

CUSTOMER VALUE OF PURCHASABLE SUPPLEMENTARY SERVICES

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ABSTRACT

There is a general trend in the airline industry to find ways to generate ancillary revenue by offering additional or unbundled services. Especially low cost carriers are known to unbundle their services, however, in contrast only some network carriers started to unbundle their services and gain ancillary revenues, others do not due to a possible negative impact on customer perception and their brand image.

The goal of this study is to determine viability and customer value of purchasable supplementary services for economy class passengers of European full-service network carriers. The focus of the study lies in determining specific characteristics of the customer value concept in the context of purchasable supplementary services. Additionally, knowledge about the unbundling of existing services, the introduction of new additional services, and the packaging of purchasable supplementary services is gained in order to determine the feasibility of implementing such measures.

Using a customer value hierarchy to formulate the economy class passenger's desired attributes of purchasable supplementary services, a framework was built as a base for the research. Furthermore, a choice-based conjoint analysis was used to determine the implicit preferences in regard to purchasable supplementary service of economy class passengers. A survey was conducted at Zurich Airport in Switzerland and the results and analysis were built on the data of 249 respondents.

The results show that economy class passengers do perceive value in purchasable supplementary services and display a general intention to purchase such services as long as they provide the passenger with added value and utility.

Keywords: Airlines, customer value, services, ancillary revenues

1 INTRODUCTION

There is general trend in the airline industry to find ways to generate ancillary revenue by offering additional or unbundled services. Especially low cost carriers are known to unbundle their services, however, in contrast only some network carriers started to unbundle their services and gain ancillary revenues and others do not due to a possible negative impact on customer perception and their brand image.

The goal of this study is to determine viability and customer value of purchasable supplementary services for economy class passengers of European full-service network carriers. The focus of the study lies in determining specific characteristics of the customer value concept in the context of purchasable supplementary services. Additionally, knowledge about the unbundling of existing services, the introduction of new additional services, and the packaging of purchasable supplementary services is gained in order to determine the feasibility of implementing such measures. The following research questions were answered by this study:

- What is the overall customer preference, value, and purchase intention of purchasable supplementary services in the context of a European network carrier?
- What is the customer preference and value of unbundled purchasable supplementary services in the context of a European network carrier?
- What is the customer preference and value of new purchasable supplementary services in the context of a European network carrier?
- Would customers consider purchasing supplementary services in bundled packages in the context of a European network carrier?

2 THEORETICAL FRAMEWORK

2.1 Ancillary Revenues

The concept of purchasable supplementary services in the airline industry establishes its essence in the strategy to generate ancillary revenue. The development of ancillary revenue generation through purchasable supplementary services established its roots with Low Cost Carriers (LCCs). The underlying and fundamental principle in a cost leadership business model applied by LCCs is simplicity. Part of this strategy is to offer limited on-ground and in-flight services, also known as the “no-frills” approach, which directly relates to the development of generating ancillary revenues through purchasable services (Shaw 2007). Ancillary revenues come into play when airlines start charging customers additional fees for services which are not included in the fare.

Ancillary revenue can be defined as “non-ticket revenue” or are “revenues beyond the sale of tickets that is generated by direct sales to passengers, or indirectly as part of the travel experience” (Holloway 2008; Sorenson 2009). Ancillary revenues are an important revenue stream for airlines and there are numerous activities, encompassing supplementary services and

other activities, with which an airline can generate non-ticket revenues. Holloway (2008) provides a good overall insight into ancillary revenue generation by categorizing the activities into two primary activities. The first activity involves “*unbundling the traditional airline product and charging for product attributes that were formerly encompassed within the ticket price or were available only to travelers in premium cabins*” (Holloway 2008). This is quite a comprehensive categorization, which is also known as “a la carte pricing” and can include several activities (Sorenson 2009). The first part of the first activity categorization, “*unbundling the traditional airline product that was previously included in the ticket price...*”, relates to the “no-frills” approach of LCCs in which supplementary services need to be purchased in addition to the barebones product (basic transportation of a passenger from point A to point B). The second part of Holloway’s (2008) first activity categorization is “*unbundling the traditional airline product and charging for product attributes that...were available only to travelers in premium cabins.*” The goal of this approach is to generate ancillary revenues, while improving the economy class passengers travel experience through value-adding purchasable supplementary services. As the description states the product attributes that are unbundled were only available to passengers of a higher premium travel class. Thus, they could add a substantial benefit and value to the economy class passengers travel experience. Hence, a top-down approach is taken in which product attributes of higher travel class are unbundled and offered to economy class passengers instead of unbundling existing services within economy class. Such services could include access to airport lounges, priority check-in, or priority boarding (Holloway 2008).

The second categorization of an activity that generates ancillary revenue is “adding and charging for additional services beyond the core air transport product”. Additional services of this categorization usually include third party services such as, travel insurance, car hire, hotel accommodation, bus and/or train tickets, or airport parking (Holloway 2008). In most cases the airline enters a business to business relationship in order to offer customers third party services and gain ancillary revenues by charging commissions for the third party services sold on their website (Sorenson 2009).

Table 1: Supplementary Service Examples

Type	Description	Touch-point
Additional trip insurance	e.g., general travel insurance; trip protection in case of irregularities	On/off online booking
Environmental Products	e.g., carbon off-set programs; donations to environmental programs	On/off online booking
Pre-Purchase Duty Free	Purchasing duty free items online before departure	On/off online booking
Off-airport	e.g., railway or public transportation tickets;	Trip to/from Airport

transportation	shuttle bus or limousine transfers	
Parking	On-airport parking or priority parking spots	Trip to/from Airport
Virtual Airport Guides	e.g.: pre-purchase augmented reality applications for smartphones	On-airport
Priority Check-in	Faster check-in possibility by avoiding queues using priority check-in lanes and counters	Check-in/Bag-drop
Additional Checked baggage items or allowance	Ability to purchase additional checked baggage allowance (weight) and number of baggage items	Check-in/Bag-drop
Priority Security lanes or Boarding Pass lanes	Fast-track lanes through boarding pass and security control	Boarding Pass Control/Security Control
Lounge Access	Purchasing business class lounge day passes	Dwell time before boarding
Airport internet access	Pre-purchase airport internet access	Dwell time before boarding
VIP Service Services	Transfer to aircraft or back to terminal with limo or shuttle bus; meet & greet escort to the gates or to baggage claim	Go to gate/upon arrival
Priority Boarding	Allowed to board aircraft first before rest of passengers	Boarding
Premium/Preferred Seat Selection	Reserving preferred seats e.g. exit row seats in economy class	On-aircraft/in-flight
Premium Meals	Upgraded meals in economy class	On-aircraft/in-flight
In-flight Entertainment	Examples incl. premium movies, gambling, games	On-aircraft/in-flight
In-flight connectivity	e.g., internet access, mobile telephony (sms or calls on personal phone)	On-aircraft/in-flight
Priority baggage delivery	Baggage items are delivered first at baggage claim	Baggage Claim
Baggage Delivery Services	Baggage delivery to home or hotel upon arrival	Post-flight
Transfer/Irregularity Priority Lanes	Fast-track lanes to transfer or lost & found counters	Post-Flight

Sources: Self-Adaptation from (Airline Information, 2010; Holloway, 2008; Reals, 2008; Grossman, 2005; Bejar, 2009; Sorenson, 2009)

As one can ascertain from Holloway's (2008) categorizations there are multiple types of services that could generate ancillary revenue. However, the focus of this study is on purchasable supplementary services that add customer value. According to Lovelock et al. (2009) supplementary services can be defined as "...services [that] augment the core product [or service] by facilitating its use and enhancing its value and appeal...and plays an important role in differentiating and positioning the core product against competing services." Supplementary services become even more important with "people processing" services, such as an airline, in which the customer plays an active role in the service process and delivery (Lovelock et al., 2009). Essentially, more supplementary services are required if a company's strategy is to add benefits and value in order to increase the perception of quality as with network carriers. Less supplementary services are required if the company's strategy is to compete with low prices as with LCCs (Lovelock, Wirtz, & Chew, 2009).

Taking Lovelock's et al (2009) definition of supplementary services into account, activities that generate ancillary revenues should augment and enhance the core service of network carriers by delivering value, benefits, and utility to the passenger through purchasable services. Therefore, the approach to unbundle existing complementary services in economy class and charging passengers for them is only viable if it is a value adding measure. On the same premise unbundling services of higher travel class (e.g. business class) or offering additional purchasable services (e.g. home baggage delivery) would also most likely add customer value to the economy class passengers and enhance the core service.

2.2 Customer Value

There is a plethora of literature that provides different definitions, conceptualizations and operationalization of customer value. However, one thing that most authors from various areas of specialization are in agreement about is that there is not one operational definition of customer value that can span across a range of conditions. In the past years several researchers have started to develop tools and procedures for the measurement and management of customer benefits generating strategic competitive advantages (Day & Crask 2000, Woodruff 1997, Belz/Bieger 2004, Payne/Holt 2001, Matzler 2000, Gale 1994, Zeithaml 1988). An analysis of the literature shows that authors define and use concepts according to context differently:

- Customer value as the value of customers from a company's point of view in the meaning of customer lifetime value or customer equity (Günter/Helm (2003), Rudolf-Sipötz (2001))
- Customer value as the value of goods or services from a customer perspective (Pechlaner/Smeral/Matzler (2002), Huber/Herrmann/Morgan (2001), Matzler (2000), Parasuraman (1997), Woodruff (1997), Gale (1994))
- Customer value as a relationship value, which relates to the value of the relationship between customers, suppliers and companies rather than simple transactions (Ravald/Grönroos (1996),

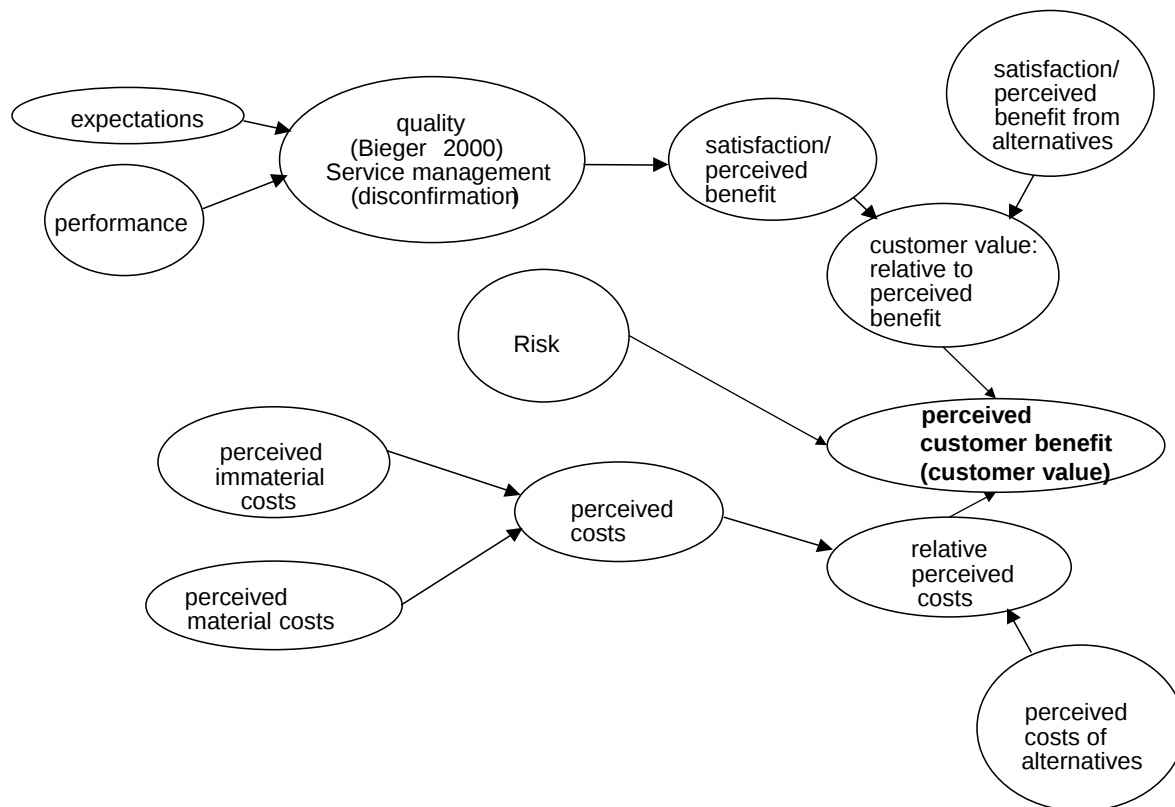
Payne/Holt (2001)) which covers the concept "Value-Creating Networks" (Kothandaraman/Wilson (2001))

- Customer value as a starting point for strategic and value oriented positioning of an enterprise (Slater (1997), Slywotzky (1997))
- Customer value as a supplement to the shareholder value for the purposes of an assessment of the performance with influence on the corporate success produced by a company from customer's perspective (Laitamöki/Kordupelski (1997))
- Customer value as a comprehensive management approach, which contains the value for the customer as well as the value of the customer for the company and offers solutions in the area of performance and customer's systems (Belz/Bieger (2004))

In this paper the customer value construct is understood as the value for the customer's perceived benefit of a product in relation to Woodruff (1997) and Gale (1994). Based on a customer oriented product development, creating and increasing customer value is seen as a key target for product and service development by companies in accordance with the value comprehension of customers.

There are important insights gained from literature concerning the customer value concept in the air transport industry. The focus of Bieger et al. (2007) was to determine the influential factors involved in a theoretical framework that includes risk as subcomponents of perceived relative benefits and perceived relative costs. According to Bieger et al (2007) customer value is a factor that effects the growth and demand involved in the product offering of air transportation and in the interaction between the customer and the supplier at a "micro-level". To be more specific the micro-level concepts involve, demand derived from business and leisure passengers, which is effected by economic development, different business models, tourist needs, and other influences; supply, which is effected by technological development and the various business models of airlines; and of course substitution through transport alternatives such as trains or road transport (Bieger et al 2007).

Figure 1: Customer value framework for air transport



3 RESEARCH PROCEDURE AND DATA

The type of research process selected for the analysis of the customer value of purchasable supplementary services in context of a European network carrier is based on observations made by previous authors investigating customer value. A common methodology of analyzing customer value is to use rating scales, such as a five point likert scale, to rate the importance or preference for product attributes or performances. However, there is a major drawback to using such rating scales, if a respondent is asked to rate specific attributes that would provide him or her with utility or added value the likelihood that the respondents' rate all attributes as important is high resulting in low discrimination between the attributes (Kotri, 2006).

Bieger et al (2007) proved that hidden preferences are relevant for the identification of customer value dimension in air transport by using discrete choice analysis. Furthermore, Boetsch et al (2011) identified the customer value dimension for business class travelers by also using a choice based conjoint analysis (Louviere et al 2000, Hensher et al 2005). Conjoint analysis is a more realistic way of questioning respondents about what product attributes they prefer or find important, because it simulates a situation in which the respondent has to make a trade-off between different attributes as in an actual purchase decision. Anderson et al (1993) analyzed

over 300 applications in literature that looked at customer needs and concluded that conjoint analysis was the most successful in comparison to other methodologies.

In light of the conclusion made by Bieger et al (2007) and Boetsch et al (2008) and the supporting initial evidence proposed by Anderson (1993) the most appropriate method for determining what service attributes/features airline customer's value in respect to purchasable supplementary services is the conjoint analysis.

Research was conducted in the form of a questionnaire at Zurich Airport in Switzerland in 2011. As the carriers serving Zurich do mostly not offer purchasable supplementary services, the sample of economy class passengers traveling from or through Zurich Airport are more likely not to have been exposed to those services, which may provide a better indication of the viability of purchasable supplementary services. Furthermore, according to Bieger et al (2007), Zurich Airport is good case study, because the population serviced is mostly affluent and is made up of a balanced mixture of business and leisure travelers that are flying to European or intercontinental destinations. The choice based conjoint analysis was conducted by using Sawtooth software. A usable sample of 249 respondents was used for the analysis. This sample size does not allow fully representative conclusions, but indications with only small deviations from reality, as sample sizes in choice experiments reach already valuable results with smaller samples (Louviere 2005).

In addition to the secondary research in literature review and in-depth interviews with airline managers, primary research offers an insight into the viability of such supplementary services and what supplementary services customers of network carriers find important and would prefer. Using the conjoint analysis helps to gain quantifiable data to determine the utilities and preferences of customers by presenting realistic trade-off questions. Additionally, standard stated preference questions, using likert scales as an attitude instrument, also made up part of the questionnaire. Finally, in addition to the conjoint analysis and stated preference questions two types of demographic sections were included in the questionnaire. The first section included standard demographic questions to determine, gender, and age, occupation, and level of education of the sample. The second section of the questionnaire involved questions about the respondents flying habits in order to gain clearer picture of what type of passengers the sample was made up of.

4 ANALYSIS AND RESULTS

4.1 Demographic Analysis

Approximately 63% of the respondents were between 21-40 years old, with 38.8% being between 21-30 years old and 19.6% being between 41-50 years old. The gender portion of respondents indicates an expected balance in which males take a stronger lead with 61.2%.

From the geographic regions that the respondents reside in one could infer that the sample was made-up of an international mix of respondents spanning across several continents, which was expected since data collection took place at an international airport. Switzerland was the only country listed in the results as an indication of how many respondents were from the local population and with 34.3% they made up the highest geographic segment. 27.9% of the respondents were from Europe, followed by North America (14.6%) and Asia (14.2%).

76.4% of the respondents were university/college educated with around quarter having attained an undergraduate degree (25.6%) and approximately another quarter having attained a graduate degree (24%). 30% of the respondents held an employee position while 16.9% were senior employees in middle management and 10.2% were students at a university or college. Generally, the various occupation types provide a realistic segmentation of the sample in respect to what type of occupation they practice.

Respondents have flown on average 8 round-trip flights of which approximately five were short-haul flights and three were long-haul flights.

The overall travel class flown by respondents was predominantly economy class, which was expected and desired as the goal of the study was to question economy class passengers. Furthermore, the overall purpose of their journey when flying provides an insight into the travel segments, business or leisure travelers. According to the answers provided, overall 62.2% usually traveled for leisure purposes while 37.8% usually traveled for business purposes.

Almost half (48.6%) were not part of a Star Alliance frequent flyer program and approximately the other half (51.4%) were part of a Star Alliance frequent flyer program, where 36.5% were part of the Miles & More Program (includes SWISS, Lufthansa, and Austrian Airlines) and 14.9% were part of another Star Alliance program.

Most respondents had not reached a Miles & More or Star Alliance status tier (77.3%). However, 19.5% had reached the first status tier Frequent Traveler (FTL) and 3.2% were members of the status tier Senator (SEN).

The leading method of booking flights was to use an online travel agency website (39.9%), followed by booking directly with the airline (27.6%) by either using their website or booking over the telephone or at an airline ticket office. Traditional travel agencies were the third most frequent method of booking airline tickets (20.1%). This reflects a general trend for passengers to book tickets online rather than visiting a traditional travel agency.

49.8% of the respondents were flying on short-haul routes and 50.2% flying on long-haul intercontinental routes at the day of data collection. 98% of the respondents were Economy Class passengers which were targeted by the survey.

4.2 Explicit importance of supplementary services

The stated importance questions were separated into sections simulating a booking of a short-haul and a long-haul flight separately. The aim was to find the importance of supplementary services. The illustration of the stated importance results did not provide a clear chronological illustration of the supplementary services from most important to least important. Therefore, the mean ranks of the supplementary service were calculated and are shown in 2 and 3.

Table2: Importance Ranking of Short-haul Stated Importance Results

Variables	Mean	Standard Deviation	n	Rank
Airport internet access	2.4494	.77857	247	1
Preferred Seat Selection Economy Class	2.4153	.78504	248	2
In-flight internet access	2.1365	.86453	249	3
Priority baggage delivery	2.0041	.85475	246	4
Priority Security lane access	1.9344	.86769	244	5
Lounge access	1.8984	.86770	246	6
Dedicated customer service hotline	1.8508	.80353	248	7
Priority Check-in lane access	1.7500	.79089	248	8
Priority Boarding lane access	1.7344	.79845	241	9
Baggage delivery to home/hotel	1.7177	.85424	248	10
Priority parking at airport	1.6371	.79303	248	11

Table 3: Importance Ranking of Long-haul Stated Importance Results

Variables	Mean	Standard Deviation	n	Rank
Preferred Seat Selection Economy Class	2.7016	.60336	248	1
Airport internet access	2.5341	.74042	249	2
In-flight internet access	2.3373	.81236	249	3
Priority baggage delivery	2.1789	.82840	246	4
Lounge access	2.1469	.84618	245	5
Priority Security lane access	2.1008	.84528	246	6
Priority Check-in lane access	1.9878	.82056	246	7
Dedicated customer service hotline	1.9518	.84104	249	8

Priority Boarding lane access	1.9268	.82976	248	9
Baggage delivery to home/hotel	1.8715	.88875	249	10
Priority parking at airport	1.6331	.78861	248	11

Differences in importance can be observed in the mean ranks of Short-haul and Long-haul stated importance results. As indicated in the Results section Airport Internet Access is the most important when booking short-haul flights while Preferred Seat Selection in Economy Class is the most important for long-haul flights. Lounge Access is ranked as the 6th most important supplementary service for short-haul flight and it gains in importance for a Long-haul flight replacing Security Lane Access as the 5th most important supplementary service. Dedicated Customer Service Hotline is ranked as the 7th most important supplementary service for a short-haul flight, while Priority Check-in Lane Access is ranked 8th. Priority Check-in Lane Access replaces Dedicated Customer Service Hotline moving to the 7th place for a long-haul flight.

4.3 Implicit importance of supplementary services

The choice based conjoint (CBC) section of the questionnaire was designed to present the respondents with two service package concepts including a mix of purchasable supplementary services and a None Option (stimulated purchase situation). The results show that 36.1% of the respondents selected the first service package concept presented in the choice task and 37.4% selected the second service package concept in the choice task. This means that a total of 73.5% of the respondents selected a service package in the simulated purchase situation. The results also indicate that 26.5% of the respondents opted for the None Option, meaning that they would have not picked any of the two service package concepts in the choice task.

Using standard importance analysis the relative importance's of the CBC (Choice Based Conjoint) attributes can be computed. In other words, using the standard importance analysis one can determine, which attribute is the most important or attractive and would provide the respondents with highest utility or impact if the most desirable service were to be implemented. Fortunately, the results of the analysis are ratio data, so making concrete observations will be clearer. In table 4 the ranking of attribute importance is depicted for the overall results of the CBC. Table 4: Relative Attribute Importance - Total CBC Results

Attribute	Part-Worth Utility	Level	Beta	Difference	%	Rank
Hospitality	Highest	Pref. Seat Selection Eco. Cl.	0.34866	0.697	63%	1
	Lowest	Lounge Access	-0.34866			
Convenience	Highest	Baggage Delivery Hotel/Home	0.09359	0.193	17%	2
	Lowest	Priority Parking at Airport	-0.09956			
Priority/Time Saving	Highest	Priority Security Lane Acc.	0.07762	0.134	12%	3
	Lowest	Priority Check-in Lane Acc.	-0.05613			
Functionality	Highest	Airport Internet Access	0.04167	0.083	8%	4
	Lowest	In-flight Internet Access	-0.04167			

As one can ascertain in table 4 the attribute Hospitality (63%) is by far the most important and would have the strongest impact on the utility provided to respondents if the supplementary service, “Preferred Seat Selection” in Economy Class, were to be implemented. Interestingly, enough the attribute “Convenience”, which included the services levels “Baggage Delivery”, “Customer Service Hotline”, and “Priority Parking”, is ranked as 2nd in importance, but with far lower percentage (17%). Nonetheless, in the stated importance results the most desirable service level “Baggage Delivery to Hotel/Home” received low importance rank. This indicates that the attribute “Convenience” would have a 2nd highest impact on the total utility of service concept from which one can infer that the service level, “Baggage Delivery to Hotel/Home”, had a higher importance when asked implicitly in the choice tasks.

Differences in attribute importance rankings were observed within the segments “Short-haul Flight” and “Business Travel”. The attribute importance ranks were the same for the segments Long-haul Flight and Leisure Travel.

Table 5: Relative Attribute Importance – Short-Haul Segment

Attribute	Part-Worth Utility	Level	Beta	Difference	%	Rank
Hospitality	Highest	Pref. Seat Selection Eco. Cl.	0.35906	0.718	62%	1
	Lowest	Lounge Access	-0.35906			
Convenience	Highest	Baggage Delivery Hotel/Home	0.09275	0.167	14%	2
	Lowest	Priority Parking at Airport	-0.07453			
Functionality	Highest	Airport Internet Access	0.07763	0.155	13%	3
	Lowest	In-flight Internet Access	-0.07763			
Priority/Time Saving	Highest	Priority Security Lane Acc.	0.0729	0.119	10%	4
	Lowest	Priority Check-in Lane Acc.	-0.04569			

In table 5 the attribute importance’s of the short-haul flight segment are depicted. The results of the analysis show that “Hospitality” still is the most important and has the highest impact on the

utility of the service concept. However, there is shift within the two lowest importance ranks. In the case of a short-haul flight the attribute “Functionality” gains in importance and climbs to rank 3 while the attribute “Priority/Time Saving” is placed in the last rank. This indicates that the “Functionality” attribute plays a more important role when respondents book a short-haul flight.

Table 6: Relative Attribute Importance – Business Travel Segment

Attribute	Part-Worth Utility	Level	Beta	Difference	%	Rank
Hospitality	Highest	Pref. Seat Selection Eco. Cl.	0.35383	0.708	60%	1
	Lowest	Lounge Access	-0.35383			
Functionality	Highest	Airport Internet Access	0.10602	0.212	18%	2
	Lowest	In-flight Internet Access	-0.10602			
Priority/Time Saving	Highest	Priority Security Lane Acc.	0.10965	0.172	14%	3
	Lowest	Priority Check-in Lane Acc.	-0.06195			
Convenience	Highest	Baggage Delivery Hotel/Home	0.05181	0.093	8%	4
	Lowest	Priority Parking at Airport	-0.04077			

Table 6 depicts the relative attribute importance of the business travel segment in which a more significant change in importance can be observed. “Hospitality” still is the most important, but “Functionality” is the second most important attribute, while it was the least important in all other segments and in the overall results. Therefore, one can ascertain that when asked implicitly business travelers would prefer “Functionality” over “Priority/Time Saving” and “Convenience”, which was unexpected.

With variance decomposition the importance of the attributes can be analyzed further by decomposing the log-likelihoods of the Multinomial Logit (MNL) model if the respective attributes are excluded. Standard importance analysis looked at the utility impact of the attributes. Variance decomposition, on the other hand, looks at the actual fit statistic, the log-likelihood, of the model, which is used to provide an indicative measure of the “...probability that the observed choices would have resulted given the estimated part-worths” in the MNL model (Orme, 2006, p. 134; 139).

Table 7: Variance Decomposition Overall Results

Log-likelihood analysis total (n=249, Chi Square=368.16495)				
	Log-Likelihood	Change log-likelihood based on total log value	% sum of change of log likelihood based on total log value	Rank
None (All)	-4041.18039			

Hospitality	-4176.09059	134.9102	93.3%	1
Convenience	-4046.85196	5.67157	3.9%	2
Prio/Time Save	-4043.27309	2.0927	1.4%	3
Functionality	-4043.05978	1.87939	1.3%	4
Sum		144.55386	100%	

As the results of the variance decomposition show the attribute Hospitality (Levels: Preferred Seat Selection and Lounge Access) was by far the most important based on the change in log-likelihood. Variance decomposition was conducted for all other sub-segments with the same high result for the Hospitality attribute observed. The differences in the subsequent attribute importance ranks were also observed, but are deemed irrelevant, because importance percentages in the variance decomposition for them were too low to draw any reasonable conclusions.

Table 8: Comparison of Stated and Discrete Importance Ranks of Short-haul Flight

Variable	Stated Importance Short-Haul Rank	CBC Short-haul Rank Importance
Preferred Seat Selection Economy Class	2	1
Baggage delivery to home/hotel	10	2
Airport internet access	1	3
Priority Security lane access	5	4

Table 9: Comparison of Stated and Discrete Importance Ranks of Long-haul Flight

Variable	Stated Importance Long-Haul Rank	CBC Long-haul Rank Importance
Preferred Seat Selection Economy Class	1	1
Baggage delivery to home/hotel	10	2
Priority Security lane access	6	3
Airport internet access	2	4

Table 8 and 9 depict a comparison between the stated importance ranks and the most desirable supplementary service levels according to the relative importance ranks of the attributes for the short-haul and long-haul segments respectively. Although the comparisons are not based on any founded theoretical methodology, it is good intuitive measure to determine if there were any differences between the stated method of asking the respondent outright what service they find important and the implicit or discrete preferences of the respondents using the CBC. Based on the analysis one can clearly determine that there were differences between stated and discrete

responses for most of the supplementary services. The only variable that is the same for the stated and discrete methods is “Preferred Seat Selection” in the case of a long-haul flight. This is an indication that the implication proposed by Bieger et al. (2007) that discrete preferences play an important role in the decisions of individuals, because they provide clearer indication of what the passenger really needs and wants, holds true in determining the customer value of purchasable supplementary services.

7 SUMMARY AND CONCLUSIONS

The goal of this study was to investigate the customer value and viability of purchasable supplementary services for economy class passengers of a European full-service network carrier. This goal was achieved by investigating the economy class passenger’s desired value and perceived preference for purchasable supplementary services using choice based conjoint analysis and stated importance questions. What one can conclude from the research is that economy class passengers do perceive value in purchasable supplementary services and display a general intention to purchase such services. The attribute “Hospitality”, including the supplementary services, “Preferred Seat Selection” and “Lounge Access”, had the highest relative importance in the choice based conjoint analysis. Therefore, economy class passengers place high value on supplementary services that accommodate the customer with added comfort by improving the service environment during service delivery. The question of whether or not economy class passengers would not perceive value in unbundled services that were complementary beforehand has been resolved. Economy class passengers do perceive value in such services as long as they provide the passenger with added value and utility. This was indicated by the strong preference for “Preferred Seat Selection” in Economy Class. Generally, the viability of bundling the supplementary service packages into packages was proven as most of the respondents choose such packages in the simulated purchase situation. However, it is recommended that the pricing of these service packages should be investigated in further detail. Moreover, differences in relative attribute importance’s show preferences for purchasable supplementary services for business and leisure travel segments and whether passengers were flying on a long-haul or short haul flight.

Conclusively, as the preference for and value of purchasable supplementary services has been investigated and established the greater impact of implementing such services should be considered. Holloway (2008) makes the important point that in the face of increasing operational costs, airlines must find ways to maintain revenue growth in order to be profitable and ancillary revenues are viable option to achieve that, but with the risk of having a negative impact on the airlines brand image. The investigation of purchasable supplementary services in this study provides a good basis for determining what “value adding” ancillary generating activities should be operationalized in order to differentiate a European full-service network carrier in an ever increasing competitive marketplace.

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