fragen: Wie verfallen die Meilen und also etwas da/ Das kann ich jetzt eh nicht beurteilen. Ich glaube, für das oberste Segment dürfen sie nicht verfallen. Beispielsweise da gibt es ja nur Diskussionen und solche Diskussionen will man ja überhaupt nicht haben mit dieser Zielgruppe, ob da jetzt Meilen verfallen. Das sind eher andere Effekte. Es gibt natürlich schon/ Also WICHTIG ist natürlich schon das Thema Kooperation. Das heißt, die Star Alliance ist nun mal der größte Player und die ganze Alliance One World oder so, dann/ Das sind natürlich wichtige Allianzen. Aber das spielt natürlich schon eine Rolle für das Programm. Aber was uns/ Natürlich ist es schön, wenn man das erweitern kann, diesen Service, beispielsweise auf alles, was reisenah ist. Also wenn man tatsächlich so ein (seemless?) Customer Journey machen könnte, die auch das ganze Thema Hotels und Mietwagen und so etwas mit abdecken würden. Andererseits bin ich der Meinung, dass das so gerade im B2B-Geschäft so schwierig ist, weil die meisten Unternehmen da natürlich ihre eigenen Regularien haben, genau festgelegt, in welchen Hotels die absteigen dürfen, welche Mietwagen die nehmen und die haben da schon allgemeine Rahmenverträge. Da wird die Komplexität einfach extrem hoch und ich weiß nicht, ob dann der Nutzen tatsächlich die Kosten übersteigt. Also da kann ich jetzt wenig sagen, also da weiß ich jetzt nicht, was da noch an Parametern kommt. #00:09:51-3#

I: Okay. Vielen Dank. Und da kommen wir schon zur letzten Frage: Glauben Sie, dass die Wirksamkeit von Frequent-Flyer-Programmen je nach Kundentyp, Reiseart und Fluggesellschaft unterschiedlich ist? Wenn ja, in welcher Hinsicht? #00:10:04-4#

B: Ja, also Kundentyp habe ich ja schon gesagt. Also das heißt, für die richtigen Frequent Flyers und eventuell auch noch für die Senatoren, also für (On Circle?) und Senatoren, mit Sicherheit wirksam. Da. Reiseart: Pff. Ja, man kriegt die ja nach wie vor privat eigentlich, obwohl das bei vielen Firmen nicht erlaubt ist. Ne? Also das ist natürlich etwas, was bei Punkt 4 noch mit reinkommt, ne, das, was die Regulierung/ Wie sind die? Darf ich solche Rabatte annehmen? Ist das noch compliant? Das hat eine große Auswirkung, weil viele Topmanager natürlich, wenn das nicht mehr compliant wäre, das zu machen, allein aus Sicherheitsgründen das dann nicht mehr machen würden. Das heißt, Compliance ist schon ein wichtiges Thema, die es gibt.

Reiseart: Also für Businessflüge wesentlich wichtiger.

Fluggesellschaft: Ja, hat einen Einfluss. Natürlich bei den Low Cost Carriern ist es weniger wichtig, da muss ich eben so ein Billigprogramm dort haben ODER ich habe dort so ein Programm, das ist dann für die besten Kunden im/ bei denen, die auch preissensitiv sind und Low Cost Carrier fliegen, aber trotzdem das Businesstraveln gewohnt sind. Dass ich da mehr oder weniger so einen Ausgleich mache, dass man mehr oder weniger den gleichen Service bekomme, wie ich ihn sonst bei klassischen Airlines bekomme. Aber eigentlich hängt das mehr mit der Buchungsklasse zusammen, also wenn ich Business buche, dann habe ich ja das und das kann ich da manchmal nicht, also deswegen. Ja, da wird es sich ein bisschen unterschieden.

Ich glaube, es hat auch noch einen Einfluss bezüglich der Länder. Also ich weiß, dass die Schweizer, die Holländer und die Südafrikaner sind einfach sammelwütig und andere Länder, die Franzosen, sind nicht ganz so sammelwütig. Das heißt, das hat mit Konsumentenverhalten zu tun. Das zeigt dann auch die Wirksamkeit von vielen Kundenbindungsprogrammen, gerade, wenn man so sammeln muss. Das funktioniert nicht in allen Ländern gleich und das ist natürlich dann auch von einer Landesgesellschaft, also (Landesfluggesellschaft?) abhängig. In der Schweiz wird natürlich die Swiss, obwohl sie ja eigentlich deutsch ist, aber hat einen extrem guten Ruf, auch Schweizerischen Ruf intern und wenn man natürlich nicht so eine dominierende Landesairline hat, dann wird natürlich/

Dann ist automatisch das Frequent-Flyer-Programm auch weniger nützlich. Weil wenn ich fliege und verteile mein Wallet sowieso auf zehn verschiedene Airlines, dann kann ich nachher sowieso nicht in allen Airlines was erreichen, wenn ich natürlich in einem Land bin, wo fast alles dann mit einer Airline ist, dann ist das wesentlich einfacher, dort alles zu machen. #00:12:58-3#

I: Hm. Ja, herzlichen Dank. Dann wären wir mit den Fragen und dem Interview auch schon durch.

Interview 5

Name der Audio-/Videodatei: Interview Dr. Andreas Wittmer - Final cut

Dauer der Aufnahme: 00:16:54-3

Datum der Aufnahme: 27.03.2020

Besonderheiten: per Telefon durchgeführt

Datum der Transkription: 01.04.20

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I: Erste Frage: Was ist Ihre derzeitige Position und in welchem Umfang beschäftigen Sie sich mit Kundenbindungsprogrammen in der Airline-Industrie? #00:00:09-3#

B: Ich bin Leiter des Luftfahrtkompetenzzentrums der Uni St. Gallen und beschäftige mich mit Loyalität/ Also sozusagen habe ich mich im Moment nicht gerade direkt, aber in der Vergangenheit mit Kundenloyalitätsprogrammen beschäftigt. Sie sind immer interessant. Auch immer die Frage, ob sie denn wirklich diesen Benefit auch wirklich bringen, den sie sollten. Und da gibt es ja unterschiedliche Meinungen und ich sage mal so, ich habe mich mehr dann eher wissenschaftlich oder auch über Diplomarbeiten, die ich betreut hatte, damit beschäftigt. #00:00:51-2#

I: Hm. Vielen Dank. Welche Parameter von Frequent-Flyer-Programmen halten Sie für wirksam oder weniger wirksam und warum? #00:01:00-9#

B: (...) Also erstens, wir reden von Frequent-Flyer-Programs, zum Beispiel wie Miles and More oder so. #00:01:09-0#

I: Ja, ganz genau. #00:01:10-4#

B: Das heißt die Kundenprogramme. Es geht um die Kundenseite und nicht um die Airline-Seite. Ist das richtig? #00:01:14-2#

I: Das ist richtig, genau. #00:01:15-7#

B: Genau. Also im Prinzip sehen wir diese Punkte, die man da sammeln kann, die sammelt man ja mittlerweile nicht nur mit Fliegen, sondern auch, wenn man die Kreditkarte nutzt oder so, also wenn ich die Kreditkarte nutze, kriege ich pro Franken, den ich da ausgebe, eine Meile und habe mal dann irgendwie drei-, vier-, fünfhunderttausend Meilen oder mehr auf dem Account, also man hat plötzlich eine Meilenflut und von dem her ist ja eigentlich gar nicht mehr nur Flugmeilen, sondern es sind ja eigentlich wie so Punkte, die man bekommt. Auch beim Supermarkt oder so gibt es ja bei uns in der Schweiz bei der (Mikro oder beim Koop?) gibt es ja auch diese Sammelpunkte und dann kann man dann wieder/ bekommt man Gutscheine und so weiter als Gegenleistung. Und ich sehe das eigentlich ein bisschen so: Der Vorteil ist, man sammelt Punkte und man kann die Punkte eigentlich wie Bargeld einlösen. Also ich kann dann zum Beispiel habe ich mir kürzlich einen Koffer gekauft mit Meilen. Einmal habe ich mir die Armbanduhr gekauft mit Meilen. Also man kann sich jetzt also die Meilen einsetzen, wie man will, das ist so quasi wie ein Dankeschön für das loyale Fliegen. Aber eben nicht nur für das loyale Fliegen, sondern man kriegt ja eben auch, wenn man eine Swiss-Kreditkarte hat, dann bekommt man ja Meilen auch für jeden Franken, den man ausgibt. Und so, ja, hat man eigentlich/ kann man diese Meilen dann einsetzen. Und was ich am besten finde, wir haben auch Studien dazu gemacht, wo bekomm ich am meisten für meine Meilen. Am meisten bekomme ich, wenn ich sie verfliege. Also die Airline gibt mir eigentlich am MEISTEN für die Meile, wenn ich Flüge buche oder upgrade. Also jetzt zwei, drei Jahre her, seid wir die Studie gemacht, da bekommt man am MEISTEN fürs Geld, wenn man das umrechnet, man kann ja dann diese Flugmeilen in einen Finanzwert umrechnen und könnte sagen: #00:02:57-1# Okay, die Uhr kostet irgendwie 500

Franken und ich muss hierfür 100.000 Meilen geben, also 100.000 Meilen sind dann irgendwie 500 Franken oder eben so. Und so kann man über das ganze Produktportfolio hinweg kann man dann diese Durchschnittswerte finanziell ausrechnen und kommt dann zu einem Durchschnittswert, was so eine Meile wert ist. Und dieser Durchschnittswert, wenn man vergleicht, man bekommt für eine Meile, die man fliegt oder upgraded, ist das höher, wie wenn man Produkte kauft. Das haben wir mal festgestellt. Und das Fliegen ist ja aber eben gerade das Problem, weil das kann man ja praktisch nicht, weil immer, wenn man ja fliegen WILL, dann gibt es einfach keinen Sitz. Das ist ja auch ein bisschen das Thema, oder? Man möchte ja dann mal/ Ich habe schon x-fach versucht, meinen Meilenflug einzulösen, einfach auch geschäftlich, um mal diese Meilen wieder abzubauen und so weiter, oder, und dann sagt es, wenn ich da/ Mein Flug geht dann meistens nicht, das heißt, man bekommt dann irgendwelche Flüge von Zürich über Düsseldorf nach Kopenhagen oder irgendsowas Verrücktes, oder, und das will ja keiner. Man will ja einen Direktflug haben. Und dann bekommt man dann ganz komische Angebote. Upgrades gehen. Die gehen manchmal auf der Langstrecke, wenn es Platz hat, kann man ein Upgrade machen oder so, das ist mir auch schon gelungen, das geht. Wo man sie immer einsetzen kann, indem man einfach Produkte kauft, also indem man wirklich auf den Onlineshop von zum Beispiel Miles and More geht und dann halt wirklich Koffer, Uhr, was auch immer, Computer, da gibt es wieder (unv.) #00:04:20-1#, da kann man ja alles kaufen, damit/ Also eigentlich ist es wie eine Währung, könnte man sagen. Und da gab es ja dann auch diese Studie, da gibt es auch ein Projekt dazu, wo einer gesagt hat: Eigentlich möchte man die Meilen und gerade (Störung in Aufnahme) #00:04:33-1# umwandeln, dass man sie eigentlich so wie eine virtuelle Währung benutzen kann. Und eigentlich über eine Karte auch damit zahlen kann, zum Beispiel dass man die zum Beispiel auf eine Kreditkarte draufgibt oder irgendsowas. Da gibt es ja ganz verrückte Ideen. Nur wenn man das so macht, dann ist es ja keine/ Also dann ist das ja nicht mehr/ #00:04:54-5#

Abbruch in Datei #00:04:55-5#

B: Hallo? #00:04:56-4#

I: Ja, Mark (Weefer?), hallo. Ja, das tut mir leid, da ist auf einmal die Leitung zusammengebrochen. Ich habe es jetzt nochmal über eine andere Leitung versucht. Tut mir leid. #00:05:04-4#

B: Okay, okay. #00:05:06-1#

I: Ja. #00:05:06-8#

B: Ja, ja. Hoffen wir, dass es klappt. #00:05:09-7#

I: Ja, ja. Nein, denke/ Denke, jetzt klappt es. (lacht) #00:05:12-1#

B: Aber haben Sie alles gehört, was ich gesagt habe? #00:05:14-8#

I: Ja, ich habe dann/ Genau. Ich habe bei der Frage zwei ja praktisch, dass es dann wie eine digitale Währung ist, bis dahin habe ich im Prinzip noch alles mitbekommen, genau. #00:05:26-2#

B: Ja, genau. Also eben genau, das ist ja eigentlich dann wie eine, genau, digitale Währung. Und die Frage stellt sich ja dann, ob so eine Währung, ob das wirklich dann Loyalitätsmechanismen auslöst oder nicht, oder? Früher war es ja eigentlich so, man hat Meilen gesammelt, um dann Flüge zu buchen oder Upgrades zu bekommen und hat das eigentlich mehr Flug/ also im Flugbusiness, also mit der Airline selbst, dann irgendwo wieder eingelöst und es war so wie so ein/ ja, ein Kickback für gute Kunden. Und heute ist/ Also ja, und den man sich selber/ Quasi/ Man hat ihnen quasi Naturalien geschenkt, zum Beispiel einen Flug, könnte man sagen. Das ist ja dann ein eigenes Produkt. Und heute ist es so, dass es wie eine Geldwährung geworden ist und damit natürlich kommen auch ganz neue Fragen der Versteuerung von Einkommen auf zum Beispiel. Dass man sagt: Ja, Moment mal, wenn man da Geld gibt, dann muss es ja als Einkommen versteuert werden, dann ist es eben steuerbar und so weiter und da gibt es die ganzen Diskussionen, wo dann natürlich der Markt kommt: Ja, dann verzichte ich lieber auf meine Meilen, wenn ich da noch Steuern zahlen muss dafür, weil ich zahle schon genug. Oder? Da gibt es dann so die ganzen Mechanismen in der Diskussion dazu. Aber (unv.) #00:06:39-8# so bisschen das Thema, die Airlines selber sind ja selber auch nicht begeistert von der Entwicklung von diesen Meilen, also die Entwicklung und die Wahrnehmung dieser Flugmeilen führt eben dazu/ Ja, führt nicht/ Also aus Sicht der Airlines, also wie ich es oft gehört habe, führt zu wenig zu Loyalität und eben Wiederkauf und diese Bindung, die nimmt tendenziell/ Die Stärke der Bindung über diese Meilen, die nimmt ab mit vielleicht auch zunehmend dynamischeren Preisen und tieferen Preisen und Transparenz über alle Airlines hinweg zum Schluss. Aber

das/ Da gibt es/ Das ist ja wie/ Die Meilen, also diese ganzen/ Die Loyalität dahinter, die wird immer mehr in Frage gestellt in der Industrie. #00:07:34-4#

I: Hm. Okay. Und wie würden Sie Frequent-Flyer-Programme weiterentwickeln, damit sie effektiver werden und was würden Sie hoffen zu erreichen? #00:07:43-8#

B: Ja, für mich ist ein Frequent-Flyer-Programm halt immer noch ein Loyalitäts-, ein Bindungsprogramm, ein Kundenbindungsprogramm, und aus der Perspektive der Airline oder (unv.) #00:07:56-9# viele vergessen, ist das noch ein Wert. Einer der wenigen Werte, die eine Airline überhaupt noch hat. Also ich meine, sind wir ehrlich: Eine Airline ist ein Commodity-Produkt. Sind alle genau gleich. Sind die gleichen Flugzeuge, gleichen Sitze, sie sind alle mittlerweile nicht mehr gut in/ Ich meine, es ist überall eng und unangenehm in der Economy Class, in der Business Class differenziert man noch ein bisschen. Aber ich sage mal so: Der Unterschied der Produkte ist ja nicht mehr wahnsinnig groß. Und damit ist das Switching-Verhalten der Kunden sehr groß geworden. Man schaut sich halt Schluss wirklich nur noch den Preis an, weil alles andere ist eh wurscht, es ist ja eh überall das Gleiche. Oder? Und das ist dieser/ Dieser Trend führt natürlich dazu, dass gerade dann eben so Loyalitätsprogramme vielleicht wieder relevanter werden und vielleicht noch einer der wenigsten USPs oder, sagen wir mal, einer der wenigen Value-Treiber sind, die ein Unternehmen noch hat strategisch. Ich meine, im Pricing, über dynamische Preise, kann man sich nicht mehr differenzieren. Das machen alle perfekt, haben alle in der Industrie perfektioniert. Über Netzökonomie und Netzeffekte und optimale Netzentwicklung kann man sich auch nicht mehr profilieren. Das machen auch alle bis zur Perfektion. Da stellt sich die Frage: Wo kann man sich dann überhaupt noch abgrenzen und strategisch entwickeln? Und da sind dann gewisse Ressourcen natürlich relevant, zum Beispiel Innovationsfähigeit, eine Marke, eine starke Marke irgendwie, die positioniert ist, eben Loyalität, Kunden- und Loyalitätsprogramme. Kunden, die eben, ja, die irgendwo/ die man halten kann. Und ich glaube, darum sind diese Programme/ sind die schon wichtig, auch wenn sie nicht mehr so wichtig angenommen werden. Jetzt habe ich aber Ihre letzte Frage nicht ganz massiv beantwortet, glaube ich. Jetzt habe ich ausgeholt. Können Sie die nochmal sagen? #00:09:48-4#

I: Ja. Wie würden Sie die Frequent-Flyer-Programme weiterentwickeln, damit sie effektiver werden und was würden Sie hoffen zu erreichen? #00:09:56-1#

B: (...) Ich glaube, Frequent-Flyer-Programme müssten einerseits/ Also es gibt zwei Wege. Den einen Weg ist wirklich die Kreditkarte, also man schreibt die Meilen quasi mit diesen Schweizer Franken auf der Kreditkarte gut und hört auf mit dem ganzen Drum und Dran da mit den Meilen. Da würde ich mir vorstellen, dass das vielleicht zu wenig Loyalität oder zu wenig Wahrnehmung von Loyalität führt. Darum gefällt mir die zweite Variante besser und die ist wieder verrückt und (unv.)-Geschäft. #00:10:28-6# Mit Flugmeilen bekommt man Flüge. Mit Flugmeilen kann man am Flughafen essen gehen, mit Flugmeilen kann man eine Priorität haben bei einer Security Line, mit Flugmeilen kann man beim Check-in beim Business Class-Einchecken statt bei der Economy, wenn man so viele Flugmeilen hat oder so. Mit Flugmeilen kann man irgendwo im ganzen Flugprozess sich einen Vorteil holen. Und ein Vorteil heute im Flugprozess hat mit Zeit zu tun. Es möchte niemand anstehen, es möchten alle die Priority Line haben, es möchten alle noch den Kaffee trinken gehen noch kurz am Flughafen, wenn man Zeit hat. Also das wären alles Möglichkeiten im Flug, im ganzen Reiseprozess drin, den Passagieren eigentlich Möglichkeiten zu geben, Lounge Access. Ich kann mir Lounge Access kaufen mit Meilen, ich kann mir einen Kaffee kaufen in der Cafeteria, ich kann bei der Priority Line durch bei der Security, ich kann bei der Priority Line einchecken. Ich weiß nicht, aber ich habe irgendwo am Flugprozess bezogene Vorteile. Ich kann einen Upgrade buchen, ich kann einen Flug buchen und ich bekomme auch einen Direktflug, wenn ich will. Der kostet halt vielleicht dann mehr wie ein Umsteigeflug, aber ich kann ihn auch buchen und mit den Meilen bezahlen. Nicht so wie heute, wo man ja nur noch die Flüge bekommt, die man nicht will, wenn man mal einen mit Meilen buchen will. Ich glaube, ICH würde sagen, WENN dann zurück zum Fluggeschäft, zum Prozess von zu Hause bis zum Ziel zurück nach Hause. Das kann ein Limousinenservice sein, der einen ins Hotel bringt. Oder in der Business Class bei Emirates Airlines bekommt man das. Da kommt die schwarze Limousine, fährt einen ins Hotel, holt einen wieder ab, das ist da dabei. Jetzt könnte man sagen: Ja, wenn ich viele Meilen habe und Economy Class fliegen muss, weil gerade eine schlechte Wirtschaftslage ist und ich kann geschäftlich auch nicht in der Business, dann kann ich meine Meilen nehmen, um dann eben diesen Limousinenservice vielleicht trotzdem zu haben oder irgendso. #00:12:20-4#

I: Hm, okay, vielen Dank. #00:12:22-0#

B: Also ich würde wirklich Flugprozess, Loyalität, wirklich dann die Leute am Flugprozess behalten. #00:12:27-4#

I: Hm. Okay. Dann vierte Frage: Sind Sie der Meinung, dass die Wirksamkeit von Frequent-Flyer-Programme von weiteren Parametern abhängt? #00:12:38-9#

B: (...) Ja, es kommt natürlich immer drauf an auch noch: Wie groß ist dann eben das Netzwerk? Also wenn ich jetzt eine Star Allianz habe und ich sammle Flyermeilen bei/ Ja, habe ich ein Lufthansa-Modell oder so und (wie?) bei Miles and More dann kann ich ja die in der ganzen Allianz mit den Partnern kann man ja Vorteile dann haben oder es ist ja dann so, dass man, je größer das Netzwerk ist, desto größer ist auch der Pool, wo ich sammeln kann. Also auch, wenn ich jetzt Singapur Airlines fliege, da sammle ich bei Miles and More und so weiter, aber das ist natürlich ein Faktor, der zentral ist. Also die Größe eines Gesamtnetzes, wo diese Programme dann quasi Partnerschaften haben. Die ist natürlich oder einerseits. Auf der anderen Seite heißt das wiederum, das ist der negative Effekt dann wieder, der Countereffekt, ja, mit je mehr Airlines wir Vorteile wir geben für EIN Meilenprogramm, desto weniger Loyalität mit einer einzigen Airline muss ich haben. Das heißt, ich schaffe mehr Loyalität mit Allianzen, auf Allianz-Ebene, und weniger auf individueller Airline-Ebene. Und ich glaube, das muss auch wahrscheinlich das Ziel sein, dass man versucht, die Leute ins Allianz-Netzwerk reinzuholen und DANN durch die Anbindungen, die man dann hat im Allianz-Netzwerk, also wenn man da mal drin ist, die Leute im Allianz-Netzwerk zu behalten, so profitieren alle Partner vom globalen Kunden, die dann irgendwo global unterwegs sind. Wogegen, wenn ich es auf die Einzelairline beziehe, dann habe ich ja ein viel kleineres Netzwerk und bin nur auf einem Markt tätig. Also nur auf einem Markt dann vielleicht Loyalitätseffekte. #00:14:31-3#

I: Hm. Okay. Und die letzte Frage: Glauben Sie, dass die Wirksamkeit von Frequent-Flyer-Programmen je nach Kundentyp, Reiseart und Fluggesellschaft unterschiedlich ist? Wenn ja, in welcher Hinsicht? #00:14:45-5#

B: (unv.), diese Flugmeilen bringen ja nur denen etwas, die auch viel fliegen. Oder? Das ist ja auch die Idee der Loyalität. Also wenn ich jetzt zum Beispiel ein Kunde bin, der einmal im Jahr in den Urlaub fliegt in Europa irgendwo nach Mallorca oder so im Sommer immer nach Spanien mit der Familie und wieder zurück, dann bringt das alles nichts, das ist nicht/ Aber das ist ja dann eben auch nicht/ Da soll es ja auch nichts bringen, weil das hat ja nichts mit Loyalität/ Loyalität sind dann ja immer die Vielflieger, die guten Kunden, die man belohnen will. Man könnte aber auch argumentieren, dass man sagt: Okay, ich bin (unv.)

Air, das ist da #00:15:19-8# dieser Ferien Carrier von der Swiss Lufthansa, die nach Zürich fliegt und ich möchte, dass die Kunden immer mit uns buchen und nicht mit unserer Konkurrenz EasyJet oder so. Oder? Und da könnte man doch schon auch argumentieren, man möchte die binden. Vor allem eben die haben keinen Vorteil durch diese Meilen, weil die kommen nie auf ein Level, dass sie die Meilen überhaupt irgendwie einsetzen können. Das heißt, da stellt sich dann die Frage: Sind Meilenprogramme eigentlich die richtigen Loyalitätsprogramme? Oder sollte man gar nicht Meilen machen? Sind es, ich weiß nicht, pro Betrag, den man bezahlt oder so Kaffeegutscheine für die Cafeteria im Flughafen oder ich weiß es nicht oder vielleicht gibt es da ganz andere Grundlagen, aber nicht die Meilenpunkte, die man dann divers einsetzen kann. Da haben wir auch mal eine Diplomarbeit gehabt, (da wurde?) diskutiert, wie man (freiwillig?) das ideale Programm haben, machen könnte, das eben gerade dem Leisure-Kunden/ dass quasi den Leisure-Kunden dazu bringt, auch im nächsten Jahr wieder mit der gleichen Airline zu fliegen. Der fliegt nur einmal im Jahr, aber möchte auch den halten. Auch den (nächsten?) (unv.). #00:16:32-3# Was muss man dem geben, dass er nicht plötzlich Ryanair oder EasyJet fliegt, weil die kämpfen natürlich (unv.) brutal über den Preis. Da sind es nicht Meilenpunkte, da muss es etwas anderes sein. #00:16:47-2#

I: Hm. Ja gut, vielen Dank, das waren die fünf Fragen, die ich/

Appendix 3: Summary of survey evaluation

Descriptive results by item

Table 0.1

Descriptive results by item

Distributions of frequencies by item

Target items

Brand attitude (BA)	do not agree at all	hardly agree	partly agree	widely agree	fully agree
Miles & More is part of my travels.	5,18%	9,76%	31,27%	33,86%	19,92%
I feel personally connected to the Miles & More program.	13,94%	23,11%	29,48%	24,50%	8,96%
I feel emotionally bonded to the Miles & More program.	30.48%	26,10%	21,71%	14,94%	6,77%
Brand image (BI)					
Miles& More is a unique brand.	15,34%	25,50%	32,07%	20.92%	6,18%
Miles & More enjoys high acceptance among travelers.	5,78%	17,93%	40.44%	28,09%	7,77%
Miles & More membership mediates a positive image.	10.96%	24,90%	33,07%	22,71%	8,37%
Purchase behavior (BP)					
I am a regular customer of Miles & More partner airlines.	3,98%	6,77%	22,91%	35,06%	31,27%
If I fly again, I will again go with Miles & More partner airlines.	3,19%	8,76%	32,67%	31,08%	24,30%
I plan to fly with Miles & More partner airlines more frequently in future.	11,16%	26,49%	28,88%	17,33%	16,14%
Brand loyalty (BL)					
I would encourage my family and friends to go with Miles & More partner airlines.	12,55%	16,93%	31,27%	24,70%	14,54%
I would be reluctant to book with non-Miles & More partners.	29,68%	23,71%	23,11%	11,75%	11,75%
I would encourage my company to book with Miles & More partner airlines.	18,53%	20.92%	29,08%	16,93%	14,54%
customer relationship (BR)					
I have a high-quality relationship with Miles & More partner airlines.	10.76%	24,10%	34,66%	23,11%	7,37%
I have trust in Miles & More partner airlines.	3,59%	7,17%	28,29%	44,02%	16,93%
I am willing to remain a customer of Miles & More partner airlines.	3,59%	7,77%	26,49%	38,65%	23,51%
Brand value (BV)					
Participating in the Miles & More program makes me feel better about myself.	25,50%	25,50%	28,49%	14,94%	5,58%

	do not agree at all	hardly agree	partly agree	widely agree	fully agree
The Miles & More program offers me additional value for my money.	11,35%	20.52%	39,44%	20.52%	8,17%
The Miles & More program is useful for me.	2,79%	11,75%	37,05%	32,07%	16,33%

Determiners (Items)

Premia height & availabiltiy (AM)	do not agree at all	hardly agree	partly agree	widely agree	fully agree
Miles & More provides a favorable mileage accumulation policy.	9,16%	24,50%	41,04%	21,91%	3,39%
Miles & More offers attractive upgrades.	17,53%	41,24%	27,09%	11,75%	2,39%
Miles & More has convincing redemption options for flight bookings.	11,55%	21,71%	42,23%	18,53%	5,98%
Miles & More has attractive premia for non-flight purchases and bookings.	39,64%	26,49%	19,92%	9,16%	4,78%
Service range and availability (AS)					
I feel that Miles & More gives me better treatment than it gives customers who do not join the program.	23,51%	29,08%	26,69%	14,94%	5,78%
I feel that Miles & More gives me faster service than it gives customers who do not join the program.	24,90%	25,90%	26,49%	15,54%	7,17%
I feel that Miles & More does things for me that it does not do for most other customers.	29,68%	33,47%	26,29%	7,57%	2,99%
Perception of status awards (AT)					
I feel that I have a high standing as a member of Miles & More.	23,31%	35,06%	26,89%	11,95%	2,79%
I believe that I am a very important customer of Miles & More partner airlines.	28,49%	33,86%	25,30%	8,76%	3,59%
I believe that Miles & More partner airlines appreciate me more than most of its other customers.	29,28%	37,85%	26,69%	4,38%	1,79%
Range of partner networks (QP)					
Miles & More has the advantage of partnering with many airlines globally.	0.20%	3,59%	18,33%	51,39%	26,49%
Miles & More has got an extensive network of attractive hotel partnerships.	6,57%	19,12%	42,03%	25,10%	7,17%
Miles & More offers a broad range of shopping options worldwide.	11,95%	24,90%	37,25%	19,32%	6,57%
Perceived transparency of redemption (QT)					
I can always redeem collected miles easily.	12,75%	19,32%	33,86%	24,90%	9,16%
The redemption of miles is transparent.	9,16%	19,72%	29,48%	30.28%	11,35%
You can flexibly use acquired miles.	9,96%	17,53%	37,85%	25,70%	8,96%

Moderators (items)

Airline safety (MAS)

I am generally satisfied with flight safety.	0.20%	0.20%	2,99%	37,05%	59,56%
I feel save during flights with Miles & More partner airlines.	0.60%	0.60%	6,77%	38,05%	53,98%
I feel the cabin crews at Miles & More Partner Airlines are competent and reliable.	1,20%	1,59%	20.72%	55,58%	20.92%
Airline Quality (MAQ)					
The employee attitude of Miles & More partner airlines demonstrates their willingness to help me.	2,79%	4,58%	30.08%	50.00%	12,55%
The employee attitude of Miles & More partner airlines shows me that they understand my needs.	2,79%	9,36%	38,45%	40.04%	9,36%
The employees of Miles & More partner airlines are able to handle my complaints directly and immediately.	8,96%	20.32%	37,85%	25,70%	7,17%
The Miles & More airlines facility is well designed.	2,39%	9,16%	38,05%	42,23%	8,17%
I rarely have to wait long to receive the Miles & More service.	5,38%	16,33%	33,27%	32,47%	12,55%

Reliability tests

Table 0.2

Reliability test results

Relliability testing	Cronbachs Alpha	Cronbachs Alpha for standardized Items	number of items
AM	0.752	0.761	4
AS	0.918	0.919	3
AT	0.823	0.825	3
BA	0.856	0.856	3
BI	0.865	0.867	3
BL	0.850	0.851	3
BP	0.815	0.821	3
BR	0.779	0.783	3
BV	0.838	0.843	3
MAQ	0.842	0.849	5
MAS	0.657	0.659	3
QP	0.707	0.702	3
QT	0.856	0.857	3

Tests for normality distribution of the constructs

Normality tests

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	stats	df	Sig.	stats	df	Sig.
MAS Airline Safety	,157	502	,000	,907	502	,000
MAQ Airline Quality	,063	502	,000	,980	502	,000
AM monetary awards	,049	502	,006	,986	502	,000
AS service awards	,123	502	,000	,943	502	,000
AT status awards	,112	502	,000	,952	502	,000
QP number of FFP partners	,080	502	,000	,984	502	,000
QT transparency of redemption	,087	502	,000	,976	502	,000
BA customer attitude	,064	502	,000	,976	502	,000
BI brand image	,069	502	,000	,981	502	,000
BP Purchase behavior	,067	502	,000	,964	502	,000
BL customer loyalty	,077	502	,000	,964	502	,000
BR customer relationship	,086	502	,000	,973	502	,000
BV customer lifetime value	,059	502	,000	,983	502	,000

Distribution of (standardized) constructs formed by factor analysis

Distribution of standardized constructs

	N	Minimum	Maximum	mean	Std. Dev.
MAS Airline Safety	502	-5,27871	1,25421	,0000000	1,00000000
MAQ Airline Quality	502	-3,22084	2,16396	,0000000	1,00000000
AM monetary awards	502	-2,01330	3,01846	,0000000	1,00000000
AS service awards	502	-1,33156	2,44676	,0000000	1,00000000
AT status awards	502	-1,41030	3,15510	,0000000	1,00000000
QP number of FFP partners	502	-3,05103	2,22167	,0000000	1,00000000
QT transparency of redemption	502	-2,07867	1,94956	,0000000	1,00000000
BA customer attitude	502	-1,91214	1,97455	,0000000	1,00000000
BI brand image	502	-2,04834	2,13705	,0000000	1,00000000
BP Purchase behavior	502	-2,64989	1,55098	,0000000	1,00000000

BL customer loyalty		502	-1,64175	1,90351	,0000000	1,00000000
BR customer relationship		502	-2,86673	1,81133	,0000000	1,00000000
BV customer lifetime value		502	-2,12909	2,11205	,0000000	1,00000000

Test of H1 to H5 – correlation analysis

<div align="right">**Table 0.5**</div>

Test of H1 to H5 using correlation analysis
Correlations - test of H1 to H5

		BA customer attitude	BI brand image	BP Purchase behavior	BL customer loyalty	BR customer relationship	BV customer lifetime value
BA customer attitude	Pearson Corr.	1	,643**	,564**	,685**	,526**	,716**
	Sig. (2-sid.		0.000	0.000	0.000	0.000	0.000
	N	502	502	502	502	502	502
BI brand image	Pearson Corr.		1	,508**	,584**	,528**	,616**
	Sig. (2-sid.			0.000	0.000	0.000	0.000
	N			502	502	502	502
BP Purchase behavior	Pearson Corr.			1	,734**	,623**	,505**
	Sig. (2-sid.				0.000	0.000	0.000
	N				502	502	502
BL customer loyalty	Pearson Corr.				1	,646**	,600**
	Sig. (2-sid.					0.000	0.000
	N					502	502
BR customer relationship	Pearson Corr.					1	,604**
	Sig. (2-sid.						0.000
	N						502

Test of H6

Table 0.6

H6 – BA

AM and BA

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,322[a]	0,104	0,093	0,95254176	0,104	9,528	0,000	
2	,551[b]	0,303	0,293	0,84064769	0,200	141,543	0,000	
3	,566[c]	0,321	0,308	0,83174878	0,017	6,314	0,002	
4	,580[d]	0,337	0,322	0,82354912	0,016	5,923	0,003	1,910

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	51,869	6	8,645	9,528	,000[b]
	non standardized residuals	449,131	495	0,907		
	total	501,000	501			
2	Regression	151,896	7	21,699	30,706	,000[c]
	non standardized residuals	349,104	494	0,707		
	total	501,000	501			
3	Regression	160,631	9	17,848	25,799	,000[d]
	non standardized residuals	340,369	492	0,692		
	total	501,000	501			
4	Regression	168,666	11	15,333	22,608	,000[e]
	non standardized residuals	332,334	490	0,678		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const	0,252	0,254		0,992	0,322		
	MC1	0,003	0,033	0,003	0,079	0,937	0,881	1,135
	MC2	-0,001	0,033	-0,001	-0,035	0,972	0,823	1,215
	MT1	0,012	0,022	0,023	0,529	0,597	0,713	1,402
	MT2	0,027	0,028	0,041	0,950	0,343	0,732	1,366
	MT3	0,061	0,034	0,084	1,780	0,076	0,611	1,636
	MT4	-0,226	0,037	-0,237	-6,100	0,000	0,900	1,111
	AM	0,339	0,044	0,339	7,795	0,000	0,714	1,401
	MAS	0,073	0,046	0,073	1,593	0,112	0,641	1,561
	I_MAS_AM	0,073	0,047	0,082	1,554	0,121	0,486	2,057
	MAQ	0,167	0,049	0,167	3,441	0,001	0,572	1,749
	I_MAQ_AM	0,016	0,039	0,020	0,404	0,687	0,531	1,883

Table 0.7

H6 – BI

AM and BI

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,231[a]	0,053	0,042	0,97885865	0,053	4,646	0,000	
2	,505[b]	0,255	0,244	0,86938453	0,201	133,511	0,000	
3	,529[c]	0,280	0,267	0,85630752	0,025	8,602	0,000	
4	,549[d]	0,302	0,286	0,84503890	0,022	7,605	0,001	2,083

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	26,709	6	4,451	4,646	,000[b]
	non standardized residuals	474,291	495	0,958		
	total	501,000	501			
2	Regression	127,620	7	18,231	24,121	,000[c]
	non standardized residuals	373,380	494	0,756		
	total	501,000	501			
3	Regression	140,235	9	15,582	21,250	,000[d]
	non standardized residuals	360,765	492	0,733		
	total	501,000	501			
4	Regression	151,096	11	13,736	19,236	,000[e]
	non standardized residuals	349,904	490	0,714		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,501	0,261		1,923	0,055		
	MC1	-0,054	0,034	-0,064	-1,585	0,114	0,881	1,135
	MC2	-0,045	0,034	-0,054	-1,304	0,193	0,823	1,215
	MT1	-0,013	0,023	-0,025	-0,553	0,580	0,713	1,402
	MT2	0,049	0,029	0,075	1,695	0,091	0,732	1,366
	MT3	0,021	0,035	0,029	0,604	0,546	0,611	1,636
	MT4	-0,116	0,038	-0,121	-3,047	0,002	0,900	1,111
	AM	0,362	0,045	0,362	8,096	0,000	0,714	1,401
	MAS	0,119	0,047	0,119	2,518	0,012	0,641	1,561
	I_MAS_AM	-0,069	0,048	-0,078	-1,437	0,151	0,486	2,057
	MAQ	0,105	0,050	0,105	2,104	0,036	0,572	1,749
	I_MAQ_AM	0,138	0,040	0,180	3,475	0,001	0,531	1,883

Table 0.8

H6 – BP

AM and BP

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,342[a]	0,117	0,106	0,94525186	0,117	10,953	0,000	
2	,445[b]	0,198	0,186	0,90196592	0,081	49,651	0,000	
3	,487[c]	0,237	0,223	0,88134538	0,039	12,693	0,000	
4	,527[d]	0,277	0,261	0,85961758	0,040	13,593	0,000	1,872

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	58,717	6	9,786	10,953	,000[b]
	non standardized residuals	442,283	495	0,894		
	total	501,000	501			
2	Regression	99,110	7	14,159	17,404	,000[c]
	non standardized residuals	401,890	494	0,814		
	total	501,000	501			
3	Regression	118,829	9	13,203	16,998	,000[d]
	non standardized residuals	382,171	492	0,777		
	total	501,000	501			
4	Regression	138,918	11	12,629	17,091	,000[e]
	non standardized residuals	362,082	490	0,739		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	-0,060	0,265		-0,226	0,821		
	MC!	0,000	0,035	0,001	0,014	0,989	0,881	1,135
	MC2	-0,046	0,035	-0,055	-1,309	0,191	0,823	1,215
	MT1	-0,011	0,023	-0,022	-0,482	0,630	0,713	1,402
	MT2	0,077	0,029	0,117	2,603	0,010	0,732	1,366
	MT3	0,133	0,036	0,183	3,716	0,000	0,611	1,636
	MT4	-0,192	0,039	-0,201	-4,966	0,000	0,900	1,111
	AM	0,115	0,045	0,115	2,521	0,012	0,714	1,401
	MAS	0,118	0,048	0,118	2,457	0,014	0,641	1,561
	I_MAS_AM	0,070	0,049	0,078	1,420	0,156	0,486	2,057
	MAQ	0,265	0,051	0,265	5,214	0,000	0,572	1,749
	I_MAQ_AM	0,024	0,041	0,031	0,583	0,560	0,531	1,883

Table 0.9

H6 – BL

AM and BL

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,384[a]	0,147	0,137	0,92899493	0,147	14,252	0,000	
2	,523[b]	0,274	0,263	0,85836617	0,126	85,811	0,000	
3	,547[c]	0,299	0,286	0,84501377	0,025	8,868	0,000	
4	,602[d]	0,362	0,348	0,80742696	0,064	24,436	0,000	1,966

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	73,799	6	12,300	14,252	,000[b]
	non standardized residuals	427,201	495	0,863		
	total	501,000	501			
2	Regression	137,025	7	19,575	26,568	,000[c]
	non standardized residuals	363,975	494	0,737		
	total	501,000	501			
3	Regression	149,688	9	16,632	23,293	,000[d]
	non standardized residuals	351,312	492	0,714		
	total	501,000	501			
4	Regression	181,550	11	16,505	25,316	,000[e]
	non standardized residuals	319,450	490	0,652		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,359	0,249		1,441	0,150		
	MC1	-0,045	0,033	-0,053	-1,375	0,170	0,881	1,135
	MC2	-0,040	0,033	-0,049	-1,223	0,222	0,823	1,215
	MT1	0,017	0,022	0,033	0,768	0,443	0,713	1,402
	MT2	0,053	0,028	0,081	1,925	0,055	0,732	1,366
	MT3	0,103	0,034	0,141	3,059	0,002	0,611	1,636
	MT4	-0,233	0,036	-0,244	-6,421	0,000	0,900	1,111
	AM	0,179	0,043	0,179	4,184	0,000	0,714	1,401
	MAS	0,049	0,045	0,049	1,084	0,279	0,641	1,561
	I_MAS_AM	0,034	0,046	0,038	0,739	0,460	0,486	2,057
	MAQ	0,333	0,048	0,333	6,985	0,000	0,572	1,749
	I_MAQ_AM	0,015	0,038	0,020	0,406	0,685	0,531	1,883

Table 0.10

H6 – BR

AM and BR

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,179[a]	0,032	0,020	0,98975617	0,032	2,737	0,013	
2	,471[b]	0,222	0,211	0,88834096	0,190	120,472	0,000	
3	,577[c]	0,333	0,321	0,82431094	0,111	40,863	0,000	
4	,619[d]	0,383	0,369	0,79435016	0,050	19,907	0,000	2,042

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	16,089	6	2,682	2,737	,013[b]
	non standardized residuals	484,911	495	0,980		
	total	501,000	501			
2	Regression	111,160	7	15,880	20,123	,000[c]
	non standardized residuals	389,840	494	0,789		
	total	501,000	501			
3	Regression	166,692	9	18,521	27,258	,000[d]
	non standardized residuals	334,308	492	0,679		
	total	501,000	501			
4	Regression	191,814	11	17,438	27,635	,000[e]
	non standardized residuals	309,186	490	0,631		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,123	0,245		0,502	0,616		
	MC1	-0,026	0,032	-0,031	-0,810	0,419	0,881	1,135
	MC2	-0,018	0,032	-0,022	-0,557	0,578	0,823	1,215
	MT1	0,002	0,022	0,004	0,105	0,916	0,713	1,402
	MT2	-0,003	0,027	-0,004	-0,094	0,925	0,732	1,366
	MT3	0,046	0,033	0,063	1,393	0,164	0,611	1,636
	MT4	-0,042	0,036	-0,044	-1,181	0,238	0,900	1,111
	AM	0,236	0,042	0,236	5,619	0,000	0,714	1,401
	MAS	0,227	0,044	0,227	5,119	0,000	0,641	1,561
	I_MAS_AM	-0,014	0,045	-0,015	-0,302	0,763	0,486	2,057
	MAQ	0,290	0,047	0,290	6,177	0,000	0,572	1,749
	I_MAQ_AM	-0,025	0,037	-0,033	-0,672	0,502	0,531	1,883

Table 0.11

H6 – BV

AM and BV

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,236[a]	0,056	0,044	0,97768381	0,056	4,855	0,000	
2	,606[b]	0,367	0,358	0,80129956	0,311	242,906	0,000	
3	,631[c]	0,399	0,388	0,78257756	0,032	12,960	0,000	
4	,656[d]	0,431	0,418	0,76277069	0,032	13,942	0,000	1,950

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	27,847	6	4,641	4,855	,000[b]
	non standardized residuals	473,153	495	0,956		
	total	501,000	501			
2	Regression	183,812	7	26,259	40,896	,000[c]
	non standardized residuals	317,188	494	0,642		
	total	501,000	501			
3	Regression	199,686	9	22,187	36,228	,000[d]
	non standardized residuals	301,314	492	0,612		
	total	501,000	501			
4	Regression	215,909	11	19,628	33,736	,000[e]
	non standardized residuals	285,091	490	0,582		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,320	0,235		1,362	0,174		
	MC1	-0,062	0,031	-0,073	-2,009	0,045	0,881	1,135
	MC2	-0,021	0,031	-0,025	-0,667	0,505	0,823	1,215
	MT1	0,023	0,021	0,044	1,099	0,272	0,713	1,402
	MT2	-0,026	0,026	-0,040	-0,997	0,319	0,732	1,366
	MT3	0,066	0,032	0,090	2,072	0,039	0,611	1,636
	MT4	-0,094	0,034	-0,099	-2,745	0,006	0,900	1,111
	AM	0,410	0,040	0,410	10,163	0,000	0,714	1,401
	MAS	0,107	0,043	0,107	2,523	0,012	0,641	1,561
	I_MAS_AM	0,049	0,043	0,055	1,128	0,260	0,486	2,057
	MAQ	0,238	0,045	0,238	5,280	0,000	0,572	1,749
	I_MAQ_AM	0,016	0,036	0,021	0,451	0,652	0,531	1,883

Test of H7

Table 0.12

H7 – BA

AS and BA

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	df1	df2
1	,322[a]	0,104	0,093	0,95254176	0,104	9,528	6	495
2	,559[b]	0,313	0,303	0,83475880	0,209	150,542	1	494
3	,571[c]	0,326	0,314	0,82817629	0,014	4,942	2	492
4	,585[d]	0,342	0,327	0,82023950	0,016	5,784	2	490

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	51,869	6	8,645	9,528	,000[b]
	non standardized residuals	449,131	495	0,907		
	total	501,000	501			
2	Regression	156,770	7	22,396	32,140	,000[c]
	non standardized residuals	344,230	494	0,697		
	total	501,000	501			
3	Regression	163,549	9	18,172	26,495	,000[d]
	non standardized residuals	337,451	492	0,686		
	total	501,000	501			
4	Regression	171,332	11	15,576	23,151	,000[e]
	non standardized residuals	329,668	490	0,673		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,641	0,257		2,497	0,013		
	MC1	0,001	0,033	0,001	0,036	0,971	0,881	1,136
	MC2	-0,008	0,033	-0,010	-0,241	0,810	0,822	1,217
	MT1	-0,015	0,023	-0,028	-0,646	0,519	0,703	1,422
	MT2	0,025	0,028	0,039	0,900	0,368	0,730	1,370
	MT3	-0,004	0,035	-0,006	-0,115	0,909	0,574	1,742
	MT4	-0,209	0,037	-0,218	-5,622	0,000	0,889	1,125
	AS	0,385	0,045	0,385	8,574	0,000	0,666	1,502
	MAS	0,056	0,046	0,056	1,204	0,229	0,628	1,592
	I_MAS_AS	-0,004	0,047	-0,004	-0,084	0,933	0,551	1,814
	MAQ	0,165	0,049	0,165	3,400	0,001	0,569	1,758
	I_MAQ_AS	0,024	0,041	0,028	0,583	0,560	0,572	1,748

Table 0.13

H7 – BI

AS and BI

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,231[a]	0,053	0,042	0,97885865	0,053	4,646	0,000	
2	,491[b]	0,241	0,230	0,87723792	0,188	122,326	0,000	
3	,521[c]	0,272	0,259	0,86105366	0,031	10,372	0,000	
4	,533[d]	0,284	0,268	0,85551110	0,012	4,198	0,016	2,029

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	26,709	6	4,451	4,646	,000[b]
	non standardized residuals	474,291	495	0,958		
	total	501,000	501			
2	Regression	120,844	7	17,263	22,433	,000[c]
	non standardized residuals	380,156	494	0,770		
	total	501,000	501			
3	Regression	136,225	9	15,136	20,415	,000[d]
	non standardized residuals	364,775	492	0,741		
	total	501,000	501			
4	Regression	142,369	11	12,943	17,684	,000[e]
	non standardized residuals	358,631	490	0,732		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const	0,843	0,268		3,149	0,002		
	MC1	-0,049	0,035	-0,058	-1,419	0,157	0,881	1,136
	MC2	-0,050	0,035	-0,061	-1,440	0,151	0,822	1,217
	MT1	-0,036	0,024	-0,069	-1,511	0,131	0,703	1,422
	MT2	0,047	0,029	0,072	1,603	0,109	0,730	1,370
	MT3	-0,039	0,037	-0,054	-1,065	0,288	0,574	1,742
	MT4	-0,104	0,039	-0,109	-2,686	0,007	0,889	1,125
	AS	0,349	0,047	0,349	7,450	0,000	0,666	1,502
	MAS	0,134	0,048	0,134	2,788	0,006	0,628	1,592
	I_MAS_AS	-0,036	0,049	-0,037	-0,728	0,467	0,551	1,814
	MAQ	0,120	0,051	0,120	2,373	0,018	0,569	1,758
	I_MAQ_AS	0,090	0,043	0,106	2,089	0,037	0,572	1,748

Table 0.14

H7 – BP

AS and BP

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,342[a]	0,117	0,106	0,94525186	0,117	10,953	0,000	
2	,462[b]	0,214	0,203	0,89302371	0,096	60,593	0,000	
3	,498[c]	0,248	0,235	0,87492209	0,035	11,326	0,000	
4	,534[d]	0,285	0,269	0,85506342	0,037	12,559	0,000	1,897

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	58,717	6	9,786	10,953	,000[b]
	non standardized residuals	442,283	495	0,894		
	total	501,000	501			
2	Regression	107,039	7	15,291	19,174	,000[c]
	non standardized residuals	393,961	494	0,797		
	total	501,000	501			
3	Regression	124,380	9	13,820	18,054	,000[d]
	non standardized residuals	376,620	492	0,765		
	total	501,000	501			
4	Regression	142,745	11	12,977	17,749	,000[e]
	non standardized residuals	358,255	490	0,731		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,144	0,268		0,537	0,592		
	MC1	-0,001	0,035	-0,001	-0,019	0,985	0,881	1,136
	MC2	-0,049	0,035	-0,060	-1,415	0,158	0,822	1,217
	MT1	-0,021	0,024	-0,041	-0,909	0,364	0,703	1,422
	MT2	0,076	0,029	0,116	2,594	0,010	0,730	1,370
	MT3	0,097	0,037	0,133	2,641	0,009	0,574	1,742
	MT4	-0,185	0,039	-0,194	-4,784	0,000	0,889	1,125
	AS	0,170	0,047	0,170	3,629	0,000	0,666	1,502
	MAS	0,096	0,048	0,096	1,989	0,047	0,628	1,592
	I_MAS_AS	-0,005	0,049	-0,005	-0,096	0,924	0,551	1,814
	MAQ	0,252	0,051	0,252	4,981	0,000	0,569	1,758
	I_MAQ_AS	0,065	0,043	0,076	1,507	0,132	0,572	1,748

Table 0.15

H7 – BL

AS and BL

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,384[a]	0,147	0,137	0,92899493	0,147	14,252	0,000	
2	,576[b]	0,332	0,322	0,82311700	0,185	136,534	0,000	
3	,595[c]	0,354	0,342	0,81124314	0,022	8,283	0,000	
4	,634[d]	0,402	0,389	0,78180348	0,048	19,876	0,000	2,001

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	73,799	6	12,300	14,252	,000[b]
	non standardized residuals	427,201	495	0,863		
	total	501,000	501			
2	Regression	166,304	7	23,758	35,066	,000[c]
	non standardized residuals	334,696	494	0,678		
	total	501,000	501			
3	Regression	177,207	9	19,690	29,918	,000[d]
	non standardized residuals	323,793	492	0,658		
	total	501,000	501			
4	Regression	201,504	11	18,319	29,971	,000[e]
	non standardized residuals	299,496	490	0,611		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,666	0,245		2,721	0,007		
	MC1	-0,049	0,032	-0,058	-1,553	0,121	0,881	1,136
	MC2	-0,045	0,032	-0,055	-1,425	0,155	0,822	1,217
	MT1	-0,001	0,022	-0,003	-0,065	0,948	0,703	1,422
	MT2	0,054	0,027	0,083	2,025	0,043	0,730	1,370
	MT3	0,048	0,034	0,065	1,416	0,158	0,574	1,742
	MT4	-0,218	0,035	-0,229	-6,173	0,000	0,889	1,125
	AS	0,301	0,043	0,301	7,029	0,000	0,666	1,502
	MAS	0,036	0,044	0,036	0,812	0,417	0,628	1,592
	I_MAS_AS	-0,008	0,045	-0,009	-0,184	0,854	0,551	1,814
	MAQ	0,291	0,046	0,291	6,291	0,000	0,569	1,758
	I_MAQ_AS	0,032	0,039	0,037	0,810	0,418	0,572	1,748

Table 0.16

H7 – BR

AS and BR

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,179[a]	0,032	0,020	0,98975617	0,032	2,737	0,013	
2	,446[b]	0,199	0,187	0,90151202	0,167	102,649	0,000	
3	,567[c]	0,322	0,310	0,83092098	0,123	44,751	0,000	
4	,615[d]	0,378	0,364	0,79756428	0,056	22,007	0,000	2,044

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	16,089	6	2,682	2,737	,013[b]
	non standardized residuals	484,911	495	0,980		
	total	501,000	501			
2	Regression	99,514	7	14,216	17,492	,000[c]
	non standardized residuals	401,486	494	0,813		
	total	501,000	501			
3	Regression	161,309	9	17,923	25,959	,000[d]
	non standardized residuals	339,691	492	0,690		
	total	501,000	501			
4	Regression	189,307	11	17,210	27,055	,000[e]
	non standardized residuals	311,693	490	0,636		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,324	0,250		1,297	0,195		
	MC1	-0,026	0,032	-0,030	-0,802	0,423	0,881	1,136
	MC2	-0,022	0,032	-0,026	-0,665	0,506	0,822	1,217
	MT1	-0,014	0,022	-0,027	-0,624	0,533	0,703	1,422
	MT2	-0,002	0,027	-0,003	-0,077	0,938	0,730	1,370
	MT3	0,009	0,034	0,013	0,275	0,784	0,574	1,742
	MT4	-0,035	0,036	-0,036	-0,959	0,338	0,889	1,125
	AS	0,228	0,044	0,228	5,227	0,000	0,666	1,502
	MAS	0,236	0,045	0,236	5,250	0,000	0,628	1,592
	I_MAS_AS	-0,012	0,046	-0,013	-0,262	0,793	0,551	1,814
	MAQ	0,304	0,047	0,304	6,428	0,000	0,569	1,758
	I_MAQ_AS	-0,015	0,040	-0,017	-0,371	0,711	0,572	1,748

Table 0.17

H7 – BV

AS and BV

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,236[a]	0,056	0,044	0,97768381	0,056	4,855	0,000	
2	,574[b]	0,329	0,320	0,82475431	0,274	201,589	0,000	
3	,614[c]	0,378	0,366	0,79613888	0,048	19,075	0,000	
4	,645[d]	0,417	0,403	0,77237743	0,039	16,369	0,000	1,912

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	27,847	6	4,641	4,855	,000[b]
	non standardized residuals	473,153	495	0,956		
	total	501,000	501			
2	Regression	164,971	7	23,567	34,647	,000[c]
	non standardized residuals	336,029	494	0,680		
	total	501,000	501			
3	Regression	189,152	9	21,017	33,158	,000[d]
	non standardized residuals	311,848	492	0,634		
	total	501,000	501			
4	Regression	208,682	11	18,971	31,800	,000[e]
	non standardized residuals	292,318	490	0,597		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,676	0,242		2,797	0,005		
	MC1	-0,058	0,031	-0,068	-1,853	0,064	0,881	1,136
	MC2	-0,024	0,031	-0,029	-0,769	0,442	0,822	1,217
	MT1	-0,003	0,021	-0,006	-0,154	0,878	0,703	1,422
	MT2	-0,023	0,027	-0,036	-0,883	0,378	0,730	1,370
	MT3	-0,003	0,033	-0,004	-0,098	0,922	0,574	1,742
	MT4	-0,084	0,035	-0,088	-2,402	0,017	0,889	1,125
	AS	0,384	0,042	0,384	9,079	0,000	0,666	1,502
	MAS	0,140	0,044	0,140	3,206	0,001	0,628	1,592
	I_MAS_AS	0,102	0,044	0,107	2,296	0,022	0,551	1,814
	MAQ	0,255	0,046	0,255	5,570	0,000	0,569	1,758
	I_MAQ_AS	-0,008	0,039	-0,010	-0,209	0,834	0,572	1,748

Test of H8

Table 0.18

H8 – BA

AT and BA

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,322[a]	0,104	0,093	0,95254176	0,104	9,528	0,000	
2	,529[b]	0,280	0,270	0,85432114	0,177	121,362	0,000	
3	,545[c]	0,297	0,284	0,84634810	0,016	5,676	0,004	
4	,568[d]	0,323	0,308	0,83198396	0,026	9,568	0,000	1,973

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	51,869	6	8,645	9,528	,000[b]
	non standardized residuals	449,131	495	0,907		
	total	501,000	501			
2	Regression	140,447	7	20,064	27,490	,000[c]
	non standardized residuals	360,553	494	0,730		
	total	501,000	501			
3	Regression	148,578	9	16,509	23,047	,000[d]
	non standardized residuals	352,422	492	0,716		
	total	501,000	501			
4	Regression	161,823	11	14,711	21,253	,000[e]
	non standardized residuals	339,177	490	0,692		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	Const.	0,459	0,259		1,770	0,077		
	mC1	-0,008	0,034	-0,010	-0,240	0,811	0,873	1,146
	MC2	0,018	0,034	0,022	0,528	0,598	0,811	1,233
	MT1	-0,013	0,023	-0,025	-0,561	0,575	0,705	1,419
	MT2	0,034	0,029	0,052	1,195	0,233	0,725	1,379
	MT3	0,012	0,035	0,016	0,339	0,735	0,584	1,714
	MT4	-0,220	0,037	-0,230	-5,867	0,000	0,897	1,115
	AT	0,325	0,044	0,325	7,385	0,000	0,716	1,398
	MAS	0,043	0,047	0,043	0,916	0,360	0,620	1,614
	I_MAS_AT	-0,026	0,049	-0,027	-0,526	0,599	0,506	1,978
	MAQ	0,208	0,048	0,208	4,327	0,000	0,597	1,675
	I_MAQ_AT	0,057	0,042	0,069	1,359	0,175	0,529	1,891

Table 0.19

H8 – BI

AT and BI

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,231[a]	0,053	0,042	0,97885865	0,053	4,646	0,000	
2	,514[b]	0,264	0,254	0,86381819	0,211	141,624	0,000	
3	,540[c]	0,292	0,279	0,84901033	0,028	9,691	0,000	
4	,549[d]	0,301	0,286	0,84520191	0,009	3,222	0,041	2,082

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	26,709	6	4,451	4,646	,000[b]
	non standardized residuals	474,291	495	0,958		
	total	501,000	501			
2	Regression	132,386	7	18,912	25,345	,000[c]
	non standardized residuals	368,614	494	0,746		
	total	501,000	501			
3	Regression	146,357	9	16,262	22,560	,000[d]
	non standardized residuals	354,643	492	0,721		
	total	501,000	501			
4	Regression	150,961	11	13,724	19,211	,000[e]
	non standardized residuals	350,039	490	0,714		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	Const.	0,705	0,263		2,674	0,008		
	mC1	-0,066	0,034	-0,077	-1,913	0,056	0,873	1,146
	MC2	-0,020	0,035	-0,024	-0,580	0,562	0,811	1,233
	MT1	-0,041	0,023	-0,079	-1,747	0,081	0,705	1,419
	MT2	0,058	0,029	0,089	2,003	0,046	0,725	1,379
	MT3	-0,030	0,036	-0,041	-0,836	0,403	0,584	1,714
	MT4	-0,105	0,038	-0,110	-2,768	0,006	0,897	1,115
	AT	0,384	0,045	0,384	8,601	0,000	0,716	1,398
	MAS	0,122	0,048	0,122	2,542	0,011	0,620	1,614
	I_MAS_AT	-0,032	0,050	-0,034	-0,639	0,523	0,506	1,978
	MAQ	0,117	0,049	0,117	2,397	0,017	0,597	1,675
	I_MAQ_AT	0,053	0,043	0,064	1,227	0,220	0,529	1,891

Table 0.20

H8 – BP

AT and BP

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,342[a]	0,117	0,106	0,94525186	0,117	10,953	0,000	
2	,517[b]	0,268	0,257	0,86185873	0,150	101,426	0,000	
3	,544[c]	0,295	0,283	0,84701489	0,028	9,733	0,000	
4	,568[d]	0,322	0,307	0,83239114	0,027	9,720	0,000	1,924

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	58,717	6	9,786	10,953	,000[b]
	non standardized residuals	442,283	495	0,894		
	total	501,000	501			
2	Regression	134,057	7	19,151	25,782	,000[c]
	non standardized residuals	366,943	494	0,743		
	total	501,000	501			
3	Regression	148,022	9	16,447	22,925	,000[d]
	non standardized residuals	352,978	492	0,717		
	total	501,000	501			
4	Regression	161,491	11	14,681	21,189	,000[e]
	non standardized residuals	339,509	490	0,693		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	Const.	0,070	0,259		0,269	0,788		
	mC1	-0,015	0,034	-0,018	-0,452	0,651	0,873	1,146
	MC2	-0,023	0,034	-0,028	-0,682	0,495	0,811	1,233
	MT1	-0,032	0,023	-0,062	-1,406	0,160	0,705	1,419
	MT2	0,087	0,029	0,133	3,052	0,002	0,725	1,379
	MT3	0,094	0,036	0,128	2,635	0,009	0,584	1,714
	MT4	-0,177	0,037	-0,185	-4,720	0,000	0,897	1,115
	AT	0,288	0,044	0,288	6,555	0,000	0,716	1,398
	MAS	0,104	0,047	0,104	2,194	0,029	0,620	1,614
	I_MAS_AT	0,064	0,049	0,068	1,302	0,194	0,506	1,978
	MAQ	0,201	0,048	0,201	4,168	0,000	0,597	1,675
	I_MAQ_AT	-0,030	0,042	-0,037	-0,716	0,475	0,529	1,891

Table 0.21

H8 – BL

AT and BL

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,384[a]	0,147	0,137	0,92899493	0,147	14,252	0,000	
2	,580[b]	0,337	0,327	0,82023390	0,189	140,975	0,000	
3	,598[c]	0,358	0,346	0,80848972	0,021	8,228	0,000	
4	,641[d]	0,411	0,398	0,77587141	0,053	22,119	0,000	2,022

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	73,799	6	12,300	14,252	,000[b]
	non standardized residuals	427,201	495	0,863		
	total	501,000	501			
2	Regression	168,645	7	24,092	35,810	,000[c]
	non standardized residuals	332,355	494	0,673		
	total	501,000	501			
3	Regression	179,401	9	19,933	30,495	,000[d]
	non standardized residuals	321,599	492	0,654		
	total	501,000	501			
4	Regression	206,032	11	18,730	31,114	,000[e]
	non standardized residuals	294,968	490	0,602		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	Const.	0,524	0,242		2,167	0,031		
	mC1	-0,061	0,031	-0,072	-1,936	0,053	0,873	1,146
	MC2	-0,018	0,032	-0,022	-0,582	0,561	0,811	1,233
	MT1	-0,005	0,021	-0,009	-0,217	0,829	0,705	1,419
	MT2	0,064	0,027	0,097	2,383	0,018	0,725	1,379
	MT3	0,057	0,033	0,078	1,713	0,087	0,584	1,714
	MT4	-0,221	0,035	-0,232	-6,339	0,000	0,897	1,115
	AT	0,315	0,041	0,315	7,691	0,000	0,716	1,398
	MAS	0,032	0,044	0,032	0,722	0,470	0,620	1,614
	I_MAS_AT	0,009	0,046	0,010	0,205	0,837	0,506	1,978
	MAQ	0,295	0,045	0,295	6,573	0,000	0,597	1,675
	I_MAQ_AT	0,004	0,039	0,005	0,101	0,919	0,529	1,891

Table 0.22

H8 – BR

AT and BR

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,179[a]	0,032	0,020	0,98975617	0,032	2,737	0,013	
2	,505[b]	0,255	0,245	0,86896132	0,223	148,186	0,000	
3	,607[c]	0,369	0,357	0,80174280	0,113	44,153	0,000	
4	,647[d]	0,419	0,406	0,77070579	0,050	21,212	0,000	2,013

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	16,089	6	2,682	2,737	,013[b]
	non standardized residuals	484,911	495	0,980		
	total	501,000	501			
2	Regression	127,984	7	18,283	24,213	,000[c]
	non standardized residuals	373,016	494	0,755		
	total	501,000	501			
3	Regression	184,747	9	20,527	31,935	,000[d]
	non standardized residuals	316,253	492	0,643		
	total	501,000	501			
4	Regression	209,946	11	19,086	32,132	,000[e]
	non standardized residuals	291,054	490	0,594		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	Const.	0,277	0,240		1,152	0,250		
	mC1	-0,043	0,031	-0,050	-1,363	0,174	0,873	1,146
	MC2	0,004	0,032	0,005	0,130	0,897	0,811	1,233
	MT1	-0,019	0,021	-0,037	-0,905	0,366	0,705	1,419
	MT2	0,006	0,027	0,009	0,212	0,832	0,725	1,379
	MT3	0,003	0,033	0,005	0,102	0,919	0,584	1,714
	MT4	-0,033	0,035	-0,035	-0,957	0,339	0,897	1,115
	AT	0,326	0,041	0,326	8,007	0,000	0,716	1,398
	MAS	0,217	0,044	0,217	4,964	0,000	0,620	1,614
	I_MAS_AT	-0,027	0,045	-0,029	-0,592	0,554	0,506	1,978
	MAQ	0,278	0,045	0,278	6,231	0,000	0,597	1,675
	I_MAQ_AT	-0,032	0,039	-0,039	-0,823	0,411	0,529	1,891

Table 0.23

H8 – BV

AT and BV

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,236[a]	0,056	0,044	0,97768381	0,056	4,855	0,000	
2	,559[b]	0,312	0,303	0,83510866	0,257	184,447	0,000	
3	,599[c]	0,358	0,347	0,80831790	0,046	17,644	0,000	
4	,639[d]	0,408	0,395	0,77803987	0,050	20,519	0,000	1,964

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	27,847	6	4,641	4,855	,000[b]
	non standardized residuals	473,153	495	0,956		
	total	501,000	501			
2	Regression	156,481	7	22,354	32,054	,000[c]
	non standardized residuals	344,519	494	0,697		
	total	501,000	501			
3	Regression	179,538	9	19,949	30,532	,000[d]
	non standardized residuals	321,462	492	0,653		
	total	501,000	501			
4	Regression	204,380	11	18,580	30,693	,000[e]
	non standardized residuals	296,620	490	0,605		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	Const.	0,492	0,242		2,028	0,043		
	MC1	-0,070	0,032	-0,082	-2,202	0,028	0,873	1,146
	MC2	0,005	0,032	0,007	0,169	0,866	0,811	1,233
	MT1	-0,006	0,021	-0,012	-0,283	0,778	0,705	1,419
	MT2	-0,014	0,027	-0,021	-0,517	0,606	0,725	1,379
	MT3	0,012	0,033	0,016	0,358	0,721	0,584	1,714
	MT4	-0,090	0,035	-0,094	-2,566	0,011	0,897	1,115
	AT	0,360	0,041	0,360	8,760	0,000	0,716	1,398
	MAS	0,113	0,044	0,113	2,569	0,010	0,620	1,614
	I_MAS_AT	0,047	0,046	0,050	1,032	0,303	0,506	1,978
	MAQ	0,288	0,045	0,288	6,391	0,000	0,597	1,675
	I_MAQ_AT	0,026	0,039	0,031	0,648	0,518	0,529	1,891

Test of H9

Table 0.24

H9 – BA

QP and BA

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,322[a]	0,104	0,093	0,95254176	0,104	9,528	0,000	
2	,443[b]	0,196	0,185	0,90297656	0,092	56,833	0,000	
3	,475[c]	0,226	0,212	0,88777343	0,030	9,532	0,000	
4	,525[d]	0,275	0,259	0,86079520	0,049	16,661	0,000	1,932

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	51,869	6	8,645	9,528	,000[b]
	non standardized residuals	449,131	495	0,907		
	total	501,000	501			
2	Regression	98,209	7	14,030	17,207	,000[c]
	non standardized residuals	402,791	494	0,815		
	total	501,000	501			
3	Regression	113,234	9	12,582	15,964	,000[d]
	non standardized residuals	387,766	492	0,788		
	total	501,000	501			
4	Regression	137,925	11	12,539	16,922	,000[e]
	non standardized residuals	363,075	490	0,741		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,150	0,266		0,564	0,573		
	MC1	0,022	0,035	0,026	0,646	0,519	0,879	1,137
	MC2	0,004	0,035	0,005	0,128	0,898	0,822	1,217
	MT1	0,014	0,024	0,027	0,587	0,557	0,708	1,412
	MT2	0,017	0,030	0,026	0,567	0,571	0,729	1,372
	MT3	0,073	0,036	0,100	2,021	0,044	0,608	1,646
	MT4	-0,232	0,039	-0,244	-6,023	0,000	0,904	1,106
	QP	0,201	0,042	0,201	4,763	0,000	0,833	1,201
	MAS	0,067	0,047	0,067	1,437	0,151	0,684	1,463
	I_MAS_QP	0,024	0,044	0,026	0,533	0,594	0,614	1,630
	MAQ	0,264	0,048	0,264	5,506	0,000	0,643	1,554
	I_MAQ_QP	0,059	0,039	0,072	1,492	0,136	0,643	1,555

Table 0.25

H9 – BI

QP and BI

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,231[a]	0,053	0,042	0,97885865	0,053	4,646	0,000	
2	,443[b]	0,197	0,185	0,90261300	0,143	88,160	0,000	
3	,485[c]	0,235	0,221	0,88253014	0,038	12,369	0,000	
4	,504[d]	0,254	0,237	0,87328089	0,019	6,239	0,002	2,022

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	26,709	6	4,451	4,646	,000[b]
	non standardized residuals	474,291	495	0,958		
	total	501,000	501			
2	Regression	98,533	7	14,076	17,278	,000[c]
	non standardized residuals	402,467	494	0,815		
	total	501,000	501			
3	Regression	117,801	9	13,089	16,805	,000[d]
	non standardized residuals	383,199	492	0,779		
	total	501,000	501			
4	Regression	127,316	11	11,574	15,177	,000[e]
	non standardized residuals	373,684	490	0,763		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,373	0,270		1,382	0,168		
	MC1	-0,035	0,035	-0,041	-0,986	0,325	0,879	1,137
	MC2	-0,035	0,036	-0,043	-0,988	0,324	0,822	1,217
	MT1	-0,012	0,024	-0,022	-0,483	0,629	0,708	1,412
	MT2	0,033	0,030	0,050	1,092	0,275	0,729	1,372
	MT3	0,048	0,037	0,066	1,310	0,191	0,608	1,646
	MT4	-0,122	0,039	-0,128	-3,118	0,002	0,904	1,106
	QP	0,297	0,043	0,297	6,950	0,000	0,833	1,201
	MAS	0,130	0,047	0,130	2,758	0,006	0,684	1,463
	I_MAS_QP	-0,018	0,045	-0,020	-0,402	0,688	0,614	1,630
	MAQ	0,166	0,049	0,166	3,404	0,001	0,643	1,554
	I_MAQ_QP	0,032	0,040	0,039	0,794	0,428	0,643	1,555

Table 0.26

H9 – BP

QP and BP

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,342[a]	0,117	0,106	0,94525186	0,117	10,953	0,000	
2	,469[b]	0,220	0,209	0,88932401	0,103	65,217	0,000	
3	,506[c]	0,256	0,242	0,87055337	0,036	11,766	0,000	
4	,548[d]	0,300	0,284	0,84595538	0,044	15,514	0,000	1,848

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	58,717	6	9,786	10,953	,000[b]
	non standardized residuals	442,283	495	0,894		
	total	501,000	501			
2	Regression	110,297	7	15,757	19,923	,000[c]
	non standardized residuals	390,703	494	0,791		
	total	501,000	501			
3	Regression	128,131	9	14,237	18,785	,000[d]
	non standardized residuals	372,869	492	0,758		
	total	501,000	501			
4	Regression	150,336	11	13,667	19,097	,000[e]
	non standardized residuals	350,664	490	0,716		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	-0,140	0,262		-0,536	0,592		
	MC1	0,009	0,034	0,011	0,277	0,782	0,879	1,137
	MC2	-0,040	0,034	-0,048	-1,163	0,245	0,822	1,217
	MT1	-0,006	0,023	-0,011	-0,254	0,800	0,708	1,412
	MT2	0,069	0,029	0,105	2,362	0,019	0,729	1,372
	MT3	0,142	0,035	0,194	4,010	0,000	0,608	1,646
	MT4	-0,191	0,038	-0,200	-5,033	0,000	0,904	1,106
	QP	0,218	0,041	0,218	5,271	0,000	0,833	1,201
	MAS	0,090	0,046	0,090	1,973	0,049	0,684	1,463
	I_MAS_QP	0,003	0,044	0,004	0,079	0,937	0,614	1,630
	MAQ	0,250	0,047	0,250	5,312	0,000	0,643	1,554
	I_MAQ_QP	0,056	0,039	0,068	1,443	0,150	0,643	1,555

Table 0.27

H9 – BL

QP and BL

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,384[a]	0,147	0,137	0,92899493	0,147	14,252	0,000	
2	,518[b]	0,268	0,258	0,86149025	0,121	81,614	0,000	
3	,550[c]	0,303	0,290	0,84247574	0,035	12,275	0,000	
4	,620[d]	0,384	0,370	0,79372925	0,081	32,144	0,000	2,002

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	73,799	6	12,300	14,252	,000[b]
	non standardized residuals	427,201	495	0,863		
	total	501,000	501			
2	Regression	134,370	7	19,196	25,865	,000[c]
	non standardized residuals	366,630	494	0,742		
	total	501,000	501			
3	Regression	151,795	9	16,866	23,763	,000[d]
	non standardized residuals	349,205	492	0,710		
	total	501,000	501			
4	Regression	192,297	11	17,482	27,748	,000[e]
	non standardized residuals	308,703	490	0,630		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,245	0,246		0,998	0,319		
	MC1	-0,031	0,032	-0,037	-0,979	0,328	0,879	1,137
	MC2	-0,033	0,032	-0,040	-1,022	0,307	0,822	1,217
	MT1	0,023	0,022	0,045	1,057	0,291	0,708	1,412
	MT2	0,047	0,027	0,071	1,710	0,088	0,729	1,372
	MT3	0,111	0,033	0,152	3,335	0,001	0,608	1,646
	MT4	-0,236	0,036	-0,247	-6,629	0,000	0,904	1,106
	QP	0,220	0,039	0,220	5,655	0,000	0,833	1,201
	MAS	0,045	0,043	0,045	1,050	0,294	0,684	1,463
	I_MAS_QP	0,039	0,041	0,043	0,947	0,344	0,614	1,630
	MAQ	0,347	0,044	0,347	7,860	0,000	0,643	1,554
	I_MAQ_QP	0,045	0,036	0,055	1,241	0,215	0,643	1,555

Table 0.28

H9 – BR

QP and BR							

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,179[a]	0,032	0,020	0,98975617	0,032	2,737	0,013	
2	,462[b]	0,213	0,202	0,89337677	0,181	113,564	0,000	
3	,582[c]	0,339	0,327	0,82031550	0,126	46,957	0,000	
4	,636[d]	0,404	0,391	0,78065371	0,065	26,631	0,000	1,989

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	16,089	6	2,682	2,737	,013[b]
	non standardized residuals	484,911	495	0,980		
	total	501,000	501			
2	Regression	106,728	7	15,247	19,103	,000[c]
	non standardized residuals	394,272	494	0,798		
	total	501,000	501			
3	Regression	169,925	9	18,881	28,058	,000[d]
	non standardized residuals	331,075	492	0,673		
	total	501,000	501			
4	Regression	202,384	11	18,399	30,190	,000[e]
	non standardized residuals	298,616	490	0,609		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,033	0,242		0,135	0,893		
	MC1	-0,017	0,032	-0,020	-0,529	0,597	0,879	1,137
	MC2	-0,010	0,032	-0,012	-0,299	0,765	0,822	1,217
	MT1	0,005	0,021	0,010	0,236	0,813	0,708	1,412
	MT2	-0,014	0,027	-0,021	-0,504	0,614	0,729	1,372
	MT3	0,060	0,033	0,082	1,830	0,068	0,608	1,646
	MT4	-0,053	0,035	-0,055	-1,500	0,134	0,904	1,106
	QP	0,270	0,038	0,270	7,068	0,000	0,833	1,201
	MAS	0,223	0,042	0,223	5,276	0,000	0,684	1,463
	I_MAS_QP	-0,022	0,040	-0,024	-0,545	0,586	0,614	1,630
	MAQ	0,317	0,043	0,317	7,286	0,000	0,643	1,554
	I_MAQ_QP	0,004	0,036	0,004	0,102	0,919	0,643	1,555

Table 0.29

H9 – BV

QP and BV

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,236[a]	0,056	0,044	0,97768381	0,056	4,855	0,000	
2	,394[b]	0,155	0,143	0,92556517	0,100	58,317	0,000	
3	,476[c]	0,227	0,213	0,88721455	0,072	22,815	0,000	
4	,570[d]	0,325	0,310	0,83069741	0,098	35,612	0,000	1,977

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	27,847	6	4,641	4,855	,000[b]
	non standardized residuals	473,153	495	0,956		
	total	501,000	501			
2	Regression	77,805	7	11,115	12,975	,000[c]
	non standardized residuals	423,195	494	0,857		
	total	501,000	501			
3	Regression	113,722	9	12,636	16,053	,000[d]
	non standardized residuals	387,278	492	0,787		
	total	501,000	501			
4	Regression	162,871	11	14,806	21,457	,000[e]
	non standardized residuals	338,129	490	0,690		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,215	0,257		0,834	0,404		
	MC1	-0,038	0,034	-0,045	-1,132	0,258	0,879	1,137
	MC2	-0,016	0,034	-0,019	-0,470	0,638	0,822	1,217
	MT1	0,023	0,023	0,045	1,030	0,304	0,708	1,412
	MT2	-0,035	0,029	-0,053	-1,222	0,222	0,729	1,372
	MT3	0,076	0,035	0,104	2,191	0,029	0,608	1,646
	MT4	-0,104	0,037	-0,109	-2,794	0,005	0,904	1,106
	QP	0,161	0,041	0,161	3,957	0,000	0,833	1,201
	MAS	0,119	0,045	0,119	2,648	0,008	0,684	1,463
	I_MAS_QP	0,027	0,043	0,030	0,625	0,532	0,614	1,630
	MAQ	0,378	0,046	0,378	8,180	0,000	0,643	1,554
	I_MAQ_QP	0,065	0,038	0,080	1,719	0,086	0,643	1,555

Test of H10

Table 0.30

H10 – BA

QT and BA

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,322[a]	0,104	0,093	0,95254176	0,104	9,528	0,000	
2	,473[b]	0,224	0,213	0,88720272	0,120	76,594	0,000	
3	,505[c]	0,255	0,241	0,87121263	0,031	10,150	0,000	
4	,544[d]	0,296	0,280	0,84849192	0,041	14,351	0,000	1,881

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	51,869	6	8,645	9,528	,000[b]
	non standardized residuals	449,131	495	0,907		
	total	501,000	501			
2	Regression	112,158	7	16,023	20,356	,000[c]
	non standardized residuals	388,842	494	0,787		
	total	501,000	501			
3	Regression	127,566	9	14,174	18,674	,000[d]
	non standardized residuals	373,434	492	0,759		
	total	501,000	501			
4	Regression	148,230	11	13,475	18,718	,000[e]
	non standardized residuals	352,770	490	0,720		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,130	0,262		0,494	0,621		
	MC1	0,033	0,034	0,038	0,950	0,343	0,878	1,139
	MC2	0,007	0,035	0,008	0,193	0,847	0,822	1,217
	MT1	-0,001	0,023	-0,002	-0,036	0,971	0,709	1,411
	MT2	0,031	0,029	0,047	1,056	0,292	0,729	1,371
	MT3	0,070	0,035	0,096	1,971	0,049	0,611	1,637
	MT4	-0,244	0,038	-0,256	-6,405	0,000	0,902	1,109
	QT	0,246	0,042	0,246	5,852	0,000	0,811	1,232
	MAS	0,071	0,046	0,071	1,529	0,127	0,669	1,494
	I_MAS_QT	0,061	0,045	0,067	1,369	0,172	0,594	1,684
	MAQ	0,246	0,048	0,246	5,150	0,000	0,632	1,583
	I_MAQ_QT	0,060	0,039	0,074	1,536	0,125	0,624	1,603

Table 0.31

H10 – BI

QT and BI

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,231[a]	0,053	0,042	0,97885865	0,053	4,646	0,000	
2	,421[b]	0,177	0,166	0,91332992	0,124	74,578	0,000	
3	,470[c]	0,221	0,207	0,89076961	0,043	13,670	0,000	
4	,510[d]	0,261	0,244	0,86952132	0,040	13,170	0,000	2,059

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	26,709	6	4,451	4,646	,000[b]
	non standardized residuals	474,291	495	0,958		
	total	501,000	501			
2	Regression	88,919	7	12,703	15,228	,000[c]
	non standardized residuals	412,081	494	0,834		
	total	501,000	501			
3	Regression	110,613	9	12,290	15,489	,000[d]
	non standardized residuals	390,387	492	0,793		
	total	501,000	501			
4	Regression	130,527	11	11,866	15,694	,000[e]
	non standardized residuals	370,473	490	0,756		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,339	0,269		1,262	0,208		
	MC1	-0,023	0,035	-0,027	-0,647	0,518	0,878	1,139
	MC2	-0,033	0,035	-0,041	-0,945	0,345	0,822	1,217
	MT1	-0,023	0,024	-0,045	-0,970	0,332	0,709	1,411
	MT2	0,055	0,030	0,083	1,827	0,068	0,729	1,371
	MT3	0,032	0,036	0,044	0,890	0,374	0,611	1,637
	MT4	-0,134	0,039	-0,141	-3,436	0,001	0,902	1,109
	QT	0,262	0,043	0,262	6,079	0,000	0,811	1,232
	MAS	0,143	0,047	0,143	3,016	0,003	0,669	1,494
	I_MAS_QT	-0,021	0,046	-0,023	-0,449	0,654	0,594	1,684
	MAQ	0,174	0,049	0,174	3,565	0,000	0,632	1,583
	I_MAQ_QT	0,149	0,040	0,184	3,733	0,000	0,624	1,603

Table 0.32

H10 – BP

QT and BP

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,342[a]	0,117	0,106	0,94525186	0,117	10,953	0,000	
2	,434[b]	0,188	0,177	0,90724381	0,071	43,344	0,000	
3	,484[c]	0,234	0,220	0,88318570	0,046	14,640	0,000	
4	,530[d]	0,281	0,265	0,85752263	0,047	15,944	0,000	1,842

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	58,717	6	9,786	10,953	,000[b]
	non standardized residuals	442,283	495	0,894		
	total	501,000	501			
2	Regression	94,393	7	13,485	16,383	,000[c]
	non standardized residuals	406,607	494	0,823		
	total	501,000	501			
3	Regression	117,232	9	13,026	16,699	,000[d]
	non standardized residuals	383,768	492	0,780		
	total	501,000	501			
4	Regression	140,681	11	12,789	17,392	,000[e]
	non standardized residuals	360,319	490	0,735		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	-0,124	0,265		-0,468	0,640		
	MC1	0,016	0,035	0,019	0,469	0,639	0,878	1,139
	MC2	-0,041	0,035	-0,050	-1,187	0,236	0,822	1,217
	MT1	-0,018	0,024	-0,035	-0,776	0,438	0,709	1,411
	MT2	0,078	0,029	0,119	2,658	0,008	0,729	1,371
	MT3	0,138	0,036	0,189	3,865	0,000	0,611	1,637
	MT4	-0,199	0,039	-0,208	-5,158	0,000	0,902	1,109
	QT	0,140	0,043	0,140	3,300	0,001	0,811	1,232
	MAS	0,113	0,047	0,113	2,404	0,017	0,669	1,494
	I_MAS_QT	0,091	0,045	0,099	1,999	0,046	0,594	1,684
	MAQ	0,272	0,048	0,272	5,646	0,000	0,632	1,583
	I_MAQ_QT	0,006	0,039	0,008	0,165	0,869	0,624	1,603

Table 0.33

H10 – BL

QT and BL

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,384[a]	0,147	0,137	0,92899493	0,147	14,252	0,000	
2	,497[b]	0,247	0,237	0,87378402	0,100	65,530	0,000	
3	,528[c]	0,278	0,265	0,85727851	0,031	10,603	0,000	
4	,599[d]	0,359	0,345	0,80948890	0,081	30,903	0,000	1,958

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	73,799	6	12,300	14,252	,000[b]
	non standardized residuals	427,201	495	0,863		
	total	501,000	501			
2	Regression	123,832	7	17,690	23,170	,000[c]
	non standardized residuals	377,168	494	0,763		
	total	501,000	501			
3	Regression	139,416	9	15,491	21,078	,000[d]
	non standardized residuals	361,584	492	0,735		
	total	501,000	501			
4	Regression	179,917	11	16,356	24,961	,000[e]
	non standardized residuals	321,083	490	0,655		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,280	0,250		1,121	0,263		
	MC1	-0,027	0,033	-0,031	-0,814	0,416	0,878	1,139
	MC2	-0,036	0,033	-0,044	-1,095	0,274	0,822	1,217
	MT1	0,008	0,022	0,015	0,345	0,730	0,709	1,411
	MT2	0,058	0,028	0,088	2,071	0,039	0,729	1,371
	MT3	0,111	0,034	0,152	3,281	0,001	0,611	1,637
	MT4	-0,242	0,036	-0,254	-6,660	0,000	0,902	1,109
	QT	0,174	0,040	0,174	4,334	0,000	0,811	1,232
	MAS	0,039	0,044	0,039	0,886	0,376	0,669	1,494
	I_MAS_QT	0,025	0,043	0,027	0,579	0,563	0,594	1,684
	MAQ	0,357	0,045	0,357	7,856	0,000	0,632	1,583
	I_MAQ_QT	0,014	0,037	0,018	0,384	0,701	0,624	1,603

Table 0.34

H 10 – BR

QT and BR

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,179[a]	0,032	0,020	0,98975617	0,032	2,737	0,013	
2	,452[b]	0,205	0,193	0,89806370	0,173	107,239	0,000	
3	,568[c]	0,323	0,310	0,83045426	0,118	42,855	0,000	
4	,626[d]	0,392	0,379	0,78830397	0,069	28,010	0,000	2,001

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	16,089	6	2,682	2,737	,013[b]
	non standardized residuals	484,911	495	0,980		
	total	501,000	501			
2	Regression	102,580	7	14,654	18,170	,000[c]
	non standardized residuals	398,420	494	0,807		
	total	501,000	501			
3	Regression	161,690	9	17,966	26,050	,000[d]
	non standardized residuals	339,310	492	0,690		
	total	501,000	501			
4	Regression	196,503	11	17,864	28,747	,000[e]
	non standardized residuals	304,497	490	0,621		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,011	0,243		0,044	0,965		
	MC1	0,000	0,032	0,000	-0,008	0,993	0,878	1,139
	MC2	-0,015	0,032	-0,018	-0,466	0,641	0,822	1,217
	MT1	-0,012	0,022	-0,023	-0,561	0,575	0,709	1,411
	MT2	0,006	0,027	0,010	0,240	0,810	0,729	1,371
	MT3	0,057	0,033	0,079	1,748	0,081	0,611	1,637
	MT4	-0,056	0,035	-0,059	-1,582	0,114	0,902	1,109
	QT	0,231	0,039	0,231	5,904	0,000	0,811	1,232
	MAS	0,231	0,043	0,231	5,356	0,000	0,669	1,494
	I_MAS_QT	0,051	0,042	0,056	1,235	0,218	0,594	1,684
	MAQ	0,319	0,044	0,319	7,204	0,000	0,632	1,583
	I_MAQ_QT	-0,070	0,036	-0,087	-1,947	0,052	0,624	1,603

Table 0.35

H10 – BV

QT and BV

MODEL SUMMARY

Model summary	R	R²	corrected R²	standard error of estimator	change in R²	change in F	sig. Of change in F	Durbin-Watson
1	,236[a]	0,056	0,044	0,97768381	0,056	4,855	0,000	
2	,517[b]	0,267	0,257	0,86212168	0,212	142,597	0,000	
3	,560[c]	0,313	0,301	0,83632130	0,046	16,475	0,000	
4	,621[d]	0,385	0,371	0,79293275	0,072	28,658	0,000	1,934

ANOVA

		squared sum	df	mean of squares	F	Sig.
1	Regression	27,847	6	4,641	4,855	,000[b]
	non standardized residuals	473,153	495	0,956		
	total	501,000	501			
2	Regression	133,833	7	19,119	25,723	,000[c]
	non standardized residuals	367,167	494	0,743		
	total	501,000	501			
3	Regression	156,879	9	17,431	24,922	,000[d]
	non standardized residuals	344,121	492	0,699		
	total	501,000	501			
4	Regression	192,916	11	17,538	27,894	,000[e]
	non standardized residuals	308,084	490	0,629		
	total	501,000	501			

COEFFICIENTS

Model				stand. Coeff. Beta	T	Sig.	collinearity tolerance	VIF
4	const.	0,167	0,245		0,683	0,495		
	MC1	-0,027	0,032	-0,032	-0,846	0,398	0,878	1,139
	MC2	-0,012	0,032	-0,014	-0,368	0,713	0,822	1,217
	MT1	0,007	0,022	0,013	0,302	0,763	0,709	1,411
	MT2	-0,018	0,027	-0,027	-0,655	0,513	0,729	1,371
	MT3	0,078	0,033	0,107	2,358	0,019	0,611	1,637
	MT4	-0,115	0,036	-0,121	-3,242	0,001	0,902	1,109
	QT	0,323	0,039	0,323	8,219	0,000	0,811	1,232
	MAS	0,093	0,043	0,093	2,143	0,033	0,669	1,494
	I_MAS_QT	-0,011	0,042	-0,012	-0,253	0,801	0,594	1,684
	MAQ	0,322	0,045	0,322	7,215	0,000	0,632	1,583
	I_MAQ_QT	0,087	0,036	0,107	2,378	0,018	0,624	1,603

Appendix 4: Original survey

Umfrage zum Vielfliegerprogramm Miles and More

* 1. Sind Sie Mitglied bei Miles and More?

○ Ja

○ Nein

Weiter

Umfrage zum Vielfliegerprogramm Miles and More

* 2. Zu Welcher Altersgruppe gehören Sie?

○ <20 Jahre

○ 20-29 Jahre

○ 30-39 Jahre

○ 40-49 Jahre

○ 50-59 Jahre

○ >=60 Jahre

* 3. Über welches Haushaltseinkommen verfügen Sie pro Jahr?

○ <=20 Tausend Euro

○ 21-40 Tausend Euro

○ 41-60 Tausend Euro

○ 61-80 Tausend Euro

○ >=81 Tausend Euro

* 4. Geschäftsreisen

	0-10%	11-20%	21-30%	31-50%	51-70%	71-100%
Ich buche … % meiner Flüge für geschäftliche Zwecke	○	○	○	○	○	○

* 5. Kurzstreckenflüge

	0-10%	11-20%	21-30%	31-50%	51-70%	71-100%
Ich buche Kurzstreckenflüge von weniger als 2 Flugstunden in etwa … % meiner Buchungen	○	○	○	○	○	○

* 6. Ich fliege... im Jahr

○ 0-1 Mal im Jahr

○ 2-3 Mal im Jahr

○ 4-6 Mal im Jahr

○ 7-15 Mal im Jahr

○ 15-25 Mal im Jahr

○ >25 Mal im Jahr

* 7. Neben Miles&More nutze ich auch andere Vielfliegerprogramme

○ Ich nutze keine Weiteren und habe auch noch nie andere verwendet

○ Früher habe ich bereits andere Vielfliegerprogramme verwendet

○ Ich verwende noch ein weiteres Vielfliegerprogramm

○ Ich verwende mehrere weitere Vielfliegerprogramme

* 8. Sicherheit von Fluggesellschaften

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Ich bin im Allgemeinen mit der Flugsicherheit zufrieden	○	○	○	○	○
Ich fühle mich sicher bei Flügen mit Miles & More Partnerfluggesellschaften (Star Alliance Netzwerk)	○	○	○	○	○
Die Kabinenbesatzungen von Miles & More Partnerfluggesellschaften (Star Alliance Netzwerk) sind meiner Meinung nach kompetent und zuverlässig	○	○	○	○	○

* 9. Qualität von Fluggesellschaften

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Die Einstellung der Mitarbeiter der Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) zeigt, dass sie bereit sind, mir zu helfen	○	○	○	○	○
Die Einstellung der Mitarbeiter der Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) zeigt mir, dass sie meine Bedürfnisse verstehen	○	○	○	○	○
Die Mitarbeiter der Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) sind in der Lage, meine Beschwerden direkt und sofort zu bearbeiten	○	○	○	○	○
Die Hardware am Boden von Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) ist gut konzipiert	○	○	○	○	○
Ich muss selten lange warten, um den Miles&More-Service zu erhalten	○	○	○	○	○

* 10. Höhe und Verfügbarkeit von Prämien

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Miles&More bietet eine positive Richtlinie zum Sammeln von Meilen	○	○	○	○	○
Miles & More bietet attraktive Upgrades an	○	○	○	○	○
Miles&More hat überzeugende Einlösemöglichkeiten für Flugbuchungen	○	○	○	○	○
Miles&More bietet neben Flugprämien auch attraktive andere Prämien (z. B. für Einkäufe und andere Buchungen)	○	○	○	○	○

* 11. Verfügbarkeit und Umfang von Services

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Ich habe das Gefühl, dass ich als Miles&More Mitglied besser behandelt werde als Kunden, die nicht am Programm teilnehmen	○	○	○	○	○
Ich habe das Gefühl, dass ich als Miles&More Mitglied einen schnelleren Service erhalte als Kunden, die nicht am Programm teilnehmen	○	○	○	○	○
Ich habe das Gefühl, dass Miles&More für mich Dinge tut, die es für die meisten anderen Kunden nicht tut	○	○	○	○	○

* 12. Umfang von Status Vorteilen

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Ich habe das Gefühl, dass ich als Mitglied von Miles&More ein hohes Ansehen habe	○	○	○	○	○
Ich glaube, dass ich ein sehr wichtiger Kunde von Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) bin	○	○	○	○	○
Ich glaube, dass die Miles&More Partnerfluggesellschaften von Miles&More (Star Alliance Netzwerk) mich mehr schätzen als die meisten anderen ihrer Kunden.	○	○	○	○	○

* 13. Anzahl der Partner

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Miles&More hat den Vorteil, mit vielen Fluggesellschaften weltweit zusammenzuarbeiten	○	○	○	○	○
Miles&More verfügt über ein umfangreiches Netzwerk attraktiver Hotelpartnerschaften	○	○	○	○	○
Miles&More bietet eine breite Palette an weltweiten Einkaufsmöglichkeiten	○	○	○	○	○

* 14. Transparenz bei Einlösungen

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Ich kann gesammelte Meilen jederzeit problemlos einlösen	○	○	○	○	○
Die Einlösung von Meilen ist transparent	○	○	○	○	○
Sie können erworbene Meilen flexibel einsetzen	○	○	○	○	○

* 15. Einstellung zu Miles&More

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Miles&More ist Bestandteil meiner Reisen	○	○	○	○	○
Ich fühle mich persönlich dem Miles&More-Programm verbunden	○	○	○	○	○
Ich fühle mich dem Miles&More-Programm emotional verbunden	○	○	○	○	○

* 16. Markenimage von Miles&More

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Miles&More ist eine einzigartige Marke	○	○	○	○	○
Miles&More genießt hohe Akzeptanz bei Reisenden	○	○	○	○	○
Miles&More-Mitgliedschaft vermittelt ein positives Image	○	○	○	○	○

* 17. Kaufverhalten

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Ich bin ein Stammkunde von Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk)	○	○	○	○	○
Wenn ich wieder fliege, werde ich wieder mit Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) fliegen	○	○	○	○	○
Ich plane, in Zukunft häufiger mit Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) zu fliegen	○	○	○	○	○

* 18. Loyalität

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Ich würde meine Familie und Freunde ermutigen, mit Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) zu fliegen.	○	○	○	○	○
Ich würde nur ungern bei Nicht-Miles&More-Partnern buchen	○	○	○	○	○
Ich würde mein Unternehmen ermutigen, bei Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) zu buchen	○	○	○	○	○

* 19. Kundenbeziehung zu Miles&More

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Ich habe eine qualitativ hochwertige Beziehung zu den Partnerfluggesellschaften von Miles&More (Star Alliance Netzwerk)	○	○	○	○	○
Ich habe Vertrauen in die Partnerfluggesellschaften von Miles&More (Star Alliance Netzwerk)	○	○	○	○	○
Ich bin bereit, Kunde von Miles&More Partnerfluggesellschaften (Star Alliance Netzwerk) zu bleiben	○	○	○	○	○

* 20. Customer lifetime value

	Ich stimme überhaupt nicht zu	Ich stimme kaum zu	Ich stimme teilweise zu	Ich stimme weitgehend zu	Ich stimme voll und ganz zu
Durch die Teilnahme am Miles&More-Programm fühle ich mich besser	○	○	○	○	○
Das Miles&More-Programm bietet mir einen Mehrwert für mein Geld	○	○	○	○	○
Das Miles&More-Programm ist für mich nützlich	○	○	○	○	○

Zurück   Fertig

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Appendix 5: Complementary interviews on generalizability

Interview Questions (concerning Interviews in appendix 5 and 6)

1. Which airline do you work for, since when and in which position?

2. To what extent do frequent flyer programs of different airlines differ?

3. What are common features of frequent flyer programs that you know?

4. Do you think that Lufthansa's "Miles & More" program has special features that distinguish it from others and what are these features, if any?

5. What special features, if any, does your airline's frequent flyer program have and how does this differentiate your airline from other frequent flyer programs?

6. To what extent do you think customers choose airlines based on frequent flyer programs or are other features critical, which ones?

The interview (continued a second research day) further includes the following questions to assess general correspondence of FFP:

7. Thinking about the schemes for earning miles, do you think that the airlines dispose of different schemes and in what respect do miles earning schemes differ? Could you name examples?

8. Thinking about the schemes of miles expiry, do you think that the airlines dispose of different schemes and in what respect do miles expiry schemes differ? Could you name examples?

9. Thinking about the options for spending miles, do you think that the airlines dispose of different schemes and in what respect do they differ? Could you name examples?

10. Thinking about status rewards, do you think that the airlines dispose of different reward schemes and in what respect do they differ? Could you name examples?

11. Do you know about limiting conditions which distinguish some airlines from others?

Interview MRS

1. What is your current job title and why do you have expert knowledge on the field frequent flyer programs?

- **CEO & Co-Founder, Loyalty Data Co** (Flagship product is statusmatch.com)
- **Editor/Owner at TravelDataDaily** – the #1 travel loyalty thought-leadership with 1,000's of travel industry subscribers
- **Associate, New World Loyalty –** Specialist on data commercialization, oneworld FFP
- **Public Speaker & Industry Thought leader:** Speaker at 20+ loyalty & aviation events since 2018 all around the world including: New York, London, Cyprus, Miami, Hong Kong, Manila, Singapore, Australia.
- **Previous industry roles:** Head of Loyalty & Enrich, Malaysia Airlines

2. To what extent do frequent flyer programs of different airlines differ?
- Most well-known legacy carriers started their loyalty programs in the 1990's, and at that time it was a relatively new industry, and thus, not much inspiration could be taken from other programs. Most airline loyalty programs had the same style of 3 tiers, earn points when you fly, and eventually you might have enough points for a free flight somewhere. They were basic and not much difference from airline to airline.
- Over the years as FFPs evolved, the 3 major airline alliances came to be (oneworld, star alliance & skyteam), and I believe this was a catalyst that turbo-charged the competitive landscape of FFPs.
- Since then, we've also seen the rise of low-cost carriers & ultra low-cost carriers, who are not part of major alliances, and yet have their own unique look & feel for frequent traveller recognition. Low cost airlines tend to operate with subscriptions (yearly or monthly), with the idea to lock in that customer for the future, rather than rewarding them with perks and benefits like legacy airlines typically operate.
- The past decade has seen a rise in some FFPs moving toward revenue accrual models, whereby the points/miles a customer would earn are more closely aligned with the value of the ticket the customer buys. This has pros and cons.
- Since about 2012, airline loyalty programs have seen more limelight for their reliable finance performance from credit card partnerships, and this has lead to airlines taking their FFP more seriously, and thus, investing into new partnerships, new benefits, and a stronger overall value proposition to attract, retain and increase the lifetime value of FFP members.

3. What are common features of frequent flyer programs that you know?
- From a consumer perspective – the core, common features are:
    - Ability to earn points & miles while flying.
    - Ability to earn points & miles through non-air partnerships such as credit card earning, hotel stays, car hire, e-shopping malls etc.
    - Ability to move up and down the elite tier system (ie: Silver/Gold/Platinum) based on the customers frequency & spend with the airline.
    - Ability to use your earned points & miles for aspirational redemptions – that is, using the virtual currency to reward yourself for your loyalty. Aspirational flight redemptions in long-haul business & first class sell the dream to the customer. Less thought-about, yet important features/benefits for FFP members can include:
- Family pooling: Combine your points/elite earning into a central account

- No expiry of points/miles, either through activity/earn requirements each 12-36 months, or
- Pause on elite status benefits for 'life events' such as the birth of a child.

4. Do you think that Lufthansa's "Miles & More" program has special features that distinguish it from others and what are these features, if any?
- Each FFP is geared to serve it's core markets. Miles & More is enginerred to serve the FFP members within the Lufthansa group (eg: Lufthansa, Brussels Airlines, Austrian Airlines). With that in mind- there are features and quirks within that M&M program that work for the local EU market, that wouldn't work in other parts of the world.
- Clear special features that M&M has are increased miles earning when flying with Lufthansa Group member airlines, the strong connectivity and link with the Star Alliance network of 25+ global carriers, and
- I don't think there is any 'stand out benefit', but that doesn't necessarily make it a bad FFP. Ultimately – if the members use the program and it's driving incremental ticket sales and other internal KPIs, the FFP is doing it's job!

5. What special features, if any, does the airline's frequent flyer program have you are most familiar with and how does this differentiate your airline from other frequent flyer programs?
- Unique benefits & features of FFPs that I am familiar with in the market:
    - Malaysia Airlines Platinum Members: Their spouse automatically receives Platinum membership in their own name.
    - British Airways Executive Club: Upon reaching a high milestone, you receive Concorde Room access, a special card that grants you access to the airline lounges above and beyond the normal 'first class' lounges
    - Qantas: Unofficially provides Platinum One (top published tier) frequent flyers with a 60-minute 747 simulator experience upon qualifying.
    - S7 Airlines: Has an elite member tier between 'Base level' and 'Silver', it's designed for the twice a year flyer who won't ever achieve much, yet provides them with recognition of being loyal to the airline.
- Airline FFPs put more effort into unique benefits for ultra-high value customers.

6. To what extent do you think customers choose airlines based on frequent flyer programs or are other features critical, which ones?
- Generally, most travellers will choose airlines based on who their 'home market' is (eg: if you live in Germany, Lufthansa makes sense. If you live in Singapore – Singapore Airlines makes sense). Price & frequency are core attractors.
- Increasingly over the years, more travellers that have ability to choose which airline they fly with (eg: their company doesn't force them to fly with airline X), are swayed by frequent flyer program benefits. Global airline alliances like oneworld, Star Alliance & Skyteam make it easier for travellers as their 'home airline' can be a 'home alliance' since most flyer perks & benefits are uniform across the alliance so that the customer can expect to receive the same level of service, perks and benefits on each of the member airlines within an alliance.

7. What is your current job title and why do you have expert knowledge on the field frequent flyer programs?
- Founder and Principal, New World Loyalty
    - o Designed, built and managed Virgin Australia's FFP
    - o Worked with over 20 FFPs as a consultant
- Previous roles:
    - o Managing Director, Velocity Frequent Flyer, Virgin Australia
    - o Head of Loyalty & Rewards, American Express Australia

8. To what extent do frequent flyer programs of different airlines differ?
- There are 3 main types of program:
    - o Traditional program from major airline – for example Qantas FF
        - Massive programs with tiers that reward frequent flyers with flight related benefits
        - Multiple partners including significant credit card partners
    - o Traditional programs for smaller, secondary airlines – for example Royal Brunei Royal Club
        - Smaller programs with basic 'must have' benefits
        - Some partners, often only travel and card partners
    - o 'Next Generation' programs – for example Westjet dollars
        - Program designs vary, often involving revenue accrual rather than distance and dynamic rewards.
- Even within each group there are differences including:
    - o Earn structures – traditionally FFP's earned 1 Mile per mile for all economy flights. This flat earn rate is now outdated with most FFP's offering earn structures more aligned to the value of a ticket
    - o Airline Rewards – the cost and availability of rewards varies from FFP to FFP
    - o Partners – which partners are offered and the partner offering
    - o Tier benefits – there tends to be a minimum 'must have' set of benefits. The other benefits and how they are earned can vary from FFP to FFP

9. What are common features of frequent flyer programs that you know?
- Almost all FFP's have:
    - o Earning points on the host airline
    - o Flight rewards on the host airline
    - o A credit card earning FFP points
    - o Some travel related partners (car rental, hotels etc)
- Most FFP's also have:
    - o Earn and burn on airline partners
    - o Tiering – rewarding frequent flyers with flight related benefits (lounge network, priority check-in, boarding and baggage)
    - o Additional partners offering the option to earn points (and sometimes burn points too)
    - o Additional ways to burn Points – e.g. gift cards

10. Do you think that Lufthansa's "Miles & More" program has special features that distinguish it from others and what are these features, if any?

- Miles and More is a Traditional FFP in a major airline and has all the features and benefits a frequent flyer would expect.
- The key strength of the program is the Lufthansa and Star Alliance network – Miles and More provides solid benefits across the network.
- The program is not known for being an innovator, although it does occasionally launch new innovations – e.g. Multiply Miles (in partnership with Loylogic).

11. What special features, if any, does the airline's frequent flyer program have you are most familiar with and how does this differentiate your airline from other frequent flyer programs?
   - I am a loyal flyer with Virgin Australia – largely because of the Velocity program
   - Velocity offers a number of key benefits that I cannot get with the main competitor (Qantas) including:
     - Family pooling of Status Credits – means I can attain a higher tier
     - Family Pooling of Points – With 5 in my family the Points add up quickly
     - Family friendly policies – e.g lounge access
   - Velocity also offers a good network of partners and all the benefits I would expect.

12. To what extent do you think customers choose airlines based on frequent flyer programs or are other features critical, which ones?
   - Once a frequent flyer attains status with an airline, that airline becomes the preferred airline - Frequent will often look at that airline first and if there is a reasonable option, book it without checking the alternative. It has been proven in many studies that tiered members will often pay more and even take less direct routes to fly with their preferred airline
   - This is mainly due to 3 reasons:
     - Tier benefits make the flight easier (lounge, priority check-in etc)
     - Earing credits to maintain tier status
     - Confidence, that if something happens they will be looked after because of their tier
     Note – earning Points/Miles is not a big driver of choice for the most frequent flyers who tend to have more Points than they can spend anyway.
   - Travellers that are not tiered are less likely to be influenced by the FFP – although the ability to earn points can be a differentiator if the other factors (price, schedule etc are similar). Even for these travellers, the value the traveller places on the Points is likely to be less than the cost of issuing the Points)

Interview SD

1. What is your current job title and why do you have expert knowledge on the field frequent flyer programs?
- Associate Consultant, New World Loyalty
  o Expertise on rewards program, my specific focus is loyalty financials
- Previous roles:
  o Managing Director, Elevate FFP, Virgin America
  o Head of Commercial, Velocity FFP, Virgin Australia

2. To what extent do frequent flyer programs of different airlines differ?
- There a small differences in the value of currencies, some programs use points, some use miles, some use other sorts of credits as ways of both rewarding and recognising loyalty. The way status benefits are applied also differs, some people get lounge access some don't, some get priority boarding, some get priority check-in, some get 1 checked bag free and others get 2 checked bags free. The way earning of points and miles varies, some are based on the distance travelled and some are based on the dollars spent on the ticket, some are 1 mile per dollar and some are five miles per dollar spent. Redeeming is priced differently also often depending on the distance flown in various zones that are shown in a table by the airline, plus a raft of other smaller nuances.

3. What are common features of frequent flyer programs that you know?
- Loyalty programs are in place to do 3 key things, help the airlines acquire more customers, incentivize customers to buy or spend more and finally to retain them as customers. There are a variety features used however there are 5 key features across all programs. The first is the ways to earn points/miles from flying with the airline or its partners, to suing credit cards everyday, staying at hotels, booking rental cars or simply shopping with any retail partner of the frequent flyer program. The second feature is the many ways to redeem those points/miles which is mostly flying and retail items such as gift cards, toasters or vacuum cleaners etc. The third feature is the ways to earn or achieve a Status Tier benefit, often this is another sort of currency and often solely based on the amount of flying an individual does directly with an airline. The fourth main feature is the way a frequent flyer program provides benefits to those who hold status such as lounge access and priority queues which recognize their loyalty. Allk of the first 4 features require some form of partnerships in order to increase the breadth and appeal of the program. The fifth and last is the marketing or communications in place by the program in order to leverage data and sell more to customers and create interactions and engagements to keep the brand top-of-mind.

4. Do you think that Lufthansa's "Miles & More" program has special features that distinguish it from others and what are these features, if any?
- Luthansa's program is not extraordinarily better of worst than any other airline frequent flyer program globally. There is nothing that makes it a stand-out from any other airline loyalty program worldwide for me as a frequent flyer. Its key benefit will be for locally based frequent flyers that fly with Luthansa regularly across Europe is that it also offers access to the Star Alliance network when travelling globally. This factor is mostly about lounge access and priority/recognition services which are conveniences during long haul travel.

5. What special features, if any, does the airline's frequent flyer program have you are most familiar with and how does this differentiate your airline from other frequent flyer programs?

- I choose my airline based on being able to achieve a status tier high enough to give me lounge access and priority benefits when I travel locally and one that will also get me benefits when I travel internationally as the wait times in airports is longer. The other aspect is the ability to use my points from credit card purchases to get business class reward seats, mostly for international travel use. Airlines that maximise their local footprint, allow me to accumulate rewards fast enough, give me suitable status or tier benefits in recognition for my ongoing support and give me ways to use those points to reduce the cost of travel become my choice. An airline program on the other side of the world from me does very little to attract my interest in their program.

6. To what extent do you think customers choose airlines based on frequent flyer programs or are other features critical, which ones?

- Frequent Travellers look for ease of access to priority benefits in things such as lounges, priority check-in, priority early boarding queues, free checked bags, free choice of preferred seats. These are all expected benefits of regular travellers and the key aspects they will look at. The look at these because priority benefits keep them away from the "general public" when travelling. The general public tend to be lured by points and the dream to redeem these for an international business class seat on a "trip-of-a-lifetime", hence much of the marketing is based on these sort of destinations and outcomes.

Appendix 6: Complementary interviews on comparability

Interview SD

1. What is your current job title and why do you have expert knowledge on the field frequent flyer programs?
   a. Associate Consultant, New World Loyalty
      i. Expertise on rewards program, my specific focus is loyalty financials
   b. Previous roles:
      i. Managing Director, Elevate FFP, Virgin America
      ii. Head of Commercial, Velocity FFP, Virgin Australia

2. Thinking about the schemes for earning miles, do you think that the airlines dispose of different schemes and in what respect do miles earning schemes differ? Could you name examples?
   There are a couple of key structures for earning miles/points in place globally. In the past it was based on the distance you flew, nowadays it is based on how much you spend with an airline. Some hybrid models are based on a combination of distance and what you pay, however there is very little differences in mainstream airline loyalty programs outside of the 2 main methods. Airlines often have partnerships and revenue sharing agreements for international travel to sell tickets on each other which is settled via IATA. As they don't trust each other and want to protect their customer revenue, they tend to agree to work based on distance flown by the customer for settlement and hence points/miles accrual calculation for the customer also. That is why some airlines have revenue based earn for domestic travel and distance based earn for international travel. There are incentives or bonus earning of points/miles for travel in premium cabins (eg. Business/first class) or for high-value status tier members (eg. Silver/gold/platinum).

3. Thinking about the schemes of miles expiry, do you think that the airlines dispose of different schemes and in what respect do miles earning schemes differ? Could you name examples?
   Most programs are driven by system limitations on what is available to implement as a policy. Some systems allow for monthly expiry, others only allow 6 monthly or annual expiries. There are then a few different schemes for points expiry policies that airlines implement:
   - Time stamped – points expire a set number of years/months from when you earned them
   - Activity based – points expire a set period of time from your last activity in earning or redeeming points.

   Time-stamped doesn't expire all your points and it forces you to use them regularly. It is a regular negative experience if your points expire regularly and you can't find a redemption for them. As a policy it also stops people accumulating large balances over time in order to afford that 'dream holiday' money can't otherwise buy.

   Activity based is much preferred from a consumer point-of-view and fairer to assess points usage on. It keeps people engaged and aspiring for the dream holiday. A very few number of larger airlines have moved to no expiry policies, this is mostly due to the fact that they can't meet the demand for redemption options and the expiry levels mean very little to their finance teams as they are immaterial in the program.

4. Thinking about the options for spending miles, do you think that the airlines dispose of different schemes and in what respect do they differ? Could you name examples?

Most airlines want to have members redeem points on their airline. The ultimate financial business model is to have points earned with external partners and redeemed on the airline. Airlines offer different products at different points/miles conversion rates. Reward Seats are the most attractive (First/Business class and then Economy), then Upgrades using points – all of these are limited in availability on each flight. Then there is "Any seat" or "Cash + Miles" whereby a member can purchase any normal airline seat using their points or a combination of points and cash. Then there are the external partner redemptions that exist once programs get big enough and sort out their financials/economics of the program that extend to redeeming for hotels, car rentals, gift vouchers and online shopping for just about anything. More recently there seems to be a rise in "money can't buy" auctions using points for things such as old airline seats you can use as a lounge in your home.

5. Thinking about status rewards, do you think that the airlines dispose of different reward schemes and in what respect do they differ? Could you name examples?

Status was introduced for 2 reasons. Firstly to create a more efficient process to move experienced travellers through the airport/airline processes, secondly to appeal to the ego's of those travellers and recognise their repeat business and loyalty by 'branding' them. This became like a badge or trophy all travellers then wanted to achieve and separate themselves from the travelling public. As this became popular tiers were introduced to stretch aspiration (and spend) upwards. Most status programs are exactly the same in core structure and design elements. The differences lie only in execution of elements like the currency to qualify for status (distance or revenue again), benefits access (lounges, preferred check-in and boarding queues, seat selection, free bags – all designed to speed up the airline's processes and allow people that know these processes well to move through them quickly. Other aspects move into more innovative policy things like family pooling of points/miles, pausing status for women during maternity leave after having a baby etc etc. The critical element often becomes international airline partners and what status benefits a member gets when travelling with a partner airline. This is where the airline alliances like One World, Star Alliance and SkyTeam make a difference. If your chosen airline is not one of these, travelling internationally can be limiting and reduce you to someone from the general public. Status is often gifted for a 12 month period, either calendar year based (many of the US airlines do this), anniversary date (from when you joined the program) or rolling window which is a rolling 12 months average/count of your status currency (status credits/status miles/status points etc).

6. Do you know about limiting conditions which distinguish some airlines form others?

Loyalty system providers are often the cause of limiting implementations, poor loyalty policy decisions and design lacking innovation. The major ones, often owned by the GDS reservation systems are staid and vanilla in their offerings. The more nimble and newer system platforms are much better in enabling program design elements and innovation but often limited in working with other airlines on things like status recognition. Every airline loyalty program has something small and unique that is either due to the people that designed the program or something related to the culture or country of the airline. Policies change over time as different people work in the business or strategically the airline/loyalty program change strategy towards being more or less customer friendly and innovative. Often these sorts of policies are driven by mass-media influence where the airline wants to be seen to be doing the right thing.

Interview PG

1. What is your current job title and why do you have expert knowledge on the field frequent flyer programs?
- Founder and Principal, New World Loyalty
    - Designed, built and managed Virgin Australia's FFP
    - Worked with over 20 FFPs as a consultant
- Previous roles:
    - Managing Director, Velocity Frequent Flyer, Virgin Australia
    - Head of Loyalty & Rewards, American Express Australia

2. Thinking about the schemes for earning miles, do you think that the airlines dispose of different schemes and in what respect do miles earning schemes differ? Could you name examples?

Airline Earning largely falls into 2 groups - Spend based and distance based.

Distance based (e.g. X miles per mile flown). This was the traditional way programs earned on airlines and is still used by many programs today including Qantas, Royal Jordanian and Emirates. The number of miles earned usually varies with only 05 or 0.25 miles per mile flown in discount economy seats and a full1 mile per mile flown in fully flexible (Y class) seats. (Note: originally most programs offered 1 mile per mile in all fair classes but this is now rare since the cost of issuing miles is more obvious).

Spend based (e.g. X Points per $1 spent on the airfare). This type of earn rate was previously fairly rare, but over the past 5 years there have been several high profile programs that have changes to this form of earn on flights - including Delta, United and American. The earn rate naturally increases as more is spent so the earn rate are usually a simple [5] Points per $1 (or something similar).

Hybrid - some programs (such as Virgin Australia) offer a hybrid, with revenue based accrual on domestic travel and distanced based accrual on international travel. This is largely due to the challenge in getting accurate, timely spend data for international flights.

Note1: most programs also offer tier based bonuses - e.g tiered members earn at a faster rate. Tier bonuses are common on all types of program irrespective of whether the base earn is distance based or spend based.

Note 2: most programs also offer a number of other ways to earn points/miles including credit cards and   other   partners.

3. Thinking about the schemes of miles expiry, do you think that the airlines dispose of different schemes and in what respect do miles earning schemes differ? Could you name examples?

There are 2 main types of miles/Point expiry - Time Stamped and Activity Based

Time Stamped - each point/mile last for a defined period (e.g 3 years). If the Point/Mile is not used in that time the point/Mile expires. This type of expiry is fairly uncommon nowadays although the are still some examples around including El AL and Kuwait Airways. The main issue with this type of expiry is that it prevents members from saving for a big once in a lifetime trip (big aspiration) and

it frustrates members who are fully active in the program but haven't been able to find a suitable reward seat.

Activity Stamped - Points/Miles do not expire until a long period of inactivity (no earn or burn of any Points/Miles). Activity periods vary with a few at 12months, many at 18-24 months and a few 36 months. Examples are Virgin Australia 24 months and Qantas 18 months.

Note: a few programs (including Delta) have recently announced that "Miles do not Expire".

4. Thinking about the options for spending miles, do you think that the airlines dispose of different schemes and in what respect do they differ? Could you name examples?

There are 2 main types of airline rewards - table based and dynamic

Table based - here there is a table providing the number of points/miles needed for certain route or distance bands. The price (number of points/miles) is set with the availability changing. Generally table based rewards offer great value to the member. Examples include Lufthansa, Cathay and Korean.

Dynamic rewards - the number of Miles/Points needs for the flight varies with the cost of the ticket. On popular times the price is higher and in low season the price is low (just like revenue tickets). Generally the number of points/miles is more than for Table based rewards. Examples include Air Canada, Southwest and Westjet.

There are also variations, for example:

Qantas and Virgin Australia both offer Table based rewards (providing value) and dynamic rewards (better availability). This combination provides the best of both worlds and should be considered best practice.

Several airlines (eg. Delta, BA and United) do not have a published rewards table but do have a table of prices that they use for many members.

Note: most programs also offer a number of other ways to redeem points e.g. with hotel and car partners or on gift cards.

5. Thinking about status rewards, do you think that the airlines dispose of different reward schemes and in what respect do they differ? Could you name examples?

There 3 main status earning structures:

Rolling window, calendar year and anniversary date:

Rolling window programs look back each day to see if the member has earned enough credits in the past year to be promoted. Programs include Virgin Australia and El AL. This approach makes it slightly easier to earn tiers compared to other approaches and is very fair for members. The main disadvantage with this approach is that it is difficult to explain to members and call centre agents and requires 2 counts to run concurrently - count of credits earned in past 12 months (to see if the next tier up has been earned) and count of credits earned since last promotion/tier review (for tier retention).

Calendar year programs including Air Canada and most US programs, review the activity each Dec 31. The main advantage is that this approach is that it is very easy to explain and for members to understand. The disadvantage is that it does not recognise members that fly a lot around the end of year/early next year. A customer that earns 80% of the credits needed in Dec and the same in Jan - could fly 60% more than required to achieve a certain tier in only 2 months and yet would not be upgraded if the member does not fly enough to meet the annual target. The calendar year window also has the whole membership being reviewed at the same time - easy for the airline to communicate, but not great for the member that may have to sweeze additional flights in around the busy Xmas period.

Anniversary date programs include Qantas, these review each year on the anniversary of the member joining the program. This has similar advantages and disadvantages to the calendar year approach but spreads the renewal throughout the year.

6. Do you know about limiting conditions which distinguish some airlines form others?

The policies that each airline operates does vary significantly between airlines, some significantly more customer friendly than others. Qantas for example are well known for applying the rules strictly whereas Virgin Australia has tended to take a more flexible approach. Policies are frequently adjusted for tiers with top tier members provided more flexibility than basic tier members for example. Policies also change over time and can be inconsistently applied by different agents which makes it very difficult to determine the approach from the outside.

Interview MRS

1. What is your current job title and why do you have expert knowledge on the field frequent flyer programs?
- CEO & Co-Founder, Loyalty Data Co (Flagship product is statusmatch.com)
- Editor/Owner at TravelDataDaily – the #1 travel loyalty thought-leadership with 1,000's of travel industry subscribers
- Associate, New World Loyalty – Specialist on data commercialization, oneworld FFP
- Public Speaker & Industry Thought leader: Speaker at 20+ loyalty & aviation events since 2018 all around the world including: New York, London, Cyprus, Miami, Hong Kong, Manila, Singapore, Australia.

2. Thinking about the schemes for earning miles, do you think that the airlines dispose of different schemes and in what respect do miles earning schemes differ? Could you name examples?

Loyalty programs are designed to benefit the host airline. In some markets, such as USA, it makes sense to align revenue (amount spent on the ticket), with the number of miles earned. This is because of the high volume of business travellers flying on expensive tickets. As the employee/traveller receives the miles into their personal account, it somewhat acts as an incentive for the employee to choose (or 'go into bat') for a higher fare than they might otherwise purchase – because they have a personal incentive to book expensive fares.

In South-East Asia, there is a mix between revenue based miles accrual, and fare class/distance based earn. Again, this approach works for many airlines in South-East asia as there are more than a dozen low cost airlines, and providing more miles for a trip acts as an incentive to book a premium

airline (with a good miles eanring proposition) versus flying with a low-cost airline that may not offer such generous miles.

3. Thinking about the schemes of miles expiry, do you think that the airlines dispose of different schemes and in what respect do miles earning schemes differ? Could you name examples?

In the 1980s when frequent flyer programs began – there was not much consideration to expiring vouchers or points. As deregulation came in (ie; USA, Australia), this brought increased competition, and airlines needed to focus on profitability – rather than cosy Government relationships.

To a degree this drove miles expiry policies, which were in favour of the airline.

In the beginning expiry policies around the world were typically a 'time stamped' or 'hard expiry date' policy whereby the miles would expire after X/years, no matter what the customer did.

In the late 1990s- that transitioned into an activity based miles expiry (again – talking generally – not every airline), which meant the customer had to earn miles every 12 or 18 or 24 months to keep their entire miles balance active.

Now, in the covid-era – we're seeing airlines extend the validity of miles beyond the normal term limits, and this is leading to new policies that I believe may ultimately change the way airlines view expiry – to the benefit of customers.

4. Thinking about the options for spending miles, do you think that the airlines dispose of different schemes and in what respect do they differ? Could you name examples?

The evolution of miles redemption has been something like this:
- Flights only
- Flights, upgrades
- Flights, upgrades, credit towards cash tickets, other airline products (ie: lounge access)
- Flights, upgrades, credit towards cash tickets, other airline prioducts (ie: lounge access, non-air redemptions like gif cards

Finally, the current model is – miles act as an airline currency and are as good as cash that can be used on anything the airline has to offer – from excess baggage fees, to flights, to gift cards, inflight duty free or donations to charity.

While there is no right or wrong model – many airlines still focus on miles redemptions for flights on their own airline. This is because up to 99% of all miles redemptions can be on their own anyway – even when gift cards and other redemption options are available.

Ultimately – frequent flyer programs are attractive, because the majority of members want to redeem on flights.

Examples in the same market: Malaysia:
- Air Asia: A large selection of non-flight redemption items for points.
- Malaysia Airlines: Very few non-flight redemption options for points.

This highlights two very different stratwegies for airlines operating in the same market.

5. Thinking about status rewards, do you think that the airlines dispose of different reward schemes and in what respect do they differ? Could you name examples?

At the root of it – Status rewards drive ticket sales. Status rewards 'lock' the customer in to the brand in a way that points/miles alone cannot.

Status acts as both a recognition tool – so airlines can recognise their top customers, a rewards tool (viewed as a 'thank you – here are your benefits') for the airline, and a way to retain customers for their next flight. The idea here is – if a customer has gold status with an airline, and chooses to fly with an airline where they have no elite status – they 'miss out' on the perks like priority boarding, lounge access, free seat selection, free bags, free meals, priority baggage, extra miles etc.. In this sense, it makes it difficult for the customer to switch their business to a competing airline when they already have elite status with an airline. The switching cost isn't a cost as such – but an emotional cost. Is the customer willing to forgo benefits for a period of time to fly with a new airline?

The more perceived benefits an airline has for elite status members – the more dififcult it is for customers to 'switch out' and start flying another airline. Status rewards are one of the best inventions loyalty programs have ever had for securing and retaining customers. Status rewards are much more effective than giving out points to customers for the purposes of retaining loyalty.

6. Do you know about limiting conditions which distinguish some airlines form others?

Note to reader: This is a very different perspective….

Limiting conditions that distinguish some airline loyalty programs from others?

Human Capital / Talent

Most of the talent working in airline loyalty programs today have never been a long-term customer of the product they represent. Often, to earn elite status at an airline, you need to spend $10,000….$20,000..+++ each year to earn status. The typical profile of an airline loyalty employee is someone that has worked in the airline industry for many years. Once working inside the airline, the employee receives deeply discounted tickets and would rarely pay for a full-fare business class ticket (their salary may not be so high as to afford such spending power either).

Airline employees typically do not have the airline co-brand credit card, and earning miles within the airline is not a priority – because they already get cheap tickets.

Therefore – airline employees are disconnected from the loyalty product they represent on a day to day basis. They rarely feel 'the pain' of travelling like a normal passenger. They rarely pay the same prices. If something goes wrong – the employee can call their colleague to fix a ticket or move their seat….

In some respects – some people working in airline loyalty programs have never experienced the product first-hand. This causes a disconnect ……..and ultimately – that distinguishes 'innovative' loyalty programs from non-innovative loyalty programs.

Some examples of innovative loyalty programs in 2021, where the people running the program have, and are real frequent flyers themselves:
- United Airlines
- Air Canada
- Qantas