Essays on Service Management: From Customer Attitude to Company Profit; Sustainability and Insurance; Customer Information Disclosure; Linking Employer Branding and Service Branding

DISSERTATION

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1

Content

Content

ACKNOWLEDGEMENTS	1
CONTENT	2
ABSTRACT	4
ZUSAMMENFASSUNG	5
PART I: AREAS OF RESEARCH AND CONTRIBUTIONS	6
1. Contribution to Service Management	6
2. From Customer Attitude to Company Profit	7
3. Sustainability and Insurance	8
4. Customer Information-Disclosure across Countries	8
5. Employer Branding and Service Branding	9
References	10
PART II: FROM CUSTOMER ATTITUDE TO COMPANY PROFIT	12
1. Introduction	12
2. Integrating Customer Value, Customer Retention, and Sales Growth	13
3. Research Framework	17
4. Data Analysis and Results	21
5. Discussion and Implications	26
References	32

Content

PART III: SUSTAINABILITY AND INSURANCE	38
1. Introduction	38
2. Toward Sustainability Segmentation in the Insurance Industry	40
3. Sustainability and Insurance	45
4. Summary	57
Appendix	60
References	62
PART IV: CUSTOMER INFORMATION DISCLOSURE	67
1. Introduction	67
2. Cross-Cultural Framework on Information Disclosure	71
3. Empirical Analysis	81
4. Discussion and Implications	92
References	99
PART V: EMPLOYER BRANDING AND SERVICE BRANDING	105
1. Introduction	105
2. The Importance of Employer Branding for Service Branding	108
3. Methodology and Empirical Analysis	117
4. Research Findings	118
5. Limitations and Future Research	123
6. Theoretical and Managerial Implications	124
References	127
CURRICULUM VITAE	136

Abstract

Researchers and practitioners in the field of service management are interested in frameworks that take the interrelationship between company, employees, and customer into account as antecedents for company performance. As a result, research in the field of service management focuses on internal processes as value creation for customers and employees and the development of models that investigate drivers for favorable employee and customer attitude. Moreover, studies explore employee-customer interaction that results in customer satisfaction and retention and finally to a better firm performance.

This research project aims to provide value on both the academic and practical front in the field of service management. This is done by investigating the company-employee-customer triangle. First, this study employs a service-profit chain approach by empirically investigating the relationship between company processes, customer behavioral intentions, and company profit. Second, an approach of sustainability and insurance is provided by adapting traditional frameworks to customers' security and insurance orientation. Third, a framework on satisfaction, trust, and benefits that unveils customers' willing to disclose personal information to companies is developed and empirically tested. Finally, the relationship between employer branding and the employees' attitude is theoretically developed and empirically investigated.

Zusammenfassung

Wissenschaftler und Praktiker im Bereich Servicemanagement stellen zunehmend Ansätze in den Forschungsmittelpunkt, die die Beziehung zwischen Unternehmen, Mitarbeitern und Kunden als massgeblichen Einflussfaktor für den berücksichtigen. Unternehmenserfolg Dementsprechend operationalisiert Forschung zu Servicemanagement Unternehmensprozesse, wie zum Beispiel die Wertgenerierung für Kunden und Mitarbeiter. Darauf aufbauend werden Modelle entwickelt. welche Einflussfaktoren für eine positive Mitarbeiterkundeneinstellung empirisch untersuchen. Studien zu Interaktion zwischen Mitarbeitern und Kunden - ein besonderer Forschungsbereich im Servicemanagement - zeigen, dass insbesondere Kundenzufriendenheit und -bindung zu einer besseren Leistung des Unternehmens führen.

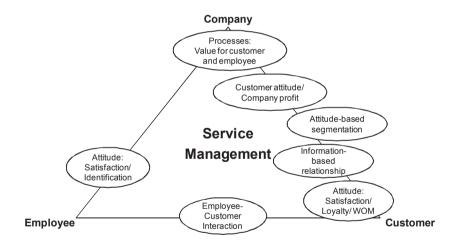
Diese Dissertation möchte einen Mehrwert für die Wissenschaft als auch für die Praxis im Bereich Servicemanagement schaffen. In vier wissenschaftlichen Arbeiten wird theoretisch und empirisch die Beziehung zwischen Unternehmen, Mitarbeitern und Kunden untersucht. Im ersten Beitrag wird unter Anwendung der Service-Profit Chain die Beziehung zwischen Unternehmensprozessen, Kundenverhalten und Unternehmensgewinn empirisch untersucht. Im zweiten Beitrag wird ein Modell zu Nachhaltigkeit und Versicherung entwickelt und empirisch getestet. Dieses ist angeleht an traditionelle Ansätze zu Nachhaltigkeit, Sicherheit und Versicherung. Der dritte Beitrag verwendet ein Modell zu Zufriedenheit, Vertrauen und Leistung, das empirisch die Kundenbereitschaft untersucht, persönliche Informationen an Unternehmen preiszugeben. Im vierten Beitrag wird die Beziehung zwischen Employer Brand und Mitarbeitereinstellung theoretisch entwickelt und empirisch getestet.

PART I: Areas of Research and Contributions

1. Contribution to Service Management

Today, marketing literature has shifted from product-centred logic to service-centred logic (e.g. Vargo and Lusch, 2004). According to Vargo and Lusch (2004) the interdependence between employee skill and attitude, company internal processes and resources, and finally customer attitude and customer-supplier interaction are the fundamental source of a competitive advantage and the unit of exchange in service settings.

Figure 1: Contribution to Service Management



Nevertheless, research still lacks to investigate the interrelation of the companyemployee-customer triangle in the field of service management (see Figure 1). Consequently, scientists call for further research that particularly relates internal resources and processes to employees' and customers' responses and finally to company profit (Brodie et al., 2009; Heskett et al., 1994; Homburg et al., 2009). Understanding these relationships allows companies to efficiently adapt internal resources and processes according to employee and customer response. Therefore, this dissertation project contributes to research in service management with four different working papers, which investigate selected elements of the company-employee-customer triangle (Figure 1) as follows: (1) Customer attitude - company profit relation (Heskett, 2002; Rust and Chung, 2006); (2) customer attitude based segmentation (Brocket and Golden, 2007; Krystallis et al., 2008); (3) customer attitude towards information disclosure (Culnan and Bies, 2003; White, 2004); and finally (4) employee attitude towards the company with impact on customer-employee interaction (Brodie et al., 2009; Palmer, 2010; Vella et al., 2009).

2. From Customer Attitude to Company Profit

The first working paper in this dissertation project deals with the relationship between customer attitude and company profit. Service management is still in the early stage of exploring the linkage between service processes, customer value, and company profits. By tying together the elements of service evaluations, customer behavioral intentions, and company profit, practitioners and researchers can reveal the interrelated links of the so called "service profit chain". Former research in this field suggests that improvements in customer perception of service value can directly lead to favorable outcomes for the firm, such as improved customer retention and sales growth (Heskett, 2002; Rust and Chung, 2006). Other studies indicate a gap between customer and employee perception of value. The first area of research aims to irradiate the service profit chain while the interrelationship of the distinct elements remains under-investigated. An integrated model that accounts for customer value, customer retention, and sales growth is theoretically developed and empirically tested. The findings indicate that customer value (e.g., individual and economic benefits that are tailored specifically to customer) is a predictor of customer retention, whereas customer retention is identified as an antecedent of sales growth.

3. Sustainability and Insurance

The second working paper included in this dissertation deals with the relevance of sustainability for the insurance industry. Persons are increasingly expressing their opinion and life-style through sustainable attitudes and behavior (Getzner and Grabner-Kräuter, 2004; Krystallis et al., 2008). Change of the customer's lifestyle is of interest for insurers since a sustainable way of living may lead to a different insurance profile. So far, no empirical study has identified the sustainable attributes of customers in the insurance industry. This paper aims to fill this gap by integrating elements, such as security orientation, insurance orientation, and claims history, that companies must take into account when managing sustainable customers. The relationship between the sustainability and insurance dimensions is predicted by linear regression analysis. Latent Class Analysis (LCA) is then performed to identify response patterns of individuals with similar sustainability profiles. The results suggest that sustainability dimensions can be applied as predictors of customers' security and insurance orientation. Moreover, insurers are supposed to extend the traditional attributes and also take into account sustainable characteristics to predict customers' risk profile, which is vital in the field of product development and pricing.

4. Customer Information-Disclosure across Countries

The third working paper integrated in this dissertation focuses on customers' attitude to share personal information with a supplier. In the information-driven global economy, customers' motivation for disclosing personal information are generally important for companies (e.g. customization of products and services, product and services innovation). Especially for companies that aim at deepening the relationships with their customers such information are inevitable. This is, because companies acquire and update knowledge about customers' preferences to enhance customer service and to explore opportunities for new products or services. Therefore, the purpose of this study is to unveil what makes customers from different cultural regions (Japan, Germany, the USA, and Brazil) willing to disclose personal information to companies. We examine established elements such as customer satisfaction and trust.

Moreover, we explore the role of uncertainty avoidance and individualism, which represent important exchange elements influencing customers' disclosure willingness. The results show that Brazilian, Japanese, and US customers tend to base their disclosure decisions on satisfaction rather than on trust. Moreover, we prove that cultural benefits influence mediate customers' willingness to disclose personal information in the four countries

5. Employer Branding and Service Branding

The final working paper in this dissertation project is about employees' skills and attitude in service settings. Today, skills and knowledge of employees are the fundamental source of a competitive advantage in particular for companies with a high degree of service processes. Employees' attitudes are regarded as central in the creation of the service brand through employee-customer interaction. Within this research project we suggest that employer branding is a central construct for the creation of service brands. This is, because it enables companies to manage employees in a way that they influence customer experience positively and thereby indirectly enhance the creation of the service brand as follows: (1) A company's value proposition for current employees determines employee satisfaction and identification with the company, (2) satisfied and identified employees influence the customers' experiences positively and thereby reinforce customers' perception of brand. Furthermore, the empirical results support that employer branding enables service companies to attract high potential employees.

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PART II: From Customer Attitude to Company Profit

From Customer Attitude to Company Profit: Linking Customer Value, Customer Retention, and Sales Growth¹

1. Introduction

Drucker (1954, p. 39) describes marketing as "the whole business seen from the point-of-view of its final result, that is, from the customer's point of view." The purpose of a business is "to create a customer" (Drucker, 1954, p. 37).

Today, service managers and researchers are still in the early stages of exploring and explaining service processes (Heskett et al., 1994) and their translation into customer value (Slater, 1997; Slater and Narver, 2000; Woodruff, 1997), and company profits (Heskett, 2002; Reichheld, Markey, and Hopton, 2000). By tying together the elements of service evaluation, customer behavioral intentions and company profit, practitioners and researchers can reveal the interrelated links of the service-profit chain (Heskett et al., 1994). It is assumed that creating value for customers is value-enhancing for companies, if value delivering leads to favorable customer attitude that transforms into an increase in company profits (Heskett, 2002; Reichheld et al., 2000; Rust et al., 2004 (a); Rust, Lemon, Zeithaml, and 2004 (b); Rust and Chung, 2006; Woodruff, 1997; Srivastava, Shervani, and Fahey, 1998). Thus, improvements in customer perception of service value can directly lead to favorable outcomes for the firm, such as improved customer retention and sales growth. Nevertheless, the interrelationship of the distinct elements in the service-profit chain remains under investigated.

The present study aims to contribute to the empirical investigation of the serviceprofit chain. In line with research on service management and customer value, this study favors an integrated model that accounts for customer value, customer retention, and sales growth. To this end, this study has two objectives. First, this paper provides

¹ This paper has been written jointly with Peter Maas and is currently under review at the Journal of Business Research. We are grateful to Dr. Gudrun Hoermann, Sabrina Blawath, Prof. Martin Eling, Alexander Braun, and Przemysław Rymaszewski for their valuable comments and suggestions.

insights into the relationship between customer-perceived value, customer behavioral intention, and sales growth. The second goal is to specify the construct "customer perceived value" by comparing and evaluating competing structural equation models. These comprise (a) the conceptualization of customer value as a higher-order construct which encompasses three distinct value components (customization value, competence value, and control value); and (b) treating customer value on a disaggregate level where the customer value components are allowed to behave independently.

This paper is structured as follows. First, the present study reviews previous research on service management, customer value, and customer retention. This article proposes an integrated model of customer attitude and company profit. Subsequently, this study tests the proposed model and three competing models empirically by employing structural equation modeling (SEM) methodology. Finally, the present article concludes with a discussion of findings, managerial implications, as well as limitations of the results

2. Integrating Customer Value, Customer Retention, and Sales Growth

The Service-Profit Chain

In the field of service management, researchers link service processes, customer attitude, and company profit. Heskett et al. (1994) propose the original framework of the service-profit chain. They assume that revenues depend on customers' perceptions of service quality; in turn these perceptions base on operational inputs and employee efforts. Heskett et al. (1994) conceptualize the relationship between customer value, satisfaction, customer loyalty, and productivity as follows: profit and growth are stimulated by customer loyalty, which is the direct result of customer satisfaction. Satisfaction is influenced by the value of the services provided to the customers. Satisfied, loyal, and productive employees create value for customers. Finally, employee satisfaction is the result of high-quality support services and policies that

enable employees to satisfy their customers and deliver superior value to them (Heskett et al., 1994; Snipes et al., 2005).

Empirical research on the service-profit chain links consumer perception to favorable behavioral outcomes such as customer duration (Bolton, 1998) and repurchase behavior (Mittal and Kamakura, 2001). However, empirical studies that link satisfaction, service quality, and profitability provide inconclusive results. For instance, Ittner and Larcker (1998) point out that satisfaction is positively related to retention and revenues but not to margins. Particularly in the field of financial services. Kamakura et al. (2002) demonstrate that low customer satisfaction does not produce a different return on sales from high satisfaction. They claim that highsatisfaction branches are overspending to satisfy customers and gain sales (Kamakura et al., 2002). They suggest that spending operational resources on service improvements has both a positive and a negative effect on profitability. On the one hand, the former is a result of internal measures (e.g., optimizing product and service quality), which lead to positive performance perceptions on corresponding attributes (e.g., quality of product and service). The negative impact, on the other hand, is equivalent to the costs incurred for investments and processes to improve performance perceptions and, eventually, service quality as well as corresponding consumer behavior. Finally, a positive evaluation by the customer leads to more favorable behavioral intentions towards the provider (e.g., positive word of mouth, willingness to recommend and loyalty) which, in turn, affect revenues.

Research on Customer Value

According to Porter (1985), a firm's competitive advantage is based on the ability of a firm to generate value for the customers that exceeds the cost of creating it. Nevertheless, customer value, as the source of competitive advantage, is a complex construct that it is not directly observable but influences purchasing behavior as well as customer satisfaction and retention. Researchers use the term value in different contexts and many authors have acknowledged the difficulties of defining it (Parasuraman, Zeithaml, Berry, 1985; Woodall, 2003; Woodruff, 1997; Zeithaml, 1988).

However, customers' perceptions are central, not suppliers' assumptions or intentions (Parasuraman, 1997; Woodall, 2003; Woodruff, 1997; Zeithaml, 1988). Zeithaml (1988) defines customer perceived value as the consumer's assessment of the utility of a product, which is based on the perception of what is received and what is given. Thus, the value of products and services results from customers' subjective judgments. Further, Doyle (1990) points out that value is not what the producer puts in, but what the customer gets out. Thus, perceived value only marginally depends on the producer's ability to create actual value.

The literature focuses on customer value as a complex construct, which is distinct from quality (Agarwal and Teas, 2001; Cronin et al., 1997) and satisfaction (Eggert and Ulaga 2002; Mc Dougall and Levesque, 2000). Other research emphasizes the structural relationship between value and other concepts by interpreting quality as an antecedent of value (Agarwal and Teas, 2001; Cronin et al. 1997; Zeithaml, 1998) or by identifying the direct influence of brand on customer's perception of value (Brodie, Whittome, and Brush 2009). Empirical research with regard to the effects of value tends to focus on customers' repurchase intention (Cronin et al. 1997; Sweeney, Soutar, and Johnson, 1999) and satisfaction (Eggert and Ulaga, 2002; Lam et al., 2004).

Research on customer value management considers value from the firm perspective in that, if created and delivered in a superior fashion for the customer, it increases the value of the company. Consequently, the result is an improvement in financial performance (Desarbo, Jedidi, and Sinha, 2001; Parasuraman, 1997) and shareholder value (Payne and Frow, 2005; Shah et al., 2006; Tuli, Kohli, and Bharadwaj, 2007). Several studies consider the profitability of investing in order to create additional customer value and show that perceived value leads directly to overall satisfaction, customer loyalty, and customer retention (Heskett, 2002; Reichheld et al., 2000). A recent study by Guenzi and Troilo (2007) empirically explores the effectiveness of marketing–sales relationship. Their findings indicate that the use of a direct sales force and customer-oriented salespeople positively affect superior customer value creation and market performance (Guenzi and Troilo, 2007).

Customer Retention

Zeithaml, Berry, and Parasuraman (1996) define customer retention as customers' favorable attitude towards the company. This results in customers' willingness to remain with the company for a period of years, to buy additional service, and to spread positive word-of-mouth communication (Zeithaml. et al., 1996). In general, favorable intention towards the company is an essential asset in service industries (Bloemer and de Ruyter, 1999; Keaveney, 1995). More specifically, studies indicate that an improvement in the customer retention rate enhances firms' profits (Gupta, Lehmann, and Stuart, 2004; Reichheld and Sasser, 1990).

Researchers in the field of customer retention have empirically examined the links among quality, satisfaction, value, and behavioral intention (Anderson and Sullivan, 1993; Athanassopoulos, 2000; Cronin et al., 2000; Oliver, 1999). The link between satisfaction and loyalty, as suggested by Oliver (1999), is the most common. Satisfaction and loyalty are divergent but somewhat overlapping concepts: satisfaction is an essential prerequisite for loyalty. Cronin et al. (2000) reveal the direct effects of service quality, satisfaction, and service value on behavioral intentions. They suggest that all three variables simultaneously and directly lead to favorable behavioral intentions.

Other studies suggest price as one of the strongest predictor of customers' favorable intentions towards the company (Srivastava and Lurie, 2001; Hidalgo et al., 2008). According to Hidalgo et al. (2008), customers rarely search for information or evaluate service and product attributes. Instead, customers passively receive information and differ in their price-consciousness. Consequently, highly price-conscious customers are sensitive to price matching as they exhibit repeat purchase behavior (Hidalgo et al., 2008).

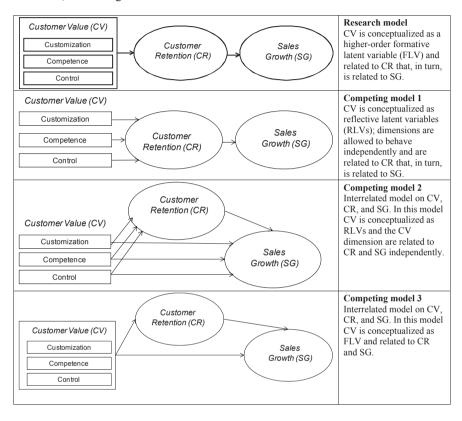
3. Research Framework

Direct and Inter-Relationships among Customer Value, Customer Retention, and Sales Growth

The first aim of the study is to test the relationship among customer value, customer retention, and sales growth. Figure 1 presents the theoretically based research model and the competing models, which serve as the conceptual frameworks for this study. However, this study is aware of numerous antecedents (e.g., quality) and mediators of customer value (e.g., satisfaction). These have been deliberately excluded from the analysis, since the focal point of this study is the relationship among customer value, customer retention, and sales growth.

In line with literature, the present study assumes that perceived customer value directly leads to customer retention (Anderson and Sullivan, 1993; Athanasopoulos, 2000; Cronin et al., 2000; Heskett, 2002; Reichheld et al., 2000). This study builds on the findings of Gupta et al. (2004) and of Reicheld and Sasser (1990) and proposes customer retention as a direct predictor of company profit. The research intention is to test the impact of customer value and customer retention on company profit simultaneously, modeled as an interrelated construct of customer attitude and company profit, as suggested by Cronin et al (2000). In doing so, this study provides new insights into the relationship among customer value, customer retention, and sales growth (for details see Competing Model 2 and 3).

Figure 1: Research model and competing models on customer value, customer retention, and sales growth



Conceptualization of Customer Attitude and Company Profit

The marketing literature advocates the conceptualization and empirical testing of theories. There is an emerging interest in conceptualizing and empirically testing customer value both as a higher-order construct and on a disaggregate level (Cronin et al., 2000; Desarbo, Jedidi, and Sinha, 2001; Ledden, Kalafatis, Samouel, 2007).

Thus, the second focus of this study is to contribute to the debate on whether to treat customer value as a higher-order formative latent variable (FLV) or as distinct reflective latent variables (RLVs). As mentioned before, the possibility exists that the relationship between customer value, customer retention, and sales growth (Research Model) depends on whether value is treated as an overall construct (FLV) or whether its dimensions are allowed to behave independently (RLVs). For this reason, competing models 1 and 2 conceptualize customer value as RLVs whereas competing model 3 treats customer value as FLV. However, all models consider customer retention as a reflective latent variable. Finally, all models treat company performance as a single variable in all models.

Customer Value (CV)

Several models conceptualize customer value via distinct dimensions, relate the customer value construct to the purchasing process, and primarily comprise get and give aspects of purchasing (Holbrook, 1994; Lages and Fernandes, 2004; Lapierre, 2000; Ulaga and Eggert, 2005; Zeithaml, 1998). Even so, the foci of this study are to get components of value that are closely related to characteristics of service, product offerings and performance (e.g., customization value, control value, and competence value).

Customization value is associated with those individual and economic benefits, that are tailored to a customer's specific needs. This favored treatment implies certain exclusivity (Gwinner, Gremler, and Bitner, 1998). This study uses a modified version of the scale developed by Lapierre (2000) that measured the value of product customization. A ten-point Likert-type scale was used, with responses ranging from "completely agree" to "not agree at all."

Competence value refers to the customers' perceived service quality, originally established as SERVQUAL (Parasuraman et al., 1990). Hartline and Ferell (1996) refine this scale to measure the service quality of customer-contact employees. The scope of the present study is to limit to the evaluation of attributes that directly refer to employees' competences constituting value for customers. Thus, this study restricts the measure to five items that specifically assess employee-related aspects of service

competence. Again, the ten-point Likert-type scale, with responses that ranged from "completely agree" to "not agree at all" was used.

Control value relates to the reliability value dimension, which was proposed and empirically tested by Lapierre (2000). This dimension refers to service performance with regard to customers' requests, which encompasses the provider's ability to keep promises as and to deliver a proper, accurate and timely solution. Once more, a tenpoint Likert-type scale was used, with responses ranging from "completely agree" to "not agree at all."

Customer Retention (CR)

Increasing customer retention, or decreasing customer defection, is a crucial factor in a service provider's ability to generate profits (Zeithaml et al., 1996). Based on the findings of Zeithaml et al. (1996) this study defines a customer's favorable behavioral intention towards the company as that customer's willingness to remain with the company for a period of years, to buy additional services, and to spread positive word-of-moth communication. The present study uses four items to measure this construct; these are in line with those used in the services marketing literature (e.g., Cronin and Taylor, 1992; Eggert and Ulaga, 2002; Zeithaml et al., 1996). A tenpoint Likert-type scale was used, with responses ranging from "very unlikely" to "very likely."

Sales Growth (SG)

This study measures sales growth by a single item: the average increase in turnover during the last three years of the respective service companies.

4. Data Analysis and Results

Data Collection and Measurement

The customer data for this study were collected via a standardized CATI survey from 2007-2009. The present study encompasses a sample on 15,844 clients and 165 German service companies. These include financial service companies, insurance companies, energy providers, and logistics provider. Participants answered 94 items on customer perceived value with special attention to perceived customization, competence, and control. In addition, we surveyed customers' attitude toward retention. The 165 service companies provided data on sales growth. Customer data and company data were merged via key variables. The CFA and SEM on customer attitude (customer value and customer retention) were conducted on the merged sample. List-wise deletion of missing values resulted in 2,852 usable customer responses.

In line with Churchill (1979) the analysis is based on a classical examination of the quality of measurements. Inter-item and item-to-total reliability tests and exploratory factor analyses were conducted. From this process, 20 items remained for the next step, which involved a Confirmatory Factor Analysis (CFA) of the 20 items, composing the three customer value dimensions and one customer response dimension using AMOS 7.0. Finally, the results confirm that the customer attitude model fits the data exceptionally well (CFI = 0.978, TLI = 0.974, RMSA = 0.047, and X^2 = 1166.683, df = 160, p = .000) (Baumgartner and Homburg, 1996; Bentler, 1992; Hu and Bentler, 1999). Cronbach's alpha values are acceptable. The five factors ranged from 0.824 for customer retention to 0.944 for control and average variance extracted (AVE) range from 0.52 for control to 0.74 for customer retention. Based on this result, all items remain. See table 1 for all composite measures and their liability assessments.

Table 1: CFA of items in the conceptual framework

Construct/Variab	le	β	Alpha	AVE
Customization			0.91	0.68
	<v2> offers high-quality products and services.</v2>	0.798		
	<v2> provides additional service features that I did not expect.</v2>	0.709		
	<v2> rewards loyal customers or affords them privileges.</v2>	0.670		
	<v2> is able to offer a variety of products at different prizes.</v2>	0.621		
Competence			0.906	0.62
	The employees of <v2> are very friendly.</v2>	0.801		
	The employees of <v2> are very professional.</v2>	0.886		
	The employees of <v2> offer good advice.</v2>	0.844		
	The employees of <v2> can explain clearly.</v2>	0.860		
	The employees of <v2> are motivated.</v2>	0.861		
	The employees of <v2> are committed to the products and services of their company.</v2>	0.757		
Control			0.944	0.52
	How do you evaluate the handling of requests?	0.875		
	My request is handled simply and unbureaucratically.	0.904		
	My request is handled quickly.	0.877		
	My request is handled accurately.	0.868		
	All promise were kept.	0.855		
	I was kept updated about the process.	0.843		
Customer retention			0.824	0.74
	How likely is it that you decide for use this company again?	0.817		
	How likely is it that you will still be a customer of this company in two years?	0.660		
	How likely is it that you recommend the company to a friend or colleague?	0.751		
	How do you evaluate the company overall?	0.753		

Notes: β = Standardized Estimates; AVE: Average Variance Extracted.

Table 2: Descriptive statistics and correlations of constructs

	Variable	No. of items	Mean	S.D.	1	2	3
	Customer Value						
1	Customization	4	6.3	0.86			
2	Competence	6	8.5	1.10	0.85**		
3	Control	6	8.6	0.54	0.64**	0.70**	
4	Customer retention	4	8.1	0.72	0.86**	0.73**	0.63**

Notes: **Significant at p> .01. *Significant at P > .05.

Please refer to Table 1 for a detailed description of each construct variable.

Table 2 presents the descriptive statistics and correlations for the four customer attitude constructs in the framework. The final customer attitude construct encompasses three customer value dimensions and one customer retention dimension.

Overall, the three value components are highly correlated (between 0.64 and 0.85) and the same holds for the relationship between customer value and customer retention (between 0.63 and 0.86).

Structural Models and Hypothesis Tests

This study uses AMOS 7.0 to test empirically the proposed research models and the three competing models. As described above, the first aim of this study is to examine the direct and the interrelationships of customer value, customer retention, and sales growth. The second aim of this study is to conceptualize customer value. Therefore, the proposed models encompass both FLV as well as RLVs that are operationalized in direct and interrelated models. In the test of the Research Model and Competing Models 1, 2, and 3, the results of the analysis provide an acceptable fit of CFI value for all models (Bentler, 1992). The RMSA values are much below the suggested cutoff value (Hu and Bentler, 1999).

The SEM results are shown in Table 3. In summary, 12 hypotheses are supported and 3 are rejected. These results provide insights into the proposed direct customer value to customer retention relationship and the direct customer retention to sales growth relationship. Measuring customer value as a higher-order construct as well as treating customer value on a disaggregate level confirms its role as a direct antecedent for customer retention. The relation of customer value to customer retention is significantly positive in the Research Model ($\beta = 0.92$, p <0.01) and in the interrelated model (Competing Model 3) ($\beta = 0.16$, p <0.01), supporting H1a and H4a. Further, the data supports H2a, b, and c respectively H3a, b, and c, in that on a disaggregate level each customer value dimension directly impacts retention: customization value ($\beta = 0.32$, p <0.001), competence value ($\beta = 0.29$, p <0.001), and control value ($\beta = 0.16$, p <0.001). Finally, the customer retention to sales growth relation as proposed by H1b and H2d must be rejected as insignificant.

In addition, the results shed light on the proposed relationship among customer value, customer retention, and sales growth. The hypothesis was that customer value and customer retention are both antecedents for sales growth, as proposed in

Competing Models 2 and 3. First, the relationship between customer value and customer retention is identical in the direct (Competing Model 1) and the interrelated model (Competing Model 2). These results indicate that treating customer value as RLVs is not affected, whether modeling customer value, customer retention, and sales growth relationship indirectly or directly. In the Research Model and in the interrelated model (Competing Model 3) ($\beta = 0.16$, p <0.001), H1a and H4b are supported. Further, the data supports H2a, b, and c respectively H3e, f, and g, in that on a disaggregate level each customer value dimension directly affects retention. The relationship between retention and performance is positive and significant ($\beta = 0.18$, p <0.001) for Competing Model 2 in which value is treated as a set of RLVs. However, a positive and significant relationship is also found for Competing Model 3 where customer value is treated as a FLV ($\beta = 0.16$, p < 0.001). Finally, the assumed positive relationship between customer value and performance must be rejected in both interrelated models. The results indicate that the relationship is statistically significant and negative for Competing Model 2. In particular, the value dimensions customization ($\beta = -0.10$, p <0.01) and competence ($\beta = -0.17$, p <0.01) have a negative effect on sales growth. Finally, treating value as a FLV in the interrelated model, the relation between value and performance is both statistically significant and negative ($\beta = -0.41$, p < 0.001).

Table 3: Results of SEM analysis

Research model CFI = 0.967, RMSA = 0.054, and TLI = 0.962 = 2.49, p-close < .0003	relationship 154, and TLI = 0.962 = 2 2 3 3 157, and TLI = 0.957, p LV) 3 4 V) 3 5 157, TLI = 0.957and, p	2.49, p-close < .0003 Retention Performance 5 < .0000 Retention Retention Retention Retention Performance	0.92***			:
	554, and TL1 = 0.962 =	2.49, p-close < .0003 Retention Performance 5 < .0000 Retention Retention Retention Performance				
	557, and TLI = 0.957, ILV) V) V) S7, TLI = 0.957, ILV) S7, TLI = 0.957 and, p	Retention Performance 5 < .0000 Retention Retention Retention Performance	0.92***			
	557, and TL1=0.957, E LV) → (V) →	Performance 3 < .0000 Retention Retention Retention Performance	-0.01	0.03	17.52	Yes
	557, and TL1=0.957, F LV) → V) → V) → → → → → → → → → →	Retention Retention Retention Retention Performance		1.78	-0.70	ο̈́N
	LV)	Retention Retention Retention Performance				
	V) → → → → → → → → → → → → → → → → → → →	Retention Retention Performance	***59.0	0.03	18.16	Yes
	>	Retention Performance	0.12***	0.03	3.55	Yes
	→ 0.957, TLI = 0.957 and, p	Performance	0.14**	0.02	6.43	Yes
	57, TLI = 0.957 and, p	0000 >	-0.01	1.78	-0.74	ο̈́N
		Retention	0.65***	0.03	18.16	Yes
	↑	Retention	0.12***	0.03	3.54	Yes
	^	Retention	0.14***	0.02	6.44	Yes
	^	Performance	0.18***	4.49	3.58	Yes
H3e Customization (RLV)	TA) ↑	Performance	-0.10**	4.55	-1.67	No
H3f Competence (RLV)	↑ (v.	Performance	-0.17***	3.80	4.11	No
H3g Control (RLV)	↑	Performance	0.05**	1.75	1.85	Yes
Competing model 3 (interrelationship) $CFI = 0.967$, $RMSA = 0.054$, $TLI = 0.963$, and $p < .0004$	54, TLI = 0.963, and	p < .0004				
H4a Value (FLV)	↑	Retention	0.16***	0.03	17.51	Yes
H4b Retention (RLV)	↑	Performance	0.38***	11.27	3.00	Yes
H4c Value (FLV)	↑	Performance	-0.41***	6.87	-2.97	Yes

Notes: *** Significant at p < .001, ** Significant at p < .05, * Significant at p < .10

Overall, these results show that the interrelated models (Competing Models 2 and 3) exhibit a superior fit compared to the direct relationship models (proposed Research Model and Competing Model 1). The insignificant relationship between customer retention and sales growth as found for the Research model and supported by the results for Competing Models 2 and 3 indicates that the customer value, customer retention, and sales growth relationship is best described by a model that accounts for the inter-relationship. Finally, comparing the model fit indices of the four models indicates the highest CFI value for both the research model and the Competing Model 3 (CFI = 0.967). This suggest that conceptualizing customer value as a higher-order construct, as the Research Model and Competing Model 3 are associated with a better fit to the data. Nevertheless, treating customer value on a disaggregated level provides more transparency with regard to the relationship among its components.

5. Discussion and Implications

The objective of this study was to provide new insights into the relationship among perceived customer value, customer retention, and sales growth. The presented results indicate that the value, customers associate with the products or services of a supplier induces favorable behavior toward the supplier. Thus, the findings presented in this paper support the literature in that perceived customer value directly leads to customer retention (Anderson and Sullivan, 1993; Athanasopoulos, 2000; Reichheld et al., 2000; Cronin et al., 2000; Heskett, 2002). Nevertheless, behavior intentions, for example, a customer's disposition to (1) say positive things about the firm, (2) recommend the firm to other consumers, and (3) remain loyal (e.g., repurchase) could not be shown to be a positive predictor of company profits. This result is not in line with previous findings, which indicate that improvements in the customer retention rate enhance a firm's profit (Gupta et al., 2004; Reicheld and Sasser, 1990).

To model the impact of customer perception as complex system that accounts for perceived customer value and customer retention simultaneously (Competing Models 2 and 3), as suggested by Cronin et al (2000), the relationship between customer

attitude and performance appears to be significant. The presented results provide insights with regard to the interrelated model on customer value, customer retention. and sales growth. Although there is a significant positive effect from customer retention on sales growth, the effect of perceived customer value on sales growth appears to be negative. These findings are consistent with the empirical results of Kamakura et al. (2002) on satisfaction and company profit. They suggest that allocating operational resources towards service improvements has both a positive and a negative effect on profitability. Consequently, the positive evaluation of services that results in customer value is a consequence of internal operations (e.g., optimizing control processes, investing in employee competence, and customizing services and products), that lead to positive performance perceptions on corresponding attributes (e.g., control value, competence value, customization value). In turn, improvements in perceived service quality generate a favorable behavioral attitude towards the provider, increase customer retention, and ultimately affect revenues. Conversely, the negative impact is directly attributable to the costs of investments and processes to improve performance perceptions.

The results suggest that value and customer retention are highly interrelated. Concerning customer attitude to company profit, customer value and customer retention have to be investigated simultaneously rather than separately. Therefore, a comprehensive model of customer attitude and company performance that accounts for an interrelated effect, as opposed to a single effect, is appropriate to describe the service-profit chain.

The second aim of this study was to provide insights into the conceptualization of perceived customer value. The respective research approach was twofold: (a) conceptualization of customer value with three distinct dimensions, for example, customization value, competence value, and control value, as well as (b) conceptualization at aggregate (treated as higher-order construct; FLV) or disaggregate (their respective dimensions are treated as separate constructs; RLVs) level. Employing this differentiation, the present study expands the research of others (e.g., Cronin et al. 2000; Diamantopoulos and Winkhofer, 2001; Ledden et al. 2007) and,

additionally, contributes to the debate on issues related to reflective versus formative conceptualization of latent variables. The results strongly conceptualization of customer value as a higher-order formative construct (Competing Model 3) since this model design fits better and outperforms the reflective latent construct specification (Competing Model 2). Nevertheless, examining the structural relationship at an aggregate level and constituting value as FLV results in confusing effects. However, the results of the reflective latent construct (Competing Model 2) are more transparent. For example, examining the relationship on a disaggregated level reveals that control value is not a significant determinant of sales growth. Overall, the results lead to the conclusion that the functional relationship between the value perceived by customer and sales growth is best understood by examining the behavior of the respective components rather than treating them as higher-order constructs. This finding is in line with Ledden et al. (2007). Although the specification of customer value as a higher-order construct exhibits a superior model fit, the findings advocate the disaggregate solution since it provides more transparency and leads to greater understanding of the relationships that are estimated.

Implication, Limitation, and Future Research

This study contributes to the empirical research on service-profit chain by investigating the structural relationship among customer value, customer retention, and sales growth. By conceptualizing customer value as a higher-order construct and by treating customer value on a disaggregate level, this study contributes to the debate on the conceptualization of latent variables. Nevertheless, some limitations of this study concerning data, model, and industries have to be mentioned.

Data: The sample size of 165 companies can be a constraint on this study. Due to the substantially smaller size of the company data samples, neither file was aggregated on the company level. However, customer data and company data were merged via a key variable, the respective customer variables and the company variable were correlated, and missing values were list-wise deleted. That resulted in 2,852 usable customer responses.

Model: First, the investigation of the relationship among customer value, customer retention, and sales growth excluded additional antecedents for customer value (e.g., quality) and customer retention (e.g., satisfaction and price). Future studies may investigate customer value, customer attitude, and relationship to sales growth, taking into account the complex interrelationship to other customer attitude constructs. Second, the customer value construct encompasses three value dimensions: customization value, competence value, and control value. Nevertheless, the present study is aware of several alternative and additional value dimensions. Future empirical research may encompass other dimensions of value (e.g., social value, functional value or emotional value as suggested by Ledden et al. (2007)) as well as give components (e.g., monetary sacrifices such as costs and fees as well as non-monetary sacrifices such as time and energy effort as suggested by Ledden et al. (2007) that are related to product and service utilities.

Industry: The present study focuses on services. Managing services is very different from managing goods because of their long-recognized inherent differences (Parasuraman et al., 1985). Hence, it would be worthwhile to see if the presented findings also hold for manufacturing industries. The relevant value dimensions may be different in the goods sector where more practical aspects of choosing a product may come into play (Rust and Chung, 2006; Vargo and Lusch, 2004).

Implications for Service Management

The results emphasize the relevance of customer attitude for company profit. In particular, the data support the strong influence of customer value on customer retention. Therefore, customers' disposition towards the company highly depends on their assessment of the utility of a product based on the perception of what is received and what is given (Zeithaml, 1988). Consequently, companies should strategically target on service and product utilities that are of value for their customers and directly influence their disposition towards the company that results in customers' willingness to remain with the company for years, to buy additional services, and to spread word-of-moth communication. The empirical results indicate that companies can stimulate the behavioral intentions of customers, thus indirectly leading to company profit and

growth through strategic customer value management. Recent studies indicate that there exists a gap between customer and employee perception of value (e.g., Maas and Graf, 2008). Bases on the findings presented here, companies can manage this perception gap and examine customers' opinion of value by concentrating on distinct value components.

Customization value: Individual and economic benefits that are tailored to customer specific needs have proven to be the strongest driver of customer retention. Nevertheless, providing products and services that exceed customers' expectations is costly. Even so, companies should make an effort to meet the unique demands of each customer as this directly leads to favorable behavioral intentions which increase sales growth.

Competence value: The way customer-contact employees perform when they provide and sell services and products constitutes value for customers. As indicated by the empirical results, customers base their decision to be loyal, recommend, and repurchase on the perceived friendliness and competence of employees. According to Heskett et al. (1994), satisfied, loyal, and productive employees are more likely to create value. Nevertheless, a company's investments in employee satisfaction and competence are associated with costs that limit sales. At the same time, companies should not hesitate to invest in customer-contact employees because of their strong influence on favorable behavioral intentions that in turn increase sales.

Control value: The consistency of service operations is of value to customers. Therefore, customers take the ability of companies to keep promises and deliver accurately and in a timely manner into account when they behave loyally and recommend or repurchase products. Consequently, customer value management should focus on high-quality services and policies that enable employees to deliver valuable results to customers. Again, this value component does not directly and positively influence sales growth, but as a predictor for customer retention, an indirect influence exists

As indicated by the empirical results, the service-profit chain should be investigated by means of an integrative approach that accounts for the interrelationship of customer value, customer retention, and sales growth. In particular, considering customer value and customer retention simultaneously is of value to companies, as both concepts correspond to a customer's favorable attitude toward the company (taking into account the relatively poor model fit in the comprehensive model that encompasses customer and company data). Investigating the relationship between customer value and sales growth separately is an incomplete research design. This is, because the creation of value for customers requires the company to incur costs for investments in employee competence, control processes, as well as service and product improvement. Therefore, the results suggest considering customer value and customer retention simultaneously, as the relevance of satisfying customers through superior value becomes visible. This is because customer value has proven to be an antecedent of customer retention (e.g., praise the company, recommend it to other consumers, and remain loyal) which positively influences sales growth (e.g., through cross selling, attracting new customers, and creating customer lifetime value).

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PART III: Sustainability and Insurance

Sustainability and Insurance - An Approach to Sustainability Segmentation²

1. Introduction

Sustainability is more than a recent trend. People are increasingly expressing their opinion and lifestyle through sustainable attitude and behavior. They demonstrate their position in their sustainable sensitive beliefs, in the products that they buy, or in the transportation that they choose (Autio et al., 2009; Dunlap and Catton, 1979; Getzner and Grabner-Kräuter, 2004; Krystallis et al., 2008; Laroche et al., 2001; Schwepker and Cornwell, 1999). This suggests the possibility that a sustainable way of living leads to a different customer behavior. In this context, sustainability seems to become a very important business issue (Kirkpatrick, 1990). However, it is a challenging task for companies to consider sustainable attitude of their customers. They need to identify customers' sustainable concerns, respond to them, and manage their needs effectively.

Changing customer lifestyle is of interest for insurers as a sustainable way of living may lead to a different insurance profile. In the context of the insurance industry, security orientation, insurance orientation, and claims history are elements that companies must take into account when managing sustainable customers (Anderson and Anderson, 2009). By predicting the influence of sustainable attitude on customers' behavior, insurance companies can adapt their customer relationship strategy and adjust products and services. Accounting for customers' sustainable concerns and employing sustainability attributes can create a competitive advantage for insurers. Sustainability attributes differ from standard actuarial variables, and therefore can provide additional useful underwriting information. Thus, a reliable and valid segmentation framework based on sustainable factors can assist insurers in

² The Winter Marketing Educators' Conference of the American Marketing Associaction has published a short-version of the paper (see Bodderas, 2010). The full version is currently under review at the Journal of Consumer Behavior. We are grateful to Dr. Gudrun Hoermann and Prof. Nadine Gatzert for their valuable suggestions and comments

developing a strong sustainable image, identifying sustainable profile, managing sustainable customers, and predicting losses.

Although several studies investigate alternative attributes such as, e.g., personal characteristics as classification variables (e.g., Brocket and Golden, 2007), so far no empirical approach addresses these opportunities and challenges for insurers dealing with sustainable customers. The present paper aims to adapt the, in scientific literature established sustainability measurement to the insurance industry. In particular, our study, first, predicts the impact of sustainable knowledge, attitude, and behavior on customers' insurance orientation and risk profile. Second, we group insurance customers with similar sustainability and loss profile. A sustainability model based on the theory of planned behavior (TPB) (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975) is developed and extended by insurance-specific elements. The final model comprises six dimensions: (1) perceived knowledge of sustainability, (2) attitude toward sustainability, (3) sustainably sensitive behavior, (4) security orientation, (5) insurance orientation, and (6) claims history.

Until today, no empirical study has identified the sustainable attributes of customers in the insurance industry. Thus, this paper investigates the sustainable profile of insurance customers in terms of their knowledge, attitude, and behavior. Therefore, this study empirically tests the proposed model of insurance and sustainability on a large dataset. We conduct an empirical survey of insurance customers in Germany. This study starts by investigating the relationship among customers' sustainable concerns, security orientation, insurance orientation, and claims history. The relationship between the sustainability and insurance dimensions is predicted by linear regression analysis. Latent Class Analysis (LCA) is then performed to identify the response patterns of individuals with similar sustainability profiles. Moreover, a regression analysis for four classes is conducted, using claims statistics as independent variables and sustainability indicators as predictors. Four classes were labeled as "attitude-oriented," "mobility-oriented," "behavioral-knowledge," and "mobility-rhetoric." The quality of derived measures is assessed by means of model fit and by identification of sustainable predictors that discriminate among the classes.

The paper is structured as follows. The next section summarizes the research on customer segmentation based on sustainability characteristics, and proposes an insurance-specific sustainability model. The proposed model is empirically tested in the third section. A summary of results is given in the final section.

2. Toward Sustainability Segmentation in the Insurance Industry

The rationale for segmentation is that customers can be grouped based on their needs and behavior (McDonald, 1995; Piercy and Morgan, 1993). Members of groups are likely to show similar responses to marketing activities or similar behavior in creating losses. According to economic pricing theory, through market segmentation, profit can be maximized when pricing levels discriminate among segments (Frank et al., 1972). Empirical research shows that companies applying segmentation perform better, because they can fine-tune their customer offerings (Beane and Ennis, 1987; Wind. 1978). Marketing distinguishes qualification from attractiveness as segmentation criteria (Dibb, 1999). These criteria are relatively simple to interpret, and they allow for an evaluation of the segmentation process; robustness of segmentation output and assessment of business issues, such as the profitability of a segment. Despite the attention that the segmentation of sustainable concern receives in the marketing literature, this approach has not yet found its way into the insurance literature. However, an important development in the insurance industry is the use of alternative attributes as psycho-behavioral variables, to classify insurance customers (Brocket and Golden, 2007).

Alternative Segmentation Variables in the Insurance Industry

Recent developments in the field of predicting losses focus on additional alternative attributes, such as biological, psychological, and behavioral attributes to forecast risky automobile driving and insured losses (Brockett and Golden, 2007; Kellison et al., 2003; Miller and Smith, 2003). Brockett and Golden (2007) argue why individuals' bio-psychological constitution influences driving performance and

financial behavior. As early as 1949, Tillman and Hobbs (1949) examined lifestyle variables and stated:"...a man drives as he lives" (p. 329). They identified the relationship between the personality characteristics, social background, and accident rates of taxi drivers. High-accident drivers had similar life histories, including emotional instability, disrespect for authority, school-related problems, juvenile criminal behavior, and short-term employment. Similar results are obtained from other studies in this field (Arnett, 1990; Sommers et al., 2000). High-accident drivers are characterized by aggressive driving, impulsive behavior, disregard for others, and disrespect for authority. They take more risks while driving, and are more likely to participate in socially deviant behavior, such as having poor personal relationships, driving for emotional reasons, and having noticeably more moving violations. Further studies identify several personal characteristics that influence driving behavior and involvement in driving accidents. For example, risk perception is correlated with anxiety, sensation seeking, and aggression (Jonah and Dawson, 1987). Thus, drivers with high-risk acceptance are more likely to be involved in accidents than are responsible drivers. Finally, young drivers are found to perceive less danger in driving situations and take greater risks than older drivers (Wison and Jonah, 1988).

Demographic Segmentation Variables in Marketing

In the literature on sustainable consumer behavior, or "green" marketing, the profiles of sustainable customers are based on traditional variables (Kilbourne and Beckmann, 1998). Empirical studies of sustainable segmentation attempt to identify the demographic variables that determine environmental and social attitude and behavior (Dunlap and Catton, 1979; Getzner and Grabner-Kräuter, 2004; Laroche et al., 2001; Schwepker and Cornwell, 1999). These variables allow for efficient segmentation of customers. For example, the variable of "age" is explored, and the assumption that "green" consumers are younger has been supported (e.g., Aaker and Bagozzi, 1982; Anderson and Cunningham, 1972; Kinnera et al., 1974). Nevertheless, the goodness of these variables is controversial because the results of the empirical studies are inconsistent. For instance, Roberts (1996) identifies the environmentally conscious consumer as older than the average consumer. Gender, as another

demographic variable, has influence on ecological awareness; women are more ecologically conscious than men are (Anderson and Cunningham, 1972; Laroch et al., 2001; Stern et al., 1993). MacDonald and Hara (1994) disprove this. Nevertheless, numerous authors state that demographic variables do not sufficiently explain the ecologically friendly concerns of customers. As a result, they favor psychographic variables such as attitude, knowledge, and behavior (e.g., Schlegelmilch et al., 1996; Schwepker and Cornwell, 1991; Straughan and Roberts, 1999).

Psychographic Variables for Sustainability Segmentation

Employing psychographic variables to classify sustainable customers is founded on TPB. According to this theory, personality traits, personal values, and lifestyle are predictors of actual behavior (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975). Simply claiming to be "sustainable" is no longer enough to predict a consistent sustainable profile. In this study, the sustainability profile consists of three components: (1) knowledge of sustainable issues, (2) attitude toward sustainability, and (3) sustainably sensitive behavior.

Knowledge

Knowledge is an important predictor in decision-making. In order to be environmentally and socially "sustainable," people need to understand the consequences of their behavior. A knowledge component therefore has to be factored into an accurate measure of sustainability. Several studies have found that knowledge is a considerable predictor of environmentally friendly behavior (e.g., Chan, 1999; Vining and Ebreo, 1990). However, other studies refute these findings. For example, Schlegelmilch et al. (2001) did not find a statistically significant relationship between respondents' knowledge about environmental and social topics and their environmental and social friendly purchasing behavior. The authors attribute these results to the difficulty of objectively capturing environmental knowledge. Another explanation is that knowledge and belief have distinct influences on behavior. For example, customers are unlikely to consume "green" products because they are aware of the shortcomings (Getzner and Grabner-Kräuter, 2004).

Attitude

Several studies have identified attitude as a good predictor of sustainable behavior (Chan, 1999; Laroche et al. 2001; McCarty and Shrum, 1994; Schwepker and Cornwell, 1991; Roberts, 1996). In general, a positive attitude toward environment leads to respective behavior. In consequence, attitudes and values, which refer to a specific perception about environmentalism, are closer to actual behavior (Dembkowski and Hanmer-Lloyd, 1994). For example, McCarty and Shrum (1994) find that the more inconvenient respondents believe that recycling is, the less likely they are to recycle. Krystallis et al. (2008) have confirmed consumer values and beliefs as predictors of organic purchasing.

Behavior

Several studies segment sustainable groups based on the membership in environmental and social organizations, on the recycling of materials, on the purchase of environmentally friendly products (Bohlen et al., 1993; Laroche et al., 2001), and on investment in "green" shares (Grabner-Kräuter, 2004). For example, environmentally conscious behavior is supposed to be an important predictor for customers' willingness to pay a higher price for environmentally friendly products or to abstain from unecological consumption. However, the empirical findings unexpectedly indicate the opposite (Laroche et al., 2001): although respondents agree to recycle and buy environmentally friendly products, they are not willing to pay a higher price for them. Autio et al. (2009) have examined the ways in which young consumers construct their images of green consumerism. They find that young people need to believe that their actions really make a difference.

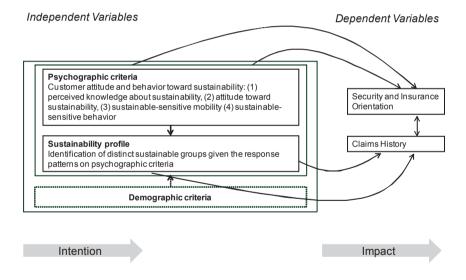
This ambiguous result might be attributed to social pressure and to the researcher response bias, for example, the desire to receive an environmentally friendly answer from respondents (Laroche et al., 2001). However, Getzer and Grabner-Kräuter (2004) argue that the desirable response bias is a general problem when investigating the relationship between attitude and behavior. Therefore, the willingness of respondents to behave in a certain way should be interpreted as a general preference rather than as

a predictor. For this reason, the present study accounts for objectively verifiable behavior (e.g., actual use of public transport) in addition to the general behavioral attitude (e.g., expressed intention to use public transports).

Conceptual Model of Sustainability and Insurance

This empirical study explores the influence of sustainability on insurance customers by: (1) investigating the influence of distinct sustainability dimension on insurance dimension; and (2) identifying the target group of sustainable customers (see Figure 1).

Figure 1: Conceptual model of sustainability and insurance



As outlined above, this study employs psychographic criteria such as knowledge, attitude, and behavior to predict customers' sustainability profile. Therefore, the final conceptual model is developed as a TPB model, that the assuming sustainability dimension is an important predictor of customers' insurance profile (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975). Thus, the effect of customers' sustainable

orientation on their behavior, which is of relevance to insurers, is determined (e.g., readiness to assume risk, insurance orientation, product individualization, and claims history). Further, by segmenting individuals who exhibit similarities in sustainable knowledge, attitude, and behavior (sustainably sensitive mobility and sustainably sensitive behavior), companies can manage the target group, respond to its needs, and predict losses of sustainable customers.

3. Sustainability and Insurance

Our findings are reported in three sections. First, the empirical procedure and the participants of the study are described. Second, the influence of sustainability on insurance customers is investigated. We determine customers' risk and insurance orientation and their claims history by using linear regression analysis. Third, in order to identify the target group in the insurance industry, we segment insurance customers according to their sustainability profile by using Latent Class Analysis (LCA).

Participants and Procedure

Our sample is taken from German insurance customers for automobile and household insurance. Of the 15,000 prospective respondents, 1,226 returned completed questionnaires (response rate = 8.2%). The participants' age ranged from 27 to over 60 (27-30=17.5%; 31-40=28.7%; 41-50=23.2%; 51-60=16.5%; more than 60=14.1%). The proportion of females was 44.9%.

The questionnaire comprises six measures: Knowledge, attitude, behavioral intention, verifiable behavior, insurance orientation, and claims history. All measures conform to common practice in this field of research (e.g., Diamantopoulos et al. 2003; Dunlap et al. 2000). Overall, we avoid responses ranging from 1 (disagree) to 5 (agree) because the pretest, which was conducted with 400 respondents via online survey, showed that ordinal response collapse. These findings are in line with previous studies on environmental attitude and behavior indicating a strong positive response bias (e.g., Kaiser and Wilson, 2004; Kaiser et al., 2007). Therefore, we use

dichotomous format to force respondents to decide either for the sustainable position or for the non-sustainable position, corresponding to pro-insurance/security or contra-insurance/security (see Appendix of Part III). This measure is taken into account because participants are generally found to respond positively due to desirability of an environmentally friendly answer (Getzer and Grabner-Kräuter, 2004; Laroche et al., 2001).

Knowledge. Knowledge is measured by rating five knowledge items (e.g., erosion of ozonlayer) in a dichotomous, Yes/No format (indicating either sustainable knowledge or non-knowledge). The five knowledge items take an α value of 0.357.

Attitude. Attitude is measured by opposing seven distinct attitude items (e.g., attitude toward media report on climate change). Again, the response is in a dichotomous format and the respondents have to decide either for Position A or Position B (indicating either sustainable attitude or non-sustainable attitude). The seven value items take a α value of 0.475.

Behavioral intention. Behavioral intention is measured by means of six behavioral variables related to consumption (e.g., ecological purchase), social-environmental engagement (e.g., engagement in social projects), and mobility (e.g., sustainable travelling). Those are also measured in a dichotomous format. Again, the respondents had to decide either for Position A or Position B (indicating either sustainable behavioral intention or non-sustainable behavioral intention). The six behavioral intension items take a α value of 0.347.

Objective behavior. Verifiable behavior is compassed by thirteen items (e.g., verifiable use of local public transport) coded in a dichotomous Yes/No format (indicating either objectively sustainable behavior or non-objectively sustainable behavior).

Insurance orientation. Insurance orientation is measured by six items in a dichotomous format. Again, the respondents have to decide either for Position A or

Position B (indicating either pro-insurance and security or contra-insurance and security). The six insurance orientation items take a α value of 0.184.

Claims history. Claims history is gathered by respondents' voluntary information about personal claims history. The respondents are asked about the number and amount of claims they had in the last five years in motor-insurance and household-insurance. The options range from 0 (no claims), 1 (1 claim) to 4 (4 or more claims) for the number of claims, and from 0 (no claims), 1 (less than 500€) to 4 (more than 3'000€).

Influence of Sustainability on Risk and Insurance Orientation

First, we employ explorative factor analysis to test the internal consistency of the construct variables and to verify the conceptual model, consisting of the sustainability and insurance dimensions. As a result of the statistical identification of the factor loadings, each of the model dimensions requires at least two indicators (McDonald and Ho, 2002). In the first step, we include all items of the survey, and in the second step, we perform factor analysis with fewer items. The indicators with low reliabilities, low factor loading, and no apparent relationship to the construct dimensions are excluded from further analysis.

Table 1 presents an overview of the included items of the final construct and factor weighting. Finally, we condense 31 selected items of the survey to 11 factors. Thus, the sustainability comprises four factors (sustainable behavior, sustainable mobility, sustainable attitude, and sustainable knowledge). Three factors represent customer attitude toward risk and insurance (readiness to assume risk, insurance orientation, and product individualization). Furthermore, four factors represent customers' claims history (liability insurance, comprehensive insurance coverage, part insurance coverage, and householder's insurance coverage). The final model integrates customers' sustainable profile, customers' risk, insurance attitude, and their claims history. The sustainability dimensions represent the independent variables as drivers toward security orientation, insurance orientation, and claims history (details for the result of factor analysis appear in Table 1).

Table 1: Overview of factor loading for sustainability and insurance dimensions

_	Construct	Underlying Items	Loading	KMO
Inc	lependent variables			-
	Sustainability dimensions			.721
1	Sustainable behavior	Ecological purchase	.744	
		Fair-trade purchase	.718	
		Shopping in ecostore/local market (obj.)	.64	
		Engagement in social/environmental projects (obj.)	.484	
		Donation (obj.)	.497	
2	Sustainable mobility	Public transport network	.644	
		Sustainable travelling	.71	
		Hold travel card (obj.)	.483	
		Use local public transport (obj.)	.776	
3	Sustainable attitude	Media reports about climate change	.586	
		Governmental contribution to environment	.674	
		Abstain from sth. because of environment	.636	
		Individual contribution to environmental	.736	
		protection		
4	Sustainable knowledge	Alternative fuel	.612	
		Erosion of ozone layer	.631	
		Ecological footprint	.498	
		Provision	.497	
		Dependent variables		
		Insurance dimensions		.496
5	Readiness to assume risk	Individuals' risk appraisal	.784	
		Individuals' risk behavior in free time	.789	
6	Insurance orientation	Organization of personal insurance issues	.746	
		Trust in insurance companies	.778	
7	Product individualization	Information of personal driving behavior	.774	
		Demand of individualized automobile insurance	.674	
_	Claims history			.528
8	Liability insurance	Number of claims	.959	
	y	Amount of claims	.961	
9	Comprehensive insurance coverage	Number of claims	.948	
	5-	Amount of claims	.950	
10	Part insurance coverage	Number of claims	.949	
		Amount of claims	.921	
11	Householder's insurance coverage		.945	
4 1	110abenblaci b ilibarance coverage	Amount of claims	.946	

Notes: Extraction method: principal component analysis. Rotation method: varimax with Kaiser Normalization. Rotation converged in four iterations. All factor loadings are significant at the 0% level.

We perform linear regression analysis to predict the causal relationship between sustainability and insurance. As hypotheses in the conceptual model (see Figure 1), we determine the effect of customers' sustainability on their insurance profile. In addition, we confirm the goodness of fit of the model and the statistical significance of the

estimated parameters. We check for goodness of fit by the R-squared. For statistical significance, we check by T-tests of individual parameters. To measure the effect of independent variables on dependent variables, we refer to standardized β -coefficients.

In general, different antecedents drive customers' attitude toward security and insurance (see Table 2). More specifically, customers' readiness to assume risk is determined by sustainable attitude (β =.078). However, the effects of sustainable mobility and sustainable knowledge are not significant. In the case of insurance orientation, sustainable knowledge appears to be a negative driver (β =.089). Testing the influence of sustainability on product individualization, sustainable value (β =.063) and sustainable knowledge (β =.07) appear to be positive drivers.

Overall, the results confirm that sustainable orientation of customers' needs to be considered separately. Whereas sustainable mobility reduces customers' readiness to assume risk, sustainable behavior increases it. Customers with high level of sustainable knowledge we assume as to be more independent, and thus, in general, less insurance-oriented. On the one hand, they are more likely to organize their insurance themselves, which is in line with less trust in insurance companies. On the other hand, sustainable knowledge and sustainable mobility increase customers' demand for individualized products and services.

Table 2: Results of the regression analysis

Security and insurance orientation				
Readiness to assume risk	Sustainable behavior	08 (-2.245)**	2.569*	800°
	Sustainable mobility	028 (-0.775)		
	Sustainable attitude	.078 (2.175)**		
	Sustainable knowledge	-0.003 (-0.079)		
Insurance orientation	Sustainable behavior	037 (-1.024)	2.077**	900.
	Sustainable mobility	035 (-0.965)		
	Sustainable attitude	.017 (0.466)		
	Sustainable knowledge	089 (-2.482)**		
Product individualization	Sustainable behavior	.033 (0.916)	2.036**	.005
	Sustainable mobility	.063 (1.759)*		
	Sustainable attitude	.026 (0.725)		
	Sustainable knowledge	.07 (1.95)**		
Claims history				
Liability insurance	Sustainable behavior	.05 (0.948)	1.204	.013
	Sustainable mobility	.037 (0.694)		
	Sustainable attitude	099 (-1.874)*		
	Sustainable knowledge	0 (-0.01)		
Comprehensive insurance coverage	Sustainable behavior	.177 (3.406)***	2.077	.011
	Sustainable mobility	048 (-0.915)		
	Sustainable attitude	032 (-0.61)		
	Sustainable knowledge	.081 (1.542)		
Part insurance coverage	Sustainable behavior	.039 (0.735)	.458	.005
	Sustainable mobility	.002 (0.03)		
	Sustainable attitude	057 (-1.066)		
	Sustainable knowledge	.026 (0.489)		
Householder's insurance	Sustainable behavior	028 (-0.534)	.132	.001
	Sustainable mobility	.005 (0.096)		
	Sustainable attitude	015 (-0.273)		
	Sustainable knowledge	02 (-0.384)		

Notes: * Regression is significant at the 0.1 level, ** Regression is significant at the 0.001 level.

When testing the impact of customers' sustainability on their claims history, the results indicate a distinct impact of sustainable behavior and attitude. Whereas sustainable attitude has significant impact on low claims amounts and frequencies in liability insurance (β = -.099), sustainable behavior influences the claims history for comprehensive insurance coverage (β =.177). The results of sustainability and claims history suggest that, overall, sustainable behavior stimulates customers' activity and leads to higher frequency and larger claims in motor insurance.

Sustainable Target Groups in the Insurance Industry

In this section, we conduct LCA to identify the response patterns of people with similar sustainable attitude and behavior. LCA assumes that each individual belongs to only one class. However, class membership cannot be observed. It is treated as probabilistic. In general, LCA assumes that answers to a set of items are independent of the class membership, but class membership is correlated to individual responses. We run regression models for four classes using claim statistics as independent variables, sustainability indicators as predictors, and demographic items as covariates. First, we test whether sustainability variables adds useful information beyond what is already captured through demographic data. Therefore, we run three models: First, we run a full model, which includes both, demographic variables as covariates and attitudinal variables as predictors. Further, we run a restricted model, which excludes the demographic variables as covariates. Finally, we estimate a traditional model, which excludes attitudinal variables but accounts for demographic variables as predictors.

The likelihood ratio test reported in Table 4 shows that the restricted and traditional models, which consistently exclude attitudinal variables and/or demographic variables, provide a significantly worse fit. Demographics do not fully capture the same information as attitudinal data. However, including demographics in addition to the attitudinal model provides a better fit indicated by L². The larger the value, the worse fits the model the data and the worse the observed relationships are described by the specific model. We identified four classes based on whether

respondents agree or disagree with the statement. As indicated in Table 3, about 41% of the respondents belong to Class 1, 23% to Class 2, about 18% to Class 3, and the remaining 17% to Class 4.

Table 3: Model summary, classification of group membership (N=715)

	Classification modal				
Probabilistic	Class 1 (41.03%)	Class 2 (23.66%)	Class 3 (18.18%)	Class 4 (17.13%)	Total
Class 1	260.76	16.38	8.81	7.54	293.49
Class 2	15.63	143.65	7.68	2.17	169.13
Class 3	6.59	4.09	117.68	1.60	129.96
Class 4	19.02	3.88	2.84	96.69	122.42
Total	302	168	137	108	715

Model summary

Full model (including sociodemographic variables as covariates)

L-squared (L2): 460.4315

(p-value = 1)

Log-likelihood (LL): -231.602 Classification errors: 0.1346

Restricted model (Excluding sociodemographic variables as covariates)

L-squared (L2): 538.5158

(p-value = 0.068)

Log-likelihood (LL): -407.094

Classification errors: 0.4998

Traditional model (Including sociodemographic variables as predictors and excluding attitudinal variables)

L-squared (L2): 753.857

(p-value = 0.0016)

Log-likelihood (LL):

-487.3451

Classification errors: 0.4333

Note: Classification modal indicates the highest membership probability, whereas the classification probabilistic indicates the probability to belong to alternative groups.

The results for the estimated model are presented in Table 4. R² indicates how well the model explains the dependent variable. The R² is similar to the explained variance in analysis of variance and to item communalities in factor analysis. However, the Wald statistic test associated with a significant p-value means that the indicator does discriminate among the clusters. Overall, the dimensions of sustainable behavior, sustainable mobility, and sustainable knowledge can distinguish the four classes. Except for the statement fair-trade purchase, all items are significant

predictors of the classes on a level of 1% rather than 5%. Concerning sustainable attitude, the items discriminate less significantly among the classes: the attitude item governmental contribution is a significant predictor on a level of 10% only.

If attitudinal groups are different, the claim statistic is expected to be significantly different across the four sustainability groups. The Wald statistic test is associated with a significant p-value support that the claims history differs among the groups. For example, the mean response on claims is lowest in Class 1 (mean = 0.10). The mean claim value in Class 2 is 0.11. Class 3 indicates a mean value of 0.18. Class 4 shows the highest mean value (0.68).

As expected, the response pattern differs among the four groups. The beta effect estimates below the column labeled "Class 1" suggest that Class 1 is influenced by sustainable behavior. For example, ecological purchase (beta = 8.68), shopping in ecostore/local market (obj.) (beta = 9.80), and donation (obj.) (beta = 22.67) have positive effects on this class. In terms of sustainable mobility, Class 1 indicates a positive effect of knowledge about public transport network (beta = 10.85), whereas verifiable use of public transport (hold travel card, beta = -16.17) and use of public transport (beta = -14.75) have negative influence. In terms of sustainable attitude, members of Class 1 favor media reports about climate change (beta = 27.01) and governmental contribution to environmental protection (beta = 27.01), but they do not feel individual responsibility (beta = -8.80). Knowledge of sustainable issues, in particular, erosion of ozone layer (beta = -14.11) is lacking. Class 1 is labeled the "attitude-oriented-class."

Members of Class 2 differ from the other classes by disapproving of sustainable behavior, e.g., engagement in social/environmental projects (obj.) (beta = -19.53) and donation (obj.) (beta = -21.64). Concerning sustainable mobility, the results indicate strong effects of verifiable mobility. Members of Class 2 are the only ones which hold travel card (obj.) (beta = 29.29) and use local public transport (obj.) (beta = 26.11). A look at knowledge about public transport network and sustainable travelling the effect is strongly negative, which indicates that sustainable mobility is not due to beliefs, but to convenience. Sustainable attitude and sustainable knowledge are not a differential

attributes. Members of Class 2 are the only ones who state knowledge about ecological foot-print (beta = 26.34). Class 2 is the "mobility-oriented-class".

Class 3 suggests a strong positive influence of verifiable behavior. Respondents are distinguished by sustainable purchase, indicated by a positive effect of fair-trade purchase (beta = 21.20) and shopping in ecostore/local market (obj.) (beta=32.14), although they reject the statement ecological purchase (beta = -63.01). Further, members of this class differ from other classes by donation (obj.) (beta = 30.97). In terms of sustainable mobility, Class 3 prefers sustainable travelling (beta = 24.28), although members of this class do not approve this by indicating knowledge about public transport net (beta = -5.61), hold travel card (obj.) (beta = -4.90), and use local public transport (obj.) (beta = -16.72). Class 3 is summarized as "behavioral-knowledge-class."

Members of Class 4 favor sustainable mobility confirmed by the predictors knowledge about public transport network (beta = 21.16) and sustainable travelling (beta = 39.12). Since they cannot approve this, the influence of verifiable predictors is negative, e.g., hold travel card (obj.) (beta = -13.86) and use local public transport (obj.) (beta = -14.11). The results of sustainable attitude are ambiguous. The statement abstain from something because of environment (beta = 20.33) is accepted, although persons do not agree with individual contribution to environmental protection (beta = -11.16). Sustainable knowledge exists concerning alternative fuel (beta = 9.46) and erosion of ozone layer (beta = 8.75), but no knowledge about ecological footprint (beta = -28.21). Class 4 is labeled the "mobility-rhetoric-class."

Table 4: Identification of different classes by means of sustainable indicators (N=715)

	Class1	Class2	Class3	Class4	Wald	p-value	Mean	Std.Dev.
\mathbb{R}^2	0.84	0.91	86.0	0.94				
Dependent								
Claim (mean response; 0=no claim; 1=claim)	0.10	0.21	0.18	89.0				
No	51.44	-27.18	2.19	32.67	16.37	0.00	20.67	31.89
Yes	-51.44	27.18	-2.19	-32.67			-20.67	31.89
Predictors								
Sustainable Behavior								
Ecological purchase	89.8	30.32	-63.01	12.97	19.68	0.00	96.6	0.02
Fair-trade purchase	0.78	-4.83	21.20	-3.54	7.81	0.10	7.78	0.05
Shopping in ecostore/local market (obj.)	9.80	-9.70	32.14	-14.40	18.44	0.00	18.43	0.00
Engagement in social/environmental projects (obj.)	0.67	-19.53	-20.01	11.97	11.76	0.02	11.31	0.01
Donation (obj.)	22.67	-21.64	30.97	-12.77	19.80	0.00	18.32	0.00
Sustainable Mobility								
Public transport network	10.85	-16.58	-5.61	21.16	16.83	0.00	16.59	0.00
Sustainable travelling	-9.30	-46.55	24.28	39.12	20.06	0.00	19.52	0.00
Hold travel card (obj.)	-16.17	29.29	-4.90	-13.86	11.83	0.02	5.85	0.12
Use local public transport (obj.)	-14.75	26.11	-16.72	-14.11	18.92	0.00	11.04	0.01
Sustainable attitude								
Media reports about climate change	27.01	-20.47	2.83	0.78	10.04	0.04	9.92	0.02
Governmental contribution to environment	16.88	-3.98	-7.99	-2.26	9.02	90.0	7.13	0.07
Abstain from sth. because of environment	-0.77	6.65	-11.91	20.33	11.42	0.02	10.26	0.02
Individual contribution to environmental protection	-8.80	1.08	14.86	-11.16	10.22	0.04	8.60	0.04
Sustainable knowledge								
Alternative fuel	4.22	-10.99	3.83	9.46	12.42	0.01	8.13	0.04
Erosion of ozone layer	-14.11	26.66	-79.94	8.75	19.55	0.00	18.78	0.00
Ecological footprint	-5.46	-44.45	26.34	-28.21	11.78	0.02	7.53	90.0

Part III: Sustainability and Insurance

Table 4 (Contitued)						
Intercept	2.19	-1.24	-2.27	1.32	2.10	0.55
Covariates						
Driving history						
-10,000 km	-0.78	1.25	89.0	-1.15	35.01	0.00
10 - 15,000 km	-0.30	0.20	0.79	-0.70		
15 - 20,000 km	2.34	-0.85	-2.94	1.45		
20 -25,000 km	-0.99	1.93	-0.07	-0.86		
25,000 + km	-0.27	-2.53	1.54	1.26		
Age						
- 30 years	0.27	-2.07	-0.29	2.09	36.79	0.00
31 - 40 years	-1.49	0.93	88.0	-0.32		
41 - 50 years	0.55	-2.29	-0.02	1.76		
51 - 60 years	-0.22	1.61	-2.96	1.58		
+ 60 years	06.0	1.82	2.39	-5.10		
Urbanity						
- 5,000 inhabitants	0.31	-0.46	-1.39	1.54	36.00	0.00
5,001 - 50,000 inhabitants	1.15	-0.29	-2.52	1.66		
50,001 - 150,000 inhabitants	-2.41	3.06	4.45	-5.10		
150,001 - 500,000 inhabitants	0.04	1.77	-2.02	0.21		
+ 500,000 inhabitants	0.91	-4.08	1.48	1.70		
Education						
High school	-0.99	-0.16	98.0	0.29	33.92	9.20E-0
Secondary school	-0.87	0.49	1.57	-1.19		
A-level	2.21	0.63	-4.02	1.18		
University	-0.36	96.0-	1.60	-0.28		
Income						
-1,000 €	-3.13	2.29	3.63	-2.79	33.46	0.00
1,001 − 2,000 €	0.65	1.88	-0.88	-1.65		
2,001 − 4,000 €	-0.40	1.02	1.73	-2.34		
4,001 − 6,000 €	3.01	2.23	-6.40	1.16		
6,001 − 8,000 €	2.43	-2.55	96.0-	1.08		
+8,000 €	-2.55	-4.87	2.89	4.54		
Gender						
Male	-0.43	-0.37	1.13	-0.33	10.99	0.01
Female	0.43	0.37	-1.13	0.33		

In addition, we include sociodemographic and socioeconomic attributes as covariate, and environmental attitudes as predictors. As indicated by the model test (see Table 4), the demographic variables do not contribute significantly more additional information. Nevertheless, the demographics are significant on a 0% level or 1% level for gender, respectively. Education appears as a highly significant covariate (9.20E-05). The results concerning the covariates are quite contrary and the adaptability demographic variables for marketing application appear ambiguous (for details see Table 4).

4. Summary

Discussion

Applying linear regression analysis, we identify the impact of sustainability on customers' security, insurance orientation, and claims history. The results indicate that sustainable antecedents have a significant impact on customers' attitude toward security and insurance. Sustainable attitude is a significant driver of customers' readiness to assume risk; sustainable knowledge drives customers' interest in individualized services and products.

By performing a LCA, it is possible to identify individuals who share a sustainability profile. For example, the sustainability indicators distinguish significantly among the segments and thus allow for a test of the model quality. The covariates allow for an estimation of segment attractiveness, such as profitability of customers in age and income. In summary, the results from LCA indicate that insurance customers can be classified into four distinct sustainability groups. The findings of LCA analysis support the limits of traditional attributes from demographics for determining customer behavior. While demographic variables fulfill statistical significance, they lack the qualitative explanatory power of the psychographic variables.

Future Research and Limitations

Marketing in the insurance industry can segment customers according to sustainable characteristics. Therefore, it is meaningful to replenish the traditional segmentation attributes such as gender and age, with sustainable attributes. The actuary must verify and integrate sustainable attributes into the premium calculation. With respect to the variables explored in this study that indicate verifiable sustainable behavior (e.g., prove actual sustainable behavior by showing temporary public transport card), it will be possible to consider sustainability, when predicting insurance losses. By controlling for the traditional attributes, psychographic variables might provide a more useful approach in segmenting insurance customers and give information distinct from standard actuarial variables.

There are limitations that must be taken into account when considering these findings. First, the customers' security orientation and claims history relies on individuals' self-report measures. While there might be methodological bias due to subjectivity, the sustainable profile needs to be verified based on objective claims history. Supporting these self-report measures with observational or behavioral measures would strengthen the findings. A second limitation is related to the sample. The objective of this study was to examine sustainable conscious attitude and behavior based on technical losses in automobile and household of insurance. Using a sample from another insurance sector, such as health insurance would extend the sustainability insurance profile. The third limitation concerns the scale, which consists of dichotomous format to avoid environmentally friendly answers. Using a dichotomous format lacks a normal distribution of the variables. Nevertheless, this study employs a dichotomous format. This is, because an adequate classification of customer is based on high variance of response patterns. The pretest shows that environmentally friendly response bias results in a low standard deviation. Employing LCA with items that indicate low variance, the classification results are not significant. Future research might refine segmentation variables, identify additional sustainable criteria, and extend the findings to other domains of sustainability (e.g. economically conscious attitude and behavior).

Managerial Implication

Managers and researchers must request the adaptability of the typical sustainable consumer profile (young, mid and high income, educated, urban woman) in terms of marketing application. The results suggest that psychographic measures in general and the dimensions, especially, knowledge, attitude, and behavior discriminate sustainable conscious customer profiles. Therefore, applying either psychographic variables or a mixed model (incorporating a range of demographic and psychographic variables) should be preferred to traditional demographic profiling methods.

Furthermore, the tested dimensions are applicable predictors of customers' security and insurance orientation. Hence, it provides useful underwriting information how they will react in creating losses, such as in automobile insurance and household insurance. Insurers should extend the traditional attributes and account for sustainable characteristics to predict customers' risk profile, which is vital in the field of product development and pricing. By managing sustainability segments effectively, insurers can establish products and services, which are consistent with customers' sustainable opinion and lifestyle. By predicting the influence of sustainable attitude on customers' behavior, insurance companies can adapt their customer relationship strategy and adjust products and services. For example, insurers can offer individualized products to customers who differ in sustainable knowledge. In the insurance industry, risk-taking behavior and security perception are elements that insurers must take into account when dealing with sustainable customers.

Part III: Sustainability and Insurance

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Appendix			
Dimension	Item		Scale
	Position A	Position B	
Knowledge	Alternative fuel		I = "am well informed" / otherwise 0
	Public transport		
	Erosion of ozone layer		
	Ecological footprint		
	Provision for one's old age		
Attitude	The climate change is exaggerated by media	About climate change it cannot be reported often enough	1=Position A (Non-Sustainable) / 2 = Position B (Sustainable)
	Humans can shape their environment according to their needs	Humans have to adapt to the environment	
	As long as other countries do not protect the environment, our contribution is useless.	All governmental support for environmental protection support to protect the environment	
	I am not about to do abstain because of environment	I abstain consciously in everyday life because to preserve the environment	
	Because an individual do not have influence on environment, it does not matter what I do	Every individual contribute with to a better environment by their behavior	
	It is the governmental task to ensure the retirement of each individual	Each individual is personal responsible for one's retirement	
	The government should treat all individuals he same and not families / children preferable	In particular the government should support families / children	
Behavioral intention	I choose products with the best ratio price-performance ratio	Choose the environmentally friendly alternative regardless of price.	1=Position A (Non-Sustainable) / 2 = Position B (Sustainable)
	Do not pay more for a product which is more expensive only because of fair-trade	I choose fair-trade products although they are more expensive	
	I travel to reach the destination as fast as possible	If possible I travel by train	
	At home I leave electrical equipment in standby sometimes	I switch of home appliance consequently	
	I do not look after seasonal product but buy those I feel like	I possible, I buy seasonal products from the region	
		10821	

Part III: Sustainability and Insurance

Annendix (continued)			
Dimension	Itom		Souls
Difficusion	Item		Scare
Verifiably behavior	BahnCard ³		I = "is true" / otherwise 0
	Ecological/regional market purchase		
	Use of public transport		
	Use of alternative energy in household		
	Pollution-free zone permission for car		
	Member of car sharing		
	Personal provision		
	Alternative fuel for car		
	Traffic offender		
	Engagement in environmental/social projects		
	Small car		
	Donation		
	Sustainable financial investment		
Insurance orientation	I organize my insurance issues by myself	I delegate my insurance issues to an insurance advisor	1= Position A (Contra Insurance/Security) /2 = Position B (Pro Insurance/Security)
	I do not want to be controlled from my insurance company	For premium discount of 20% I am willing to give information about my personal driving bin	
	I am rather a risk-seeking person	I am rather a cautious person	
	One should not trust insurance companies completely.	I trust my insurance company in most cases	
	I prefer a automobile insurance which is customized even though is can mean additional expenses	I prefer a common, standardized automobile insurance which covers he basics	
	In my free time I rather search for adventure and	In my free time I rather search for silence and	
	excitement	relaxation	
Claim history	Number of claims in the last five years in motor-insurance and household-insurance		0=no claim, 1 =1 claim, 2 = 2 claims, 3 =3 claims 4 =4 claims
	Amount of claims they in the last five years in motor- insurance and household-insurance		0= no claim, $1 = <500$, $2 = 501$ -1500, $3 = 1501$ -3000, $4 = >300$

³ BahnCards are for frequent travelers. Holders of BahnCard can save money, e.g., 25% using Bahncard 25, respectively a ticket is offered at half price holding Bahncard 50.

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PART IV: Customer Information Disclosure

Cross-Country Research on Customer Information Disclosure: The Role of Satisfaction, Trust, and Benefits⁴

1. Introduction

Companies that operate across national borders are challenged to establish a relationship management strategy that is suited to countries other than their own (Nakata and Sivakumar, 2001). This is particularly important for service companies, which are likely to operate in multiple national markets (Nijssen and van Herk, 2009; Ozdemir and Hewett, 2010; Sin et al., 2005). Customers' satisfaction and trust, in addition to perceived risks and benefits, are critical antecedents for successful relationship marketing (Ozdemir and Hewett, 2010; Palmatier et al., 2008; White, 2004). Therefore, an understanding of how evaluations of customer relationships differ between national markets is important (Laroch et al., 2004; Ozdemir and Hewett, 2010).

Empirical studies have found that companies' success in meeting their customers' needs, which results in satisfaction and trust as well as commitment, differs greatly across countries (Laroch et al., 2004; Nijssen and van Herk, 2009; Ozdemir and Hewett, 2010). For example, Japanese customers seem to be more demanding than customers in the US or Canada, which results in more conservative service evaluation. It is not enough simply to meet consumer expectations. According to Verhage and colleagues (1990), "global marketers need to be very cautious in accepting theories or techniques that are proven to be successful in their home markets." The influence of culture on relationship marketing has been explored empirically from the company and customer perspectives. Sin and colleagues (2005) provide evidence that a firm's relationship marketing strategy differs across cultures. In addition, there is considerable evidence that the customers' perception of their relationship to the service

⁴ This paper has been written conjointly with Peter Maas. We are grateful to Dr. Gudrun Hoermann and Tobias Schlager for their valuable suggestions and comments.

provider differs across cultures (Brady et al., 2005; De Wulf, Odekerken-Schröder and Iacobucci, 2001; Nijssen and van, Herk 2009; Ozedmir and Hewett, 2010; Zhang, Beatty, and Walsh, 2008). This is, because perceived service quality, satisfaction, trust, and behavioral intentions differ across cultures (Doney, Cannon, and Mullen, 1998; Laroch et al., 2004; Nijssen and van Herk, 2009; Ozdemir and Hewett, 2010). This finding emphasizes the importance for companies to understand country-specific relationship patterns and to adapt their relationship strategies accordingly.

Relationship quality has become increasingly important in the field of marketing research (De Wulf et al., 2001; Grönroos, 2004; Harker, 1999; Palmatier et al., 2009; Palmatier, 2008; Verhoef et al., 2002) and has become a topic of international marketing studies (Nijssen and van Herk, 2009; Ozdemir and Hewett, 2010). Companies value a strong customer relationship, because cooperative, adaptive, and interactive customer behavior increases customer retention, and thus improves financial performance (Gupta, Lehmann, and Stuart, 2004; Kumar and Shah, 2009; Morgan and Hunt, 1994; Palmatier, 2008; Verhoef et al., 2002). In addition, interactions between a firm and consumers facilitate active co-creation experiences (Prahalad and Ramaswamy, 2004), and although transparency of information reduces the risk of unsatisfactory service, it can lead to services that fit the needs of specific customers. Studies indicate that customers' cooperative and adaptive behavior increases customers' value for the company (Anderson, Fornell, and Mazvancheryl, 2004; De Wulf et al., 2001; Crosby, Evans, and Cowles, 1990; Palmatier et al., 2009; Palmatier, 2008). Moreover, cooperative customers are more likely to disclose proprietary information (Palmatier, 2008) and allow marketers to engage in information-based customer relations (Culnan and Bies, 2003; White, 2004).

In the information-driven global economy, customers' motivations for disclosing personal information are very important for companies in general (e.g. co-production of value and customization of products and services, product and services innovation), and especially to relationship-seeking marketers. This is, because marketers acquire and update knowledge about customers' preferences to enhance customer service, and to explore opportunities for new products or services (White, 2004; Prahalad and

Ramaswamy, 2004). Successful information-based relationship marketing results in the identification of valuable customers, the creation of tailored offerings, and greater customer retention (Deighton, 1996). Such strategies improve the quality of the relationship.

Despite the growing interest in the field of relationship marketing for customers' information disclosure, the literature still lacks theoretically developed and empirically tested frameworks that apply this issue to a global marketplace (Malhotra, Kim, and Agarwal, 2004). It is common sense that the customers' perspective and his or her attitude toward the relationship are essential antecedents for customer behavioral intentions, e.g., the disclosure of personal information (Grönroos, 2004; Palmatier et al., 2009; Palmatier, 2008).

Therefore, what do international operating companies have to consider when they attempt to deepen relationships with their customers by encouraging the disclosure of personal information? Studies have investigated customer experiencebased factors such as trust and satisfaction, which underlie customers' motivation and reluctance to self-disclose (e.g., share private information about their shopping motives, turnover, and frequencies) to the company with that they are doing business. Studies refer to social exchange theory (Emerson, 1981) and cite customers' perception of benefits and risks as key factors (Culnan and Bies, 2003; White, 2004). Further, empirical studies on self-disclosure propose customers' perception of benefits and risks as key factors (Culnan and Bies, 2003; White, 2004). However, international marketing studies show that customer satisfaction and trust, as well as benefits and risk, vary greatly across countries (Furrer, Liu, and Sudharshan, 2000; La Roche et al., 2004; Nijssen and van Herk, 2009; Ozdemir and Hewett, 2010; Soares, Farhangmehr, and Shoham, 2007). Moreover, countries have different laws about privacy, so customers' reaction to disclosure will depend on national laws and regulations and on the industry sector (Malhotra, Kim, and Agarwal, 2004). Unlike European countries with strict privacy laws, the United States have privacy industry-specific privacy regulations. Hence, an understanding of country-specific privacy regulation allows for

a better grasp of customers' perception of the benefits and risks of information disclosure

Recent studies by Ozdemir and Hewett (2010) and Nijssen and van Herk (2009) provide some evidence of the influence of national culture on the link among relationship characteristics, such as trust, satisfaction, and behavioral intention (e.g., word of mouth and loyalty). So far, no empirical research has considered either the culturally based effects of satisfaction and trust nor the benefits and risk as drivers of customers' decision to disclose information. As mentioned above, acquiring and updating information about customers' preferences and behavior is essential for globally acting information-driven companies. Therefore, the purpose of this study is to unveil what makes customers from different cultures willing or reluctant to disclose personal information to companies. Adopting an exchange-based framework for an information-based relationship, which encompasses customers' experience and individual value and belief systems, can deepen the understanding of customers' attitude to the disclosure of personal information to relationship-seeking marketers.

By exploring customers' disclosure behavior, we contribute to the literature on cross-cultural relationship marketing. We examine established elements such as customer satisfaction and trust, and the role of uncertainty reduction avoidance and individualism, which represent important exchange elements with influence on customers' disclosure willingness. Finally, we make a practical contribution to research on international relationship marketing and customer behavior by examining the key drivers of customers' willingness to disclose personal information across four countries from different continents and cultural regions: Brazil, Germany, Japan, and the US.

In the following section, we discuss the framework and theoretical background of cross-cultural information-based relationships. We refer to the literature on information disclosure, social exchange theory, and outline the influence of culturally based value and beliefs systems. Based on these remarks, the framework is developed and four hypotheses are proposed and empirically tested. We conclude with a

discussion of the findings and implications of the research, including its theoretical and practical implications.

2. Cross-Cultural Framework on Information Disclosure

Information-Based Relationship Quality

This study builds on research in relationship marketing and uses the concept of relationship quality to operationalize the framework of information disclosure. We adopt Harker's (1999, p. 16) formulation: "An organization engaged in proactively creating, developing, and maintaining committed, interactive, and profitable exchanges with selected customers over time is engaged in relationship marketing."

The concept of relationship quality and its antecedents has focused on relationship marketing. Maintaining and fostering a strong relationship with customers is of value for companies, because it positively influences customers' willingness to disclose private information, accept product changes, and test new products (Palmatier et al., 2009; Palmatier, 2008). The concept of relationship quality relies on previous research, which operationalized relationship quality as relational ties that influence or restrain a partner's action, with effects on customers' collaborative behavior (Palmatier, 2009; Palmatier, 2008). Much of the research on relationship quality conceptualizes relational constructs, such as satisfaction, trust, and affective and calculative commitment on customers' cooperative and adaptive behavior (De Wulf et al., 2001; Garbarino and Johnson, 1999; Morgan and Hunt, 1994; Palmatier et al., 2009; Palmatier, 2008; Verhoef, Franses, and Hoekstra, 2002). Researchers have studied the influences of individual dimensions on relationship quality by exploring the influence of culture. Griffith, Meyers, and Harvey (2006) show that in intercultural interorganizational relationships, Japanese firms perceive a stronger association between trust and commitment than do US firms. Other studies show that cultural values such as collectivism have a significant moderating role on the relationship between quality and behavioral intentions (Ozdemir and Hewett, 2010). Nijssen and van Herk (2009) show that satisfaction, trust, and value as relational antecedents are affected by ethnocentrism and by consumers' beliefs about the industry, which influence cross-border relationships and their dynamics.

As indicated above, drivers for customers' collaborative behavior depend on their cultural roots. This suggests that behavioral patterns concerning customers' disclosure behavior differs across countries. The improvement in information technology in the globalized economy allows companies to meet customers' needs by offering highly personalized products and services. In general, collecting information about their customers allows marketers to deepen the relationships through the co-creation of value, highly customized and improved products and services, and allows companies to explore opportunities for new product or service introductions (Culan and Bies, 2003; White, 2004). Today, companies use sophisticated data mining to analyze transaction data that provide the basis for individualized marketing programs (Winer, 2001). This use of information benefits both customers and companies (Winer, 2001). Customers enjoy greater convenience, are able to co-create, and gain access to personalized offers and other benefits such as loyalty programs. Companies benefit from greater customer loyalty, reduced costs, and more knowledge about their customers. Identifying their customers' personal characteristics allows companies to respond to and meet their customers' needs. For example, by segmenting customers with similar homogeneous characteristics, companies can adapt their customer relationship strategy and offer the appropriate products and services. For insurance providers, customers' private information yields useful underwriting information and allows insurers to predict how customers will create losses.

At the same time, advances in information collection raise privacy concerns because of the potential for surveillance (Culnan and Armstrong, 1999; Culan and Bies, 2003). There is an asymmetry between a customer and a supplier concerning private information as the supplier only has limited access to customer personal information. Resolving this asymmetry by acquiring and updating knowledge about customers is not easy. Customers actively avoid disclosure and it is far less certain why they would accept relationship-building attempts that build on disclosing personal

information. Empirical research indicates that customers seem to be conducting a "cost-benefit" analysis (Culnan and Bies, 2003; White, 2004) and exchange personal information as long as they perceive adequate benefits in return. What customers perceive as benefit (e.g. individualized services) influences the likelihood of disclosure (Culnan and Bies, 2003; White, 2004). However, the opposite is the case with perceived risk. Hence, the risks of disclosure far outweigh its benefits and customers are consequently less willing to reveal information (Culnan and Bies, 2003; White, 2004). This holds especially true in the insurance industry. Insurance providers rely on personal information about their customers to calculate the premiums according to their risk profile; nevertheless customers try to avoid negative information about risk.

For most companies, and especially for relationship-seeking marketers, customers' private information is a resource that is difficult to obtain and that customers do not give away frivolously, but one that offers strategic advantages to improve relationship quality. For the framework on information-based relationship quality, we consider customers' private information as a resource that provides benefits to the company. Applying social exchange theory (Emerson, 1981) to personal disclosure allows for the investigation of the profit and loss calculation that a customer makes when releasing private information to a company.

Empirical research has revealed that customers perform a risk-benefit analysis and only disclose to marketers if the benefits of personal information to a supplier outweigh the losses. The levels of satisfaction and trust, based on experience, reflect the quality of the relationship, and accordingly determine customers' likelihood of disclosure. Moreover, customers' value and beliefs system influence the perception of risk and benefits, and therefore mediates the relationship between customer experience (which results in satisfaction and trust) and disclosure. Therefore, if the perceived benefit of risk reduction and customization is high (or low) it may compensate for a lack of satisfaction and trust and increase (or decrease) customers' willingness to disclose personal information. Including uncertainty avoidance and individualism, which represent cultural values, as mediators allows us to support the claim that the differences in information disclosure across countries are due to cultural values. We

discuss the antecedents, including satisfaction and trust, in addition to the influence of culture on customers' willingness to disclose personal information in the following sections.

Satisfaction and Trust as Antecedents for Information Disclosure

According to Anderson et al. (1994) "satisfaction is an overall evaluation based on the total purchases and consumption experiences with a good or service over time" (p. 54). Customers' first-hand experience with the company or the industry affects their satisfaction and trust, which results in behavioral intentions. Empirical research highlights that deep customer relationships are characterized by high levels of satisfaction and trust (Bolton and Lemon, 1999; Verhoef, Franses, and Hoekstra, 2002; White, 2004; Zeithaml, Berry, and Parasuraman, 1996). For these reasons, customer satisfaction and trust are the key elements of relationship quality in general and of information-based relationship in particular.

Satisfied customers show positive attitudes towards the company and therefore are more likely to behave in a cooperative and adaptive way. Many studies support the positive effect of satisfaction on customer retention, purchase intention, usage of services, and information disclosure (e.g., De Wulf et al., 2001; Garbarino and Johnson, 1999; Morgan and Hunt, 1994; Palmatier et al., 2009; Palmatier, 2008; Verhoef, Franses, and Hoekstra, 2002).

Moreover, trust is an important facilitator of successful, long-term relationships (Garbarino and Johnson, 1999; Morgan and Hunt, 1994). Moorman, Deshpande, and Zaltman (1993) and Morgan and Hunt (1994) highlight the importance of confidence and reliability in the conception of trust. Several studies have confirmed the link among trust, loyalty, and relationship commitment (Garbarino and Johnson, 1999; Morgan and Hunt, 1994).

According to Garbarino and Johnson (1999) there is a difference between satisfaction and trust in the customer-supplier relationship. They found that for low-relational customers, satisfaction is the primary construct in customers' attitude

towards the company and future intentions, whereas for high-relational customers, trust influences attitudes and future intentions. Finally, research on consumer privacy emphasizes the role of trust in customers' willingness to disclose (Culnan and Bies, 2003; Malhotra, Kim, and Agarwal, 2004; White, 2004). Accordingly, Culnan and Bies (2003) state that trust reflects customers' expected risks and behavioral intention to disclose; this has been empirically proven by Malhotra, Kim, and Agarwal (2004).

Given that customers' prior experience is expected to affect information disclosure, we propose the following two hypotheses.

Hypothesis 1:

A high level of customer satisfaction increase customers' motivation for information disclosure

Hypothesis 2:

A high level of trust increase customers' motivation for information disclosure.

Cultural Consequences on Individual Values and Belief Systems

Culture exerts the broadest influence on human behavior, and is thus relevant in research on consumer behavior. Cultural influences on customer behavior and marketing practices have been of increasing interest in the last few years as researchers find different ways to operationalize culture (for an overview, see Soares, Farhangmehr, and Shoham, 2007).

According to Steenkamp (2001), there is empirical support for the assertion that differences among countries allow nationality to be taken as a proxy for culture. Hofstede (2001) argues in a similar way, as nations "are the source of considerable amount of common mental programming of their citizens" (Hofstede, 1991, p. 12). Empirical and theoretical studies operationalize culture in terms of ethnological descriptions or regional affiliations. Other approaches measure the values of subjects in a sample, and infer cultural characteristics based on the aggregation of these values (Hofstede, 1991; 2001; Lenartowicz and Roth, 1999). Studies applying the last

approach allow operationalize cultural values and beliefs as predictors to explain different behavioral pattern across countries (for an overview, see Soares, Farhangmehr, and Shoham, 2007). In line with these cultural approaches, this study defines culture based on nationality, which identifies individuals by their place of birth

Schwartz's universal structure of values identifies distinct psychological values and proposes a theory for the universal structure of values (Schwartz, 1999). Nisbett et al. (2001) distinguish analytic (Western) from holistic (Asian) cultural systems of thought, which still have an impact for example on practices, debate and rhetoric, law and contracts, and religion.

Hofstede's (2001) five-dimensional cultural framework is the most popular in cross-country research marketing and management (Soares, Farhangmehr, and Shoham, 2007; Steenkamp, 2001). The first dimension, individualism-collectivism, describes the relationships individuals have in each culture. In individualistic societies, individuals look after themselves and their immediate family only, whereas in collectivistic cultures, individuals belong to groups that look after them in exchange for loyalty. The second, *Uncertainty avoidance*, is the extent to which people feel threatened by uncertainty and ambiguity and try to avoid these situations. This dimension deals with the need for well-defined rules for prescribed behavior. The third dimension, power distance, reflects the consequences of power inequality and authority relations in society. It influences hierarchy and dependence relationships in the family and organizational contexts. Masculinity-femininity, the fourth dimension, defines dominant values in masculine countries by achievement and success and feminine countries are characterized by caring for others and quality of life. The fifth and final dimension, long-term orientation, emphasizes the fostering of virtues oriented towards future rewards, especially the virtues of perseverance and thrift.

Nevertheless, there are arguments against the use of dimensions to capture the multidimensional culture construct. For example, dimensions fail to capture all relevant aspects of culture (Briley et al., 2000). Au (1999) found that intra-cultural variation on certain variables was greater than inter-cultural variation. Another

shortcoming is that the empirical work that led to detection of the dimensions was conducted between 1967 and 1973. Responding to claims that the findings might be outdated, Hofstede contends that national cultural value systems are quite stable over time (Hofstede and Usunier, 1999). However, it makes sense that the advantages outweigh the disadvantages; the identification of reliable cultural dimensions helps to develop a framework that integrates diverse attitudinal and behavioral empirical phenomena and provides a basis for the formulation of hypotheses.

Subsequent researchers have modified Hofstede's cultural value dimensions and linked them to economic dynamics and institutional stability (e.g., Tang and Koveos, 2008). As a whole, research has confirmed the relevance of the five cultural dimensions for international marketing. Hence, power distance predicts advertising appeals (Albers-Miller and Gelb, 1996), information exchange behavior (Dawar, Parker, and Price, 1996), innovativeness (Yaveroglu and Donthu, 2002), and service performance (Birgelen et al., 2002). Masculinity influences innovation (van Everdingen and Waarts, 2003), and service performance (Birgelen et al., 2002). Finally, long-term orientation influences innovativeness (van Everdingen and Waarts, 2003).

In this studywe will focus on two of Hofstede's dimensions uncertainty avoidance and individualism-collectivism. Both of these dimensions have been proven to predict customers' behavioral intention (e.g., Ozdemir and Hewett, 2010; Liu, Furrer, and Sudharshan, 2001). Moreover, these dimensions represent important exchange elements in risk-benefit analysis, which mediates the relation between customers' firsthand experience and customers' self-disclosure. Therefore, we outline literature that empirically explores the influence of uncertainty avoidance and individualism on consumer behavior.

Uncertainty Avoidance. In countries with high levels of uncertainty avoidance, there is a stronger need for predictability, explicit rules, structured situations, and the establishment of competence. Researchers emphasize the need to explore the influence of uncertainty avoidance in companies' relationship-seeking (Ozdemir and Hewett, 2010). They suggest that customers perceive less risk in the presence of trust and

commitment. Accordingly, in cultures with a high level of uncertainty avoidance, the building of relationships and the establishment of trust is more important than and an antecedent of business (Laroch et al., 2004), which is supported by findings of Garbarino and Johnson (1999). The opposite is true in countries with a low level of uncertainty avoidance. In summary, prior experience, satisfaction, and trust are indispensable antecedents to a deep relationship. Reimann, Lünemann, and Chase (2008) have revealed that customers from cultures with a high degree of uncertainty avoidance were more dissatisfied than were low-uncertainty customers when their service expectations were not met. These results are in line with Laroche et al. (2004), who suggest that customers with a generally high level of uncertainty avoidance, such as Japanese customers, indicated a more conservative satisfaction evaluation than did customers from countries with a low uncertainty level like the USA or Canada. However, customers with a high level of uncertainty avoidance are more loyal. Liu, Furrer, and Sudharshan (2001) found that customers with a high level of uncertainty avoidance, who have a positive service experience tend to give positive word of mouth; they are unlikely to change providers, give negative word of mouth, or complain even if they received poor service.

People from cultures with a high level of uncertainty avoidance tend keep their distance from risk and unknown people and situations. Consequently, these people are presumably less trustful and less forthcoming with foreigners. In this study, we conceptualize uncertainty avoidance as the benefit dimension "uncertainty reduction," which refers to customers' preference for competent service employees, transparency, honesty and trustworthiness, and for comprehensive protection against risk. This concept of uncertainty refers to product and service features that constitute confidence in service and products. However, this operationalization of uncertainty is similar to Hofstede's cultural dimension, but it refers to concrete benefits rather than to latent cultural values. Therefore, marketing practitioners can factor certainty into product and service offerings because customers include these when considering the risks and benefits of disclosure. If uncertainty reduction is provided in exchange for information disclosure, prior experience might be outweighed and the likelihood for disclosure will increase. Therefore, it is expected that customers' motivation for disclosure does not

only depend on prior satisfaction and trust, but is also mediated by the evaluated benefit of uncertainty reduction.

Based on these arguments, we hypothesize:

Hypothesis 3:

Uncertainty reduction is a mediator in the relationship between customer satisfaction and trust and is a driver for customer motivation to disclose personal information.

Individualism. According to Hofstede (2001), in an individualistic society, self-concept, autonomy, and personal achievement are important. The individual is independent and there is an emphasis on individual decision making and personal well-being. Empirical studies indicate that customers in countries with a high level of individualism are more receptive to new products and participation in technology-based service delivery process (Birgelen et al., 2002; van Everdingen and Waarts, 2003, Yaveroglu Donthu, 2002, Yeniyurt and Townsend, 2003). These findings suggest that companies with new products and technologies should target countries with a high level of individualism.

The empirical results suggest that customers in individualistic cultures seem to be more open-minded. Nevertheless, their willingness to disclose personal information would depend also in their prior experience with the benefits, that are provided in exchange. In an individualistic society, we expect people to favor tailor-made products and services, and customized assistance. We would also expect people in these cultures to value individualized products and services; the risk of self-disclosure should decrease. In our study, we operationalize individualism not as the aggregation of individualistic values, but as insurance offerings that are customized to individual needs (e.g., support in preventing accidents and tailor-made products). The operationalization of individualism is not identical to Hofstede's concept of individualistic cultural values. Nevertheless, they refer to specific offerings that provide insights into the risk-benefit analysis that customers perform when deciding whether or not to disclose. This operationalization of individualized product and services does not generally allow for a comparison with Hofstede's mean values of

individualism across countries. Moreover, our approach gives practical advice to relationship marketers concerning the impact of individualized product and service features on customer disclosure behavior.

Therefore, we hypothesize:

Hypothesis 4:

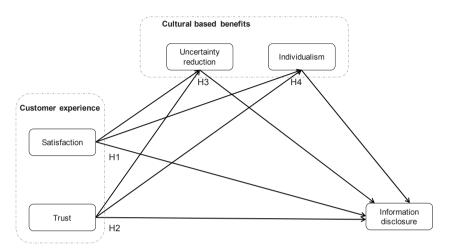
Individualism is a mediator in the relationship between customer satisfaction and trust a driver for customer motivation to disclose personal information.

Model of Cross-Cultural Information-Based Relationship Quality

We expect customers' perception of a close relationship, in which a high level of satisfaction and trust has been established, to increase the likelihood of information disclosure (H1 and H2). In addition, we expect individualism and uncertainty reduction to have a mediating role in the experience-disclosure relationship. More specifically, we expect the perceived benefit of individualized products and services to compensate for less satisfaction and trust (H3) as a driver of information-disclosure. Similarly, we expect the perceived benefit of uncertainty reduction to offset a lack of satisfaction and trust (H4) as a driver of information disclosure.

Figure 1: Cross-cultural model on information-based relationship quality





3. Empirical Analysis

We tested the proposed information-disclosure model across four countries and focus on customer experience and cultural values as antecedents of customer motivation for disclosure. First, this study tests the cross-cultural invariance of the information-disclosure model, which encompasses four attitudinal constructs (satisfaction, trust, uncertainty reduction, and individualism) and one behavior construct (information disclosure). In addition, we identify culturally based differences in the structural relationship between customer attitude and customer disclosure across the four countries. The scale ranged from 1 ("very little benefit") to 6 ("very high benefit") for the items on individualization of products and services as well as for the items on uncertainty reduction, and from 1 ("totally disagree") to 6 ("totally agree") for satisfaction items, trust and information disclosure items.

Sample and Questionnaires

Japan, Germany, the USA, and Brazil were chosen because these countries reflect distinct cultural regions and because they provide a range of differences regarding uncertainty avoidance and individualism.

Data was collected from a self-administered online survey of approximately 400 respondents from each country. The final dataset consisted of 404 Japanese respondents, 381 German respondents, 447 respondents from the USA, and 422 respondents from Brazil. Surveys were received from 1,654 respondents. The members of the Japanese sample were 45 years old on average, close to average age of the country's adult population: 42 years. The percentage of females (50.2%) was also similar to that of the general population (52.5%). The average age of the German respondents was 48 years old on average, higher than the average adult, who was 43 years old. The percentage of females (50.7 %) was close to that of the general population (51.7%). The US sample was 42 years old on average, again older than the average American adult: 36.5 years. The percentage of females (51.7%) was identical to that of the general population (51.7%). The members of the Brazilian sample were 40 years old on average. The percentage of females (47.9%) was lower than that of the general population (51.2%). The strong bias concerning the age of the participants is because the online sample was selected based on a representative distribution of age between 18 years and older and 60 years and older, as these groups are most likely to have insurance. The questionnaire was developed in German and then translated into English, Portuguese, and Japanese by a professional translator. A bilingual employee from the company operating in the country was recruited to ensure that all idioms and colloquial expressions were used correctly.

Participants answered questions on (1) their experience with insurance, (2) their attitude towards uncertainty reduction and individualization of products and services, and (3) their willingness to disclose private information.

Requirement on Cross-Cultural Measurements

The aim of this cross-cultural study is twofold. First, it assesses cross-country invariance on the relationship quality model by confirmatory factor analysis (CFA). Second, we test for cross-country relationship patterns between the information disclosure constructs by using the Structural Equation Model (SEM), taking trust and satisfaction as independent variables, uncertainty reduction and individualism as mediators, and information disclosure as dependent variable, using Kenn and Baron's (1986) test of mediation. To assess the cross-country invariance of the five constructs, we followed the steps that Steenkamp and Baumgartner (1998) suggested. Configural invariance must be established first, and then metric invariance (factor loadings) and scalar (means and item intercepts) invariance must be tested. The configural invariance approach tests, if the simple structure of the model is invariant across the tested countries. Metric invariance explores if the people in different countries respond to the items in the same by constraining the factor loadings. Scalar invariance tests the covariation of the items in different countries. Applying a cross-country invariance test on the structural relationship patterns, full or partial metric invariance and invariance of factor variance have to be satisfied. Scalar invariance is not required, because no absolute comparisons of scale scores are conducted.

In all the subsequent analyses, practical and statistical considerations guided the model fitting. Given the known sample-size dependency of the X^2 statistics, the statistical indexes of choice for assessing model fit were the comparative fit index (CFI) and X^2 /degrees of freedom. A ratio of X^2 to degrees of freedom that ranges from 1.00 to 5.00 and a CFI value greater than .90 both indicate an acceptable fit to the data (Bentler, 1995).

Invariance Test of the Five Constructs

Configural Invariance. The hypothesized model for each country showed a satisfactory fit of the data to the model: For the German sample, CFI = .949 ($X^2/75 = 2.053$); for the US sample, CFI = .955($X^2/75 = 2.023$); and for the Japanese sample, CFI = .929 ($X^2/75 = 2.407$); and for the Brazilian sample, CFI = .965 ($X^2/75 = 1.778$).

A test of configural invariance yielded a good fit: $X^2/292 = 1.996$ and CFI = .955, which support that the same factor pattern across Germany, the USA, Japan, and Brazil and that all factor loadings are significant. Details of the configural model across the four countries, including fit indices and factor loadings (including X^2 , DF; X^2/DF ; CFI; RMSEA, and p-close value) are presented in Table 1. All factor loadings were close to or above the recommended level of 0.7 (except for one item on individualism) and were highly significant in all countries.

Moreover, the mean values and intercept for the five constructs are presented, which reveal that the level of customer satisfaction and trust, as well as uncertainty reduction and individualism, and information disclosure vary across the four countries (Table 1). However, for the Japanese sample the lowest mean values and intercepts across the five constructs are found, which can be explained by Laroch's (2004) conclusion that Japanese customers are more conservative in service evaluation. Moreover, as customers' first-hand experiences is supposed to be the basis for building trust, the level of trust is also found to be low for the Japanese sample. Accordingly, the value of uncertainty reduction, individualism, and information disclosure is low for the Japanese sample.

Metric Invariance. Because of differences in the interpretation of content of particular items, item measurements may not be equivalent across cultures. Based on the final model for each country, we tested for metric invariance by constraining all eight factor loadings to be equal across groups, and then we compared the model in a simultaneous analysis of the data. We based judgment on two criteria: (1) goodness-of-fit of the constrained model, and (2) probability level of the equality constraints, as determined by the Modification Indices (MI) test. As stated earlier, the results of the configural invariance model achieve acceptable fit indices. However, we found the full metric invariance model to be significantly worse than it was in the configural invariance model. In particular, four constraints were untenable across the Brazilian sample (U3, U4, S1, S3), and four constraints were untenable across the Japanese sample (U3, U4, I2, S1). After relaxing these constraints on the regression weights, we conducted a second test of invariant measurements produced a satisfactory

measurement model that was partially metric invariant across the four countries. The results yielded $X^2/310 = 1.942$ and CFI = .954. The X^2 difference between this model and the configural model was 19.304, with 18 degrees of freedom (p > .05), which indicates that the fit of this model is not significantly worse than that of the configural model. Therefore, partial metric invariance is supported (details for the comparison of CFA are presented in Table 2).

Table 1: Measurement weights across the four countries (group comparison baseline model)

Constructs		Latent means (SE), C.R.	Latent means (SE), C.R. and measurement weights		
		Brazil	Germany	Japan	USA
Satisfaction		4.22 (0.07) 57.09	4.59 (0.07) 65.91	3.59 (0.05) 66.00	4.64 (0.06) 76.74
S1	My insurance: Easy claims handling	0.744	0.753	0.803	0.775
S2	Overall satisfaction with service of my	0 012	3000	982 0	0.03
	Insurance agent cold useful insurance	0.010	0.70	0.700	0.00
S3	coverage	0.707	0.644	0.788	0.717
$^{ m S4}^{ m f}$	Present insurance coverage > enough flexibility	0.817	0.829	0.796	0.797
S5	My insurance is more cost-effective than other insurances	0.681	0.679	0.716	0.668
Trust		3.38 (0.09) 39.93	3.07 (0.08) 38.94	2.96 (0.06) 48.23	3.22 (0.08) 39.82
Uncertainty reduction		4.96 (0.07) 66.97	5.00 (0.07) 70.63	4.64 (0.06) 74.72	5.10 (0.06) 89.12
Ulf	Competent / well trained agents	0.819	0.818	0.753	0.732
U2	Transparent and clear documentation	0.858	0.844	0.799	0.732
U3	Honesty and trustworthiness	0.858	0.828	0.771	0.732
U4	Comprehensive insurance protection for all risks	0.821	0.704	0.693	0.732
Individualism		5.03 (0.08) 67.30	3.93 (0.08) 47.57	3.88 (0.06) 65.73	4.25 (0.07) 59.99
11^{f}	Support in preventing accidents	0.703	0.674	0.772	0.68
12	Tailor-made products	0.449	0.468	0.544	0.401
Disclose information		4.77 (0.09) 54.79	3.79 (0.10) 37.29	3.51 (0.07) 51.62	4.40 (0.08) 57.80
$D1^{f}$	Submit data for lower premiums	0.88	0.827	0.839	0.835
D2	Submit data for additional services	0.877	0.924	0.886	0.867
Model fit	$X^2 = 582.84$; DF = 292; X^2 /DF = 1.996; CFI = .955; RMSEA = 0.031; p-close value = .	; CFI = .955; RMSEA = 0.	031; p-close value = 1		

Notes: * All factor loadings were significant at p < 0.001. [†] A parameter fixed to 1 for purposes of statistical identification

Table 2: Comparisons of CFA and SEM across the four countries

CEA	X^2	DE	X^2/DF	CEL	DMCEA
CFA	X	DF	X /DF	CFI	RMSEA
Unconstrained	582.84	292	1.996	0.955	0.031
Configural invariance	631.832	319	1.981	0.951	0.031
Metric invariance	875.175	343	2.552	0.917	0.038
Metric invariance (partial)	602.144*	310	1.942	0.954	0.03
Scalar invariance (partial)	617.139*	315	1.959	0.953	0.03
Equation 1					
Configural invariance	504.177	208	2.424	0.944	0.037
Metric invariance	590.356	232	2.545	0.932	0.038
Invariance of factor variance	522.855	211	2.478	0.941	0.038
Metric invariance (partial)	528.376*	225	2.348	0.943	0.036
Equation 2					
Configural invariance	185.96	80	2.325	0.971	0.035
Metric invariance	203.48	95	2.142	0.97	0.033
Invariance of factor variance	199.092	83	2.399	0.968	0.036
Metric invariance (partial)	196.299*	93	2.111	0.972	0.033
Equation 3					
Configural invariance	836.428	316	2.647	0.919	0.04
Metric invariance	941.249	343	2.744	0.907	0.041
Invariance of factor variance	855.19	319	2.681	0.916	0.04
Metric invariance (partial)	826.764 *	314	2.633	0.92	0.039

Notes: *X² Difference test support that the model is not significantly worse than the configural invariance model (p<0.05).

Scalar Invariance. We tested the invariance of intercepts by concomitantly constraining the intercepts of all invariant item measurements across groups. The results from this run yielded $X^2/=2.552$ and CFI = .917. Two intercepts showed clearly demarcated high MI values for the Brazilian sample (U3, S1) and one incept for Japanese and US sample (3F). After relaxing the constraints of intercepts, we obtained a model that yielded CFI = .953 and $X^2/315 = 1.953$. The change in X^2 ($X^2/23 = 34.299$, p > .10) indicated that the model did not significantly differ from the configural model, in support of partial scalar invariance. Thus, our assumption of instrumental invariance for service quality and customer satisfaction across the four country samples is partially supported.

Invariance Test of the Cross-Country Relationships

To test for mediation, Baron and Kenny (1986) recommend estimating three regression equations: (1) independent variable → mediator; (2) independent variable → dependent variable; (3) mediator and independent variable → dependent variable. We test and estimate separate coefficients for each equation. A test of the linkage of the mediational model must fulfill the following conditions: (1) In the first equation, the independent variable must affect the mediator; (2), the independent variable must affect the dependent variable in the second equation; (3) the mediator must affect the dependent variable in the third equation. Finally, the effect of the independent variable on the dependent variable must be less in the third equation than in the second.

In the following we first test the cross-country relationship by employing configural invariance, metric invariance, and invariance of factor variance for all three equations using SEM. As the three equations fulfill the requirement of cross-country invariance, the coefficient can be analyzed to estimate the effect of the linkages of the meditational model, based on the metric invariance models.

Configural Invariance. A test of configural invariance yielded a good fit across the three equations for the meditational model: $X^2/208 = 2.424$ and CFI = .944 for equation 1, $X^2/80 = 2.325$ and CFI = .971 for equation 2, $X^2/316 = 2.647$ and CFI = .919 for equation 3, which supports the same pattern of experience and value across Germany, the USA, Japan, and Brazil.

Metric Invariance. We tested for metric invariance for the three equations across the four countries. Again, we based judgment of replicability goodness-of-fit of the constrained model and MIs. Overall, the result of this analysis revealed that the final partial metric invariance models are highly acceptable for all three equations. CFI = $.943 (X^2/225=2.348)$ for equation 1; CFI = $.972 (X^2/93=2.348)$ for equation 2; CFI = $.918 (X^2/334=2.564)$ for equation 3. Details for metric invariance for the three equations are presented in Table 2. The details of relaxing constraints for the three metric invariance models are outlined below.

al relationships	Estimated p
Table 3: Estimated cross-cultural structural relationships	Independent variables
Table 3: Estimated	First equation

I able 3. Estillated c	Table 3. Estimated Closs-cultural structural telationships	SIIIDS		
First equation	Independent variables	Estimated path	Mediators	
			Uncertainty reduction	Individualism
	Satisfaction	↑	B=.467***/G=.554***/	B=.314***/G=.238***/
			J=.29***/U=.427***	J=.231***/U=.102
	Ť.	↑	B=007/G=103 (10%)/	B=032/G=.084/
	irust		J=12(8%)/U=214**	J=042/U=.258***
	To do not not do not a constitute of the		2	
second equation	independent variables		Dependent variable	
			Information disclosure	
	Satisfaction	↑	B=.599***/G=.315***/	
			J=.344***/U=.404***	
	ţ	^	B=.036/G=.31***/	
	Tust		J=.162**/U=.206***	
Third equation	Independent variables		Dependent variable	
			Information disclosure	
	Satisfaction	↑	B=.237***G=/.076/	
			J=.181***/U=.089**	
	ţ	↑	B=.058/G=.287***/	
	Tust		J=.168**/U=.209*	
	Uncertainty raduction	↑	B=.073/G=.133**/	
	Once tainty reduction		J=.097/U=.153**	
	Individualism	↑	B=.345***/G=.337***/	
			J=.084/ O=.22 / r r r	

Notes: Standardized regression weights were significant at *** p < 0.001; ** p < 0.01; * p < .05. All factor loadings were set equal across the four countries. B = Brazil, G = Germany, J = Japan, U = United States

Invariance of Factor Variance. Finally, we impose invariance of factor variance for the three equations to test if the correlations between the latent constructs are invariant across the countries. The invariance of factor variance was not supported for equations 1 and 2 (as there was only the factor variance for satisfaction there were no possibility of relaxing any constraints for the models). Nevertheless, for equation 3 we released the constraints of factor variance for satisfaction across the four countries which decreased the chi-square value compared to the scalar invariance model. Nevertheless, the chi-square value decrease compared to the configural invariance model was not significant: The X^2 difference between this model and the configural model was 13.132, with 3 degrees of freedom (p = .04), indicating that the fit of this model is significantly worse than that of the configural model.

Comparison of Information Disclosure across Countries

Based on the partial metric invariance results, we obtain for the three models (first equation, second equation, third equation), we conducted structural relationships across the four countries. As shown in Table 3, there were significant cultural differences in customer attitude for disclosure, that were affected by people's experiences and cultural values. We found that customer experiences with satisfaction and trust, as well as culturally based values and beliefs directly influence customers' willingness and reluctance to reveal personal information to relationship-seeking marketers. Therefore, this research gives valuable insights for the application of experience-based components of relationship quality and for the culturally formed benefits as drivers in a relationship model on information disclosure.

First, the empirical findings indicate that satisfaction and trust determine customers' perception of benefits, operationalized as uncertainty reduction and individualism (Table 3, equation 1). Hence, the results indicate that satisfaction is a strong driver for uncertainty reduction and individualism across all countries (although the effect of satisfaction on individualism for the US respondents is not significant). Moreover, the results show that trust is not a positive driver of what customers perceive as benefits. In short, trust reduces uncertainty across all countries, but the strongest significant negative effect is found among the American customers.

However, the opposite is found for perceived benefit of individualism for the US sample, as trust results in a significant positive effect.

In exploring the influence of customer experience on disclosure, the study concludes that customer satisfaction is the strongest driver across the four countries, and thus gives support to H1 (Table 3, equation 2). Hence, the level of satisfaction reflects the quality of the relationship and is the primary construct that determines customers' likelihood of disclosure (in support of the findings of Garbarino and Johnson,1999). Notably, we found differences in the strength of effect between satisfaction and information disclosure across the four countries. The strongest effect of satisfaction on information disclosure by far is found for the Brazilian sample, followed by the US sample; the sample from Germany indicates the lowest impact of satisfaction. These results imply that the relationship quality construct of satisfaction can be adapted to information-based relationship model across-countries.

As assumed, the second experience-based driver trust has positive effects on German, Japanese, and the American customers' willingness to disclose personal information. Moreover, the German customers tend to base their decisions equally on trust and on satisfaction. However, the positive effect of trust on disclosure is not found for the Brazilian sample. Therefore, H2 is only partially supported (Table 3, equation 2). This implies that the relationship quality construct of trust cannot be fully adapted to an information-based relationship model across countries.

Testing cultural values as mediators in the relation between customer experience and customer self-disclosure give support that the satisfaction-disclosure relationship in particular is mediated through cultural benefits. Therefore, we accept H3. Hence, including the two cultural dimensions, uncertainty reduction and individualism in the customer experience-customer willingness to disclosure relationship (Table 3, equation 3) results in a weaker effect of satisfaction on information disclosure, compared to the exclusion of mediators in the relationship (Table 3, equation 2) (Baron and Kenny 1986). In particular, for the German and the American respondents the satisfaction-disclosure relationship is almost perfectly mediated by the cultural benefit dimensions of uncertainty reduction and individualism. This allows us to

assume that across-countries customers include culturally based benefits in their decision for disclosure.

Conversely, trust as a relational driver for customer motivation for information disclosure is not mediated through cultural value dimension. The results indicate that the effect of trust on information disclosure remains the same regardless of whether the mediators are included or excluded. This is the case for all countries except for Germany. Therefore, H4 is not accepted across all of the tested countries.

In detail, the results of equation 3 indicate that the dimension of individualism has the strongest mediating effect across all countries, except for Japan, whereas the mediating effect of uncertainty reduction on information disclosure is only found for Germany and the USA.

4. Discussion and Implications

General Discussion

In summary, the findings support that customer-supplier relationship patterns vary strongly across national cultures. This is consistent with recent findings in cross-national relationship marketing (Nijssen and van Herk, 2009; Ozdemir and Hewett, 2010). Moreover, customers' willingness to disclose personal information differs across countries, whereas customers' motivation and reluctance are driven by satisfaction and trust and are mediated by people's culturally based values.

There are two principal findings in this study. First, a framework customerdisclosure that based on social exchange theory was developed and empirically tested. This model integrates the relationship quality constructs of satisfaction and trust in addition to people's culturally based risk-benefit evaluation to explore drivers for customer disclosure, which bears great relevance to relationship-seeking marketers. Second, we used the information-disclosure model, which encompasses five constructs to be invariant across the four countries that allow relationship-seeking marketers to explore information-disclosure patterns across countries.

The empirical findings indicate that a social exchange perspective that considers customers' perspective on perceived risk and benefits for disclosure can explain customers' motivation and reluctance to disclose personal information across countries. The present study has shown the relationship quality constructs that are applied in the context of customers' behavior intention as commitment and word of mouth are sufficient to explain customer disclosing behavior. Moreover, customers perform a risk-benefit analysis when deciding to disclose private information. These results indicate that former experience with the supplier, which results in a high quality relationship indicated by a high level of satisfaction and trust reduces the expected risk to privacy.

Our findings are in line with former studies that customer experience with products and services, which results in satisfaction and trust, varies across countries (e.g., Laroch et al., 2004; Reimann, Lünemann, and Chase, 2008). However, in addition to experience-based factors, we proposed that culturally based risk-benefit calculations affect customers' motivation for disclosing private information. Our results clearly support the assumption that customers' perception of uncertainty reduction (e.g., competent employees, transparency of documents, honesty and trustworthiness, comprehensive protection against risk) and individualized products and services (e.g., support in preventing and tailor-made products) mediates the satisfaction-disclosure relationship. However, uncertainty reduction and individualization of products and services do not mediate the trust-disclosure relationship in all countries (except for the German respondents). The finding that trust cannot be offset by offered benefits are in line with the conclusions of Garbarino and Johnson (1999) who pointed out that trust is a unique construct to operationalize relationship quality and distinct from satisfaction to identify high-relational customers. Hence, our results demonstrate that trust is also a unique construct in informationbased relationships.

Second, the proposed cross-cultural model on information-based relationship quality allows for the operationalization of customer experiences that result in trust and satisfaction as well as culture-based benefits across countries. The results of the configural invariance test support that the basic structure of the model is adequate across the four countries. This indicates that the conceptualized information-based relationship model that encompassed five constructs and 15 items achieve an excellent fit to the data across the tested countries. Similarly, the responses to the items are identical, supported by the results of the partial metric invariance model after setting 4 of 8 factor loadings for the Brazilian and Japanese sample free. Employing the three equations, which achieve partial metric invariance across the four countries, allows for the testing of the different strengths of the effects of trust and satisfaction while accounting for culturally based values as mediators in relation to information disclosure.

Managerial Implication

These findings have several managerial implications for companies that hope to develop and deepen the relationship with their customers based on the exchange of private information. Comparing the driver for customer disclosure across the four countries allows companies to identify countries with similar or different disclosure patterns. This enables marketers to improve their information-based relationship.

In times of mass customization, co-creation of value, and highly individualized products and services, a sophisticated information-based relationship strategy gives marketers a strategic advantage. In particular, for co-creation, direct interactions with consumers and consumer communities are critical (Prahalad and Ramaswamy, 2004). According to Prahalad and Ramaswamy (2004), companies must learn as much as possible about their customers. Exchange of private information is especially important for insurers, as they base their product development and premium calculation on their customers' individual characteristics (e.g., demographic and social attributes as well as claim history).

Nevertheless, there is an information asymmetry between customers and suppliers, as customers are less willing to share private information. What can companies do if customers refuse to disclose their information to suppliers? Therefore, it is important for companies to gain a deep understanding of customers' willingness and unwillingness to disclose information.

Our study shows that satisfaction and trust are significant antecedents of customers' willingness to share private information across different countries. Companies that are operating internationally have to consider country-specific differences in customer satisfaction and trust. Moreover, because customers perform a risk-benefit analysis when deciding whether or not to disclose, companies have to take customer-perceived benefits into account like individualization and uncertainty reduction, which are culturally formed. However, this allows companies to rely on two information-based strategies. The first is to align the information-based relationship strategy based on similar levels of trust, satisfaction, and perceived benefits across countries. The second is to adapt the relationship strategy based on country-specific differences in drivers for information. Hence, before entering a foreign market companies first need to understand the antecedents of personal disclosure.

Simply put, to build an information-based relationship in the Brazilian markets, satisfaction alone is an antecedent for information disclosure and holds as indicator for a high-quality relationship. Brazilian customers tend to decide for disclosure based on prior service experiences that result in satisfaction, but not to base their decision on the trustworthiness of the supplier. Consequently, satisfied Brazilian customers tend to accept the offered benefits as uncertainty reduction and individualism in exchange for disclosure. However, trust is a driver for customers' reluctance for disclosure. It therefore appears that the level of trust is not enough to guarantee disclosure and even the uncertainty reduction and individualization of service do not prevail over the risk of disclosure. Therefore, to build an information-based relationship in the Brazilian market, companies have to invest in trust-building strategies while satisfying their customers with superior claims handling, and adaptable and well-trained employees.

Companies in the German market need to be aware, that for the German customers, satisfaction and trust are important drivers of disclosure. Investing in a relationship based on trust has been shows to be a factor in customers' willingness to share private information. Nevertheless, German customers do include uncertainty reduction in their risk-benefit analysis when deciding to disclose. On the one hand, German customers are high-relational customers (Garbarino and Johnson, 1999) because trust leads to information-disclosure. On the other hand, by delivering superior services which result in satisfaction, companies can stimulate the risk-benefit analysis. The results show that delivering individualized services and reducing uncertainty mediates the influence on the trust-disclosure relationship.

In the Japanese market, to companies should focus on superior products, service delivery, and trust building. In general, satisfaction is the strongest driver, which can be stimulated if companies provide benefits that both reduce uncertainty and meet customers' need for individualization. However, trust is hardly mediated though any other values. On the one hand, if there is a trusting relationship with the provider, the likelihood of disclosure increases. On the other hand, because trust is sensitive and dependent on prior firsthand experience, it might be destroyed quite easily and cannot be outweighed by provided benefits.

The US respondents offer insights for companies hoping to establish information-based relationship in the US market. Satisfied customers in the US market are quite willing to disclose information. Moreover, companies can stimulate the satisfaction-disclosure relationship by offering uncertainty reduction and individualized services. US customers are hardly influenced by benefits that might meditate their disclosure. Nevertheless, if trust is established, the likelihood of disclosure increases

The results of our study support that companies need to focus on developing information practices and policies (e.g., an unwarranted disclosure of personal information to a third party) that address the perceived risk of disclosure. Independent from country-specific privacy laws and regulations, a positive experience with a company over time results increases customers' perception that the company can be

trusted. The management of customers' personal information in practices, fairness, transparency, and competence is regarded as essential in mitigating the expected risk that the company might not handle the information carefully; this is important to sustain trust. The violation information policies and the fraudulence regarding private information will destroy trust that has taken a long time to build.

Limitations and Future Research

This study has several limitations that present opportunities for both future theoretical and empirical work. Using the insurance industry as the focus of the information-disclosure study is of specific managerial relevance, as insurers base their product development and premium calculation on private information. Nevertheless, from a methodological perspective, it is a limitation to use insurance customers as a sample, as it limits the generalization to other industries. In addition, in the insurance sector the privacy of personal information is a very sensitive topic for customers, and therefore the risk-benefit analysis a customer performs when deciding for disclosure will be different from what it would be for other industries. Moreover, the insurance industry is strictly regulated. These regulations result in country-specific customer experiences and attitudes towards information disclosure as well as in different patterns of information asymmetry. Nevertheless, the risk-benefit analysis, which influences customers' motivation to disclose private information, is assumed to be consistent across industries and countries.

Our focus has been on the mediating influence of cultural values on the relationship between experience and disclosure with respondents from Brazil, Germany, Japan, and United States, which are quite different cultural regions. It might be useful to replicate the study with, for example, different European or Asian countries and to concentrate on intra-cultural or inter-cultural as well as intra-country and inter-country differences (Au, 1999). In this way, depending on the industry, results might shed more light on whether the differences in risk-benefit analysis and willingness for disclosure can be attributed to the distinction between Western and Asian cultures; between the level of uncertainty avoidance and individualism; or if industry and country-specific privacy regulations offset the cultural influence.

Moreover, the information-based relationship framework that is developed and empirically tested in the insurance industry contest here might be extended and adapted. We therefore propose three areas for future research. First, the comparison of information-based relationship patterns between products and services offers great insights for information-based relationship management. As shown by Edvardsson et al. (2000), service experiences (e.g., financial services and insurance services) differ from product experiences, resulting in different drivers that influence the risk-benefit analysis. Second, models of customer relationship quality account for the concept of customer retention (e.g., Garbarino and Johnson, 1999; Palmatier, 2008; Verheof et al., 2002), because customer retention is indicative of a strong customer relationship. Integrating customer retention into an information-based relationship quality model gives further evidence of customers' behavioral intentions in an information-based Third, the scale we used to imitate Hofstede's cultural dimension uncertainty avoidance and individualism can be operationalized by referring to the original scales that were developed by Hofstede (1991; 2001). This allows for the comparison of latent cultural values across countries, which are distinct from productand service-based benefits, as influencing factors on information disclosure.

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PART V: Employer Branding and Service Branding

Employer Branding and Service Branding: An Empirical Investigation⁵

1. Introduction

Recently, marketing literature has shifted from goods-centred logic to service-centred logic (e.g. Vargo and Lusch, 2004). According to Vargo and Lusch (2004), resources such as knowledge and their integration are the fundamental source of a competitive advantage and the unit of exchange in service settings. Goods are only means to the distribution of services. Thus, the service-centred approach is also applicable for products. Furthermore, a network perspective rather than a dyadic approach between company and customers is suggested (Brodie et al., 2008; Vargo and Lusch, 2008). Although the ideas of a service-centred approach also have received criticism (e. g. Grönroos, 2008), they thoroughly enhanced the understanding of nearly all marketing streams, among them service branding (SB).

Although extensive research on branding has been performed regarding goods, remarkably little attention has been payed on branding within a service setting (Payne et al., 2009). Still, academics are starting to rethink branding along with service-dominant logic, and as a result, focus on research concerning service branding (SB) (Brodie et al., 2009; Merz et al., 2009). Scholars state that during the service delivery process, the company's brand image is mainly shaped by the customers' experiences (Berry, 2002; Brodie et al., 2009). These experiences evolve within interactions between several stakeholders (Ballantyne and Aitken, 2007; Merz et al., 2009), which may not all be directly influenced by the company. Stakeholders mainly comprise employees, customers, and other third parties. Previous research investigating the creation of the service brand emphasizes that all types of interactions are important. Among them are employee-customer interactions (Brodie et al., 2009) and customer-customer interactions, such as in customer communities and customer tribes

⁵ This paper has been written jointly with Tobias Schlager, Joël Luc Cachelin, and Peter Maas and is currently under review at the Journal of Service Branding. We are grateful to Carin Huber and Vance Edwards for their valuable suggestions and comments.

(Ballantyne and Aitken, 2007; Merz et al., 2009; Payne et al., 2009). It should be mentioned that most commonly employees are customers of the own company (e.g., Jackson, 2005). Literature already assessed the role of employees as customers within customer-customer interaction. This shows the multitude and complexity of interactions, and intuitively the following question arises:

How can a company still efficiently influence the creation of the service brand within a complex network of interactions?

Most commonly, companies are more easily capable of influencing employees than customers, as they are closer to the company and can be affected by a large body of avenues, such as human resource management tactics (e.g., Huselid, 1995), internal marketing (e.g., Mudie, 2003) and organizational behavior processes (e.g., Edwards, 2010). Thus, although realizing the relevance of customer-to-customer interaction, employees need to be taken into account when considering an efficient managerial approach on SB. Several articles have acknowledged the importance of employeecustomer interaction for creating positive customer experiences (Berry, 2000; Brodie et al., 2009; de Chernatony and Dall'Olmo Riley, 1997; de Chernatony et al., 2006), and hence successful SB. Within the employee-customer interactions, employees' attitudes and behaviors have a fundamental influence on customer attitudes toward a service brand (Vella et al., 2009). Thus, the dyadic approach between companies and customers, needs to be extended with a special focus on employees within a servicecentred context. Bearing in mind the aforementioned discussion, recent research in service marketing reflects the importance of employees and employee-interaction (e.g., Brodie et al., 2009; Burmann and Zeplin, 2005; Chung and Schneider, 2002; Vella et al., 2009; Palmer, 2010). Nevertheless, research investigating the link between employees and SB is still at its infancy (Brodie et al., 2009). Moreover, until today no research has approached the influence of employees' attitudes on SB. Furthermore, there is no research on SB yet that particularly considers the role of potential employees. This is remarkable, sincethese workers are crucial in a long-term perspective as they may become future employees (e.g., Jackson, 2005). Therefore, in order to enhance the understanding of SB, research needs to consider current employees' attitudes that specifically influence customer outcomes on the one hand and potential employees on the other hand.

We maintain that scholars have already explored concepts that are capable of linking both the management of current and potential employees and the creation of the service brand. Our research approach suggests applying employer branding (EB). The concept communicates a company's attractiveness to current employees, which in turn provokes favorable attitudes (Berthon et al., 2005) among them and among potential employees, thereby attracting better applicants (Collins and Stevens, 2002; Slaughter et al., 2004). Hereby, EB has a special focus on creating the brand within interactions by internally and externally aligning brand perceptions (Davies et al., 2004; Hatch and Schultz, 2001). For two reasons, we believe that EB is crucial for the long-term success of SB. First, it forms and aligns current employees' attitudes, which is important for customer experiences (Vella et al., 2009) and therefore for SB (Brodie et al., 2009). Second, it attracts potential employees with congruent values (de Chernatony et al., 2006), which is important for the long-term success of SB. Contrary to other approaches in SB that consider concerting brand communities or brand tribes, we claim that the consideration of EB for SB has two crucial advantages: (1) employees constitute an important link for establishing the service brand and (2) are easier to manage than customers, as they are closer to the company.

As discussed above, the purpose of this study is to establish the link between SB and EB. For this purpose, we apply the framework of Brodie et al. (2009) on SB and further refine it. In doing so, we assume that employees, which are attracted, retained, and aligned by EB, are an important link to SB. Therefore, we claim EB to be a concept that fundamentally fosters SB. In order to substantiate our framework, on the one hand we empirically examine how EB affects current employees' attitudes in relation to customer attitudes. On the other hand, we empirically examine the influence of EB on favorable attitudes of potential employees. In conclusion, our empirical investigation allows us to point out how management needs to concert EB efforts in order to best support SB. Furthermore, implications and future avenues for research are outlined. To the best of our knowledge, no similar approach has been developed

for SB, yet. In addition, until today, no empirical investigation of the relationship between EB and SB has been performed.

2. The Importance of Employer Branding for Service Branding

Hsieh et al. (2004) defines a brand as the feelings, impressions, perceptions, beliefs, and attitudes toward a company. Branding most frequently focuses only on external stakeholders (Aurand et al., 2005), such as customers. Originally, branding was applied to differentiate tangible products. The construct focuseson influencing customers' awareness of the brand (Backhaus and Tikoo, 2004; Keller, 1993). The relevance of branding is given by the fact that companies increasingly consider the brand as one of their most valuable assets (Merz et al., 2009). Positive brand attitudes affect customer behavior, such as purchasing behavior, and are thus crucial for a company's long-term success (Hoek et al., 2000). Thus, research on this matter is crucial in order to understand how customer attitudes can be influenced. A recently emerging research stream within branding literature speaks of SB (Dall'Olmo Riley and de Chernatony, 2000; Padgett and Allen, 1997), which is aligned to the ideas of the service-dominant logic (Vargo and Lusch, 2004).

Within a service-centred context, branding plays a broader role as it comprises a network of stakeholders, such as the employees, customers, and consumers (Brodie et al., 2009; Merz et al., 2009). The meaning of companies' brands derive from customers' experiences (Brodie et al., 2009; Grace and O'Cass, 2005; Berry, 2000). These experiences are evolved within the interaction between several stakeholders (Merz et al., 2009; Ballantyne and Aitken, 2007), such as employees and customers. Although it is important not to underestimate the customer-customer interaction (Merz et al., 2009), employee-customer interaction constitutes an important source of SB as well (Brodie et al., 2009). Subsequently, researchers agree that, in a service-centred approach, customers' experiences with the company are mainly gathered through interaction with employees (Berry, 2000, Iacobucci and Ostrom, 1995). Therefore, one of the company's tasks is to thoroughly manage employee attitudes and

behaviors as they become visible in employee-customer interaction (Pugh, 2001). From a company perspective. SB begins internally with the relationship between the company and its employees and comes alive during the interaction between customers and employees (Davies 2008; Davies et al., 2004; de Chernatony, 2001; Dall'Olmo Riley and de Chernatony, 2000). Particularly in a service-centred context, employees have the ability to build brand equity (King and Grace, 2005; de Chernatony et al., 2003). Furthermore, a long-term perspective on SB also needs to cover potential employees, as they may be a future link within interaction with the customer. The company needs to ensure that potential employees' values are congruent with the service brand (de Chernatony et al., 2006). Nevertheless, SB is a holistic process. In order to provide a consistent image of the service brand, the company needs to back the image with external communication, which refers to the direct link between the company and its customers (Brodie et al., 2009). Thus, Brodie et al. (2009) established the conceptualization of SB into three process components between the company, employees, and customers: first, the creation of value for employees within companycustomer interaction that results in positive and aligned employee attitudes (internal marketing); second, the company-customer communication (external marketing); and third, the employee-customer interaction (interactive marketing). The results indicate that these marketing processes affect the customers' service experiences and therefore the customers' service brand image.

As our discussion demonstrates, there is an imperative need for a stronger focus on employees when considering branding within a service-centred approach. EB, which integrates marketing and human resource management tactics (Edwards, 2010), recognizes this and focuses on employees within its branding activities. With features like a company's identity, key values, policies, behaviors, and systems, EB constitutes the character of the organization itself (Edwards, 2010; Dell and Ainspan, 2001). Contrary to short-term measures that influence employees, EB is a comprehensive long-term process as it begins with the initial contact of potential employees with the employer brand and ends after employees leave the organization. Beck (2008) distinguishes five phases from the employees' point of view in chronological order: associating, orientation, matching, retention, and ex-post. One of the objectives of EB

is to communicate an attractive image of the company to current and potential employees (Edwards, 2010; Martin and Beaumont, 2003). As a result, high-potential employees are likely to work with the company, and favorable attitudes of existing employees are enhanced and aligned with the company's image. This becomes especially relevant in today's business setting, as high potential and loyal employees are often short in supply (Berthon et al., 2005; Collins and Stevens, 2002; Gatewood et al., 1993). The development and alignment of employee attitudes begins with the recruitment process. In the labor market, EB communicates functional utility to future employees, as certain job characteristics cannot be directly observed by potential employees (Wilden et al., 2010). Companies that embrace EB tactics are able to gain a strong position in the competitive labor market. Furthermore, for delivering a consistent brand image, it is important to make sure that the potential employees' values are also congruent with the company's values (de Chernatony, 2005).

In order to set up a framework that encompasses EB and SB, we build upon the research of Brodie et al. (2009). They further develodp a framework on SB that was initially set up by Calonius (1986) and refined by other scholars (Grönroos, 1996, 2006, 2007; Bitner, 1995). Their framework on SB discusses internal, external, and interactive marketing within the triangle of company, employees, and customers. Therefore, SB becomes a holistic process with the need for comprehensive management tactics. We exclusively focus on employee outcomes within our empirical investigation, as a direct evaluation of customer outcomes is beyond the scope of our research. Nevertheless, we also discuss customer outcomes for applying the framework of Brodie et al. (2009) for discussing SB and EB (see Figure 1).

The service brand is created through internal marketing between the company and employees (Brodie et al., 2009). The internal marketing perspective considers all internal, organizational, and human resource management processes that impact employee-customer interactions (Vella et al., 2009; George and Grönroos, 1991). EB comprises internal marketing tactics that focus on identified employees, an asset that is difficult for other companies to compete with (Backhaus and Tikoo, 2004). Being positioned as an attractive company, which is one of EB's objectives, helps to trigger

favorable employee attitudes (Berthon et al., 2005). Furthermore, the employees' behavior and attitudes need to be aligned with the service brand in order to achieve a consistent delivery of the service brand, which is another objective of EB (Berthon et al., 2005; Collins and Stevens, 2002; Lloyd, 2002). As research concerning this link is still in its infancy, there is a latent need to evaluate the dimensions of EB that favorably influence employees' attitudes.

Another important aspect of SB is that it comprises the external marketing perspective, which encompasses all direct communication processes with customers (Brodie et al., 2009). Considering the external marketing perspective for EB, our framework only investigates the direct effect on potential employees empirically and not the effect on customers. Nevertheless, potential employees can be also considered as customers of the company. Furthermore, EB also enhances corporate and product brands for customers (Backhaus and Tikoo, 2004), as it supports the delivery of the service brand by backing the branding efforts of a firm. Additionally, potential employees may constitute future employees, and therefore the important future link to consistent SB emphasizes the relevance of investigating this link as well.

Furthermore, employees are the main driver in customer experiences, and thus SB, when considering the interactive marketing perspective (Brodie et al., 2009). This causal link has been broadly researched by scholars specialized on interactive marketing and customer-contact staff members' influence on customers. Within this research area, employees' attitudes are considered as a main driver for customer attitudes (Hatch and Schulze, 2001). Thus it can be assumed that EB, which fosters the attitudes of customer-contact employees, directly influences customer attitudes toward the brand (Mosley, 2007; Papasolomou and Vrontis, 2006). Moreover, the potential employees' perceptions of the brand are reinforced as they notice the current employees' positive attitudes (Gatewood et al., 1993).

The result of the discussion of the three relationships supports that applying EB tactics within a company helps to establish a consistent service brand image. Figure 1 summarizes the proposed framework that links SB and EB.

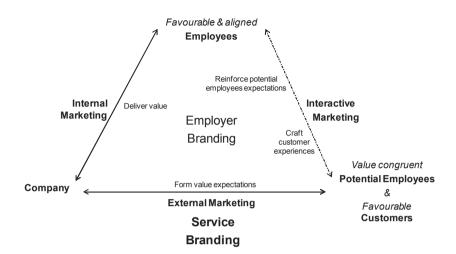


Figure 1: The link between Employer Branding and Service Branding

The framework proposes EB as a crucial component of SB. In order to enhance the understanding of SB, it is also necessary to deepen the understanding of EB's connection to SB. In the next step, we develop hypotheses that support this link. First we determine the dimensions of EB through a comprehensive literature review. Next, we investigate customer outcomes that have already been connected to favorable outcomes of branding by literature. Within this part, we also determine employee outcomes that provoke these customer outcomes. Our hypotheses relate the EB dimensions that craft the employee outcomes. This shall provide the link of EB to SB and thus enhance the understanding of SB.

The Dimensions of Employer Branding

In order to develop a measurement instrument for EB, we partially applied the dimensions of Berthon et al. (2005). They use deductive and inductive approaches for developing the five dimensions of EB: economic, development, interest, social, and application value. Nevertheless, for our approach study, we only adopted three of the dimensions of Berthon et al. (2005), namely *economic value*, *development value*, and *social value*, as they were proven to best predict favorable employee attitudes within

the study by Berthon et al. (2005). Economic value comprises items such as a good salary, a fair amount of holiday, and retirement benefits. *Development value* refers to variables such as good training opportunities, an empowering environment, and good mentoring culture. The third dimension, *social value*, encompasses for example a strong team spirit and a respectful environment. The study of Berthon et al. (2005) only considers potential employees. As EB also targets current employees, there is a need to revise the scales. After a comprehensive literature review, we added the two dimensions explained below.

The first dimension that we added is *reputation value*. Several researchers point out that current employees derive value from working with a company with a good reputation. Employees tend to be more satisfied (Bellou, 2010) and identified (Wilden et al., 2010; Lievens et al., 2007) when working with a prestigious company. Companies with an attractive external image and an attractive organizational identity are more likely to create a higher level of employee identification (Dukerich et al., 2002). This is confirmed by several other similar studies (e.g., Towers Perrin, 2005, p. 17). Literature suggests that this also holds true for potential employees that catch certain brand signals as job signals (Weiber and Adler, 1995). In particular, reputational ones referred to as reputation value appear in literature (Edwards, 2010; Burmann et al., 2008; Cable and Graham, 2000). Several empirical studies confirm the importance of a company's reputation for attracting new employees (Cable and Graham, 2000; Preston and O'Bannon, 1997; Turban and Greening, 1996; McGuire et al., 1988). Backhaus and Tikoo (2004) use the social identity theory to explain the importance that a company's reputation poses for potential new employees.

The second dimension added, *diversity value*, is similar to the category of 'interests' from Berthon et al. (2005). However, we added several items that have been mentioned within the context of EB that deal with challenging tasks (Towers Perrin, 2005; Backhaus and Tikoo, 2004) and a broad variety of work activities (Backhaus and Tikoo, 2004). It is obvious that current employees who experience work with the company in everyday professional life can rate those aspects. Nevertheless, even potential employees may grasp these facets of working with a company as even

functional aspects, challenges, or unique opportunities of employment are communicated by the employer to potential employees through the recruiting process, for example (Backhaus and Tikoo, 2004).

Employees' Attitudes that Enhance SB: Satisfaction and Identification

One of the most popular and most-researched customer outcomes that may predict future behavior toward a brand is satisfaction (Mittal and Kamakura, 2001). This aspect turned out to provoke positive brand attitudes (Spreng et al., 1995), and to foster customers' purchasing behavior (Low and Lamb, 2000). Other authors, such as Grace and O'Cass (2005), describe customer satisfaction as the result of the evaluation of expectations in the post-consumption stage. Furthermore, satisfaction has a significant effect on brand attitudes and brand loyalty (Spreng et al., 1996; Cronin Jr. and Taylor, 1992), which underpins its importance for the creation of the service brand.

Within service literature, a traditional concept that has just recently been investigated is the service profit chain. This connects internal processes to companies' profit via mediating constructs like employee satisfaction and customer satisfaction. A direct link between employee satisfaction and customer satisfaction is established (Homburg et al., 2009; Heskett et al., 1997). Thus, when intending to relate EB to the creation of the service brand, the focal employee outcome to investigate is satisfaction. Literature ascertains that creating employee satisfaction is one of the employer brand's responsibilities (Davies, 2008). As a result, we hypothesize that each of the EB dimensions positively influences current employees' satisfaction, thereby connecting EB to SB.

H1-5p:

All dimensions of employer branding positively influence current employees' satisfaction.

The ultimate goal of the brand-building process is to create a brand relationship (Aaker, 1991; Keller, 2003), which is reflected by the level of customers'

identification with the brand (Kimpakorn and Tocquer, 2010). Therefore, a customer's identification with a company differentiates the brand from others, which is one of the most important goals of brands (Kim et al., 2001). Therefore, the question to investigate is thus: what provokes customer identification on the employee side? Within a service context, customer identification was just recently investigated as an outcome of employee identification by the complementary service profit chain (Homburg et al., 2009).

Recent studies also connect emotional responses to EB (Davies, 2008); one of these responses is identification (Riketta, 2005). Employee identification has a highly significant effect on employee commitment, which is also one driver for brand attitudes on the customer side (Punjaisri et al., 2009). Especially in a service-centred context, employee identification is considered as "vital for any business" (Punjaisri et al., 2009). Thus, the creation of a clear and strong employer brand needs to include actions that aim at identification (Punjaisri et al., 2009; Vella et al., 2009; de Chernatony and Cottam, 2006), which in turn provoke customer identification with the company (Homburg et al., 2009). Following the discussion we formulate the hypotheses H6-10p:

H6-10p:

All dimensions of employer branding positively influence current employees' identification with the company.

For potential employees, it is only possible to form expectations of the employer brand based on all perceived functional and symbolic attributes, and these have the ability to predict affinity with a company (Lieven et al., 2007, p.49). Potential employees are attracted by company's value proposition (Backhaus and Tikoo, 2004). When considering the focal outcomes of EB in relation to the labor market, satisfaction cannot be taken into account, because potential employees have not experienced work with a respective employer, yet. Therefore, we apply potential employees' identification with the company as a dependent variable. Similar to the sample of current employees, all of the employer brand dimensions are tested, as

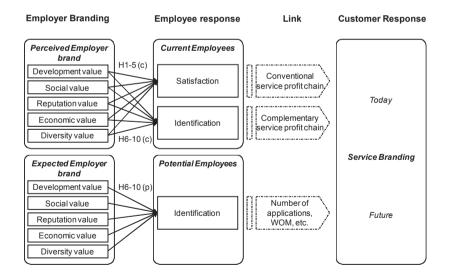
potential employees may have formed expectations of the company of choice. Thus, the following hypotheses can be stated:

H6-10e:

All dimensions of employer branding positively influence potential employees' identification with the company.

In summary, we connected EB with SB by determining employee outcomes, which are assessed by literature to positively influence the customer outcomes important for SB. In the next steps, we will empirically investigate the hypotheses (Figure 2) on a dimensional level in order to point out whether and how EB can support SB. This aims to establish a deeper understanding of SB and to give concrete managerial implications on how a company can influence SB by refining EB tactics.

Figure 2: Model on employer branding, employee response, and service branding



3. Methodology and Empirical Analysis

For the analysis an insurance provider was chosen as this industry provides a good example for a service intensive sector and branding is particularly relevant for differentiation as most of the customers cannot distinguish between products (Schlesinger and Schulenburg, 1993). Insurance policies are naturally intangible, complex, and trust-based offerings, which poses a challenge for the customer-contact employees. Thus, in particular for insurance providers, attracting the right employees as well as developing favorable employee attitudes is crucial for the creation of the service brand

Data were collected through a self-administered online survey. Employees of an international operating Swiss insurance provider were contacted and 2,189 employees, from twelve countries, responded. Respondents' ages ranged from 20 to 50 years. Only a few employees were younger than 27 years of age (12 percent) and 19 percent of employees were between 28-35 years of age. Most employees were older: 45 percent were between 36-49 years of age and 24 percent were older than 50. Overall, there were slightly more male (55 percent) respondents than female ones. Participants answered a wide selection of items aimed at determining an employee's evaluation of specific dimensions of EB: *development value, social value, reputation value, economic value,* and *diversity value*. Scale items were partly adapted from Berthon et al. (2005).

First, respondents had to evaluate the EB dimensions of their current employer (*company today*), and rate them according to importance. Afterwards, the respondents had to imagine an ideal employer they would like to work with (*company of choice*) and correspondingly evaluate the EB dimensions based on their expectations. A five-point Likert-type scale was used in this study, 5 indicating maximum "agreement" and 1 "no agreement" (1 = "not important"; 5 = "important").

4. Research Findings

Overall, measurement quality was assessed using confirmatory factor analysis (CFA). The fit indices suggested that the proposed constructs fit the data well across company today ($X^2 = 1839.573$, degrees of freedom (df) = 237; comparative fit index (CFI) = 0.930; and root means square error of approximation (RMSEA) = 0.056) as well as company of choice ($X^2 = 1608.56$; df = 237; RMSEA = 0.060; CFI = 0.37) (Hu and Bentler, 1995). Comparing both CFA models based on CFI values indicates data better fits the model for the company of choice as the CFI value is higher. Nevertheless, the RMSEA value does not decrease.

All loadings, except one (high job security) exceed 0.50 across *company today* and *company of choice*, and each indicator z-value was significant (see Table 1). Cronbach's α scores (Bagozzi and Yi, 1988) and average variance extracted for all measurement scales indicate sufficient reliability. (*development value* (today)/ (choice): α =0821 / 0.823); *social value* (today)/ (choice): α =0.841 / 0.860); *reputation value* (today)/ (choice): α =0.816 / 0.867); *economic value* (today)/ (choice): α =0.708 / 0.828; *diversity value* (today)/ (choice): α =0851 / 0.870).

In terms of convergent validity, the proportions of variance in the items explained by the underlying factor are below the .50 criterion given by Fornell and Larckner (1981), except *social value* and *diversity value* for company today (0.524; 0.524). In addition, the co-variance among both models is less than the variance in the items explained by each of these factors, satisfying the discriminate validity criterion (Fornell and Larcker, 1981). However, the variance of the dimension *development value* shared with the construct *social value* for *company today* (0.438) is not much less than the variance in the items explained by the factor *development value* (0.446). Similar results concerning convergent validity can be observed for the construct *social value* for *company of choice*. The co-variance between *social value* and *development value* is 0.238 while the variance of the items explained by the factor *social value* is only 0.248.

Table 1: Summary of confirmatory factor analysis and reliability estimates

Measurement scales and their respective indicators	Company today	Company of choice
Development Value (Cronbach's Alpha / Variance)	$\alpha = 0.821 / 0.446$	$\alpha = 0.823 / 0.28$
Good internal training opportunities	0.63	0.66 (25.03)
Good mentoring culture	0.73 (27.92)	0.711 (25.05)
Room for creativity	0.66 (25.82)	0.712 (25.79)
Empowering environment	0.71 (27.33)	0.737 (26.22)
Good recognition for individual work	0.73 (27.80)	0.75 (25.03)
Social Value (Cronbach's Alpha / Variance)	$\alpha = 0.841 / 0.524$	$\alpha = 0.860 / 0.248$
Respectful environment	0.69	0.63
Friendly relationship amongst individual co-workers	0.51(21.87)	0.57 (19.66)
Strong team spirit	0.63 (26.70)	0.75 (24.55)
Competent co-workers	0.57 (24.19)	0.76 (24.76)
Good managers	0.80 (33.08)	0.76 (24.75)
"People first attitude"	0.77 (32.08)	0.63 (19.66)
Reputation Value (Cronbach's Alpha / Variance)	$\alpha = 0.816 / 0.391$	$\alpha = 0.867 / 0.352$
Good quality of products	0.68	0.81 (30.33)
Well known products	0.64 (24.82)	0.77 (31.16)
Innovative products	0.60 (23.20)	0.78 (26.16)
Good reputation of the company amongst friends	0.70 (26.29)	0.66 (26.98)
Good brand to have on the resume	0.70 (26.22)	0.67 (30.33)
Economic Value (Cronbach's Alpha / Variance)	$\alpha = 0.708 / 0.426$	$\alpha = 0.828 / 0.425$
Good salary	0.61	0.75 (28.55)
Good retirement benefits	0.59 (20.94)	0.80 (24.93)
Fair amount of vacation	0.52 (19.13)	0.66 (28.60)
Good health benefits	0.51 (18.52)	0.80 (17.76)
High job security	0.53 (19.30)	0.48 (28.55)
Diversity Value (Cronbach's Alpha / Variance)	$\alpha = 0.851 / 0.524$	$\alpha = 0.870 / 0.311$
Good variety of work activities	0.73	0.73
Challenging tasks	0.82 (35.99)	0.88 (34.12)
Interesting tasks	0.89 (37.72)	0.90 (34.90)
Fit indices		
X ² Value	1839.573	1608.56
df	237	237
RMSEA	0.056	0.06
TLI	0.918	0.926
CFI	0.930	0.937

Note: ^a First parameter restricted to 1; ^bz-Values shown in parentheses.

As shown in Figure 2, we assume that employees' evaluation of value working with an employer results in his or her attitude towards the employer. To empirically verify the supposed relationships, as predicted by $\rm H1_p$ - $\rm H10_p$ and $\rm H6_e$ - $\rm H10_e$, two models are evaluated that include links between the employee perceptions of distinct EB dimensions and employees' attitudes toward the employer. We employed a structural equation model (SEM) using the maximum likelihood estimation method.

Table 2: Matrix for correlation of the constructs

Employer brand constructs	1	2	3	4	5
Company today					
Development Value	1				
Social Value	0.91	1			
Reputation Value	0.72	0.73	1		
Economic Value	0.77	0.71	0.78	1	
Diversity Value	0.68	0.56	0.50	0.59	1
Company of choice					
Development Value	1				
Social Value	0.90	1			
Reputation Value	0.73	0.67	1		
Economic Value	0.72	0.70	0.58	1	
Diversity Value	0.80	0.69	0.62	0.56	1

Note: All correlations were significant at p < 0.01.

Table 3 shows the final results obtained from the structural models. In the *company today* model, the $X^2 = 2082.905$ with df = 276 and X^2/df ratio of 7.547, a CFI of 0.930, and a RMSEA of 0.055, which indicates that the model provides a good fit. The second structural model was assessed for *company of choice*, which indicates a better model concerning the Chi-square and comparative fit index: $X^2 = 1703.446$, df = 330; $X^2/df = 6.654$; CFI = 0.936; and RMSEA = 0.06. The standardized estimates for the hypothesized paths are presented in Table 3. Not all paths were supported in the model on *company today* as whether the z-values associated with the structural path were not statistically significant for (p < 0.10) or the signs were not correct. Similarly, two hypothesized paths had to be rejected for the model regarding *company of choice*, as the structural relationships were not significant.

Perceived Employer Brand

The empirical results confirm that perceived EB effects the employee's satisfaction and identification with the company as shown in Table 3. Employee's development value had a significantly positive effect (SE = 0.33, p < 0.01) on employee's job satisfaction working with the *company today* (H1_p). Furthermore, there was no significant positive effect on the identification with the company (H9p). For perceived social value the hypotheses H2_p and H7_p were clearly supported. *Social value* was found to significantly impact both, employee's job satisfaction (SE = 0.20, p

< 0.01) and identification with *company today* (SE = 0.19, p < 0.01). Concerning the effect of *reputation value* on employee's job satisfaction and identification with *company today*, Table 3 indicates that the assumed positive effect on job satisfaction cannot be supported. Thus, $H3_p$ is rejected. However, the path from *reputation value* to identification with *company today* was significant positive (SE = 0.40, p < 0.01), supporting $H8_p$.

Testing the path from *economic value* to employee's job satisfaction at *company today* supports H4_p (SE = 0.15, p < 0.01). However, the effect of *economic value* on identification with the company as hypothesized by H9_p cannot be supported, as the structural path is not significant. Finally, the empirical results support the hypothesized significant positive effect of *diversity value* on job satisfaction H5_p (SE = 0.14, p < 0.01). On the other hand, the estimated effect on identification with the company as hypothesized by H10_p is not significant.

It is obvious that for supporting the creation of the service brand among current employees a mixture of both, measures that aim at current employees' satisfaction and measures that aim at current employees' satisfaction, needs to be considered. For example *social value* was proven to support both favorable employee outcomes. Therefore, companies should enhance this dimension. We also suggest that the dimensions that have the strongest influence on identification with the company and satisfaction should be taken into account in order to create the service brand. For satisfaction the dimension development value was investigated to have the highest influence. To create identification with the company, especially reputation value needs to be delivered to current employees. Clearly, it is not an easy task to find the right mixture as some dimensions are proven to support one outcome, but not the other (i.e. *development value*).

Table 3: Testing research hypotheses using standardized estimates

)	10)				
Hypotheses	Measurement scales respective indicators	Hypotheses Measurement scales and their respective indicators	Expected Today signs	Today		Choice	
				Standardized Coefficient (SE)	Hypotheses supported	Standardized Coefficient (SE)	Hypotheses supported
H1p	Development \(\)	Development Value> Satisfaction	+	0.33***	Yes		
Н2р	Social Value	Social Value> Satisfaction	+	0.20***	Yes		
Н3р	Reputation Val	Reputation Value> Satisfaction	+	-0.03	No		
H4 _p	Economic Valu	Economic Value> Satisfaction	+	0.15***	Yes		
$H5_p$	Diversity Valu	Diversity Value> Satisfaction	+	0.14***	Yes		
H6 _{p/e}	Development Value>	Value>	+	0.07	No	-0.15	No
H7 _{p/e}	Social Value	Social Value> Identification	+	0.19**	Yes	0.42***	Yes
H8 _{p/e}	Reputation Val	Reputation Value> Identification	+	0.49***	Yes	0.37***	Yes
H9 _{p/e}	Economic Valu	Economic Value> Identification	+	-0.02	No	-0.04	No
$\mathrm{H}10_{\mathrm{p/e}}$	Diversity Valu	Diversity Value> Identification	+	0.03	No	0.16***	Yes
Fit indices				2082.905		1703.446	
X2 Value				276		256	
df				0.055		90.0	
RMSEA				0.917		0.925	
TLI				0.93		0.936	

Note: Significance at: *p < 0.10; **p < 0.05; ***p < 0.01.

Expected Employer Brand

Identification with the company of choice was tested as dependent variable in order to analyze the potential employees' expectations. Employing the structural relationships in the *company of choice* model indicates what potential employees expect as value. The expected *development value* has the strongest positive effect on identification (SE = 0.42, p < 0.01). Therefore, H7_e, is supported. Similarly, *reputation value* is a strong positive driver for employees to identify with the *company of choice* (SE = 0.37, p < 0.01) as assumed by H8_e. As proposed by H10_e what employees expect as *diversity value* influences their identification with an employer (SE = 0.16, p < 0.01). However, different from what is proposed in H6_e and H9_e, what employees expect as *development value* and *economic value* is not a positive driver for employee's identification with an employer of their choice.

Thus, when considering potential employees, which are important for the long-term success of the service brand, especially the provision of *development* and *reputation value* needs to be leveraged. Since they have also been proven to provoke favorable employee outcomes among current employees, a company should focus on these dimensions when creating the service brand through EB.

5. Limitations and Future Research

Studies in service marketing are confronted with complex interactions of different constructs, perspectives, and concepts. To name a few, a service brand is linked to research on service quality (Vella et al., 2009), customer value (Brodie et al., 2009), and customer experience (Palmer, 2010). Due to the complexity of research streams concerning SB, it is necessary to focus on fewer. Hence, this study focuses on employees' role within the process of SB. For doing so, we explore the relationship between EB and SB (Davies, 2004; Berthon et al., 2005).

The survey encompasses the employee perspective of companies' ability to create value and influence employee satisfaction and identification. The link between employees' attitudes, customers' experiences, and finally on the creation of the service brand is established theoretically (Palmer, 2010; Brodie et al., 2009; Vella et al., 2009; Burmann and Zeplin, 2005). Nevertheless, the impact of EB on customer outcomes has not been empirically investigated by our study. Future research on SB needs to extend this by simultaneously investigating employees' attitudes and customers' experiences. Furthermore, the study was conducted within one company from one service industry. Hence, further research is needed for investigating industry characteristics. Valid and reliable comparisons of companies across different industries need to be investigated in order to determine differences and similarities in value drivers. This would give evidence if development value, social value, and reputation value are general or industry specific drivers on employee's favorable attitude towards the employer, and thus industry specific determinants of SB.

6. Theoretical and Managerial Implications

In addition to these limitations, our study provides valuable insights to enhance the understanding of SB. The service brand is created in the triangle between company, employee, and customer. We suggest that EB is an efficient construct for fostering SB. This is because it enables companies to manage employees in a way that they influence customer experience positively and, thereby, indirectly influences SB as follows: (1) EB results in employee satisfaction and identification with the company, (2) satisfied and identified employees influence customers' experiences positively and thereby enhance the creation of the service brand, and (3) the long-term creation is assured by also considering potential employees.

Next, our investigation related EB to the service profit chain. By measuring employee satisfaction and employee identification with a company, both the conventional and the complementary service profit chain (Homburg et al., 2009) can be influenced by EB. Therefore, our paper suggests that EB enhances the well-

researched service profit chain and indirectly pays off by leveraging a company's profits (Heskett et al., 2003; Anderson and Mittal, 2000; Heskett et al., 1994). As a result, companies can gain a competitive advantage by correctly applying EB, as it enables them to manage their employees' skills and favorable attitudes, which is strategically relevant for the employee-customer interaction (Brodie et al., 2009; Homburg et al., 2009; Vella et al., 2009; Vargo and Lusch, 2004).

Overall, the empirical results support that EB enables companies to attract highpotential employees and to retain and align current employees. The gap between EB and favorable employee outcomes is closed empirically. We argue that these employee outcomes in turn provoke favorable customer outcomes that lead to the creation of the service brand. Thus, we propose EB as a critical part of SB.

Retain and Align Current Employees

As discussed, employer branding supports service branding. This is done by favorably influencing employees' attitudes, which enhance the customers' experiences within interaction. (Bernhardt et al., 2000; Bettencourt and Brown, 2002; Hartline and Ferrell, 1996; Homburg and Stock, 2004; Homburg et al., 2009; Pugh, 2001) and therefore perform a key role in the service setting. Customers' experiences during service delivering process shape their image of the company's brand (Brodie et al., 2009; Vargo and Lusch, 2004; Berry, 2002).

Hence, companies need to manage the employer brand as it assists in the creation of a company's service brand. Therefore, it is important to deliver value to employees, that enhances the level of employee satisfaction and results in identification with the employer. In doing so, companies can positively influence customers' experiences in the employee-customer interaction. The results support the hypotheses that delivering value to employees encourages employees' favorable attitudes, specifically satisfaction and identification. Companies should focus on those value dimensions that are most likely to satisfy and identify employees; namely, *development value*, *social value*, and *diversity value*. To actively influence employee satisfaction, human resource management should provide training opportunities, room for creativity, and mentoring

and foster an empowering environment. Moreover, companies should build a *social culture* that focuses on friendly relationships among co-workers, adopt a "people-first attitude," and provide interesting and challenging tasks for employees.

Attract Potential Employees

The research findings support the assumption that a company's ability to create and to deliver an attractive image of the employer to the potential labor market increases the likelihood of attracting high-potential applicants (Slaughter et al., 2004; Collins and Stevens, 2002). Within a service-centred approach, a highly-skilled and identified staff is even more important, as they are the future link to the creation of the service brand. Therefore, it is imperative for companies to foster those value dimensions that attract potential employees; namely, *social value*, which encompasses the social image of a company, including a respectful environment, friendly relationships among co-workers and a "people-first attitude," which attracts employees even more than a good reputation of the products and company? Hence, companies who support strong culture of corporate social responsibility have an advantage regarding competition for talented and identified employees.

Social value aside, the research findings support the hypotheses that potential employees catch certain brand signals as job signals (Weiber and Adler, 1995). Therefore, reputational aspects (Edwards, 2010; Cable and Graham, 2000), do influence potential employees' identification with a company. This means that a company needs to foster a good reputation among friends or well known products. Hence, service providers are challenged to build a good reputation in order to get identified high-potentials that may create the future service brand.

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