

The simultaneous operation of a network and low-cost carrier business model and its effect on perceived customer value

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Abstract

This conceptual study examines the simultaneous operation of full-service network and no-frills low-cost carrier within the same airline grouping and its effect on perceived customer value. The analysis is based on an extensive literature research about the constructs of business modeling and perceived customer value as well as some explorative empirical investigation. The author develops a model on how the perceived stimuli of a business model are related to each other and become affected by the introduction of a parallel low-cost unit delivering the same basic output. Finally, the paper proposes hypotheses which shall be tested in a subsequent quantitative customer survey.

Keywords: Airline business models; Internal low-cost unit; Perceived customer value

1. Introduction

Many airlines, in particular the incumbent and full-service network carriers, are responding to the incursion of the low-cost carriers on short to medium haul routes by increasingly founding and operating a parallel no-frills low-cost unit. The emerging subsidiaries or divisions are run simultaneously to the existing business models in the airline grouping. Though they are differently configured to successfully address other market segments, they deliver the same basic output, that is the scheduled and public air transportation between two destinations. By following this strategy, the incumbent airlines intend to protect existing markets and to increase revenues by taking advantage of growth opportunities in the low-fare market. However, by operating the two business models of the network and low-cost carrier at the same time, negative impacts for the grouping arise which limit both organizational efficiency and marketing effectiveness (Graf, 2004).¹

Presumably, incompatibilities of the two business models explain these negative impacts, affecting customers, employees, partners, and the management of the grouping. Either they appear due to contrary and conflicting configurations of the business models² or due to inconsistencies in the way the business model of a low-cost carrier has been applied to the new unit³ (Bieger et al., 2000b; Graf, 2004). The number and extent of the negative impacts depend on organizational (internal) and market-driven (external) conditions, thus on controllable and non-controllable contingencies for the management of the grouping. A preceding study, Graf (2004), developed these hypotheses by qualitatively exploring and comparing five different cases in the European airline industry. The primary source for this research was given by 24 semi-structured interviews with airline managers

¹ In consequence, many approaches of setting up a parallel low-cost unit have failed, as the overall costs of this strategy for the grouping became higher than the benefits (see Table 1 in Graf, 2004).

² The contrary and conflicting configurations are both determined by the definitions and requirements of the business models themselves or are a consequence of the approach taken by the management in positioning and linking the two business models in the airline grouping (Graf, 2004).

³ Repeatedly, the incumbent airlines differ from the ideal configuration of how to set up a low-cost carrier. Bieger et al. (2000b) also point out that the elements of a business model have to be consistent with themselves. For instance, revenue mechanisms have to fit to the core products and the customers values conveyed.

at all levels and areas of the organizations. Thus, the paper analyzed the incompatibilities of the business models from a management perspective. Interestingly, the interviewees rated the negative impacts affecting the management and the employees as most important. Accordingly, the preceding study focused on debating the negative impacts concerning the organizational efficiency, defined as the internal incompatibilities. The negative impacts influencing the customer side and thus marketing effectiveness, described by the author as the external incompatibilities, have not been discussed in detail yet.

2. Purpose of the study

At present, the scholarly discussion lacks an analysis of how customers perceive the combination of a full-service and no-frills business model with the same basic output in one grouping. It is unknown which effects arise on the customer side and what this means to the consumers' behavior. After all, it matters how the customers perceive the market offerings delivered by the business models and how this changes their behavioral intentions in the decision making process. In the present research work, it is assumed and theoretically discussed that the simultaneous operation of a network and low-cost carrier in the same grouping has an effect on the value of the existing and new market offerings perceived by the customers. By developing a theoretical model, the present research enhances the scientific debate of what the parallel operation of a full-service and no-frills business model delivering the same basic output in one grouping means to the customer.

Conceptually, the examination will make use of the constructs of business modeling and perceived customer value, both increasingly discussed in the scientific community (Belz and Bieger, 2004; Bieger et al., 2002a; Knyphausen-Aufseß and Meinhardt, 2002; Matzler, 2000).

The airline industry is supposed to be a good research field for exploring the effects on the customer, since in recent years many incumbent suppliers of passenger transportation services

vertically extended existing markets by adding a low-cost unit to their portfolio.⁴ Hence, the objective of this study is to develop a model and to derive hypotheses about the effect on perceived customer value of a vertical market extension by adding a low-cost business model to the existing operations at the example of the airline industry. A subsequent task following this paper will be to test the derived hypotheses quantitatively in a consumer survey. The research will give further insights to the scientific discussion about the compatibilities of business models and the effect on perceived customer value. Moreover, the author intends to derive managerial recommendations of what has to be expected and considered by practitioners when following a vertical market extension strategy by operating different business models. In summary, the central research question of this study is defined as: “what are effects of the simultaneous operation of a full-service and no-frills low-cost business model in the same grouping on the perceived customer value of airline passengers?”

In order to tackle this issue, the research question is divided into several subordinated issues. First, the paper has to find out which stimuli of a business model are actually recognized by a customer and how these stimuli can be classified. Customers might only perceive certain elements of a business model but not all of them. In this context, the author has to determine whether customers also distinguish between different business models and their perceived stimuli. It is important to know for this study if customers perceive business models differently and if they sort them into certain categories, i.e. airline types. Furthermore, in order to understand the roots of the incompatibilities of the business models on the customer side, the theoretical analysis also has to discuss how the perceived stimuli by the customers affect each other. Eventually, the individual stimuli can not be discussed separately but have to be regarded in a related framework. Finally, the author will center the study on developing a model which reflects the change in perceived customer

⁴ A vertical product differentiation is defined as a variation in quality levels of products within a category. Since the differentiation widens product offerings to distinctive customer segments, existing markets are extended. This characteristic also distinguishes the term from a product line extension. Market extensions target basically a different or newly created market segment, whereas line extensions are sold to the same

value due to the introduction of a parallel low-cost business model. In this model, the affected elements of the perceived customer value construct will be identified and the consequences of the change discussed. The debate will also explore the contextual factors on which the effects on the customer side depend. Ultimately, the author will suggest how the model and the derived hypotheses can be tested empirically in a subsequent study.

3. Method

To elaborate this model, inductive and qualitative research methods will be applied, as the scholarly debate about the compatibility of business models from a customer perspective has not advanced much yet (Belz and Bieger, 2004; Bieger et al. 2002a). The used methods in this study fall back upon primary and secondary sources, also to support the triangulation of data and thus to improve the construct validity of this study. Primary information is obtained by conducting both semi-structured interviews with senior airline managers and in-depth interviews with customers, basically to consider both views for this research, the supply and the demand side. Additionally, secondary sources, such as customer surveys and complaints and news clippings in apposite travel journals have been analyzed. The investigation is coupled with an extensive literature research about the customer value discussion in marketing science.

For gaining empirical insights into the customers' perceptions and changes in perceived customer value, the author has selected the case of "Swiss in Europe" (see Graf, 2004). In September 2003, Swiss International Air Lines decided to set up an internal low-cost unit on point-to-point relations in the Economy Class in Europe. Though this unit has not been founded as an independent subsidiary set up in a separate organization, but rather with the same organization, means of production, and brand, it can be rated as an internal low-cost carrier with a particular configuration.

After all, it is important how customers perceive a product and how they distinguish and categorize it.

In eight in-depth customer interviews, performed in April 2005, both frequent flyers and passengers flying occasionally with the Swiss International Air Lines on point-to-point relations in Europe have been questioned. Free-elicitation approaches recommended by Olson and Reynolds (1983) were used to obtain information about the cognitive structures of consumers. The discussions first pointed out whether a categorization of airline types is made by the passengers. Then, the questions referred to the perceived elements and stimuli of airline business models. Moreover, the customers were asked to think about any issues negatively affecting their perceived benefits and costs of a chosen product offering due to the simultaneous operation of a full-service and low-cost carrier business models. The in-depth interviews were concluded by evaluating the behavioral intentions and losses, airline customers are possibly experiencing as a consequence.

In addition, from November 2004 till April 2004, the author accomplished ten semi-structured interviews with senior airline managers. The respondents, responsible for the areas of marketing, sales, and business strategy in different network and low-cost carriers, were asked to give their view of how the customers' side is affected by the simultaneous operation of a full-service network and low-cost carrier. The talks detailed the picture the author has got by the in-depth consumer interviews and supplemented previous research presented in Graf (2004). Overall, both empirical methods, the in-depth consumer interviews and the semi-structured company interviews with experts of this industry, help in choosing and applying the appropriate theories and finally in developing the model.

4. Discussion and development of the model

4.1. *The business model from a customer perspective*

In order to determine how the simultaneous operation of a full-service and low-cost business model in the same grouping influences customer's perceived value, the main stimuli need to be discussed that affect the perception of the described business models.⁵ In this respect, the author refers to the operational approach taken by Bieger et al. (2002a) who argue on business model theory.⁶ In their view, a business model is described as the way in which a company, a corporate system, or an industry creates value on the market. The same authors specify the business model term by eight dimensions, giving answers to the following questions: What benefit is offered for what customers? How is this benefit communicated in the relevant market? How are the revenues generated? What growth concept is pursued? What core competencies are necessary? What are typical features of the organization? What cooperation partners are selected? What coordination model in networks is used? Answering these questions determine the product and service, the communication, revenue, and growth concept, the competence configuration, the organizational form, and the cooperation and coordination concept of a business model (Bieger et al., 2002a).

By asking which dimensions and elements of a certain product offering delivered by a business model consumers perceive, the author could reduce the number of relevant dimensions in the model from eight to four. From a customer perspective only the elements of the product and service, communication, revenue, and cooperation concept are perceived and are important for their behavioral intentions. Eventually, a product offering is determined by the product elements and the

⁵ Generally, stimuli are any physical, visual, or verbal communications that can influence an individual's response. The two most important types of stimuli influencing consumer behavior are marketing and environmental (social and cultural influences). This work centers on marketing stimuli, which are any communications or physical stimuli that are designed to influence consumers (Assael, 1992).

⁶ For further explanation of the business model term, see Bieger et al. (2002a) and Knyphausen-Aufseß and Meinhardt (2002).

services offered, the marketing and brand communication, the price and pricing model attached, and the means of production assigned to deliver it (Gutsche, 1995; Diller, 2003). All the other dimensions of a business model tested in the study remain in the background of the value chain and have not significantly influenced customer perceptions.⁷ Figure 1 shows the dimensions and elements of business models which are perceived by the customers. In this figure, the depiction of the perceived stimuli of any product offering and the subsequent purchase process is based on the Stimulus-Organism-Response (SOR) paradigm, brought up first by Howard and Sheth (1969). The presentation also relates to the work of Gutsche (1995), who identified the factors of a product in determining consumer preferences in a process-based view. Needs and a comparison of the needs to the present resources prompt consumers to perceive the stimuli of alternative product offerings. Further in this process, benefits and costs of each alternative are evaluated subjectively, leading to the determination of preferences and behavioral intentions.

Important for this study are the perceived stimuli of a business model. The author suggests to classify them into the four dimensions of the product and service, communication, revenue and cooperation concept.

INSERT Figure 1 about here

The different composition (packaging) of elements out of these four dimensions form the diverse product offerings of the business models. In this study, it is assumed that airline customers are able to distinguish between the product offerings of different business models. Thus, the author suggests

⁷ For a detailed description of the dimensions and elements of the network and low-cost carrier business model see Bieger et al. (2002a and 2002b) and Graf (2004).

that the different stimuli of the business models are also perceived differently by the passengers.

This means that certain categories of airline types exist in the consumers' mind.

According to Dube and Schmitt (1991) and Mervis and Rosch (1981) every individual tends to develop attitudes and beliefs about types of product offerings as a result of the phenomenon of categorization. This is a behavioral process where a person classifies products and services into categories, so that later evaluation is made easier. Each of such categories is linked to a number of beliefs that the person will attach to the particular instances within that category (Eagly and Chaiken, 1993). As Cohen (1982) has already noted, categories are inherently evaluative rather than neutral: People associate beliefs and affects with categories and even form attitudes toward those same categories. Such heterogeneous attitudes toward each service category are reflected in beliefs about the service and the companies offering them.

The author of this study assumes that the array of differing attitudes affects the evaluation of later service encounters. This argument will be brought up again in the following analysis. In the airline industry, the categorization of the traditional full-service airline and the revolutionary no-frills low-cost airline is increasingly made by consumers, as these two airline business models dominate more and more the market for passenger transportation on short haul relations. In addition, marketing communication and news media both enforce this categorization, also to explain product differences.

4.2. Interaction between the perceived stimuli

Before discussing the effect of the parallel operation of the two business models on perceived customer value, the author will explore the interaction between the perceived stimuli of a business model by the customers. Eventually, the relationships between quality, price, and brand information influence the perceptions and expectations of the different product offerings in the same grouping.

In the following discussion, the product elements and services offered are represented by the term “quality”⁸, the price and pricing model attached by the term “price” and the marketing and brand communication made by the term “brand information”.⁹

For this study, it is important to discuss the interaction between a) the perceived quality and the perceived price of a product, b) the brand information and the perceived quality of a product, and c) the brand information and the perceived price of a product. Concerning the first interaction, it has been found in numerous investigations that the perceived quality of a product is positively related to the perceived price (Chang and Wildt, 1994; Doods and Monroe, 1985; Dodds et al., 1991; Olson, 1977; Zeithaml, 1988). This means that the use of the price as an indicator of perceived quality is rational and that consumers infer from the perceived quality to the price of a product. However, Zeithaml (1988) added that the validity of this relationship depends on the product category, and Chang and Wildt (1994) admitted that the link is lessened in the presence of substantial direct product information.

The results of the assessments of Dodds et al. (1991) and Zeithaml (1988) also indicate that favorable brand information has a positive effect on perceived quality. In this respect, Olson (1977) noted that brand information is even stronger than the price indicating the level of quality of a product to consumers. Thus, the author of this study proceeds from this assumption that a product delineated by favorable brand information is rated as higher quality.¹⁰ A similar conclusion can be drawn from the research work of Dodds and Monroe (1985) who testified that brand information enhances the price effect. Consequently, this means for the third interaction discussed in this section

⁸ In this paper, quality does not refer to the fulfillment of an expected standard or condition of a product offering but to the number of benefits or elements in a product offering that satisfy customers' needs.

⁹ The assigned means of production, also determined by the cooperation concept of the business model, specify the product and thus contribute to its quality.

¹⁰ Occasionally, practitioners make use of this phenomenon and extend existing brands to new product offerings. Aaker and Keller (1990) and Loken and John (1993) discussed the positive and negative effects of brand extensions. Brand dilution is identified as one negative effect in which the favorable attribute beliefs consumers have learned to associate with the family brand name diminish.

that a product delineated by favorable brand information will be perceived as more valuable and will generate a price premium accordingly.

The interactions between the major stimuli described above also determine the formation of perceptions and expectations. Perceptions are subjective and selective and influence attitudes. The other way round, attitudes may distort the perception and judgment of attitudinal stimuli (Eagly and Chaiken, 1993). A person's prior attitudes influence his or her perceptions of the product offering to a great extent. Individuals either seek confirming information or distort encountered information to support that attitude or expectation (Iglesias, 2004). For each product offering, characterized by its major stimuli, such as quality, price, and brand information, adaptation levels are formed.

Consumers perceive stimuli only in relation to this adapted standard and not according to objective criteria (Helson, 1964). Expectations perform the function of an adaptation level in that they define the standard against which subsequent performance is judged. The adaptation level can be understood as the expectation that a consumer has towards a product due to his prior experiences, external information, word-of-mouth information, or needs. This implies that high quality consequently does not lead to high satisfaction, if the customer has defined a high adaptation level correlating with high expectations (Matzler, 2000).

In service industries, these notions are particularly true. Due to the lack of tangible elements in the service encounter, consumers base their assessments of quality on extrinsic cues, such as price and brand information (Zeithaml et al., 1985). Consequently, expectations towards product quality are particularly formed by price and brand information. Figure 2 summarizes the results of this section of how the stimuli perceived by the customers are interacting.

INSERT Figure 2 about here

4.3. *Affected benefits and costs of the customer*

The previous two sections explained which stimuli of a business model are perceived by the customer and how these are linked with each other in a separated view for each business model. Now, it has to be clarified, how the stimuli of each business model influence the value perceptions of customers in a related framework, where different business models are operated simultaneously delivering the same basic output. In this study, the analysis will be conducted at the example of the airline industry, in which the business models of a network and low-cost carrier are combined in the same grouping. When operating these two models at once, several different product offerings are competing. Customers are affected by the combination of a full-service and no-frills product offering, a point-to-point and connection based, and a business- and leisure-travel oriented product offering. The mixture of these different and contrary product offerings in the same grouping will concern customers in their decision making process.

Perceived customer value is a measure consisting of the perceived benefits and costs a consumer is experiencing in a potential purchase situation (Belz and Bieger, 2004; Zeithaml, 1988). The perceived benefits can be classified into material and immaterial benefits and the perceived costs into monetary and non-monetary costs (Matzler, 2000). Instead of using the term benefits and costs, researchers also refer to the quality and price of a product. The author will conduct the analysis on the basis of these dimensions and will focus the study on the major effects reducing or raising the perceived value of airline customers.

The construct of perceived customer value is of great importance in the consumer behavior research, as value is considered to be a determinant which forces behavioral intentions (LeBlanc and Nguyen, 2001; Zeithaml 1988). In this construct, consumers compare their perceptions of the quality received and the price paid with their expectations. Expectations are based on the influences forming attitudinal and cognitive knowledge. The confirmation of expectations result in a gain of

value and satisfaction, the disconfirmation in a loss of value and dissatisfaction. Figure 3 depicts the construct of perceived customer value.

INSERT Figure 3 about here

Starting with the affected qualities a customer is perceiving due to existence of parallel product offerings, the author refers first to the material benefits. These consist of the tangible and intangible elements of the actual service encounter. Due to the introduction of a low-cost business model in the same grouping, these elements might be reduced in a way that also the product offerings of the network carrier business model are affected. For instance, customers of the network carrier business model might be asked to pay for food and newspapers on board (decreased tangible benefit) or perceive the staff as less caring for their needs, since processes in the service delivery change and become more efficient (decreased intangible benefit). Furthermore, investments may also be reduced in the network carrier business model, as financial resources are used to establish the low-cost unit on the market. Customers of the network-carrier business model may notice the savings and feel as being treated disadvantaged, since the focal point of investments and activities of the company is shifted.

More important for the research issue of this study seem to be the immaterial benefits, which might have been changed in the view of the customer. They include the reputation, the convenience, the emotional payoff, and the community effects a customer receives before, during, and after the service encounter. For instance, the reputation of the service provider deteriorates, since service qualities are reduced and upper and lower market segments are evidently addressed simultaneously. Moreover, benefits from community memberships fall, because product offerings lose their exclusiveness and attractiveness when opening them to other market segments, thus also a

community affiliation. In these cases, passengers of different market segments perceive the clash between business and leisure travelers as unpleasant (e.g. clapping hands after landing, travelers wearing suits and ties in contrast to backpackers, etc.). The mixture of different market segments may also lead to inconveniences in the service delivery (e.g. crying babies on board, longer lines at security checks and passport control). Additionally, the emotional payoff of flying and reaching destinations in a shortened period of time and exclusive way blurs and turns into a commodity. But also the perceived costs of acquiring the product offerings may alter due to the introduction of a low-cost unit. First and most important, the move may influence the reference price a consumer has for the product offering according to the assumed airline category (Diller, 2003; Herrmann et al., 2004). When increasingly promoting lower fares, the reference price as an orientation and adaptation level for a product category is lowered by the consumer. The perceived deviation depends on the actual reduction and the consumers cognitive and attitudinal structures. Concerning non-monetary costs, the consumer might be faced with perceptions of a decreased price fairness, since price ranges between higher and lower fare levels increase and lower levels (e.g. half-return prices in the Internet) are increasingly promoted to attract new customers. Accordingly, the transparency into prices and the reliability and consistency of price levels may decrease. Transaction costs in the meaning of time and search costs may also raise, because the higher number of distinct offerings have to be studied before converting the behavioral intention.

4.4. The research model

All these effects presumably reduce the value perceptions of customers when operating the two business models simultaneously in the same grouping. A change in perceived customer value can be explained by a decrease in perceived qualities and an increase in perceived costs. In consequence to this change in perceived customer value, consumers may infer several perceptions about the product

offerings of the grouping, which influence their attitudes. First, they may have the feeling of inequity of receiving lower quality for paying higher prices, since the requested link between qualities and prices is weakened (Reinecke, 1997). Additionally, they may perceive a higher risk in acquiring the product offerings of the grouping, when the value equation becomes unfavorably (Bieger et al., 2004). Presumably, consumers are also confused due to the similarity and overload of stimuli emitted by the same service provider or grouping (Mitchell and Papavassiliou, 1999; Rudolph and Schweizer, 2004).¹¹ Moreover, a strong effect on the consumers' behavioral intentions will have any dissatisfaction which results from a negative fulfillment or disconfirmation of will and should expectations (Bailom et al., 1996; Boulding et al., 1993). Consumer have certain basic requirements towards the product offerings of distinct categories. These can only prevent dissatisfaction. If they are not met, disproportionately dissatisfaction is the result, because there was no prevention. For instance, in contrast to the expectations towards network carriers, consumer do not demand much from low-cost carriers. Accordingly, the satisfaction with the product offerings of the latter carrier is much higher. Moreover, the grouping operating both business models in parallel will also become less credible in delivering competent and attracting product offerings. The reputation gets undermined (Porter, 1996). Finally, but also very important for the success of the vertical market extension are negative perceptions about the prices attached to the product offerings. If price-sensitive consumers do not expect to find a bargain in a grouping known for higher qualities and prices, they will not consider them in their selection process (Herrmann et al., 2004). These perceptions forming attitudes of the customer will determine behavioral intentions, such as customer loyalty, recommendations, word-of-mouth information, the level of expenditures and the price premium granted to the service provider.

In addition, the author assumes that the effects on perceived customer value and the perceptions inferred to the product offerings depend on contextual factors. The analysis of this study

¹¹ Consumer confusion relates to the lack of clarity of the disposable stimuli in marketing measures incited by the physical object or event (Rudolph and Schweizer, 2004).

hypothesizes that three contingencies influence the change in perceived customer value. The degree of separation of the business models in terms of brand, markets, organization, autonomy, and means of production is supposed to have a significant effect (Graf, 2004; Bieger et al. 2004; Lindstädt / Fauser, 2004). Furthermore, the change will also depend on the involvement of the customer into the product type and category and on the number of the considered choices in his or her evoked set (Antil, 1984; Zaichkowsky, 1985). Moreover, the author assumes that certain market characteristics, such as the extensibility of market segments and the possibilities for product differentiation, also influence the change in customer value (Graf, 2004; Porter, 1996). In summary, the author considers the model shown in Figure 4 as suitable to explain the prevailing effects due to the parallel operation of a full-service and no-frills business model.

INSERT Figure 4 about here

5. Conclusions

The previous discussion hypothesized that the perceived customer value of different market segments is affected, when a full-service and no-frills business model are run simultaneously in the same grouping. Several effects of a vertical market extension on the customer in the airline industry were studied in this explorative analysis. The investigation has also assumed that the effect of the conflicting stimuli of the business models on perceived customer value depends on contextual factors. These factors are again driven by controllable and non-controllable contingencies for the grouping.

Future research might supplement the model and test its applicability in various industries. In this respect, researchers have to debate which approach of a confirmatory analysis for the model is suitable. The author of this paper regards a multivariate factor analysis or a conjoint measurement as the appropriate methods. The first approach may simply test the validity of the drafted hypotheses applying regression analyses. The second analysis might compare disrupting factors of competing airline product offerings by determining consumers' preference. A larger consumer survey interviewing a few hundred airline passengers flying on short haul routes with a network or affiliated low-cost carrier would deliver the data for both analyses. The survey shall be carried out in a setting where any bias of consumers can be excluded. A pretest of such a survey of how air passengers are affected and whether they categorize different product offerings is carried out in these days in cooperation with Swiss International Air Lines.

In any case, this study suggested that the parallel operation of different business models in the same grouping influences the customer side. The compatibility of different business models in the same grouping can not be determined in a framework ignoring the customer perspective. In addition to internal incompatibilities limiting the organizational efficiency, external incompatibilities restricting the marketing effectiveness will influence the success of any vertical market extension by adding a low-cost business model. It seems possible, that the changes in perceived customer value discussed in this paper help in explaining the failure of numerous examples in the airline industry.

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References

- Antil, J.H., 1984. Conceptualization and Operationalization of Involvement. *Advances in Consumer Research* 11(1), 203-209.
- Aaker, D.A., Keller, K.L., 1990. Consumer Evaluations of Brand Extensions. *Journal of Marketing* 54(January), 27-41.
- Assael, H., 1992. *Consumer behavior and marketing action*. 4th Ed. Boston, MA: PWS-Kent
- Bailom, F., Hinterhuber, H.H., Matzler, K., Sauerwein, E., 1996. Das Kano-Modell der Kundenzufriedenheit. *Marketing ZFP* 18(2), 117-126.
- Belz, Ch., Bieger, Th., 2004. *Customer Value - Kundenvorteile schaffen Unternehmensvorteile*. St. Gallen, Thexis.
- Bieger, Th., Beritelli, P., Weinert, R., 2004. *Kundenwert durch neue Preissysteme im Tourismus - Ein neues Feld für Dienstleistungsinnovation*. Working Paper Universität St. Gallen (IDT), St. Gallen.
- Bieger, Th., Rüegg-Stürm, J., von Rohr, Th., 2002a. *Strukturen und Ansätze einer Gestaltung von Beziehungskonfigurationen - Das Konzept Geschäftsmodell*. In: Bieger, Th. et al. (Eds.), *Zukünftige Geschäftsmodelle: Konzept und Anwendung in der Netzökonomie*. Springer, Berlin etc., 35-61.

- Bieger, Th., Döring, Th., Laesser, Ch., 2002b. Transformation of business models in the airline industry - impact on tourism. In: Bieger, Th., Keller, P. (Eds.), Publication of AIEST, 52nd Congress. Edition AIEST, St. Gallen, pp. 49-83.
- Boulding, W., Kalra, A., Staelin, R., Zeithaml, V.A., 1993. A dynamic process model of service quality: from expectations to behavioral intentions. *Journal of Marketing Research* 30(1), 7-27.
- Chang, T.-Z., Wildt, A.R., 1994. Price, Product Information, and Purchase Intention: An Empirical Study. *Journal of the Academy of Marketing Science* 22(1,Winter), 16-27.
- Cohen, J.B., 1982. The Role of Affect in Categorization: Toward a Reconsideration of the Concept of Attitude. *Advances in Consumer Research* 9, 94-100.
- Diller, H., 2003. Preiswahrnehmung und Preispolitik. In: Diller, H., Herrmann, A. (Eds.), *Handbuch Preispolitik*. Wiesbaden: Gabler, 259-283.
- Dodds, W.B., Monroe, K.B., 1985. The Effect of Brand and Price Information on Subjective Product Evaluations. *Advances in Consumer Research* 12, 85-90.
- Dodds, W.B., Monroe, K.B., Grewal, D., 1991. Effects of Price, Brand, and Store Information on Buyer's Product Evaluations. *Journal of Marketing Research* 28(August), 307-319.
- Dubé, L., Schmitt, B.H., 1991. The Processing of Emotional and Cognitive Aspects of Product Usage in Satisfaction Judgments. *Advances in Consumer Research* 18, 52-56.
- Eagly, A.H., Chaiken, Sh., 1993. *The Psychology of Attitudes*. Fort Worth, TX: Harcourt Brace.
- Graf, L., 2004. Incompatibilities of airline business models in the same entrepreneurial system. *Proceedings of the Air Transport Research Society World Conference - 2004, July 1-3*.
- Green, P.E., Krieger, A.M., 1985. Models and heuristics for product line selection. *Marketing Science* 4, 1-19.
- Gutsche, J., 1995. *Produktpräferenzanalyse: Ein modelltheoretisches und methodisches Konzept zur Marktsimulation mittels Präferenzzerfassungsmodellen*. Berlin: Duncker & Humblot.
- Helson, H., 1964. *Adaptation-Level Theory: An Experimental and Systematic Approach to Behavior*. New York: Harper & Row.

- Herrmann, A., Huber, F., Sivakumar, K., Wricke, M., 2004. An Empirical Analysis of the Determinants of Price Tolerance. *Psychology & Marketing* 21(7), 533-551.
- Howard, J.A., Sheth, J.N., 1969. *The Theory of Buyer Behavior*. New York: John Wiley&Sons.
- Iglesias, V., 2004. Preconceptions About Service: How Much Do They Influence Quality Evaluations?. *Journal of Service Research* 7(1, August), 90-103.
- Knyphausen-Aufseß, D.zu, Meinhardt, Y., 2002. Ein Ansatz zur Systematisierung und Kategorisierung von Geschäftsmodellen. In: Bieger, Th. et al. (Eds.), *Zukünftige Geschäftsmodelle: Konzept und Anwendung in der Netzökonomie*. Springer, Berlin etc., 63-90.
- LeBlanc, G., Nguyen, N., 2001. An exploratory study on the cues that signal value to members in retail co-operatives. *International Journal of Retail & Distribution Management* 29(1), 49-59.
- Lindstädt, H., Fauser, B., 2004. Separation or integration? Can network carriers create distinct business streams on one integrated production platform? *Journal of Air Transport Management* 10(10), 23-31.
- Loken, B., John, D.R., 1993. Diluting brand beliefs: When do brand extensions have a negative impact. *Journal of Marketing* 57(July), 71-84.
- Matzler, K., 2000. Customer Value Management. *Die Unternehmung* 54(4), 289-308.
- Mervis, C.B., Rosch, E., 1981. Categorization of Natural Objects. *Annual Review of Psychology* (35), 113-35.
- Mitchell, V.W., Papavassiliou, V., 1999. Marketing causes and implications of consumer confusion. *Journal of Product & Brand Management* 8(4), 319-339.
- Olson, J.C., 1977. Price as an Informational Cue: Effects in Product Evaluation. In: Woodside, A.G. et al. (Eds.), *Consumer and Industrial Buying Behavior*. New York: North Holland Publishing Company, 267-286.
- Olson, J.C., Reynolds, T.J., 1983. Understanding Consumer's Cognitive Structures: Implications for Advertising Strategy. In: Percy, L., Woodside, A. (Eds.), *Advertising and Consumer Psychology*. Lexington, MA: Lexington Books.

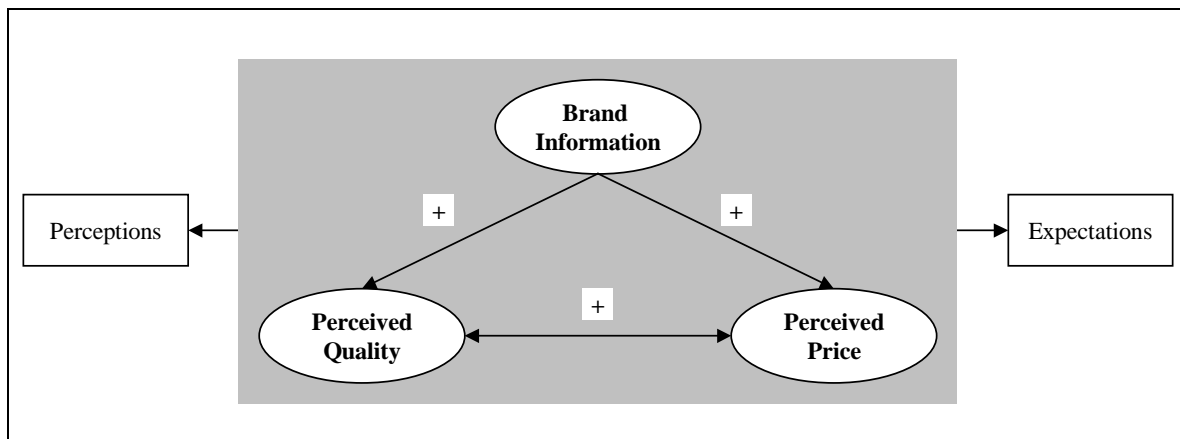
- Porter, M.E., 1996. What is Strategy? *Harvard Business Review* 74(November-December), 61-78.
- Randall, T., Ulrich, K., Reibstein, D., 1998. Brand Equity and Vertical Product Line Extent. *Marketing Science* 17(4), 356-279.
- Reinecke, S., 1997. Preise am Kundennutzen orientieren. *Thesis* 14(2), 40-45.
- Rudolph, Th., Schweizer, M., 2004. Consumer Confusion aus Sicht der Konsumenten : empirische Ergebnisse einer qualitativen Studie. *Thesis* 21(4), 11-16.
- Zaichkowsky, J.L., 1985. Measuring the involvement construct. *Journal of Consumer Research* 12, 341-352.
- Zeithaml, V.A., 1988. Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing* 52(July), 2-22.
- Zeithaml, V.A., Parasuraman, A., Berry, L., 1985. Problems and Strategies in Services Marketing. *Journal of Marketing* 49(2), 33-46.

Fig.1.: Stimuli of a business model customers perceive and process

S	Needs / present resources			
	Product / service concept	Communication concept	Revenue concept	Cooperation concept
	<ul style="list-style-type: none"> • Product items • Supplementary services • Distribution channels • Loyalty program 	<ul style="list-style-type: none"> • Branding • Positioning of marketing communication • Personal address in the marketing communication 	<ul style="list-style-type: none"> • Price level • Price conditions • Price transparency • Price consistency • Related costs 	<ul style="list-style-type: none"> • Corporate context • Number and type of horizontal and vertical partnerships
Package of elements = Product offering A by business model A	Package of elements = Product offering B by business model B	Package of elements = Product offering x by business model x		
O	Perception of product offerings			
	Evaluation of expected benefits and costs			
	Comparison and formation of preference			
	Determining the probability of reaction			
R	Conversion of behavioral intentions			

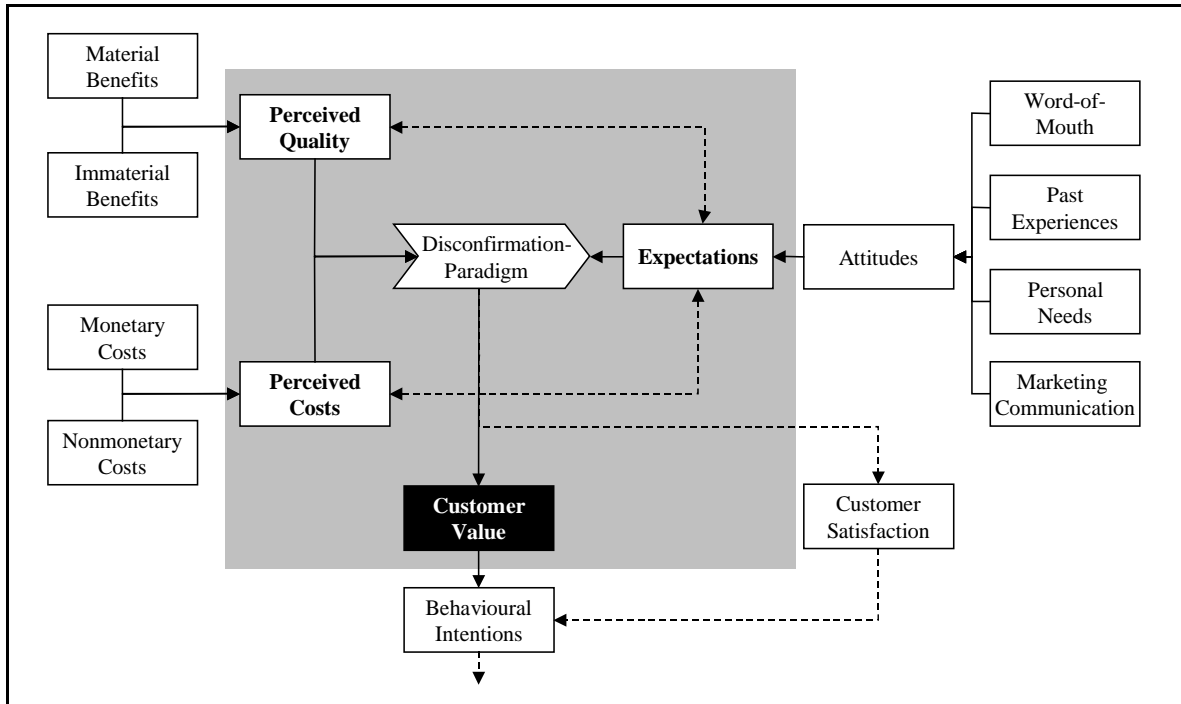
Source: own presentation, partly following Gutsche (1995)

Fig.2.: Relationships of the stimuli perceived by customers



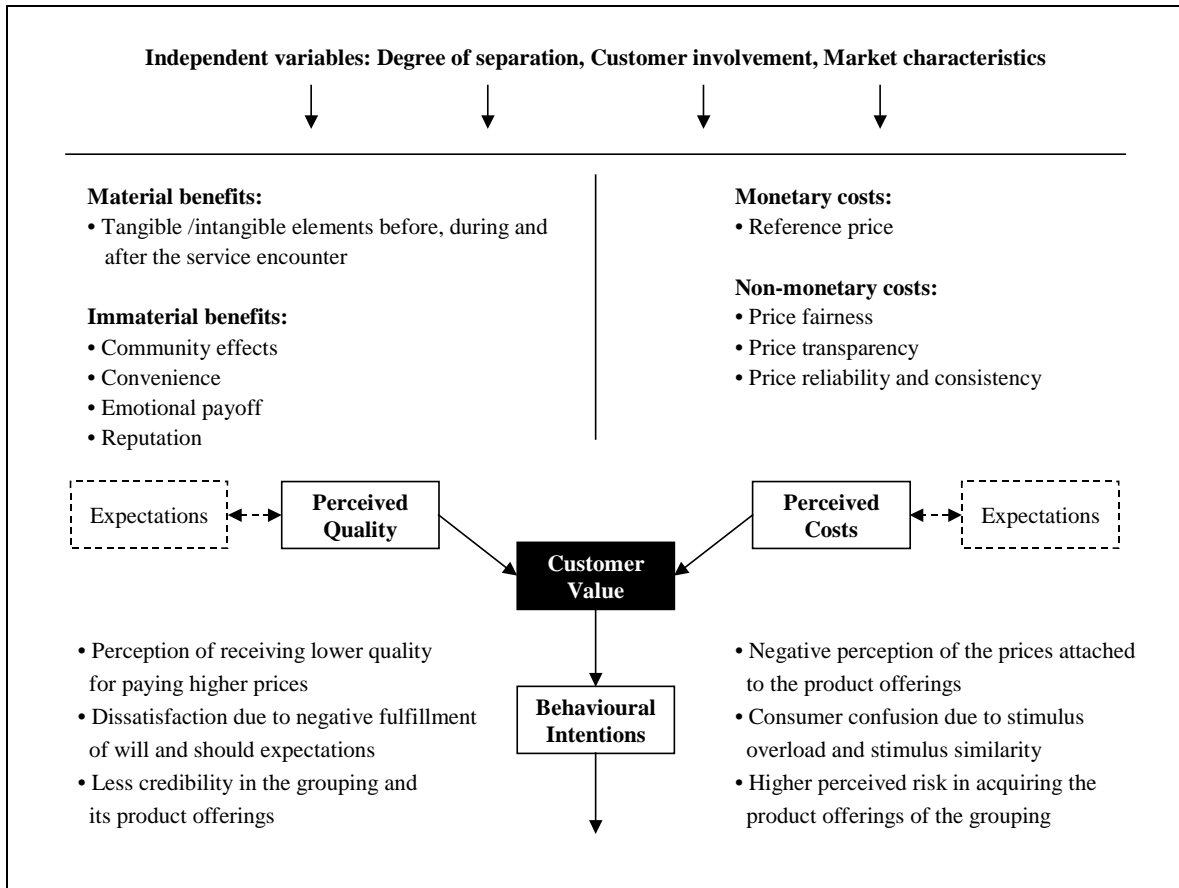
Source: own presentation, partly following Zeithaml (1988)

Fig.3.: Construct of perceived customer value



Source: own presentation, partly following Matzler (2000)

Fig.4.: Model of the affected dimensions in perceived customer value and its consequences



Source: own presentation