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Study of Insurance Economics

Études et Dossiers

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World Risk and Insurance Economics Congress

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The Geneva Association - General Secretariat - 53, route de Malagnou - CH-1208 Geneva
Tel.: +41-22-707 66 00 - Fax: +41-22-736 75 36 - secretariat@genevaassociation.org - www.genevaassociation.org

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How value added services influence the purchasing decision of insurance products

Authors:

1st author: Stephan von Watzdorf
Affiliation: ETH Zürich, Switzerland
Title: Diplom-Informatiker Univ.
Position: Research Associate / PhD Candidate

Postal Address:
ETH Zürich
Information Management
Scheuchzerstrasse 7 (SEC E 5)
CH-8092 Zurich

E-Mail: swatzdorf@ethz.ch
Phone: +41 44 632 8960
Fax: +41 44 632 1740

2nd author: Alexander Skorna
Affiliation: University of St. Gallen, Switzerland
Title: Diplom-Wirtschaftsingenieur
Position: Research Associate / PhD Candidate

Postal Address:
University of St. Gallen
Institut für Technologiemanagement
Dufourstrasse 40
CH-9000 St. Gallen

E-Mail: alexander.skorna@unisg.ch
Phone: +41 71 224 7247
Fax: +41 71 224 7301

Abstract

More intensive competition confronts insurance companies with increasingly price-driven and disloyal customers. Strategies for maintaining and advancing competitiveness through value added services have hence come to the fore. Despite the number of academic contributions in this area and products on the market it remains unclear how the provision of value added services affects the customer's decision during the purchasing process. To close the research gap, we conducted a choice-based conjoint analysis to explore the influence of providing value added services as part of an insurance product on the purchasing decision. Based on a motor insurance product we considered product-related factors such as price, franchise, and the no claims discount as well as services provided after an accident and services provided at the time of closing the contract. The results of this analysis show a significant influence of services provided after an accident and services provided at the time of closing the contract on the overall purchasing decision. A consecutive cluster analysis revealed different customer segments which reflect traditional price-aware customers but as well those who primarily base their purchasing decision on the provision of value added services.

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1. INTRODUCTION

Increasingly intensive competition results in insurance companies being confronted with low margins and more disloyal customers, ultimately leading to higher customer acquisition and retaining costs. Trapped between eroding prices and higher costs, insurance companies experience significant profit squeezes. In such a situation, the literature usually recommends the innovation of new insurance services (Haller 2000, Graf and Maas, 2008a/b). Innovative insurance services may offer differentiated alternatives based on hard-to-imitate service resources and skills. Since the early 90s, however, the insurance sector has not been very engaged in the creation and innovation of new services. Anecdotal evidence, such as that approximately 80% of insurance companies viewed their competitors as the main source of innovations, suggests a very low interest in innovation. Insurance companies simply imitate competitors' modifications in insurance services instead of actively exploring new ways of creating competitive advantages through service innovation (Teixeria and Ziskin, 1993).

Evidence on the type of innovations initiated by insurance companies support this line of reasoning. Insurance providers are mostly concerned with incremental innovations; cost-orientated process innovations in the main sphere include sales, marketing and delivery processes. There is only very limited innovation effort focused on creating new differentiation opportunities (Hollenstein, 2003).

The limited effort being made in the innovation of new insurance services has added to the situation in which customers perceive insurance services as commodities (Haller, 2000; Maas and Graf, 2008). Customer perception of insurance services and their preference structure is, therefore, dominated by price sensitivity and trade-offs between insurance franchises and insurance fees. A "franchise tariff" is the sum of money up to which the customer pays for a reported claim. The services included in the insurance fee apply if the claim costs exceed the franchise tariff. Growing price sensitivity is also evident in the increasing customer expectation of obtaining "no-claims discounts", i.e. a reward in terms of lower insurance fees, or even a refund, is expected if a claim is not reported to the insurance provider during a certain length of time.

Insurance companies have started to extend their core insurance service with different types of supplementary services in order to mitigate the dominance of price awareness on the part of the customer. The first type of service reflects "post-accident" services, which function as a customer service for creating positive experiences in case the insurance company has to support the customer (Parasuraman, 1998; Lovelock, 1994). A simple illustration here is the provision of a rental car in the case of a car accident. Such post-accident services maintain a close link to the insurance services. The second type of service can be described as "value-added" services. These are increasingly independent of the core offers (Haller, 2000) and do not primarily address the core insurance services. They aim instead at encouraging the customer to be generally more active, in its participation in the value co-creation and correspond to the idea of using a more service-dominant perspective in an innovation approach (Michel, Brown and Gallan, 2008; Vargo and Lusch, 2009). From a service-dominant perspective, customers are value co-creators leading a specific application and development of customer competences. These competencies and specialized customer skills then enable companies to adapt the role of the customer in the value creation process. Potential changes in the role of the customer can affect the way in which services are purchased, used and paid for (Michel *et al*., 2008; Sheth and Mittal, 2004).

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A typical illustration of innovating the way in which the customer pays for services is the value-added offer known as the “pay as you drive” system. This service monitors the driving behaviour of the customer by technical means and calculates the motor insurance fee based on the results obtained. Monitoring driving behaviour not only affects the driving skills of the customer but also alters his perception of the motor insurance fee. Online tools for comparing different insurance offers and configuring the insurance attributes actively develop the way in which the customer purchases such services. Safety training for young drivers in the context of motor insurance, or sponsorship for sports activities in the context of health insurance, develop the role of the customer in using the services.

The results of such value-added service innovations are still mixed. Norwich Union, a UK-based insurer, removed its “pay as you drive” product from the market as their customers did not value the concept of being monitored whilst driving: they were simply afraid of being punished for violating traffic rules. In complete contrast, however, car safety training for young drivers, or encouraging sports activities in the context of health insurance, both appear to be rather successful.

The basic idea behind value-added services is nevertheless rather clear. Insurance companies aim at maintaining and advancing their competitiveness through value-added services (Haller 2000) on the one hand and, on the other, wish to use value-added services to influence the customer preference structure for insurance services. The ability to modify the customer preference structure is beneficial for achieving competitive advantages and creating differentiation opportunities (Payne, Storbacka and Frow, 2008). While the competitive argument is widely supported in the literature (Toffler, 1980; Kotler, 1986; Tapscott and Williams, 2006, Prahalad, 2004, Vargo and Lusch, 2004), little is known of the role of value-added services in the preference structure of the customer (Payne, Storbacka and Frow, 2008).

This study investigates the innovation of value-added services. It is based on a survey of 1053 customers, with the survey data being collected and analyzed by conjoint analysis. The first chapter explores the impact of value-added services on the preference structure of the customer; the second considers the way in which the impact of value-added services may differ for each customer, and their role in different segments are explored. The theoretical foundations for value-added services and the research model are both described here. The third chapter discusses the methodological issues that arise from the application of the conjoint analysis, with the results being presented in the fourth chapter. Finally, the findings are discussed; their theoretical and managerial implications are highlighted, limitations of the study are presented, and topics for future research are suggested.

2. THEORETICAL FOUNDATIONS AND RESEARCH MODEL

Although the specific term of “value-added services” has received limited attention in the literature (Chernatony and Harris, 1998), there are various notions related to its usage in the insurance industry. Nielson (1992) uses the term “value-added marketing” to express how companies should try to enrich (i.e. enlighten) the customer. Potential ways of increasing perceived customer value are by providing services. Grönross (1997) uses the term “added value” for additional services that extend the value created through the actual core offer.

Parasuraman (1998) and Lovelock (1994) describe the idea of value-added services through the notion of “customer service”, which is a supplement that accompanies a core

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offer (Parasuraman, 1998). This description is related to Lovelock's (1994) idea of the "flower of service", with the basic product or service being at the centre of the flower and the petals explaining how the customer is served. These notions of customer service are, however, limited in the context of this study since both imply that customer service is linked directly to the insurance services. Customer service, for this reason, is used more to reflect post-accident services in the insurance industry.

The use of value-added services in the present study is closely related to the definition of the companies' total offers through various layers surrounding core services and goods (Gummesson, 1993; Kotler, 1994; Belz, Schuh, Gross and Reinecke, 1997; Haller 2000) and, most importantly, through the value-in-use perspective. Insurance services such as car insurance, health insurance or life insurance represent the core offers provided by insurance companies. These core offers are supplemented by a customer service which accompanies each product and is only relevant if the customer requires the assistance of the insurance service. The insurance sector also describes this layer in terms of customer service, and includes the aforementioned post-accident services, hotline, information and consultation services.

A typical illustration would be the rental car service that could accompany a motor insurance. The rental car service creates customer value if the customer has been involved in an accident leading to a car breakdown or repair. Such post-accident services are beneficial to the customer because they are timesaving and convenient (Maas and Graf, 2008b). In the context of the service-dominant logic and the value-in-use concept, customer service would not affect the skills of the customer. The offer is still part of the value-in-exchange created by the core insurance service and refers, therefore, more to an attribute embedded in the total offer related to the insurance service.

Value-added services, in contrast, create customer value that is more independent of the core insurance service. Car safety training, for example, creates customer value that is not necessarily linked to a motor insurance. The focus is on changing the role of the customer regarding purchasing, using and paying for insurance services. They are therefore closely related to the value-in-use concept rather than to value-in-exchange. Offering car safety training allows customers to improve their current driving skills: the customer thereby becomes a value co-creator. Developing driving skills mean that customers change their perception of motor insurance services, leading to changes in their roles in purchasing, paying, and using the services. They might, for example, drive more safely and thus request higher franchise tariffs and lower insurance fees.

Value-added services are, therefore, considered as being important enablers in modifying the prevailing value-in-exchange perspective of insurance services. This perspective emphasizes the fact that insurance companies extract the value of the customer by increasing their variety of aforementioned customer services, where the customer still acts as a passive consumer (Vargo and Lusch, 2008; Grönroos, 2007). Our notion of value-added services implies that the customer is, on the contrary, an active consumer (Vargo and Lusch, 2008) and co-creates value. It means that moving from customer service surrounding the insurance service to value-added service could change the role of the customer in the insurance sector.

Whilst this change has been discussed intensively in the literature (Toffler, 1980; Kotler, 1986; Tapscott and Williams, 2006; Prahalad, 2004; Vargo and Lusch, 2004), the role

of value-added service within the customer's preference structure remains unclear (Payne *et al.*, 2008). In insurance practice, value-added services allow the customer's resources and skills to become an operant resource that affects the customer preference structure (Lusch, 1994). As an operant resource, the customer's driving skills, for example, can introduce changes in the customer's preference structure for the motor insurance service.

This study uses a conjoint analysis, following the recommendations on assessing customer preferences (Gustafsson, Herrmann and Huber, 2007) to increase understanding of how value-added services are embedded in the customer's preference structure. The application of the customer preference structure extends the existing concepts used in the insurance industry. Instead of only concentrating on price, insurance levels, and post-accident services (Maas and Graf 2008b; Haller 2000), value-added services are also included.

The research model used here originates from the literature discussed and has been developed in a collaborative effort between the research team and experts from the insurance industry. This collaborative effort led to the conceptualization of the customer preference structure through five attributes: (1) *price* (insurance fee), (2) *insurance franchise*, (3) *no-claims bonus*, (4) *post-accident services* and, as one of our research goals, (5) *value-added services*. All five attributes are embedded in the current perceived value of the customer, influence the preference structure of the customer, and can be considered as the value-driving elements related to insurance services (Maas and Graf 2008b).

3. RESEARCH METHODOLOGY

The following research setting was chosen to investigate the role of value-added services in the preference structure of the customer. German-speaking customers of a motor insurance service in Switzerland were chosen as the unit of analysis. The Swiss insurance market was liberalized in the 1990s and is currently characterized by harsh and intensive competition. The rationale for choosing the motor insurance service is based on the assumption that the customer is more likely to expect post-accident and value-added services for a motor insurance service than e.g. life insurance of third party liability coverage services. Motor insurance services are also extremely competitive, with people frequently changing their insurance provider. The German insurance company *HUG Coburg*, for example, competes aggressively with car insurance companies such as Volkswagen Financial Services and Daimler Financial Services. HUG Coburg co-operates with repair centres and independent dealers in order to control and monitor the actual costs that correspond to the claims made. Furthermore, the customer is most probably already involved with a motor insurance service. Against this background, understanding the preference structure of the customer in this context will lead to valuable managerial insights. In addition, previous initiatives, as mentioned in the introduction, have struggled (e.g. pay-as-you-drive concept offer by Norwich Union) in changing the role of the customer in the value creation processes through value-added services.

Expert interviews have been conducted with two insurance providers in Switzerland in order to identify the most relevant insurance purchasing attributes and ascertain their levels. Both companies reported the insurance franchise, no-claims bonus, post-accident services, and cost as being the most relevant attributes. A "franchise" is the amount of money up to which the customer himself has to compensate when making a claim. The insurance provider covers costs exceeding the franchise tariff selected by the customer. The "no-claims bonus"

is the discount a customer can be awarded if no claims are reported to the insurance provider during a certain period of time. Three franchise levels, three no-claims bonus levels, three post-accident services and four price levels were selected for the study design; these are offered in a similar manner by most of the insurance providers active on the Swiss market. Post-accident services included the provision of a free-rental car as well as the obligation to use a garage recommended by the insurance provider. Finally, two value-added services were included in the design: car safety training and software for "smart phones" that could be used for car navigation. Both the insurance product and the value-added services are described in detail in the survey.

The online survey was conducted in August 2009 and was administered by a professional panel. The participants were given monetary incentives. The sample was controlled for age and gender, and is representative for the group of internet users (see Table 1). A total of 1,562 people were contacted of which 1,348 participants started the survey. Since knowledge concerning motor insurance products was a prerequisite, participants who use their car less than once a month were excluded from the survey. This led to 1,053 respondents completing the survey. The total response rate of 67.4% was above the average of similar studies (Baruch, 1999). Participants were asked to provide demographic details of age, gender and education. Details related to their motor insurance coverage were also requested. The sample characteristics are summarized in Table 1.

Using a choice-based conjoint analysis, the relative importance of the five insurance attributes, including the attribute levels (Louvière and Woodworth 1983; Hair *et al.*, 2006), were estimated. The use of conjoint analysis entails participants rating various products that are described in terms of a set of product-specific attributes. Compared to traditional, or adaptive, conjoint methods the choice-based method has gained wide acceptance in theory and practice (Gustafsson *et al.* 2007; Hartmann, Sattler, 2006). As part of choice-based conjoint analysis, estimation procedures are required in order to derive the utility of the different product attributes. Whilst the "multinomial logit" model" estimates the utility structure on an aggregated level over the whole sample, the "latent class" method" (Wedel, Kamakura, 2000) can be used to derive clusters in the utility structure and explain segment-specific customer groups. The more recent "Hierarchical Bayes estimation procedure" (Lenker and De Sarbo, 1996), on the other hand, allows for the estimation of individual utility values. The latter method has been found to generate more valid results compared to those based on the logit estimation or latent class estimation procedures when using full-profile designs (Morre, Gray-Lee 1998; Pinnell, 2000).

A choice-based conjoint design approach was used with an adjacent Hierarchical Bayes estimation. Iterative sampling was used in Hierarchical Bayes estimation in order to calculate the individual utility values. Five different product attributes were used as independent variables, with the choice representing the dependent variable to assess the utility. A list of the conjoint factors and attributes is given in Table 2. In the choice-based conjoint section of the online survey the participants were confronted with eight full-profile choice sets, each of which contained two insurance offers and a "no-choice" option. The design efficiency was increased by the employment of a randomized design; no hold-out choice-sets were used to guarantee external validity. Based on the results from the online survey, Sawtooth Software Package was used to calculate individual preference values using the Hierarchical Bayes estimation procedure with iterative sampling.

A cluster analysis, based on the individual preference values, was conducted to identify the different customer segments. The amount of possible clusters was limited a priori to a set of two to seven, which still allowed for an interpretation of the different number of clusters. The k-means cluster analysis procedure was subsequently used to derive the different clusters. An adjacent linear regression was used between the individual preference values and the cluster membership as the dependent variable to identify the number of clusters with the highest variance explained.

4. RESULTS

Composition of the preference structure

The Hierarchical Bayes estimation led to a convergence of root-likelihood values after the first few thousand iterations when individual utility values from the choice-based conjoint analysis were calculated. After 20,000 iterations the root-likelihood goodness-of-fit index was 67.8% with 64.6% certainty. The average utility values for the whole sample are given in Table 3. Linearity was assumed, so the relative distance measures of the attributes were used as the utility values of the attributes. The results show that franchise is the most relevant factor (37.8%), followed by price (31.2%). Post-accident services (18.5%) and value-added services (8.6%) represent a notable share, whilst no-claims discount was of the least importance (3.9%).

A more detailed inspection of the factors reveals the positive and negative effects on the attribute levels. An intuitive order from the customer's perspective of the attributes is given for the franchise, no-claims discount and price. A negative impact on the purchasing preference is observed as a result of a higher franchise, a lower no-claims discount and a higher price. A more detailed examination is required for the post-accident service and the value-added services: for the former, the obligation of using a garage stipulated by the insurer had, interestingly enough, a negative impact (-0.959) on the preference. This means that the customer does not consider it to be beneficial to be obliged to use the garage chosen by the insurer. On the contrary, the customer prefers to select the place that performs the repairs himself. A weak negative impact (-0.087) was observed when no post-accident service was offered; a positive influence (1.046) was shown when a free rental car was offered after an accident. As far as the value-added services are concerned, it may be assumed intuitively that the customer considers the provision of car safety training and mobile navigational service as beneficial, with correspondingly positive utility values. Only the absence of value-added services should therefore reveal a negative utility value. The results obtained in this study nonetheless contradict this assumption in part. The provision of car safety training was the only attribute with a positive impact on the purchasing preference (0.579). The mobile telephone-based navigation system (-0.356) and the provision of no value-added service (-0.223) had a negative influence on the preference structure.

Preference-based cluster analysis

K-means cluster analysis identified four customer segments, achieving the highest variance explained for the solution. All five attributes discriminate between the four clusters. Reflecting the importance of purchasing attributes in each of them, clusters can be interpreted as (1) *risk-averse surplus customers*, (2) *risk-averse savers*, (3) *price-driven customers* and (4) *value-added service customers*.

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The first cluster is known as *risk-averse surplus customers*, as illustrated in Table 4. With a total of 369 (35.0%) it represents the highest number of customers. An aversion to a franchise tariff dominates the purchasing decision (43.2%) within this cluster. The customer benefits directly from relatively low franchise tariffs; it seems that he is willing to pay higher prices in order to avoid excessive franchise tariffs. This segment bases its purchasing decision to only 13.5% on the price whilst the franchise plays the dominant role. The customer also bases his decision to 25.1% on the provision of post-accident services and to 13.5% on the availability of value-added services. The importance of those two attributes is even higher than the price. A no-claim discount plays only a minor role in the purchasing decision (4.8%), which means that this customer segment expects a surplus and additional service either in the event of an accident or in the form of value-added services. The customer benefits from small franchise tariffs, free rental car and safety training and, finally, moderate prices.

The second cluster can be described of *risk-averse savers*, and represents 324 participants (30.8% of the sample). As in cluster one, the franchise tariff plays the most important role in the customer's preference structure and related purchasing decision (43.7%). In contrast to cluster one, however, *risk-averse savers* do not favour surplus services in terms of post-accident or value-added services: both attributes are of limited importance in the purchase decision (14.4% for the former and 5.4% for the latter). Besides the franchise tariff, price plays the dominant role within customer preference (32.8%), e.g. a no-claims discount receives only little attention (3.7%). The customer in this group thereby prefers low franchise tariffs and low prices.

The third cluster contains *price-driven customers,* and represents 224 participants (21.3% of the sample). The customers in this segment base their purchasing decision to over 51.4% on the price and to an additional 29.8% on the franchise. Price and franchise both play dominant roles while value-added and post-accident services have a negligible influence (5.2% and 10.4%, respectively) and, in common with the other clusters, a no-claim discount is of minor importance (3.2%).

Cluster four represents the group of *value-added service customers,* and is has 136 participants (12.9% of the sample). This segment bases its purchasing decision to 36.7% on post-accident services and to 20.6% on value-added services. The accumulated influence of the service elements hence accounts for 57.3% of the purchasing decision. The influence of price is minor (18.1%) and the influence of franchise is moderate (20.6%). A no-claim discount is of incremental importance (4.4%), as with the other clusters.

The influence of value-added services becomes visible in cluster four and, to a smaller extent, in cluster one. The increased importance of additional services can be observed most clearly between clusters with risk-averse surplus and price saving customers: the influence of post-accident services increases from 14.4% to 25.1% and that of value-added services from 5.4% to 13.5%. While the franchise remains at a similarly high level of 43.7% and 42.2% this increased influence of services is compensated by a decrease in the importance of the prices from 32.8% to 13.4%. A further comparison between the various clusters of value-added surplus and value-added service customers also reveals an increase in the influence of post-accident services from 25.1% to 36.7% and the influence of the value-added service from 13.5% to 20.6%. The importance of franchise is now reduced from 43.2% to 20.3%.

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5. DISCUSSION

Theoretical Implications

The analysis employed in this study extended existing literature on value creation in the following ways: firstly, a novel and more general definition of value-added services in the context of value creation in the insurance industry was provided. Our notion of value-added services implies that the customer is an active consumer (Vargo and Lusch, 2008) and co-creates value. It means that moving from customer service surrounding the insurance service to value-added service could change the role of the customer in the insurance sector. It was also observed that there is a coincidence of value-added services within the customers' preference structures.

Secondly, this coincidence means that a value-added service plays a vital role in the preference structure of the customer. These findings extend existing knowledge on how the initiation of value-in-use through value-added services influences customer preferences. However, as the value-in-use concept indicates, it creates heterogeneous interactions and a personalization of the co-creation experience by using value-added services. This assumption became visible in the overall preference structure and in the four customer segments identified. More specifically, some clusters seem to be more in line with the value-in-exchange concepts, since they mainly built their preference around price and franchise whereas in other clusters, value-added services increasingly represent the core of the preference structure.

Thirdly, finding customer segments more related to the value-in-exchange perspectives and those more related to the value-in-use supports the assumptions that whilst both perspectives are different, they co-exist (Grönroos, 2007; Vargo and Lusch, 2008).

Fourthly, the increase of importance in value-added services also influences the role of customer service in preference structures positively. Customer services seem to be important antecedents to value-added services. Both types of service create a vital relationship and substitute the importance of insurance fees and franchise tariffs. This means that value-added services can lead to value-co-creation, where the customer develops skills that can, in return, affect his preference structure.

Fifthly, in line with this reasoning, our findings support the assumption that moving away from innovating simple attributes related to core insurance services and towards innovating the role of the customer in the value creation process seems to be beneficial for insurance companies. Innovating the role of the customer reduces price awareness with respect to insurance fees, no-claim discounts and franchise tariffs, a finding that supports the recent discussion of using a more service-related innovation approach (Michel, Brown and Gallan, 2008). Innovation approaches in the insurance sector should, therefore, be more open towards changing the role of the customer. Integrating customers in the innovation process does not only concern discovering their potential requirements. It is more about experimenting with how customers learn by using value-added services, creating experiences and skills and projecting the impact of these new competencies on customer preferences (Möller, 2008; Vargo, 2008).

Finally, these findings suggest that understanding whether, as well as how, insurance companies can possess appropriate value-creating advantages, capabilities and action potential that can motivate the emergence of value-creation strategies and insurance actions

intended to better capture value-creation opportunities and their impact on customer preference (Pitelis, 2009). This would, however, be a major change in the approach to innovation with the insurance sector (Hollenstein, 2003).

Management Implications

The most important managerial implications arise from the aforementioned theoretical implications. Firstly, managers need to modify their approach to innovation. Such modification should be focused on the value-in-use concept and its underlying rationale on innovating the role of the customer regarding the buying, using and paying for insurance services. This represents a huge modification in the approach currently employed. Thus, a subsequent step toward innovating the role of the customer could be to create a more extensive customer service. Concentrating on customer service creates service-related skills and abilities in insurance companies that, at a later date, can be applied to the role of the customer. It could be considered as fundamental step in creating internal service knowledge. The second managerial implication is related to the marketing approach which, for insurance providers, means that the customer perceives the presence of value-added services differently. Without knowing a priori to which group a new customer belongs, insurance providers require a strategy of new processes in order to target the segment of customers interested in value-added services.

Limitations and Further Research

The limitations of this study are stated due to the choice of methodology and focus of the problem researched. The study was focused geographically on Switzerland; differences in purchasing behavior mean that further studies are required in order to validate the results in other countries. The limitations of conjoint analysis apply for the results presented: it is, most importantly, a static approach. Conjoint analysis does not allow the investigation of the dynamic interrelationship between offering value-added services to encourage customer value creation, developing customer skills and initiating customer preference changes. Future research activities should, therefore, examine the dynamic processes underlying these interrelationships.

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APPENDIX

Table 1: Description of the sample

Variable	**Sample**
Size	1053
Gender	
Male	48.5%
Female	51.5%
Total	100%
Age	
0-19	2.8%
20-29	21.6%
30-39	25.6%
40-49	28.5%
50-59	14.0%
60 and older	7.6%
Total	100%
Education	
Primary	4.5%
Secondary	53.8%
University < 3	17.6%
University ≥ 3	24.1%
Total	100%

Table 2: Factors and attributes in the choice-based conjoint design (1 CHF ≈ 1 USD)

Factor	**Attribute 1**	**Attribute 2**	**Attribute 3**	**Attribute 4**
Franchise	0 CHF	500 CHF	2000 CHF	
No-Claims Discount	40%	50 %	60 %	
Post-Accident Service	Free rental car after accident	Insurer-given garage	No special service	
Value-Added Service	No value-added service	Mobile phone-based navigation	Safety training	
Price	713 CHF	865 CHF	1017 CHF	1169 CHF

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Table 3: Average part worth preferences and standard errors, based on a Hierarchical Bayes estimation.

Factor	**Attribute**	**Utility**	**Distance (SE)**	**Weight**
Franchise	0 CHF	1.701	4.098 (0.058)	37.8%
	500 CHF	0.698		
	2000 CHF	-2.398		
No-Claims Discount	40%	0.155	0.421 (0.020)	3.9%
	50%	0.112		
	60%	-0.267		
Post-Accident Service	Insurer-given garage	-0.959	2.004 (0.037)	18.5%
	No special service	-0.087		
	Free rental car after accident	1.046		
Value-Added Service	Mobile phone based navigation	-0.356	0.935 (0.023)	8.6%
	No value-added service	-0.223		
	Safety training	0.579		
Price	713 CHF	1.639	3.383 (0.046)	31.2%
	865 CHF	0.986		
	1017 CHF	-0.882		
	1169 CHF	-1.744		

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Table 4: Utility values for each cluster with importance of factors.

Attribute	**Cluster 1** Risk-averse surplus customers	**Cluster 2** Risk-averse savers	**Cluster 3** Price-driven customers	**Cluster 4** Value-added service customers
Percentage of the total sample	35.0 %	30.8 %	21.2 %	12.9%
Franchise	43.2%	43.7%	29.8%	20.3%
0 CHF	1.994	2.5430	0.880	0.233
500 CHF	0.848	0.817	0.434	0.433
2000 CHF	-2.842	-3.360	-1.315	-0.666
No-Claims Discount	4.8%	3.7%	3.2%	4.4%
40%	0.188	0.169	0.107	0.106
50%	0.155	0.158	0.024	0.026
60%	-0.343	-0.328	-0.131	-0.132
Post-Accident Service	25.1%	14.4%	10.4%	36.7%
Insurer-given garage	-1.406	-0.924	-0.300	-0.906
No post-accident service	0.003	-0.096	-0.169	-0.175
Free rental car after accident	1.402	1.021	0.469	1.082
Value-Added Service	13.5%	5.4%	5.2%	20.6%
Mobile phone-based navigation	-0.668	-0.249	-0.063	-0.242
No Value-Added service	-0.171	-0.236	-0.158	-0.436
Safety training	0.840	0.486	0.222	0.679
Price	13.4%	32.8%	51.4%	18.1%
713 CHF	1.082	2.270	2.363	0.455
865 CHF	0.649	1.140	1.534	0.632
1017 CHF	-0.419	-1.257	-1.425	-0.347
1169 CHF	-1.312	-2.153	-2.471	-0.740

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