

The Role of the Customer Contact Center in Relationship Marketing

Empirical studies on the added value of the quality of the customer contact center in relationship marketing, from a customer and employee perspective.

Een wetenschappelijke proeve op het gebied van de Managementwetenschappen

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Voor Willem

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Contents

Contents

Chapter 1 | Introduction

1.1	General objective	2
1.2	The role of the customer contact center in relationship marketing	3
1.3	Motivation	5
1.3.1	Customer contact center quality	5
1.3.2	Customer contact center job quality	7
1.4	Overall objectives of the dissertation	8
1.5	Key constructs	10
1.5.1	Holistic view on customer contact center quality	10
1.5.2	Holistic view on customer contact center job quality	11
1.5.3	Creating value	11
1.5.4	Outcomes of customer contact center quality	11
1.5.5	Outcomes of customer contact center job quality	12
1.6	Theoretical and managerial relevance	13
1.6.1	Theoretical relevance	13
1.6.2	Managerial relevance	13
1.7	Outline of the dissertation	14

Chapter 2 | Perceived customer contact center quality: conceptual foundation and scale development

2.1	Introduction	18
2.2	Conceptual framework	19
2.2.1	Service quality concept	19
2.2.2	Measuring service quality	19
2.2.3	Measuring customer contact center quality	20
2.3	Scale development	22
2.3.1	Qualitative study	22
2.3.2	Item generation through qualitative study	23
2.3.2.1	Research design	23
2.3.2.2	Sample characteristics	23
2.3.2.3	Respondent characteristics	23

2.3.2.4	Focus group sessions	24
2.3.2.5	Insights	24
2.3.2.6	Item generation	27
2.3.3	Quantitative studies	27
2.3.3.1	Data collection and scale purification I	27
2.3.3.2	Data collection and scale purification II	29
2.4	Discussion and theoretical implication	34
2.5	Managerial implications	35
2.6	Limitations and further research	37

Chapter 3 | Job quality in the customer contact center: conceptual foundation and scale development

3.1	Introduction	40
3.2	Conceptual framework	42
3.2.1	Job quality	42
3.2.2	Dimensions of job quality	43
3.2.3	Specific dimensions of customer contact center job quality	45
3.3	Scale development	48
3.3.1	Qualitative study	48
3.3.2	Item generation through qualitative study	49
3.3.2.1	Research design	49
3.3.2.2	Sample characteristics	49
3.3.2.3	Respondent characteristics	50
3.3.2.4	Focus group sessions	50
3.3.2.5	Insights	51
3.3.3	Quantitative studies	58
3.3.3.1	Data collection and scale purification I	58
3.3.3.2	Data collection and scale purification II	63
3.4	Discussion and theoretical implications	68
3.5	Managerial complications	71
3.6	Limitations and further research	74

Chapter 4 | Customer contact centers as relationship marketing instruments: the role of customer contact center quality

4.1	Introduction	78
4.2	The transformation from cost to value centers	79
4.3	Theoretical background	83
4.3.1	Customer contact center quality	84
4.3.2	The consequences of customer contact center quality	88
4.3.3	Relationships of customer satisfaction, trust, affective commitment and customer loyalty	91
4.4	Research design and method	93
4.4.1	Sampling and data collection	93
4.4.2	Measures	94
4.5	Analysis and results	94
4.6	Discussion	97
4.7	Managerial implications	99
4.8	Limitations and further research	100

Chapter 5 | Reducing employee turnover through customer contact center job quality

5.1	Introduction	104
5.2	Theoretical background	106
5.2.1	Job quality	106
5.2.2	Job quality in a customer contact center context	107
5.2.3	Customer contact center job quality	108
5.2.4	Effects of customer contact center job quality on employee turnover	109
5.3	Method	113
5.3.1	Data collection	113
5.3.2	Measures	114
5.4	Results	115
5.5	Discussion	117
5.5.1	Theoretical implications	117
5.5.2	Managerial implications	118
5.5.3	Limitations and further research	119

Chapter 6 | Conclusions

6.1	Synopsis	122
6.1.1	Customer contact center quality	123
6.1.2	Customer contact center job quality	125
6.1.3	Customer contact center quality's impact on long-term customer relationships	127
6.1.4	Customer contact center job quality's impact on employee turnover	128
6.1.5	The customer contact center as a relationship-oriented value center	128
6.2	Discussion and theoretical implications	130
6.3	Managerial implications	134
6.3.1	Managing the customer contact center: customer perspective	134
6.3.2	Managing the customer contact center: employee perspective	136
6.3.3	Managing the customer contact center as a relationship-oriented value center	139
6.4	Perspective on future research	140
	APPENDIX A Customer contact center quality scale items – descriptive statistics	145
	APPENDIX B Customer contact center job quality scale items – descriptive statistics	149
	APPENDIX C Customer contact center quality scale items	153
	APPENDIX D Customer contact center job quality scale items	149
	Summary in Dutch	163
	References	171
	About the author	187

Chapter 1

Introduction

In this chapter, I introduce the general objective of the present dissertation. The chapter starts with the role of the customer contact center in relationship marketing. Then, the motivation and overall objectives of the dissertation are presented. Finally, the key constructs, the theoretical and managerial relevance are discussed and the chapter ends with an outline of the dissertation.

1.1 General Objective

Service has grown into a crucial instrument of relationship marketing. Service is more difficult for competitors to copy than for example price offers, so an organization that offers excellent service may enjoy a competitive advantage. Since the mid-1980s, organizations have delivered increasing proportions of their service through customer contact centers (Anton 2000; Holman *et al.* 2007; Miciak and Desmarais 2001), leading to extreme growth in this sector (Datamonitor 2007; VCN 2010), along with changing roles for centers and their employees.

Because customer contact centers previously focused on handling as many transactions as they could as quickly as possible, they started out as efficiency-driven cost centers. In the past decade though, many studies have shown that value for customers, and thus for the service organization, requires more than focusing on individual transactions and their costs. For example, Feinberg *et al.* (2000), Miciak and Demarais (2001), and Marr and Parry (2004) show that none of the operational, transaction-oriented performance indicators (e.g., average handling time, service levels) actually influence customer satisfaction. Instead, to add value, customer contact centers need to focus on enhancing long-term customer relationships (Alexander and Colgate 2000; Coviello and Brodie 1998; Morgan and Hunt 1994).

This shift from a more short-term oriented cost center focus to a more long-term oriented value center perspective, is not unique to the customer contact center context. It occurred for marketing and service over the past 20 years, in line with the transition from an inside-out to an outside-in perspective. An inside-out perspective is primarily an internal organizational view that focuses on processes, quality, R&D, and learning (Knox and Bickerton 2003; Luo and Bhattacharya 2006; Noble *et al.* 2002; Olson *et al.* 2005)—that is, the cost center perspective. In contrast, an outside-in perspective takes an external, customer-driven view and focuses on customer-oriented behaviors (Day 1994; Knox and Bickerton 2003), parallel to the value center perspective.

Many organizations have integrated this outside-in, value-based perspective by consciously attempting a shift toward relationship marketing (Alexander and Colgate 2000; Payne and Frow 2005). With the recognition that a short-term, transaction-oriented

perspective would not suffice, these firms embraced customer relationship management to ensure their success in the long run (e.g., Hennig-Thurau *et al.* 2002; Payne and Frow 2005; Ryals 2005).

The need for customer contact centers to make such a shift has increased, because during this same period, many tasks formerly performed by account managers or service encounters have been transferred to customer contact centers. The situation appears somewhat paradoxical. Scholars and practitioners alike agree that human interactions facilitate long-term customer relationships, but traditional, interpersonal means for establishing customer relationships, such as account managers and physical stores, are becoming more scarce. Without any of the benefits of physical proximity, customer contact centers must substitute for more traditional sales instruments and create long-term customer relationships. How can they do so, and through what mechanisms? Extant literature on customer contact centers has largely neglected these questions, and this dissertation aims to rectify that neglect through four studies that answer these questions.

1.2 The Role of the Customer Contact Center in Relationship Marketing

Service organizations have come to realize more and more that they must alter their short-term, transaction-oriented perspective to adopt a long-term, relational perspective (Alexander and Colgate 2000; Coviello and Brodie 1998; Hennig-Thurau *et al.* 2002; Morgan and Hunt 1994). With a relational perspective, the focus lies on creating long-term customer relationships, and this change in perspective has significant consequences for the role of the customer contact center.

From a customer point of view, it means that it is no longer sufficient to focus solely on problem-solving transactions. The customer contact center often must fill the disappearing role of account managers and physical stores. Customers are forced to depend more and more on a large, impersonal customer contact center if they confront a question or problem. The customer contact center therefore needs to make the customer feel like the employee knows him or her, can offer proactive advice, listens well, and of course still can answer the question or solve the problem. These elements are all part of customer contact center quality (*CCC Quality*), and it is important to analyze the impact of this form of quality

on relationship quality and outcomes, to ensure that the customer contact center can fulfill its more relationship-oriented role as a value center.

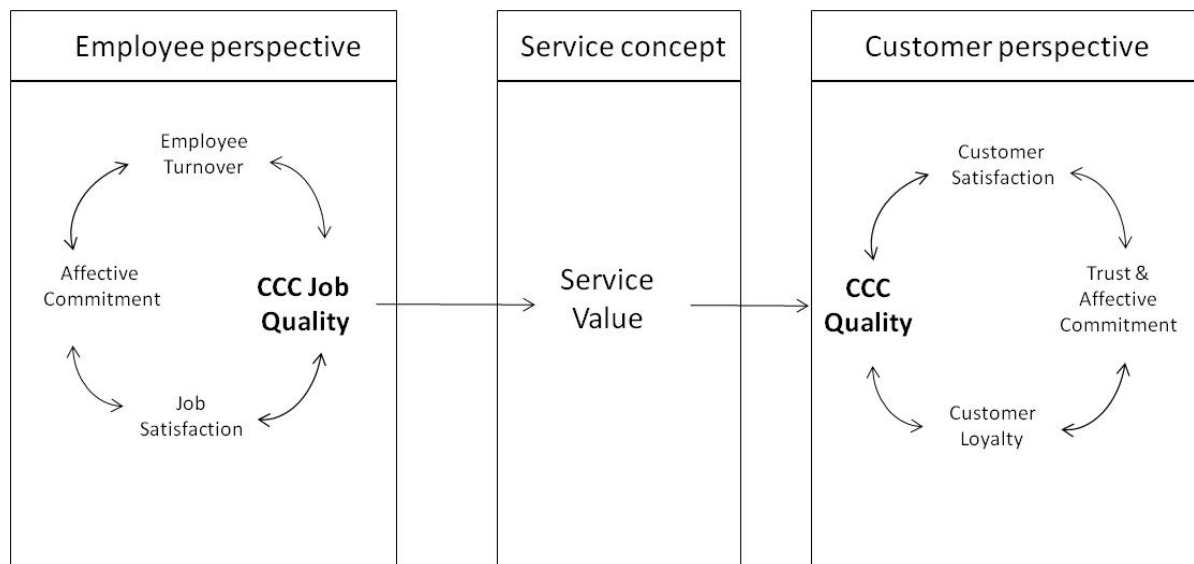
From an employee point of view, this change in perspective has consequences as well. In more transaction-oriented customer contact centers, employees' tasks are small and specific; they have virtually no empowerment to do what they consider best for the customer. They are assessed solely according to the time they spend talking to customers. In more relational-oriented customer contact centers, employees take on much more challenging roles, because they need to build relationships instead of just answering customer questions. The empowerment of the employees increases as they are often allowed to do what they think is necessary to create a better customer experience. These dimensions are all part of customer contact center job quality (*CCC Job Quality*). In addition, their performance assessments focus less on the time they spend talking to customers and more on the customer satisfaction they generate, creating and maintaining long-term customer relationships.

The customer and employee perspective cannot be seen as separate mechanism, as the employee perspective clearly has an influence on the customer perspective. The mechanisms that explain this relationship (see Figure 1.1) are described in the service profit chain theory (Heskett *et al.* 1997).

The service profit chain theory contends that the quality of the job that the employee experiences, has an impact on the quality of the service that is delivered to the customer. The quality of the work of the employees is a constant issue in the customer contact center, due to extreme turnover rates. The turnover rates in the customer contact center range on average from 20% to 40% a year (Hillmer *et al.* 2004; Malhotra and Mukherjee 2004; Whitt *et al.* 2004). This means that there is a constant issue of experienced employees who leave the organization and therefore the need to hire new employees. New employees receive training, but there is almost invariably a time lag before they can function at the same standard as employees with work experience. This gap reduces productivity and service quality, which leads to poorer service delivery to customers, which then might reduce customer satisfaction (e.g., Heskett *et al.* 1997; Rust *et al.* 1995; Spreng and Mackoy 1996). Therefore, there is a sense of urgency in terms of the need to focus on both employee and

customer perspectives when determining the quality of the customer contact center. In the present dissertation I focus on the customer and the employee perspective as such; I will not explore the mechanisms between these two perspectives, since I build on the robust findings of the interactions between the two from service profit chain theory.

Figure 1.1. The Service Profit Chain mechanisms



1.3 Motivation

As more and more organizations make use of the customer contact center, while at the same time most organizations are making a shift toward relationship marketing, the question arises whether, and if so, how the customer contact center is able to add value in relationship marketing. By focusing on a holistic view from both the customer and employee perspective of the quality of the customer contact center, I address the gaps in current literature and explore the role of the customer contact center in creating long-term customer relationships.

1.3.1. Customer Contact Center Quality

One of the crucial concepts in creating satisfied and loyal customers with service organizations is service quality (Parasuraman *et al.* 1985; 1988). Service quality is a measure of how well the service level delivered matches customer expectations (Parasuraman *et al.* 1985). In order to realize customers that are satisfied with the service delivered, organizations need to focus on the quality of the service they deliver.

The theoretical basis of customer contact center quality is analogous to the dominant conceptualization of service quality, namely, the confirmation–disconfirmation paradigm (Parasuraman *et al.* 1985). However, the specific context of customer contact centers makes some conceptual differences likely. Although the SERVQUAL instrument is generic and therefore in principle applicable to a wide field of services, the dimensions of service quality constructs are less generalizable across contexts than the current dominance of the SERVQUAL instrument suggests (Grönroos 1990; Johnston 1995). Therefore, the question arises whether customer perceptions of the quality of the customer contact center are the same as customer perceptions of service quality, or do other dimensions, specific to the customer contact center context, play a role?

Existing studies of customer contact center quality consist of either articles that focus on customers' perceptions (value center perspective) or those pertaining to the internal functions or management of the centers (cost center perspective). The latter category provides levers for the former group. Customer-oriented studies reveal that the impact of internal aspects, such as service levels, total calls, and average talk time, have minimal impact on the customer's experience (Feinberg *et al.* 2000; Heinen 2006; Holland 2003; Marr and Parry 2004; Miciak and Desmarais 2001). Customer contact centers thus demand consideration of other dimensions.

In initial studies in this area, De Ruyter and Wetzels (2000) investigated employee performance, the contact center representative (CCR), and the specific impact of perceived listening by the CCR on customer satisfaction and customer trust. Burgers *et al.* (2000) considered the role of the CCR in a broader sense: What does the customer expect of a CCR? Their answers indicate adaptiveness, assurance, empathy, and authority. In studying customer expectations of a service, Dean (2004) finds a new dimension, in addition to basic aspects such as solving the problem, being friendly, and explaining the steps in the process, that is, customer feedback.

These studies focus on particular aspects of the quality of the customer contact center, such as the CCR or perceived listening behavior, without considering the entire spectrum of this form of quality from the customer's point of view and its impact on relationship quality or customer loyalty. Therefore, in this dissertation, I focus on establishing a conceptualization and operationalization of a multidimensional customer contact center quality construct (Chapter 2).

In order to define the role of the customer contact center in creating long-term customer relationships, the next step after conceptualizing and operationalizing customer contact center quality, is to explore the impact of customer contact center quality on relationship quality, in terms of customer satisfaction, trust and affective commitment, and customer loyalty in terms of word of mouth and repurchase intentions (Chapter 4).

1.3.2. Customer Contact Center Job Quality

Just as service quality is a crucial concept in creating satisfied and loyal customers, job quality is a crucial concept in creating satisfied and loyal employees (e.g., Agho *et al.* 1993; Christen *et al.* 2006; Matzler *et al.* 2004). Employees that experience a high quality job, are more satisfied with their work and thus less likely to leave the organization. At present, we know little about what constitutes job quality (Burgess and Connell 2008). Some studies focus on its elements, such as empowerment (e.g., Thomas and Velthouse 1990), autonomy (Christen *et al.* 1997), or stress (Holdsworth and Cartwright 2003). But to understand the role of job quality in a customer contact center setting, we need to detail specific characteristics of this setting and how it differs from other service settings.

For example, Cordes and Dougherty (1993) find that customer contact center employees experience higher levels of burnout, and Singh *et al.* (1994) note that customer service representatives experience more emotional exhaustion than other service workers. Holdsworth and Cartwright (2003) also reveal that stress levels are higher among customer contact center employees, whereas their perception of empowerment is lower than that in the general working population. Enhancing the level of empowerment might reduce stress levels; De Ruyter *et al.* (2001) argue that role stress, as a result of conflicting demands, declines when employees are empowered by higher levels of autonomy.

Moreover, customer contact center stress levels are particularly high due to the use of continuous performance monitoring. On a minute-to-minute basis, employees undergo monitoring to ensure their average handling time matches the mandated service level. As Holman *et al.* (2002) note when discussing the three elements of performance monitoring—that is, performance-related content (i.e., immediacy of feedback, clarity of performance criteria), beneficial purposes (developmental instead of punitive), and perceived intensity—

perceived intensity of performance monitoring has a negative impact on employee well-being.

Finally, customer contact center employees constantly confront the flaws of their organization because customers call in to voice complaints about the firm. If the organization does not resolve these flaws, despite complaints and other customer signals, employees keep addressing the same flaws and dissatisfied customers, over and over again. Yet the nature of their job generally prevents customer contact center employees from initiating any change to address customer concerns. In contrast, a hotel desk clerk for example often is empowered to help guests on the spot. In this sense, customer contact center employees function only as damage controllers.

Considering these conceptual differences, I undertake a conceptualization and operationalization of a multidimensional customer contact center job quality construct (Chapter 3).

After defining the customer contact center job quality construct, the next step is to explore the impact of customer contact center job quality on job satisfaction, affective commitment and turnover. As turnover is such a serious issue in the customer contact center, it is crucial to explore whether customer contact center job quality is able to positively influence the attitudes of the employees, thus making them less likely to leave the organization. Therefore, I also address the impact of customer contact center job quality on job satisfaction, affective commitment, and employee turnover (Chapter 5).

1.4 Overall Objectives of the Dissertation

The central research question of this dissertation can be formulated as follows:

How can the customer contact center perform as a relationship-oriented value center, instead of a transaction-oriented cost center, for both customers and employees?

For the customer contact center to be a true value center, it must add value for both customers and employees. From the customer perspective, the goal of the customer contact center is to increase customer loyalty by increasing relationship quality (Chapter 4). To analyze this relationship, I first need to conceptualize the customer contact center quality construct (Chapter 2). From the employee perspective, the goal is to lower employee

turnover rates by improving job satisfaction and affective commitment levels (Chapter 5). To analyze these relationships, I similarly need to begin by conceptualizing the customer contact center job quality construct (Chapter 3).

The central question thus comprises the following related research questions:

1. *How can customer contact center quality be conceptualized, and which dimensions are part of the operationalization of customer contact center quality? (Chapter 2)*
2. *How can customer contact center job quality be conceptualized, and which dimensions are part of the operationalization of customer contact center job quality? (Chapter 3)*
3. *What is the impact of customer contact center quality on relationship quality and customer loyalty? (Chapter 4)*
4. *What is the impact of customer contact center job quality on job satisfaction, affective commitment, and employee turnover? (Chapter 5)*

As these research questions imply, two conceptual models are at the heart of this dissertation (see Figure 1.2 and 1.3).

Figure 1.2. Conceptual framework of the impact of customer contact center quality

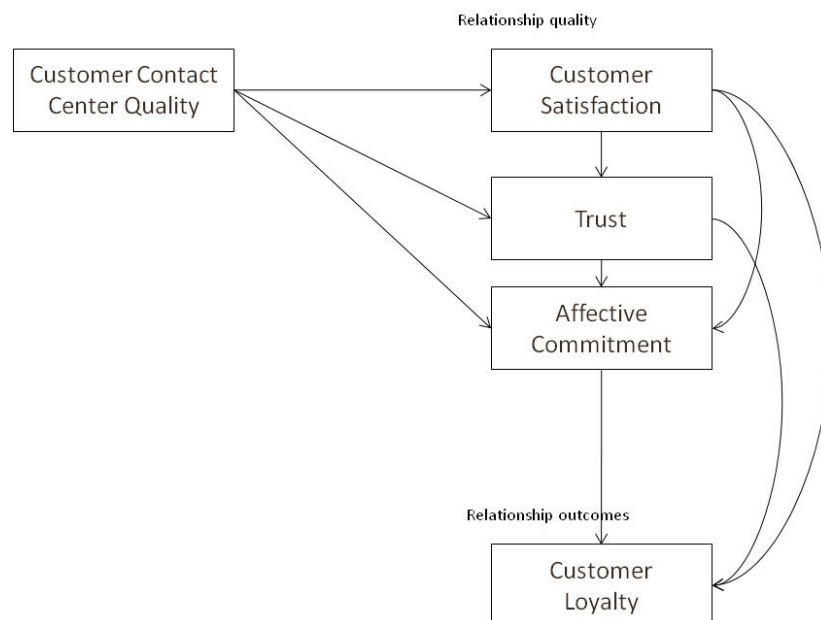


Figure 1.3. Conceptual framework of the impact of customer contact center job quality



By answering these four questions, I address the main question about whether customer contact centers can be embraced as relational instruments for organizations instead or merely being the cost center they are now.

1.5 Key Constructs

1.5.1 Holistic View on Customer Contact Center Quality

Most studies of customer contact centers focus on specific elements of the quality of the service delivered. For example, De Ruyter and Wetzels (2000) investigate the listening skills of the customer service representative, and Feinberg *et al.* (2000) note the impact of internal measures, such as average handling times and service levels, on satisfaction. Thus a holistic view of customer contact center quality is missing. Chapter 2 develops the customer contact center quality construct on the basis of existing service quality research and an extensive qualitative and quantitative study. Ultimately, I define customer contact center quality as *the overall evaluation of the customer contact center, as perceived by customers*. Chapter 2 contains a detailed account of the conceptualization and operationalization of the customer contact center quality construct.

1.5.2 Holistic View on Customer Contact Center Job Quality

Most studies on job quality focus on aspects of job quality instead of its entire spectrum. Many studies investigate, for example, empowerment (Spreitzer *et al.* 1997; Thomas and Velthouse 1990). Christen *et al.* (2006) have studied the role of compensation and autonomy, and Holdsworth and Cartwright (2003) and De Ruyter *et al.* (2001) focus on the impact of stress. Yet again, the holistic view has been missing. Therefore, Chapter 3 contains the development of the customer contact center job quality construct, based on job quality research and an extensive qualitative and quantitative study. I define customer contact center job quality as *the overall evaluation of the job experience within the customer contact center, as perceived by employees*. In turn, Chapter 3 details the conceptualization and operationalization of the customer contact center job quality construct.

1.5.3 Creating Value

Both customer contact center quality and customer contact center job quality are measured at the customer contact center level. But improving customer contact center quality and customer contact center job quality are not goals in themselves; the goal must be to create value for the entire organization. This means improving customer loyalty to the organization, as well as decreasing the level of employee turnover in the organization. Therefore, the outcome constructs are measured at the organizational level, instead of the customer contact center level.

1.5.4 Outcomes of Customer Contact Center Quality

As noted, the marketing discipline is shifting, from a transactional to a more relational perspective (e.g., Hennig-Thurau *et al.* 2002). The key components of relationship marketing are relationship quality, which consists of customer satisfaction, trust, and affective commitment, and relationship outcomes, which include customer loyalty in terms of word of mouth and repurchase intentions (Chiou and Droge 2006; Garbarino and Johnson 1999; Lam *et al.* 2004; Morgan and Hunt 1994). For this study, I focus on the impact of customer contact center quality on all of these elements and intentions.

Customer satisfaction with an organization is a result of a psychological comparison of the perceived benefits obtained from an organization and the expectations of it (Oliver

1980; Yi 1990). Trust encompasses the perceived credibility and benevolence of an organization (Doney and Cannon 1997). Affective commitment refers to a feeling of belonging to the organization and caring about its long-term success (Garbarino and Johnson 1999). Customer loyalty focuses on customers' future intentions with regard to repurchase intentions and positive word of mouth (Zeithaml *et al.* 1996).

Several studies have shown that customer satisfaction, trust, and affective commitment are important mediators of loyalty (e.g., Caceres and Pappas 2007; Garbarino and Johnson 1999; Morgan and Hunt 1994). Because these three factors increase customer loyalty through an attitudinal process in customers' minds, customers develop so-called true customer loyalty—a more sustainable form of customer loyalty than the spurious customer loyalty created by inertia (Bloemer and Kasper 1995; Dick and Basu 1994). Chapter 4 thus focuses on the impact of customer contact center quality on all these relationship outcomes.

1.5.5 Outcomes of Customer Contact Center Job Quality

A crucial outcome of customer contact center job quality is employee turnover. Especially in a customer contact center context, employee turnover is a huge problem, with rates ranging from 20% to 40% a year (Hillmer *et al.* 2004; Malhotra and Mukherjee 2004; Whitt *et al.* 2004). Two important antecedents of turnover are job satisfaction and affective commitment. In particular, job satisfaction, as defined by Locke (1969), is “an emotional state resulting from an appraisal of the employee's job in the customer contact center.” Affective commitment instead reflects “the emotional involvement of the employee with the goals and values of the entire service organization and the identification of the employee with the entire service organization” (Allen and Meyer 1990; Bansal *et al.* 2004; Martin 2008). Yet for customer contact centers, extremely high levels of employee turnover are often the norm, which means that employees are likely to leave (Ganesan and Weitz 1996). Chapter 5 therefore focuses on the impact of customer contact center job quality on these outcomes.

1.6 Theoretical and Managerial Relevance

The findings of this dissertation are relevant for both academics and practitioners involved in the service sector.

1.6.1 Theoretical Relevance

From a theoretical perspective, this dissertation provides several contributions to research into the role of the customer contact center.

First, the specific context of customer contact centers increases the likelihood of conceptual differences between service quality and customer contact center quality. Customer contact center quality comprises some common features but also some unique dimensions compared with SERVQUAL. Chapter 2 contains an instrument that can measure customer contact center quality more accurately.

Second, I contribute to existing literature by conceptualizing customer contact center job quality, validating existing and adding new dimensions that apply to the customer contact center setting, and developing a scale to measure job quality in customer contact centers (Chapter 3).

Third, this dissertation offers a better understanding of the concept of customer contact center quality and its direct and indirect impact on relationship quality and customer loyalty. In doing so, I create a better understanding of the role of the customer contact center in creating long-term customer relationships (Chapter 4).

Fourth, a comprehensive understanding emerges of the impact of customer contact center job quality on job satisfaction, affective commitment, and employee turnover. I show in particular that customer contact center job quality is a crucial instrument in the battle against turnover (Chapter 5).

1.6.2 Managerial Relevance

First, managers of customer contact centers should recognize that in order to improve customer contact center quality, a more holistic view than previous studies may have indicated is required. Although these managers may have access to a wealth of internal measures, such as waiting time or abandonment rates, they know less about key customer-centric information, such as customer contact center quality (Chapter 2).

Second, I provide managerially relevant guidelines regarding ways to monitor and improve customer contact center job quality, according to specific insights about how to improve all dimensions that constitute the customer contact center job quality construct (Chapter 3).

Third, I offer managers of customer contact centers clear insights into the impact of customer contact center quality on customer satisfaction, trust, affective commitment, and customer loyalty in terms of word of mouth and repurchase intentions. Such insights enhance their understanding of what they actually can do to increase the positive impact of customer contact center quality on relationship quality and customer loyalty (Chapter 4). Moreover, I show that customer contact center quality is an underrated marketing instrument that can enhance long-term customer relationships. Thus, marketing budgets should be invested in improving the quality of the customer contact center.

Fourth, this dissertation offers valuable insights into how managers can use the customer contact center job quality construct to ensure their employees are satisfied and committed and thus less likely to leave. This ability has concrete internal and external financial consequences, because it decreases costs pertaining to hiring and training new employees and leads to improved service quality (Chapter 5).

These contributions combine to address the central research question of this dissertation, that is, whether customer contact centers are able to function as relationship-oriented value centers instead of transaction-oriented cost centers.

1.7 Outline of the dissertation

Chapter 2 presents the results of an extensive qualitative and quantitative study that conceptualizes customer contact center quality and develops a robust scale to measure the seven dimensions that constitute this construct.

Chapter 3 relies on the same extensive scale development procedure, including qualitative and quantitative studies, but with a focus on the conceptualization of the construct of customer contact center job quality. The robust scale developed in this chapter consists of twelve dimensions.

Chapter 4 details the outcomes of customer contact center quality. Specifically, it answers the question, Does customer contact center quality have a positive impact on relationship quality, consisting of customer satisfaction, trust, and affective commitment, and customer loyalty, consisting of word of mouth and repurchase intentions?

Chapter 5 follows the procedure from Chapter 4 but with regard to the impact of customer contact center job quality on employee turnover, in the form of job satisfaction, affective commitment, and employee turnover.

Finally, Chapter 6 summarizes the main findings of this dissertation with a focus on the central research question. I also present an overview and discussion of the implications of the findings for marketing academics and practitioners before pointing out some limitations and suggestions for further research.

Perceived Customer Contact Center Quality: Conceptual Foundation and Scale development.

In Chapter 2, the research question how customer contact center quality can be conceptualized, and which dimensions are part of the operationalization of customer contact center quality is answered. Although the quality of the customer contact center is pivotal for services, a thorough conceptualization and operationalization of perceived customer contact center quality does not exist. The extensive scale development process moves from focus group sessions for item generation to exploratory and confirmatory factor analyses. Perceived customer contact center quality consists of seven dimensions: reliability, empathy, customer knowledge, customer focus, waiting cost, user friendliness of the voice response unit, and accessibility. Compared with existing conceptualizations of service quality, perceived customer contact center quality offers additional dimensions.

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2.1 Introduction

Firms offer more and more services through customer contact centers (Anton 2000; Holman *et al.* 2007; Miciak and Desmarais 2001), which in turn become showpieces for service organizations and a central means to create a delightful customer experience. In particular, the contact center is pivotal for forming customer relationship marketing strategies (Mitchell 1998; Prabhaker *et al.* 1997) because it facilitates both the maintenance and enhancement of customer relationships. Service research suggests that the efficient and effective management of services – and thus customer contact centers – demands a distinct level of customer-perceived quality (Parasuraman *et al.* 1985; Rust *et al.* 1995).

The managerial relevance of perceived customer contact center quality as a potential corporate success factor derives from the substantial impact of perceived quality on customer relationships. Managers of customer contact centers must recognize that several dimensions influence quality perceptions so that they may implement successful, quality-based differentiation schemes. Although these managers may have access to a wealth of internal measures, such as waiting time or abandonment rates, they know less about customer-centric information, such as perceived customer contact center quality.

The theoretical basis of perceived customer contact center quality is analogous to the dominant conceptualization of service quality, namely the confirmation–disconfirmation paradigm (Parasuraman *et al.* 1985). However, the specific context of customer contact centers makes some conceptual differences likely. The dimensions of service quality constructs are less generalizable across contexts than the dominance of the SERVQUAL instrument suggests (Grönroos 1990; Johnston 1995). Therefore, we assume that the SERVQUAL scale needs to be modified for the specific customer contact center setting. As Finn and Kayande (2004) found in their study, we will use an extensive scale development procedure including confirmatory factor analysis (CFA) to make valid adjustments to define this specific scale. Using a qualitative study and a large-scale quantitative study, we demonstrate that perceived customer contact center quality comprises some common features but also some unique dimensions. Moreover, we provide an instrument that enables the measurement of perceived customer contact center quality.

In the next section, we outline a conceptual foundation for perceived customer contact center quality. The results of a qualitative study provide some initial suggestions for possible dimensions. Through our exhaustive scale development process, based on the quantitative study, we confirm that perceived customer contact center quality consists of seven dimensions: reliability, empathy, customer knowledge, customer focus, waiting cost, user friendliness of the voice response unit (VRU), and accessibility. Finally, we discuss the results of the study, provide some theoretical and managerial implications, and note limitations and some further research ideas.

2.2 Conceptual Framework

2.2.1 Service Quality Concept

The concept of service quality began to emerge in the late 1970s, with a primary focus on goods. Because services differ from goods on key features such as intangibility (Shostack 1977), heterogeneity (Booms and Bitner 1981), and inseparability (Grönroos 1978), researchers also needed a separate concept of service quality. Two early conceptualizations by Grönroos (1982) and Smith and Houston (1982) used the confirmation–disconfirmation paradigm suggested by Churchill and Suprenant (1982), which contends that service evaluations relate to the size and direction of the disconfirmation experience. This disconfirmation necessarily pertains to a consumer’s initial expectations. Therefore, in line with the confirmation–disconfirmation paradigm, Grönroos (1982) argues that customers compare the service they expect with the service they receive to evaluate its quality. When the service delivered does not meet initial expectations, the consumer is dissatisfied, whereas if the service meets or exceeds those expectations, he or she is satisfied. This paradigm also paved the way for seminal work by Parasuraman *et al.* (1985) and Parasuraman *et al.* (1988) on service quality and its measurement.

2.2.2 Measuring Service Quality

For service quality, SERVQUAL (Parasuraman *et al.* 1988) is the most widely used measurement tool. Parasuraman *et al.* (1985) studied the topic extensively and found, on the basis of their focus group sessions, that service quality consists of 10 dimensions.

In a further development (Parasuraman *et al.* 1988), these authors propose a measurement scale for service quality (SERVQUAL) that consists of 22 items in five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Although SERVQUAL dominates studies of service quality, several critical issues remain concerning this scale.

First, as Cronin and Taylor (1992) suggest, SERVQUAL measures the gap between the expectations and actual performance. However, using performance-based measures would provide a more reliable source of information and more valid measure of service quality (Cronin and Taylor 1992; 1994). They suggest a SERVPERF scale that consists of 21 of the 22 SERVQUAL items, but with measurements based on actual performance only. After Cronin and Taylor's (1992, 1994) work, several authors have confirmed that performance-only measures are preferable to gap measurements (Badri *et al.* 2005; Brady *et al.* 2002; Davis and Heineke 1998; Dean 2004; Hamer 2006; Karatepe *et al.* 2005).

Second, in terms of the dimensionality of the SERVQUAL scale, Johnston (1995) claims that SERVQUAL's five dimensions are not robust and calls for more research. Similarly, Badri *et al.* (2005) do not find a five-component structure for SERVQUAL in the IT services industry. In Table 1, we compare the dimensions identified in SERVQUAL studies by Parasuraman *et al.* (1985, 1988) and those found by Grönroos (1990) and Johnston (1995).

The proposed dimensions differ not only in number but also in their content. Table 2.1 illustrates both similarities and differences across the four scales. Dimensions such as reliability, responsiveness, and empathy appear in all of them, but Johnston (1995) adds substantially new dimensions, such as functionality and integrity. That is, prior findings pertaining to the dimensions of service quality are not consistent. Although Zeithaml *et al.* (1996) claim that SERVQUAL applies across industries, they also note that any study should incorporate industry- or situation-specific elements in the scale.

2.2.3 Measuring Customer Contact Center Quality

The growth in customer contact centers is reflected in the number of studies on the subject, which began appearing in 2000 (e.g. Burgers *et al.* 2000; Feinberg *et al.* 2000; De Ruyter and Wetzels 2000). These studies consist of two categories: articles that focus on customers' perceptions of customer contact centers.

Table 2.1: Overview of the dimensions of service quality

SERVQUAL (10) Parasuraman <i>et al.</i> (1985)	SERVQUAL (5) Parasuraman <i>et al.</i> (1988)	Johnston (1995)	Grönroos (1990)
Reliability	Reliability	Reliability	Reliability and trustworthiness
Responsiveness	Responsiveness	Responsiveness	Accessibility and flexibility
Tangibles	Tangibles	Appearance / Aesthetics	Professionalism and skills
Competence	Assurance	Cleanliness / Tidiness	Attitudes and behavior
Credibility		Comfort	Recovery
Communication		Communication	Reputation and credibility
Security		Competence	
Courtesy		Courtesy	
Understanding / Knowing the customer	Empathy	Friendliness	
Access		Availability	
		Access	
		Security	
		Attentiveness/Helpfulness	
		Care	
		Commitment	
		Functionality	
		Integrity	

and those pertaining to the internal functions or management of the centers. The latter category provides levers for the former group of studies. These customer-oriented studies reveal that the impact of internal aspects, such as service levels, total calls, and average talk time, actually have minimal impact on the customer's experience (Feinberg *et al.* 2000; Heinen 2006; Holland 2003; Marr and Parry 2004; Miciak and Desmarais 2001). Customer contact centers needed a focus on other dimensions, which prompted more studies of customers' perceptions.

The initial studies of customers' perspectives came from De Ruyter and Wetzels (2000) and Burgers *et al.* (2000). De Ruyter and Wetzels (2000) investigate employee performance, the contact center representative (CCR), and the specific impact of perceived listening by the CCR on customer satisfaction and customer trust. They find that perceived

listening consists of three dimensions: attentiveness, perceptiveness, and responsiveness. Attentiveness and responsiveness both have direct impacts on customer satisfaction, and receptiveness and responsiveness have direct impacts on customer trust. These three dimensions likely influence overall evaluations of the quality of the contact center as well. Burgers *et al.* (2000) consider the role of the CCR in a broader sense: What does the customer expect of a CCR? Their four dimensions are adaptiveness, assurance, empathy, and authority. Dean (2004) studies customer expectations of service and finds, in addition to basic service aspects such as solving the problem, being friendly, and explaining the steps in the process, two new dimensions: customer feedback and customer focus. The measurement scale for customer feedback features items such as regular monitoring of customer satisfaction, encouragement of informal feedback, and informing customers of changes. The scale for customer focus instead consists of items such as understanding the needs of the customer, constantly creating value for the customer, and adopting a main objective of keeping the customer satisfied. In a comprehensive framework of perceived customer contact center quality, these additional dimensions may play key roles.

All these studies concentrate on particular aspects of the quality of the customer contact center, such as the CCR, perceived listening behaviour, and so on. To our knowledge, there have not been any previous studies focusing on the entire spectrum of the quality of the customer contact center from the customer's point of view.

2.3 Scale Development

2.3.1 Qualitative Study

To develop a reliable, valid scale of perceived customer contact center quality, we follow the rigorous scale development process recommended by Churchill (1979) and Gerbing and Anderson (1988). This process consists of five steps: (1) item generation through a qualitative study, (2) questionnaire development, (3) data collection (first sample) and scale purification, (4) data collection (second sample) and scale purification, and (5) assessment of reliability and validity.

2.3.2 Item generation through qualitative study

2.3.2.1 Research Design

We begin the item generation process with focus group sessions that included customers of different business-to-consumer service industry organizations, all of which have large customer bases and many customer contacts through a customer contact center. By organizing focus groups into interviews, we generated more items because the participants could elaborate on their comments. This elaboration is not possible in an in-depth interview with individual customers (Morgan, 1996). Therefore, we organized focus group sessions with 7–11 customers of each participating firm.

2.3.2.2 Sample Characteristics

We focus on the experience that customers have had with the contact center of an organization. Therefore, as recommended by Zeller (1993), we agreed in advance to stop running the focus group sessions as soon as no new items were generated during them. In total, we ran three focus group sessions: one with customers of a bank and two with customers of two different health insurance companies, as we described in Table 2.2.

Table 2.2. Background information on participating focus group organizations

Number of	Bank	Health insurance company (1)	Health insurance company (2)
Customers	2 million	440,000	350,000
Phone calls per year	700,000	500,000	450,000
Employees	98	60	70

2.3.2.3 Respondent Characteristics

The respondents included randomly selected customers who had recent contact with the customer contact center. A short period of time (less than 1 week) had elapsed since their last contact, which ensured that their experience would still be relatively vivid. In total, 13 male and 14 female respondents participated. The average age was 45 years, with a range from 18 to 72 years. Most customers claimed that they contacted the center once every 6 months to 1 year and had been a customer of the participating organization for 5–10 years.

2.3.2.4 Focus Group Sessions

The sessions lasted 1.5–2 h and proceeded according to the method recommended by Morgan (1996). The moderator asked participants to elaborate on their recent experiences with the customer contact center. In discussing these experiences, they also could respond to one another and add new comments. At the end of the discussion, the moderator noted the items that emerged from previous studies as a means to confirm whether the participants had mentioned these aspects or if other aspects needed to be added.

2.3.2.5 Insights

The focus group sessions indicated that eight dimensions help determine the quality of customer contact centers. These dimensions derived from a joint effort between the moderator and the customers, who together grouped the aspects that customers believed, represented underlying dimensions. This participative judgment helped enhance the objectivity of our determination of the dimensions. From this process, we can identify the following dimensions: reliability, empathy, customer knowledge, validation of customer needs, focus on customer's interest, accessibility, waiting cost, and user friendliness of the VRU.

Reliability. This first dimension comprises concepts such as answering the question and being able to trust the employee's knowledge, which represents the core goal of customer contact centers. However, other aspects also define reliability. For example, one participant mentioned:

The information that is given by the organization should be consistent. When I read the Internet or a flyer or when I talk to another employee from the contact center, the answer to my question should be the same at all times.

When a customer engages in contact by phone, no written evidence of the answer given by the employee remains. Customers want to feel completely sure that they can trust the employee's knowledge on the topic.

Empathy. This dimension consists of aspects such as friendliness, listening, and understanding. As a participant described:

'When I talked to the employee the last time, he was very friendly and also very patient with me'.

Some other aspects refer to reassurance:

You often feel like you are asking a dumb question. An employee that I was talking to made me feel like my question was important to him and I really felt that he tried to place himself in my situation.

That is, customers consider not only the competence of the employee, including listening skills, but also his or her ability to make the customer feel special and provide personal attention.

Customer knowledge. This dimension consists of aspects that make customers feel as if the organization knows them:

Just having the right information about the customer in front of them and letting me know that they know my history, gives me the feeling that they know me. That I am not just a number in their organization.

Customer knowledge encompasses not just details about the customer as a person but also information about prior transactions.

Validation of customer needs. This dimension consists of aspects such as asking whether the answer was clear or whether the customer has any other questions. For example:

The employee asked me whether my question was answered and whether this contact was satisfactory for me. This made me feel like they find it important to know whether they have fulfilled my needs and are not just busy to end the phone call as quickly as possible.

This effort to meet the needs of customers appears to have a determinant effect on the experience with the customer contact center.

Focus on customer's interest. This dimension consists of aspects such as giving proactive advice or providing information to enhance customer satisfaction. For example:

The time that my expectations were exceeded I was given advice proactively. I had a product which apparently did not suit my situation anymore. So they offered me a better product, without it being more expensive.

When an organization offers proactive advice or displays how it has learned from its customers, it appears to be focusing on the interests of the customer.

Accessibility. The respondents in the focus groups note that they want to be able to find the contact number for the center and the hours of operation. However,

When I needed to contact the customer service center, I had to search their website extensively in order to find it. That was very annoying.

Waiting cost. This dimension refers to the time customers must wait when they contact the center, which customers do not want to take too long. However, the focus group respondents were not very specific about what constituted too long – 5 min or 30 s? They also noted that when they were waiting, they would prefer to know how long they would be waiting, whether in terms of the time remaining or the number of customers ahead of them:

When I called a contact center from another company, they let me know that there was a waiting period. But they offered me the option to leave my phone number behind and that they would return my call later. So I didn't have to wait at all. I think all contact centers should offer this service.

User friendliness of VRU. This dimension consists only of aspects related to the VRU, that is, the automated menu customers proceed through before they can speak to an employee. Some customers prefer to avoid the VRU completely, whereas others indicate that a properly designed VRU (i.e. clear menu options, not too long) leaves them indifferent towards it. One respondent even noted:

Sometimes organizations use a never-ending VRU. After option 7, I have no idea what option I should choose to answer my question.

2.3.2.6 Item Generation

The qualitative study, using focus group sessions, thus identified specific aspects of perceived customer contact center quality. On the basis of these sessions, we generated 61 items (Table 2.3).

2.3.3 Quantitative Studies

In addition to the 61 designated items, which use a 7-point Likert scale anchored by 'strongly disagree' and 'strongly agree', we include socio-demographic (e.g. age, gender, education) and other background (e.g. years they had been customers, average number of contacts with the center, number of products purchased from the organization) questions in the survey questionnaire to validate the results of our study subsequently.

2.3.3.1 Data Collection and Scale Purification I

The first quantitative study included customers of a telecom provider. We randomly selected 1175 customers who recently initiated contact with the customer contact center. We approached the sample of customers via email, with a link to an online survey. Of this sample, 305 respondents completed the questionnaires (26% response rate). The respondents were 52% male and 48% female. This response rate is a bit lower than average email survey response rates, which lies around 30% (Sheehan 2001). This might be explained by the fact that the questionnaire was rather long for an email survey. According to their background characteristics, we confirm that the sample is representative of people who approach the customer contact center.

We deleted seven items (see end of Table 2.3) from the original set because of the high number of missing values, which raised doubt about the valid measurement of these items. With the remaining 54 items, we ran an exploratory factor analysis to determine the dimensionality of the quality of the customer contact center (for the descriptive statistics of the items, see Appendix A). The exploratory factor analysis with VARIMAX rotation extracted eight factors that explained 71% of the variance (KMO: 0.952; Bartlett: chi-square: 16576.519; df: 1485; significance: 0.000), as shown in Table 2.3. The results of the exploratory factor analysis largely coincide with the elements of perceived customer contact

center quality from the qualitative study. In light of the promising internal consistency measures, we decided to confirm the 54-item instrument using data from new samples and CFA.

Table 2.3. Results of the focus group sessions and exploratory factor analysis (Varimax rotation)

	Factor 1 (Accessibility)	Factor 2 (Waiting Cost)	Factor 3 (VRU)	Factor 4 (Knowing the customer)	Factor 5 (Empathy)	Factor 6 (Reliability)	Factor 7 (Validation customer needs)	Factor 8 (Interest of customer put first)
Access1	0.764							
Access2	0.776							
Access3		0.655						
Access4		0.691				0.401		
Access6		0.566						0.305
VRU1			0.850					
VRU2			0.830					
VRU3			0.710					
Knowing1				0.666				
Knowing2				0.682		0.363		
Knowing3				0.627		0.411		
Knowing4				0.580		0.487		
Knowing5				0.596			0.312	
Knowing6				0.622				
Empathy1					0.511			
Empathy2					0.813			
Empathy3					0.842			
Empathy4					0.808			
Empathy5					0.772	0.342		
Empathy6					0.823	0.320		
Empathy7					0.788	0.349		
Empathy8					0.729	0.307		
Empathy9					0.617			
Empathy10					0.747	0.374		
Empathy11					0.696	0.326		
Empathy12					0.698			
Empathy13					0.593	0.427		
Empathy14					0.595	0.535		
Empathy16					0.576	0.446	0.366	
Knowing7				0.319	0.346	0.619		
Empathy15					0.451	0.547		
Expert1					0.398	0.720		
Expert2					0.343	0.664		
Expert3					0.457	0.707		
Expert4					0.430	0.683		
Expert5					0.310	0.666		0.308

Table 2.3. *Continued*

	Factor 1 (Accessibility)	Factor 2 (Waiting Cost)	Factor 3 (VRU)	Factor 4 (Knowing the customer)	Factor 5 (Empathy)	Factor 6 (Reliability)	Factor 7 (Validation customer needs)	Factor 8 (Interest of customer put first)
Answer1		0.342				0.687		
Answer2		0.352				0.702		
Answer3						0.570		
Answer8					0.470	0.590		
Generic1					0.426	0.540		
Generic3						0.632		
Generic4						0.625		0.413
Generic5						0.720		0.307
Generic10						0.622		0.441
Empathy17					0.591	0.336	0.567	
Empathy18					0.522	0.375	0.622	
Empathy19					0.515	0.335	0.571	
Empathy20					0.395	0.316	0.639	
Generic2						0.316		0.467
Generic6						0.369		0.675
Generic7		0.375						0.423
Generic8						0.350		0.562
Generic9								0.700
Variance extracted (%)	3.5%	5.3%	5.0%	7.2%	20.6%	18.6%	5.0%	6.0%

Notes: The following 7 items were deleted (too many missing values):

- When the question cannot be answered, somebody calls me back later
- I am being called back within the agreed timeframe
- The contact center of organization X calls sooner than the agreed timeframe
- When my question cannot be answered right away, the contact center keeps me informed of the status of my question.
- It would be better to immediately talk to an employee instead of a VRU
- The connection is never broken by the contact center when they are busy
- When it is very busy, I can leave my number behind and they call me back

Note: minimum factorloading of 0.3 based on sample size.

2.3.3.2 Data collection and scale purification II

For the second quantitative study, we hoped to examine the robustness of the 54-item scale for perceived customer contact center quality. We therefore collected data pertaining to the quality of the customer contact centers of two banks and an Internet service provider.

In Table 2.4, we offer some background information about the three organizations. We again selected customers who recently had experience with the customer contact centers. They were approached via email, after they had been asked by phone whether they

would be willing to participate in the study. For the first financial services firm (Bank 1), we identified 738 customers, of whom 154 respondents completed the questionnaire (response rate 21%). These respondents were mostly men (65%), with an average age of 47 years. For Bank 2, we noted 1235 customers and received 396 responses (response rate 32%) from a group that consists of 49% male and 51% female respondents, with an average age of 42 years. Finally, for the Internet provider, we found 2989 customers, and 472 respondents filled out a complete questionnaire (response rate 16%). The gender and age characteristics are as follows: 67% male and 33% female respondents, and an average age of 48 years. We validated the representativeness of the samples with some other background characteristics and find that all three samples are representative of customers who contact the firms' centers.

Table 2.4. Background information on the CFA participating organizations

Number of	Bank (1)	Bank (2)	Internet provider
Customers	2 million	7 million	2 million
Phone calls per year	700,000	12.5 million	3.5 million
Employees	98	2000	575

We analyzed the three samples using CFA (AMOS 16). We first examined whether the three samples could be pooled or demanded three separate analyses. The results of a multi-group comparison are given in Table 2.5. The multi-group CFA demonstrates metric invariance, which implies that the three samples represent the same general population, and so we proceed with the analysis based on pooled data.

Table 2.5. Significance of differences in covariance structure across three samples

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	NNFI rho2
Measurement weights	172	37,648	1,000	,001	,001	-,008	-,009
Structural covariances	240	250,825	,303	,006	,006	-,006	-,007
Measurement residuals	364	1761,362	,000	,040	,043	,023	,024

We discarded eight items because of their low item reliability. The final CFA model provides the following fit statistics: $\chi^2(946) = 3840.275$, $p = .000$, root mean residual (RMR) = .215, goodness-of-fit index (GFI) = .862, adjusted goodness-of-fit index (AGFI) = .835, normed fit

index (NFI) = .912, nonnormed fit index (NNFI) = .922, comparative fit index (CFI) = .932, incremental fit index (IFI) = .932, and root mean square error of approximation (RMSEA) = .055, with a 90% confidence interval ranging from .053 to .056 (p -close = .000). We find evidence of convergent validity in the factors' average variance extracted (AVE), which ranged between 0.544 and 0.831, well above the criterion of 0.500 (Fornell and Larcker, 1981). In addition, we use CFA to check the discriminant validity by fixing each of the 28 factor correlations to one (i.e. 1 df), such that any merger of two constructs would lead to a significant and strong deterioration of model fit. With this method, we determined that the validation of customer needs and focus on customer's interest factors do not discriminate. Because they appear to measure a single factor, we joined these categories into a customer focus factor. The results of the CFA are given in Table 2.6.

Table 2.6. Confirmatory factor analysis of pooled data

Factor	Item	Loading	Alpha	AVE
Accessibility	The phone number of the contact center of organisation X is easy to find.	0.877	0.723	0.783
	The opening hours of the contact center of organisation X are sufficient.	0.893		
Waiting	When I call the waiting time is made clear to me.	0.588	0.674	0.608
	The waiting time of the contact center of organisation X is acceptable.	0.891		
	The costs of calling the contact center are acceptable.	0.826		
Voice response unit	The VRU is logically ordered.	0.934	0.898	0.831
	The VRU is clear.	0.930		
	The VRU is not too long.	0.869		
Knowing the customer	As soon as I talk to an employee, I notice that the employee:		0.860	0.589
	- knows me as their customer.	0.656		
	- immediately has my data at his disposal.	0.806		
	- has insight into my personal data.	0.833		

Table 2.6. *Continued*

Factor	Item	Loading	Alpha	AVE
	- has insight into my product data.	0.831		
	- knows when and why I contacted the contact center previously.	0.721		
	- knows what other contacts I have had with the organisation (e.g., letters, email, visit to the office).	0.741		
	- says his name.	0.600		
	- is friendly.	0.788		
	- is patient.	0.842		
	- understands me correctly.	0.885		
	- listens well.	0.906		
	- takes me seriously.	0.907		
	- puts himself in my situation.	0.896		
	- knows my needs.	0.798		
	- gives me personal attention.	0.883		
	- makes me feel my question is important.	0.882		
	- takes my level of knowledge into account.	0.788		
	- is solution oriented.	0.879		
	- thinks along with me.	0.886		
Reliability	The employee can quickly find the information to answer my question.	0.855	0.942	0.633
	The employee tells me what I can expect.	0.825		
	The employee knows his own organisation well.	0.835		
	I can trust the knowledge of the employee.	0.893		
	The employee can answer all my questions.	0.897		
	The employee can promise next steps that the organisation actually follows through.	0.822		
	I do not have to call more than once to receive an answer to my question.	0.834		
	When I speak to an employee, my question is answered at once.	0.853		

Table 2.6. *Continued*

Factor	Item	Loading	Alpha	AVE
	I receive a written confirmation of important agreements.	0.659		
	When the employee is not able to answer my question, I am being redirected to an employee who can.	0.785		
	The employee asks the right questions to get to the heart of my question/problem.	0.807		
Customer focus	The employee asks me whether the answer is clear.	0.736	0.879	0.544
	The employee asks me whether my question has been answered.	0.721		
	The employee asks me whether I am satisfied at the end of the conversation.	0.666		
	When I have had contact with the contact center, some time after this contact I am being asked whether this contact was to my satisfaction.	0.613		
	The contact center of organisation X learns from the signals it receives from its customers.	0.802		
	I receive proactive advice on what products would suit my situation.	0.717		
	The contact center of organisation X always keeps its promises.	0.812		
	The information I receive is consistent, even when I talk to another employee.	0.807		

Notes: The following items were deleted because of low item reliability:

- The employee is interested.
- The employee tells me the next steps that will be taken.
- The employee is knowledgeable.
- When I receive an answer of the contact center, I can trust the accuracy of this answer.
- I have a specific employee that I can call every time.
- The information I receive is consistent, whether I receive the answer from the employee of for example find the information on the internet.
- The contact center of organisation X always has the interest of the customer at heart.
- The employee asks whether I have any more questions.

Model fit: $\chi^2 = 3840.275$, d.f. = 946, CFI = 0.932; NNFI = 0.922; IFI = 0.932; RMSEA = 0.055.

The CFA of the pooled data thus shows that the higher-order construct of perceived customer contact center quality consists of seven sustainable factors: reliability, empathy, customer focus, customer knowledge, waiting cost, user friendliness VRU, and accessibility. Each factor consists of multiple items, varying from 2 (accessibility) to 13 (empathy). In total, our proposed scale for perceived customer contact center quality consists of 46 items (for the predictive validity of the scale see Chapter 4). In Table 2.7, a final comparison can be found between the SERVQUAL dimensions and the customer contact center quality dimensions.

Table 2.7. Comparison SERVQUAL scale with final customer contact center quality scale

SERVQUAL		Customer Contact Center quality	
Reliability	5 items	Reliability	11 items
Empathy	5 items	Empathy	13 items
Tangibles	4 items	Accessibility	2 items
Assurance	4 items	Waiting cost	3 items
Responsiveness	4 items	Voice Response Unit	3 items
		Knowing the customer	6 items
		Customer focus	8 items
	<i>22 items</i>		<i>46 items</i>

2.4 Discussion and Theoretical Implications

Our focus in this study has been to develop a multidimensional scale of perceived customer contact center quality. We find seven pertinent factors: reliability, empathy, customer knowledge, customer focus, waiting cost, user friendliness of VRU, and accessibility.

Reliability and empathy appear in most other service quality scales; however, we reformulate these items in the customer contact center quality scale for the specific context of customer contact centers. In addition to confirming previous findings regarding these dimensions of service quality, we also identify some new factors that play a role.

First, the organization needs to demonstrate that it really puts customers' interests first, as in the case of customer focus. Items such as 'the organization learns from the signals of its customers', 'the organization gives me proactive advice about which products best suit

my situation', and 'after a period of time, the organization asks me whether the contact was handled to my satisfaction' do not appear in previous studies on the customer contact center quality. For existing dimensions, we also have enriched the consideration of the underlying items for the specific context of customer contact centers.

Second, accessibility is another new factor in the customer contact center quality scale, though the SERVQUAL 10-dimensional scale (Parasuraman et al., 1985) mentions a dimension called 'accessibility'. In our study, accessibility consists of two items, namely opening hours and easy to find the number customers need to call, whereas for SERVQUAL, it consists of items pertaining to the waiting experience. Although we find evidence of waiting experience in our study, it represents a separate factor as defined by waiting cost.

Third, we uncover a customer knowledge factor. In the 10-dimensional SERVQUAL, it appears as a separate dimension, but in the final five-dimensional scale, this knowledge gets incorporated into the empathy dimension. We argue that three factors, namely waiting cost, accessibility, and customer knowledge should be measured as separate factors in the customer contact center quality scale.

The results of our research also align with many previous studies that identify a different dimensionality of service quality than that proposed by SERVQUAL in particular contexts. In this sense, customer contact center quality offers a more reliable and valid measurement of perceived customer contact center quality. Moreover, the scale exhibits good robustness, as demonstrated by its stable application across several samples collected in different industries.

2.5 Managerial Implications

This study is able to give managers of customer contact centers clear insights into the dimensions that play critical roles in creating a high quality perception of their center. It also offers an instrument for assessing this quality continuously. Managers should realize that internal measurements, such as abandonment rates, average talk time, and so on, can be replaced, or at least supplemented by perceived customer contact center quality measurements, which provide better insights into the true customer experience.

The reliability of the customer contact center depends on whether customers need to call more than once to receive an accurate answer. Employees who talk to customers

must have all required information at their disposal, including product information, service information, customer history, and so forth. With this knowledge, the employees can answer customers' questions quickly and consistently.

Employee empathy refers to interpersonal skills possessed by employees. Organizations might improve their CCRs' empathy by training employees to listen to and reassure customers, as well as by making the CCR aware of their great impact on the customer experience.

Accessibility consists of two aspects: operating hours and ease of finding the telephone number. Customers can indicate their preferences for operating hours, and firms might experiment with longer or shorter times. The firm's contact number should appear in all channels-paper communication (flyers, letters, bills), in the Web site, and in stores or branches. It should be extremely easy to find whenever a customer needs to contact the organization.

The waiting cost, which entails both time and monetary aspects, also defines assessments of the quality of the contact center. As the focus group sessions indicated though, no agreement exists about an acceptable length of time to wait. Therefore, contact center managers should ask their own customers about their expectations.

The user friendliness of the VRU should enable this automated tool to direct customers to the answer to their questions. Most customers do not mind it, as long as the VRU is user friendly, which means not too long and easy to understand. When the VRU helps customers access employees who can help them immediately, the use of the VRU is beneficial.

Customer knowledge refers to the ability to make the customer feel like the organization knows him or her. For example, a customer contact center employee should know about previous contacts the customer has had and the status of an application or order the customer has sent. Making the history of each customer available to CCRs is not sufficient though; employees must be proactive with this knowledge. A CCR who mentions that the customer sent an e-mail the previous week about a particular topic should give the customer the feeling that the organization knows him or her. This finding is in line with previous findings in the customer information systems literature. Jayachandran *et al.* (2005) found that technology is an important and supportive role in the success of customer

relationship management and Mithas *et al.* (2005) even find that the use of such applications increases not only customer knowledge but even customer satisfaction.

Finally, customers consider whether they have received proactive advice, if the firm appears to have learned from previous signals from customers, and if they periodically can indicate whether the contact was satisfactory to determine their customer focus evaluation. These items and aspects can be implemented easily with the right tools. For example, learning from customers' signals is possible only when the firm registers the questions posed by customers. In so doing, it can conduct pertinent analyses: What are the top 10 questions we receive? What are the characteristics of customers who contact us frequently? Such information can help the organization prevent unnecessary customer contacts and thus minimize costs.

2.6 Limitations and Further Research

The present study provides a scale to measure the perceived customer contact center quality; it also contains some limitations that should be taken into account when interpreting the results.

First, the organizations that participated in our study represent a limited number of industries. The CFA analysis included three participating organizations, two of which came from the same industry (i.e. financial services). Further research should include other industries to test the generalizability of the proposed scale.

Second, we excluded customers who called the contact center with a complaint. The state of mind and emotions of complaining customers differ significantly from those of customers with questions, and so the results apply only to customers who have a question or a remark, not those with a complaint. Further research might address complaint handling by customer contact center to determine whether the seven dimensions we identify are applicable in a complaint setting.

Third, our study, executed in the Netherlands, does not take cultural differences into account. This consideration might be relevant, especially as more organizations outsource their contact centers but still service local markets. For example, Indian employees may respond to Dutch customers' questions. Additional research into this issue could explore whether cultural differences are pertinent.

Fourth, we focus our study on scale development and do not test whether the seven identified factors influence customer satisfaction or loyalty. Recognizing the impact of these factors would enable an assessment of the value that customer contact centers add to the entire organization. Further research therefore should measure the impact of these factors on the success of the contact center or overall firm success.

Fifth, in our study we use the subjective measure of perceived waiting time. As the difference between actual waiting time and perceived waiting time can be quite substantial, this might be a topic of interest for future research. Especially since most contact centers are constantly focusing on short waiting times. When it turns out that the actual waiting time is not as important as the perceived waiting time, managers of contact centers need to shift their attention to reduce the perceived waiting time instead of the actual waiting time.

Job Quality in the Customer Contact Center: Conceptual Foundation and Scale Development.

In Chapter 3, the research question how customer contact center job quality can be conceptualized, and which dimensions are part of the operationalization of customer contact center job quality is answered. To develop a comprehensive framework of dimensions of job quality in a customer contact center, this study adopts the employee's perspective and proposes 12 dimensions. Previous studies suggest conceptualizations of the dimensions of job quality, but have failed to address the specific dimensions that need to be taken into account in a customer contact center setting. With its multiple dimensions, the proposed job quality scale achieves high internal validity, reliability and generalizability in the customer contact center setting. Yet the increasing role of such centers for service delivery makes them and their employees critical to customers' quality perceptions, and the findings of this study offer managers clear guidelines adjusted to the customer contact center environment.

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3.1 Introduction

In the past two decades, service has become ever more prominent for organizations, especially service delivered through customer contact centers (CCCs) (Anton 2000; Holman *et al.* 2007; Miciak and Desmarais 2001). Employees in CCCs are largely responsible for the customer's service experience, which means they must be able to answer customers' questions, empathize with their needs, solve their problems, and handle their complaints. In turn, CCC managers must address the job quality of these employees to ensure positive consequences (e.g. employee satisfaction) and avoid negative ones (e.g. turnover), thereby supporting the financial health of service organizations (Glebbeek and Bax 2004). It is expensive to find and train new employees, as well as recover from the loss of tacit knowledge that occurs every time an employee leaves an organization. Therefore, increasing job quality is a crucial instrument for improving employee satisfaction and reducing turnover rates.

Literature on organizational behaviour has long investigated the concept of job quality, whereas its study in service literature is more recent. This is mainly due to the growth of the service sector that does not always offer high-quality jobs (Gorjup *et al.* 2008). The creation of high-quality jobs is a key challenge in the service industry, especially in the CCC setting, where jobs often entail an advanced form of Taylorism (Zapf *et al.* 2003). Employees in a CCC exhibit extremely high turnover percentages, varying from 20% to 40% (Hillmer *et al.* 2004; Malhotra and Mukherjee 2004; Whitt *et al.* 2004), probably because of the high levels of stress and constant reminders of the flaws of their organization (Cordes and Dougherty 1993; Singh *et al.* 1994).

In addition to increasing employee satisfaction and lowering turnover, job quality can provide other positive consequences for a service organization, which we group into internal and external consequences. Employee satisfaction and turnover, of course, are internal consequences, as are the increased commitment of employees towards the organization (Donovan *et al.* 2004; Mukherjee and Malhotra 2006) and better overall performance (De Ruyter *et al.* 2001; Matzler *et al.* 2004; Mukherjee and Malhotra 2006). The external consequences of job quality are reflected in the service profit chain, in that high-quality jobs

increase employee satisfaction (Heskett *et al.* 1997), which influences the quality of the service delivered, which affects the customer's experience of service quality. Because perceived service quality has a positive impact on customer satisfaction and loyalty, increasing job quality eventually can enhance customer satisfaction and loyalty.

But how can job quality be conceptualized? Which existing and possible new dimensions are part of the job quality construct? How can it be operationalized in a scale so that management can influence the perceived job quality of CCC employees? Various studies have investigated the job quality concept, though no extensive study yet validates the dimensionality of job quality in a CCC setting. Moreover, there seems to be much overlap in the concepts related to job quality and some dimensions seem to be missing.

Because the CCC represents a unique service setting, in terms of the higher stress levels and constant reminders of organizational flaws, additional unique dimensions, beyond those identified for other service settings, may play a role. These dimensions are related to a learning environment. The learning environment is particularly critical in the CCC setting. Since for CCC employees, as compared with employees in other departments, learning from customers (signals such as questions, complaints, and suggestions) is even more important as they are constantly confronted with signals, but are unable to act upon them. This lack of impact increases their levels of stress (e.g. Cordes and Dougherty 1993; Singh *et al.* 1994).

Moreover, research into the relationship between a learning environment and employee satisfaction, as described by Kontoghiorghes *et al.* (2005), reveals that elements of a learning environment, such as information sharing and support for learning and development, correlate positively with employee satisfaction, commitment, low turnover, and low absenteeism. Thomsen and Hoest (2001) also have found that involving employees in policymaking has a positive effect on their commitment. Since a learning environment has such a positive impact on employees, we expect that the learning environment has to be taken into account as a unique aspect of CCC job quality.

In this article, we contribute to the existing literature. We conceptualize job quality, validate existing and add new dimensions that apply to the CCC setting and develop a scale to measure job quality in CCCs. Moreover, we provide managerially relevant guidelines for

monitoring and improving CCC job quality as a means to improve employee satisfaction, decrease employee turnover, and contribute to the performance of the service organization.

The remainder of this article is organized as follows: in the next section, we address the conceptualization of job quality in general and the dimensionality of job quality in the CCC setting in particular. We then outline the results of a qualitative study to provide suggestions for the (new) dimensions of job quality in the CCC. Our exhaustive scale development process, based on a quantitative study, confirms that CCC job quality consists of 12 dimensions, which we describe in detail. Finally, we discuss the study results, its theoretical and managerial implications, and limitations and issues for further research.

3.2 Conceptual Framework

3.2.1 Job Quality

There are many studies that focus on dimensions that play a role in the employees' perception of the quality of his/her job. But almost all studies use different concepts as a point of departure in order to study this perception of job quality. Concepts that we found, for example, are job design (Hackman and Oldham 1975; Sims *et al.* 1976), job enrichment (Herzberg 1966; 1968), work environment (Lawler and Hackman 1971), job characteristics (Agho *et al.* 1993), and well-being (Holman *et al.* 2002). Although these concepts might seem to be different, there is a lot of overlap. For example, dimensions of job enrichment (Lawler and Hackman 1971), such as autonomy and variety, are also found in the dimensions of job characteristics (Agho *et al.* 1993). The dimensions of job design again are found in the dimensions of job enrichment. So there is a lot of overlap between the different job-quality-related constructs.

Then there is the relationship between quality and satisfaction. In the first studies on service quality, the general consensus was that service quality was a result of several satisfying or dissatisfying transactions (Parasuraman *et al.* 1985). So satisfaction was an antecedent of service quality. Later studies have changed this general consensus. One of these studies concerns the study of Cronin and Taylor (1992). They found that service quality actually is an antecedent of satisfaction. Many studies have confirmed this relationship

resulting in the widely accepted notion nowadays that satisfaction is indeed a result of service quality. As such, we pose that job quality is an antecedent of job satisfaction. So the antecedents of job satisfaction might well be part of the concept of job quality.

Therefore, in this study, we integrate all these different perspectives on job quality and base the possible dimensions of job quality on both the job-quality-related constructs and the antecedents of job satisfaction. We conceptualize job quality based on the confirmation / disconfirmation paradigm that is at the heart of the concept of service quality (Parasuraman *et al.* 1985). As with service quality, job quality is the result of the comparison of the expected quality of the job by the employee with the actual experienced level of job quality by the employee. When the actual experience is better than expected, the evaluation of job quality is positive. When the actual experience is less than expected, the evaluation of job quality tends to be negative. We therefore define the concept of job quality as follows:

Job quality is a measure of how well the actual job experience matches the expected job experience of the employees.

For a service organization to meet or exceed its employees' expectations, it must know what the expectations are and which are most important. Therefore, the organizations need an understanding of the underlying dimensions of job quality.

3.2.2 Dimensions of Job Quality

According to Taylorism, there is only one motivation for employees: financial rewards. Yet Herzberg (1966; 1968) posited that job quality consisted of more dimensions, including various motivators and hygiene factors. His critical incident techniques revealed that the elements that made employees feel good (motivators) were not the same as the elements that made them feel bad (hygiene factors), as Table 3.1 summarizes.

Table 3.1 : Motivators and hygiene factors identified by Herzberg (1966, 1968)

Motivators	Hygiene factors
Achievement	Pay
Advancement	Company policy
Growth	Supervisory style
Recognition	Status
Responsibility	Security
The work itself	Working conditions

In turn, Lawler and Hackman (1971) studied the role of six job-quality dimensions: variety, autonomy, task identity, feedback (core dimensions), dealing with others, and friendship opportunities (interpersonal dimensions). The four core dimensions indicated strong impacts on satisfaction, involvement, and absenteeism, whereas the interpersonal dimensions were less important. Furthermore, these authors found that focusing on one core dimension was not sufficient and that all four dimensions needed to be present.

The research of Lawler and Hackman (1971) led to widely used job quality scales, namely the job diagnostics survey (JDS) and job characteristics inventory (JCI). The JDS scale consists of variety, autonomy, identity, feedback, and significance (Hackman and Oldham 1975), whereas the JCI scale contains variety, autonomy, identity, and feedback (Sims *et al.* 1976). All these dimensions should play an important role in job quality assessments in the CCC setting.

More recent studies extend the scales with more specific dimensions of job quality. For example, Agho *et al.* (1993) identified eleven dimensions that largely confirm prior studies but also include new dimensions, such as role ambiguity and role conflict. Another dimension widely studied during the 1990s is empowerment (Spreitzer *et al.* 1997; Thomas and Velthouse 1990), though empowerment might simply represent the autonomy dimension in previous studies. Matzler *et al.* (2004) explored the role of nine dimensions, five of which help create satisfied employees: superior (is supportive, fair, provides challenges, etc.), job (is challenging, rewarding, useful, etc.), remuneration (pay is fair, adequate, etc.), responsibility (decision-making power, scope of action, etc.), and firm (pleasant work environment, firm is strategy oriented, etc). They also divided their

dimensions into hygiene factors and motivators and labelled training and decision-making power motivators. This assignment matches the findings of many studies on the importance of empowerment (Thomas and Velthouse 1990).

Christen *et al.* (2006) also focused on dimensions that might create satisfied employees. Their compensation and job autonomy dimensions appear in other studies (c.f. Lawler and Hackman 1971), whereas their job attractiveness and social climate dimensions seem to represent new factors. However, their definition of job attractiveness relates to the concept of meaning (Hackman and Oldham 1975), and social climate tends to entail the feeling of pride in working for the organization. We expect these four dimensions to appear in the job quality concept in a CCC setting too.

3.2.3 Specific Dimensions of Customer Contact Center Job Quality

One of the main differences between the job characteristics of the CCC setting and other service settings is the level of stress the employees experience. For example, Singh *et al.* (1994) found that customer service representatives experience more emotional exhaustion than other service workers, and Cordes and Dougherty's (1993) study confirms higher levels of burnout. The stress likely stems from the need for CCC employees to deal with different stakeholders, each with different demands, such as customers and management.

Other studies found similar results. De Ruyter *et al.* (2001) argued that employee empowerment, and specifically its autonomy dimension, can reduce role stress as a result of conflicting demands. Holdsworth and Cartwright (2003) found that among CCC employees, stress levels are higher, but the perception of empowerment is lower than that among the general working population. To create satisfied employees, they suggested enhancing the empowerment dimensions of meaning, impact, and self-determination. We expect these dimensions to play a role in the CCC setting.

Furthermore, continuous performance monitoring is an extra stress factor in the CCC setting: everything an employee does gets recorded or registered by automated systems. Holman *et al.* (2002) have studied three aspects of performance monitoring: performance-related content (i.e. immediacy of feedback, clarity of performance criteria), beneficial

purposes (developmental instead of punitive), and the perceived intensity of performance monitoring. The first two relate positively to well-being, but perceived intensity has a negative impact on well-being. Performance monitoring thus might be an important dimension of job quality in CCCs.

Mukherjee and Malhotra (2006) focused not on role stress but rather on role clarity and its impact on employee perceptions of service quality. The antecedents of role clarity include feedback, autonomy, participation, supervisory consideration, and team support. Feedback about performance from a superior, participation in making improvements in the employee's job, and team support between the employee and colleagues all influence role clarity, which in turn influences job satisfaction. These dimensions could play a role in the job quality of the CCC.

Because of these particular job characteristics in a CCC setting, we expect that additional unique job-quality dimensions come into play for CCC job quality compared with job quality in more generic service settings. In Table 3.2, we summarize these potential dimensions of CCC job quality, derived from previous studies.

Table 3.2: Summary of possible dimensions of job quality

Dimensions		
Achievement	Working conditions	Training
Advancement	Financial reward	Decision making power
Growth	Variety	Role stress
Recognition	Autonomy	Performance monitoring
Responsibility	Task identity	Role clarity
The work itself	Feedback	Self efficacy
Pay	Significance	Responsibility
Company policy	Role ambiguity	Firm
Supervisory style	Role conflict	Superior
Status	Empowerment	

Sources: Agho *et al.* 1993; Christen *et al.* 2006; De Ruyter *et al.* 2001; Hackman and Oldham 1975; Herzberg, 1966, 1968; Holman *et al.* 2002; Lawler and Hackman 1971; Matzler *et al.* 2004; Mukherjee and Malhotra 2006; Sims *et al.* 1976.

Another specific element in the CCC setting is the constant confrontation of the employees with the flaws of their organization during their contact with customers, when they voice

their complaints about the firm. If the organization does not resolve these flaws, despite complaints and other customer signals, such as questions, suggestions, and customer satisfaction research, employees keep facing the same flaws and dissatisfied customers over and over again. Yet the nature of their job and their responsibilities often prevent CCC employees from initiating change to meet customer expectations. This is in contrast with, for example, the duties of a hotel receptionist, who is often empowered to help the customer on the spot. In this sense, CCC employees function only as damage controllers.

Therefore, we expect three other dimensions concerning the learning environment and the constant confrontation with the flaws of the organization, to play an important role in the CCC setting: learning from customers, learning from employees, and information sharing. All three dimensions have been studied previously, but not in relation to the concept of job quality in the specific CCC setting. First, by learning from customers, such as their questions, suggestions, and complaints, the organization's service might be improved. Previous studies have addressed this dimension only among other groups of employees, such as frontline hotel employees or sales representatives, for whom learning from customers might not be important, because they do not confront as many customers or as continuously as a CCC employee does. These employees are also far more empowered to help customers than are employees in a CCC setting. Instead, the CCC employee receives consistent, constant customer signals to improve the service but often cannot do anything to help the customer, especially if the question or problem falls outside standard service responses. This scenario causes frustration for the employee. We therefore posit that knowing their organization is doing everything possible to learn from customers and working to prevent customers from having to call the contact center repeatedly with the same issues, enhances the job quality of CCC employees.

Second, CCC employees might find the dimension learning from employees, meaning an active involvement a learning environment, more significant than do other service employees, because of their constant reminders of the organization's flaws and the resulting customer dissatisfaction. By learning from the employees, such as by asking them what they think should be improved, the organization indicates that it takes their opinions seriously and can create more affective commitment by the employee. As we noted previously, a learning environment correlates positively with satisfaction, commitment,

low employee turnover, and low absenteeism (Kontoghiorghes *et al.* 2005; see also Thomsen and Hoest 2001). Especially among employees who talk to customers all day, this dimension should affect the perceptions of job quality.

Third, information sharing is especially important in a CCC setting. For example, when the marketing department releases a new campaign, without sharing this information with the employees of the CCC, they will be unpleasantly surprised by the calls of the customers. At that moment they do not have the knowledge about the campaign and are thus unable to service the customers, leading to frustration with both the employees and the customers. Another example might be a flaw in the invoicing process. The invoice department might have accidentally sent out 100.000 invoices containing a small error in the amount of the invoice. The CCC is the first department that will be confronted with this flaw. When the invoice department does not inform the CCC about this flaw and the accompanying solution, again, the employees are unable to help the customers. Therefore, we expect that information sharing in the CCC setting plays a role in the job-quality perception of the employees.

3.3 Scale Development

3.3.1 Qualitative Study

Based on these theoretical and empirical foundations, we operationalize job quality in terms of a second-order scale. To develop a reliable and valid scale for CCC job quality, we integrate the rigorous scale development process, as recommended by Churchill (1979) and Gerbing and Anderson (1988). Although Gerbing and Anderson (1988) focus on finding unidimensionality, their process of validity is useful for developing valid dimensions in second-order scales as well. From Churchill (1979) we follow the process from item generation to testing the validity and reliability of the scale on a second data set. But instead of using Churchill's split-half reliability and criterion validity, we use Gerbing and Anderson's confirmatory factor analysis (CFA) approach. This means that our methodology process is as follows:

- (1) Specifying job quality based on the literature (Churchill 1979)
- (2) Item generation (Churchill 1979)
- (3) First data collection (Churchill 1979)
- (4) Purifying the scale, through factor analysis and Cronbach's alpha (Churchill 1979)
- (5) Second data collection (Churchill 1979)
- (6) Asses reliability and validity through CFA (Gerbing and Anderson 1988)

3.3.2 Item Generation through Qualitative Study

3.3.2.1 Research Design

We began the item generation process with focus group sessions with CCC employees of different business-to-consumer (B2C) service industry organizations with large customer bases and many customer contacts. By using focus groups instead of interviews, we generate more potential items because the participants can elaborate on one another's comments in ways not possible in in-depth interviews with individual respondents (Morgan, 1996). The focus group sessions contained 6–10 employees of each participating firm.

3.3.2.2 Sample Characteristics

We focus on the experience that employees have had in the CCC setting. As recommended by Zeller (1993), we agreed in advance to stop running the focus group sessions as soon as no new items were generated. In total, we ran five sessions with CCC employees of a bank, a government organization, a telecom provider, and two health insurance organizations, as mentioned in Table 3.3.

Table 3.3. Background information on the participating organizations

	Telecom provider	Government organization	Bank	Health insurance company (1)	Health insurance company (2)
# Customers	500.000	2.5 million	2 million	440.000	350.000
# phone calls/year	750.000	1.500.000	700.000	500.000	450.000
# CCC employees	110	220	98	60	70

All five service organizations use in-house contact centers, which means the employees are employees of the organization itself instead of being outsourced through an external contact center. The number of employees of the five contact centers vary from 60 to 220. The number of customers vary from 350,000 to 2.5 million (Table 3.3).

3.3.2.3 Respondent Characteristics

The respondents included randomly selected employees who work in a CCC. All employees work in the frontline of the voice-to-voice department within the contact center, so-called agents. We asked the managers of the CCC to ask 8–10 employees in the frontline to participate in the focus group sessions. We asked them to take into account a representation of employees across elements as working experience as an agent in general, working experience as an agent in the specific organization itself, age and gender. Across the five participating organizations, there are 17 male and 24 female participants. Their average age is 34 years (range: 23–57 years). Most employees had worked at the CCC for one or two years and filled an agent role (i.e. answering phone calls from customers).

3.3.2.4 Focus Group Sessions

The sessions lasted 1.5–2 h and proceeded according to the method recommended by Morgan (1996). The moderator asked the participants to elaborate on their recent experience with their work in the CCC, by using the concept of job quality defined as the difference between their actual job experience and their expected job experience. The moderator did so by asking the participants to answer two open questions: what aspects do you expect to be part of your job and what aspects would exceed your expectations when they would be part of your job? In discussing these aspects, they also could respond to one another and add new comments. Next the moderator noted some ideas from previous studies to confirm whether the participants had mentioned them or if other aspects needed to be added. At the end of the item-generation process, the moderator asked the participants to group the items that were found. This gave the moderator a first insight into the dimensions that the participants found to be part of job quality.

3.3.2.5 Insights

The focus group sessions indicated that 12 dimensions determine CCC job quality. These dimensions derived from the joint effort between the moderator and the employees, who together grouped all aspects that the employees believed represented underlying dimensions. This participative judgment enhances the objectivity of our dimension determination. From this process, we identify the following dimensions: role ambiguity, information sharing, role conflict, coaching superior, learning from customers, learning from employees, opportunity and challenge, enjoying the work, ease of tools, empowerment, integrity, and atmosphere.

Role ambiguity. The first dimension comprises concepts such as clear goals, knowing what to do when a customer has a problem, and knowing the employees' tasks. For example, a participant mentioned:

It is not uncommon for customers to call us with a complaint or a problem. It is nice to know how I should handle these kind of situations.

Role ambiguity appears in almost all previous studies on job quality (Agho *et al.* 1993; De Ruyter *et al.* 2001). However, the sessions also revealed that in a CCC, this dimension also involve knowledge of how to handle customer-related role ambiguity.

Information sharing. This dimension consists of sharing information between teams, as well as between the CCC and other departments. As one of the participants described:

Almost every time that Marketing thinks of a new campaign, they just execute it without informing us about it. So customers call us about for example an offer that they have received in the mail and we do not even know about the offer, so we are not able to answer the questions.

Furthermore, the CCC employees believe that they can share information with other departments:

We get so many ideas from our customers. We should share this information much more with other departments. They can improve the products based on all the information we receive from our customers.

With all the customer contacts that the CCC employees have, the CCC could offer great value to other departments that aim to improve the organization's overall performance or become more customer-oriented. This dimension has not appeared in previous studies.

Role conflict. This dimension consists of the way employees feel they are managed and the context in which they do their job:

My superior is always focusing on the time we spent on the phone with our customers. It always has to be faster. But our organization's strategy is to create satisfied customers! For my job these two are in constant conflict. Should I give the customer a quick answer, knowing he is not totally satisfied or should I make the customer happy but take a little more time? Sometimes it is frustrating.

Making sure that the strategy of the organization is in line with the operational management is important for addressing this role conflict. Many previous studies include this dimension (Agho *et al.* 1993; De Ruyter *et al.* 2001).

Coaching superior. Being able to rely on a superior, receiving feedback to improve the work, and being taken seriously by the superior constitute this dimension. For example:

Whenever I have a problem that I do not know how to solve, I can ask my superior.

I do not only receive feedback when I do something wrong, but also when I do something right. I think that this is a good balance that needs to be found.

The superior must balance being there when the employee needs support with communicating a sense that the superior has faith in her or his abilities. The role of the superior appears in previous studies (Hackman and Oldham 1975; Matzler *et al.* 2004) but not in the form of the specific coaching role mentioned here.

Learning from customers. This dimension consists of aspects such as learning from the signals from customers, learning from complaints, and using the input of customers to improve continuously. For example:

It is very frustrating when you cannot help the customers because something in the system or otherwise is not being solved. The other departments should learn from the signals the CCC receives from the customers, so customers do not have to phone multiple times for the same question or problem.

Being able to give proactive advice and adjusting the product portfolio based on the signals of customers thus plays a role. Studies that take the customer point of view, such as service quality studies (Parasuraman *et al.* 1988), include this dimension, but studies that adopt the employee perspective have not.

Learning from employees. This dimension involves being asked how the service can be improved and feeling that these suggestions are taken seriously:

The employees of the CCC talk to thousands of customers each day. If anyone knows what the customer wants, it is us. But we are hardly being involved in improving the organization. And when occasionally we are being asked to tell management what should be improved, we never hear from them again.

Many organizations want to be more customer-oriented; so involving the employees in this process is a good strategy. However, this dimension has not been found explicitly in other studies. It might relate somewhat to empowerment (Spreitzer *et al.* 1997) and decision making power (Matzler *et al.* 2004).

Opportunity and challenge. Growth opportunities within the CCC, feeling that the employee's role is meaningful, and experiencing sufficient challenge on the job constitute this dimension:

In the CCC, there are not many growth opportunities. Most employees stay employees for a long time. Although we know that our job is to answer the questions of the customers, we still think that it is

possible to gives us more challenge. For example by letting us answer emails and letters, or involving us in improvement projects.

This dimension appears in most previous studies (Agho *et al.* 1993; Sims *et al.* 1976).

Enjoying the work. To define this dimension, the respondents refer to having fun, experiencing diversity on the job, and being able to answer customers' questions during their first call:

I really enjoy being able to answer the questions of the customers. It makes them happy when I can help them right away. And making the customers happy is much more fun than having to deal with unhappy customers.

This dimension also has been found in previous studies (Herzberg 1966; 1968).

Ease of tools. All modern CCCs use automated tools. As one respondent mentioned though:

It is so frustrating when the tools are slow or not available at all. We need them in each call, for both answering the question and registering the call. So when they do not work properly, our work is influenced immediately.

The tools must be easy to access and use as a means to register all calls. This dimension might be very specific to the CCC setting, where employees rely more on automated tools than to many other frontline employees. In turn, this dimension has not appeared in previous studies.

Empowerment. This dimension consists of employee responsibility and the ability or encouragement to show initiative:

Since the beginning of last year our management has given us a budget. We can use this budget to give compensation to customers that we feel have not been treated fairly. We are solely responsible for this budget and do not have to consult our manager when we want to compensate a customer. This gives me a great feeling of responsibility that I did not have before.

It has been studied extensively in previous research (Spreitzer *et al.* 1997; Thomas and

Velthouse 1990).

Integrity. This dimension involves not only the honesty of the organization towards customers and employees but also the level of customer orientation in the organization:

For me it is very important to work for an organization that is honest toward both the customer and the employees. When the organization is not being honest to their customers, we are the ones that are confronted with it every day when we talk to our customers and have to explain our policies.

Although this dimension has not appeared explicitly in other studies, it might be linked to other dimensions, such as significance (Herzberg 1966; 1968) and feeling proud to work for the organization (Christen *et al.* 2006).

Atmosphere. Finally, the atmosphere dimension consists of good collaboration among colleagues within the CCC:

An important reason that I go to work with enthusiasm everyday is because of the atmosphere with my colleagues.

This dimension exists in previous studies as well (Agho *et al.* 1993).

Our qualitative study, using focus group sessions, thus has identified 12 specific dimensions of CCC job quality. On the basis of these sessions, we also generated 98 items (Table 3.4).

Table 3.4. Original questionnaire with 98 items based on focus group session

Variable	Question
Company1*	I am well-informed about the strategy of company X.
Company2	Company X is customer oriented.
Company3	Company X is honest towards its customers.
Company4	Company X is honest towards its employees.
Company5*	We as customer service employees are involved in changes that impact the entire organisation.
Company6*	There is an open communication within our organisation.
Company7*	Our organisation pays attention to corporate social responsibility.
Company8	Company X offers a good product portfolio to its customers.
Company9	Company X stays in touch with customers regularly to inform itself about its customers' needs.

Table 3.4. *Continued*

Variable	Question
Company10	Company X uses the input of its customers to better match its products and services with the needs of the customers.
Work1	My work is diverse.
Work2*	Working at company X enables a good work-life balance.
Work3*	I can arrange my own working hours.
Work4*	Extra personnel is organized on busy days.
Work5*	I am appreciated for the work I do.
Work6	I have sufficient growth opportunities with company X.
Work7	I feel that my work is meaningful.
Work8	I am sufficiently challenged in my work.
Work9	I have enough fun in my work.
Work10	We often share information between among ourselves.
Work11	I can answer questions of our customers the first time.
Work12*	Customer of our customer contact center are not being placed on hold.
Work13*	I have sufficient breaks during my work.
Work14*	I am sufficiently supported to do my work.
Work15*	I have enough time to deliver the quality that I want to deliver.
Work 16*	The pressure of work is evenly divided between the teams.
Work17*	The customer service of company X anticipates the periodical cycles in delivering its services.
Work18*	I have sufficient training- and education possibilities with company X.
Work19	Company X stimulates training and education.
Work20	I have enough autonomy in my work.
Work21*	My application for vacation is handled quickly.
Work22*	My application for vacation is approved most of the time.
Work23*	Company X offers relaxation possibilities during breaks.
Role1*	I have sufficient autonomy to do my work well.
Role2	I have clear, fixed goals in my work.
Role3*	I know that I have divided my time well across the different tasks I am suppose to perform.
Role4	I know my responsibilities in my work.
Role5	I know exactly what is expected from me in my work.
Role6	I receive clear explanation of what is expected of me in my work.
Role7	I know what is expected from me during contact with customers.
Role8	I know how much service to give to customers.
Role9	I know how to handle objections of customers.
Role10	I know how to handle unexpected situations or problems.
Role11	I know how to handle criticism of customers.
Role12*	Within company X I know who is responsible for what.
Role13*	Within the customer service of company X everybody knows who is responsible for what.

Table 3.4. *Continued*

Variable	Question
Atmosphere1*	There is teamwork within the customer service department.
Atmosphere2	The collaboration with my colleagues is pleasant.
Atmosphere3	There is a good work climate in the customer service department.
Comm1*	The employees of the customer service department of company X are well informed about what is going on in the organisation.
Comm2	My coach / superior communicates and informs me well.
Comm3	I receive sufficient feedback about what I do well.
Comm4	I receive sufficient feedback about what I can improve.
Comm5	The teams inform one another on a regular basis
Finance1*	I receive sufficient pay.
Finance2*	I receive a personal bonus.
Finance3*	Company X is clear about the duration of my contract.
Finance4*	The rewards are the same for employees that do the same work.
Workplace1*	At my workplace I have access to the Internet.
Workplace2*	I have a good workplace.
Workplace3*	I have a fixed workplace.
Workplace4*	I have enough supportive tools to answer the questions of the customers.
Workplace5	I have enough easily accessible tools to answer the questions of the customers.
Workplace6	I have easy tools to register the contacts with the customers.
Workplace7*	The computer systems we use work well.
Workplace8	There is enough distance between the workplaces.
Infosharing1	We as customer service receive sufficient cooperation of other departments.
Infosharing2	There is good communication between customer service and other departments.
Infosharing3	We share information from customer service with other departments.
Infosharing4	Other departments use the information they receive from customer service.
Infosharing5	We as customer service are informed in time about activities from other departments that have an impact on customer service.
Infosharing6	Within company x all departments collaborate well.
Infosharing7	Company X takes action based on the customers' complaints.
Infosharing8	The good quality of the products and services of other departments make sure that we do not receive unnecessary calls from our customers.
Infosharing9	Company X learns from its customers' signals.
Superior1	My superior has faith in my abilities.
Superior2	My superior is there for me when I have questions.
Superior3	I experience positive stimulus from my superior.
Superior4	My superior takes me seriously.

Table 3.4. *Continued*

Variable	Question
Performance1*	In customer service, the emphasis lies on numbers (e.g. the duration of my calls).
Performance2*	In customer service, the emphasis lies on the customer experience (e.g. the satisfaction of the customer about the call).
Performance3*	The kpi's that my performance is evaluated upon are in line with the overall strategy of company X.
Performance4*	My performance is evaluated based on kpi's that are under my influence.
LearnEmp1	I am regularly being asked how I think we can improve our organisation.
LearnEmp2	I feel that my suggestions are being used.
LearnEmp3	I receive feedback about the suggestions that I have made.
Conflict1	I have to do things that should be done differently.
Conflict2	I have to do tasks without having the authority to do so.
Conflict3	I have to go against rules to do my tasks.
Conflict4	I work with two or more teams that work very differently.
Conflict5	I receive contradictory assignments from two or more people.
Conflict6	I do things that one accepts but the other doesn't.
Conflict7	I receive assignments without the means to execute them.
Conflict8	I engage myself in needless matters.
Empower1*	I am able to judge for myself how to handle problems in the best possible way.
Empower2	I am stimulated to take initiative.
Empower3	It is allowed to take initiative.
Empower4	They trust me to make the right assessment.

* Items deleted on the basis of the missing value analysis and the exploratory factor analysis.

3.3.3 Quantitative Studies

In addition to the 98 designated items that use seven-point Likert scales anchored by 'strongly disagree' and 'strongly agree', we include socio-demographic (e.g. age, gender, education) and other background questions in the questionnaire to validate the results of our study.

3.3.3.1 Data Collection and Scale Purification I

The first quantitative study included CCC voice-to-voice frontline employees of a bank. We randomly selected 124 employees who responded to customers' questions; we explicitly

excluded those who handled customers' complaints, because complaint handling requires more specific competences than the more generic competences needed to answer questions. All the employees received personalized e-mail invitations, with a link to the online survey.

From this sample, 77 respondents completed the questionnaires (62% response rate). The much higher response rate we obtain, compared with average e-mail survey response rates of approximately 30% (Sheehan 2001), may be because managers asked these employees to complete the questionnaire and indicated the results of the study were important to the organization. Using the background characteristics they provided, we confirmed that the sample represents employees who work in a CCC.

We deleted 40 items (Table 3.4) from the original set of 98. These items were deleted because of the high number of missing values, which raised doubt about their valid measurement. Apparently, these were items that were not relevant for the employees or items that they have not had any experience with. Most of these items had to do with fringe benefits. These items had often been mentioned by one individual during one of the focus group sessions, but were not representative for all the employees. With the remaining 58 items, we ran an exploratory factor analysis to determine the dimensionality of CCC job quality. Exploratory factor analysis with VARIMAX rotation extracted 15 factors (eigenvalues > 1). Two factors consisted of only one item with a higher loading on one of the other 13 factors (for the descriptive statistics, see Appendix B). Therefore, we proceeded with 13 factors that explained 67.5% of the variance, as shown in Table 3.5 (Kaiser-Meyer-Olkin [KMO] = 0.812; Bartlett $\chi^2(1770) = 6084.621, p = .000$).

All the average variances extracted (AVE) are higher than the squared shared variances (Fornell and Larcker 1981). The results of the exploratory factor analysis thus largely coincide with the dimensions of CCC job quality from the qualitative study, except for the coaching superior factor, which appears to be two separate factors (coaching and superior). Because of the low number of respondents in relation to the number of items, we increased the validity of our study by also using Cronbach's alpha scores for the factors found as indicators of the reliability of each factor (Table 3.5). Most factors had a Cronbach's alpha above 0.7 (between 0.722 and 0.894) although one factor had a Cronbach's alpha below 0.7, but above the bare minimum of 0.6 (0.672).

Table 3.5. Results of the exploratory factor analysis (VARIMAX)

	Factor 1 Role ambiguity	Factor 2 Info sharing	Factor 3 Role conflict	Factor 4 Superior	Factor 5 Learning from customers	Factor 6 Learning from employees	Factor 7 Opport. and Challenge	Factor 8 Enjoy tools	Factor 9 Ease of tools	Factor 10 Empower- ment	Factor 11 Integrity	Factor 12 Atmosphere	Factor 13 Coaching and feedback
Role2	0,528												
Role4	0,700												
Role5	0,664												
Role6	0,606												
Role7	0,736												
Role8	0,767												
Role9	0,721												
Role10	0,772												
Role11	0,566												
Comm5		0,514											
Infosharing1		0,766											
Infosharing2		0,837											
Infosharing3		0,610											
Infosharing4		0,690											
Infosharing5		0,654											
Infosharing6		0,742											
Infosharing8		0,551											
Conflict1			0,438										0,477
Conflict2			0,662										
Conflict3			0,763										

Table 3.5. Results of the exploratory factor analysis (VARIMAX) (continued)

	Factor 1 Role ambiguity	Factor 2 Info sharing	Factor 3 Role conflict	Factor 4 Superior	Factor 5 Learning from customers	Factor 6 Learning from employees	Factor 7 Opport. and Challenge	Factor 8 Enjoyment	Factor 9 Ease of tools	Factor 10 Empowerment	Factor 11 Integrity	Factor 12 Atmosphere	Factor 13 Coaching and feedback
Conflict4			0,625										
Conflict5			0,821										
Conflict6			0,689										
Conflict7			0,603										
Conflict8			0,663										
Superior1				0,783									
Superior2				0,694									
Superior3				0,762									
Superior4				0,860									
Company8					0,702								
Company9					0,745								
Company10					0,683								
Infosaring7					0,654								
Infosaring9					0,519								
LearnEmp1									0,802				
LearnEmp2									0,828				
LearnEmp3									0,795				
Work6										0,798			
Work7										0,766			
Work8										0,804			
Work9												0,418	
Work10												0,728	
Work11												0,611	

Table 3.5. Results of the exploratory factor analysis (VARIMAX) (continued)

	Factor 1 Role ambiguity	Factor 2 Info sharing	Factor 3 Role conflict	Factor 4 Superior	Factor 5 Learning from customers	Factor 6 Learning from employees	Factor 7 Opport. and Challenge	Factor 8 Enjoyment	Factor 9 Ease of tools	Factor 10 Empowerment	Factor 11 Integrity	Factor 12 Atmosphere	Factor 13 Coaching and feedback
Work1								0,789					
Workplace5								0,732					
Workplace6								0,756					
Workplace8		0,435						0,618					
Empower2										0,747			
Empower3										0,786			
Empower4										0,748			
Company2				0,604							0,588		
Company3				0,500							0,618		
Company4											0,468		
Atmosphere2												0,849	
Atmosphere3												0,745	
Comm2													0,427
Comm3													0,597
Comm4													0,730
Variance extracted (%)	8.9%	8.5%	6.9%	6.2%	5.3%	5.0%	4.8%	4.2%	4.1%	4.0%	3.6%	3.0%	3.0%
Alpha	0.894	0.880	0.851	0.831	0.828	0.888	0.878	0.811	0.773	0.848	0.722	0.795	0.672

Note: minimum factorloading of 0.4 based on sample size.

Some factor loadings are lower than rules of thumb (which would be between 0.6 and 0.65 for this sample size) suggest. However, taking into account the modest sample size and, consequently, an increased variability of factor loadings, we were cautious not to drop potentially valid and informative items. In order to substantiate our decision to keep or discard items, we examined whether discarding weakly loading items leads to a substantial increase in Cronbach's alpha, which was not the case. Moreover, the KMO is well above the minimum score for sampling adequacy and meets the minimum criteria subjects to variables (STV) ratio of 1.2 with 77 respondents to 58 variables, which leads to an STV of 1.3 (Arrindell and Van der Ende 1985; Barrett and Kline 1981). Still, we certainly need to interpret these results with caution, because only 77 respondents provided 58 items, but the promising internal consistency measures prompted us to investigate the 58-item instrument using data from new samples and CFA.

3.3.3.2 Data Collection and Scale Purification II

In our second quantitative study, we examined the robustness of our 58-item scale for CCC job quality by collecting data from six B2C service industry organizations, all with a substantial CCC. In Table 3.6, we offer background information about the six organizations.

Table 3.6. Background information on the participating organizations

	Bank 1	Health Insurer 1	Telecom provider	Bank 2	Health Insurer 2	Government Agency
# Customers	7 million	2.6 million	2 million	2 million	440,000	2.5 million
# phone calls per year	12.5 million	4 million	3.5 million	700.000	500.000	4.5 million
# employees	2000	200	575	98	60	700

We again selected employees who answered customer questions by phone on a daily basis, so-called agents. They were all based in voice-to-voice departments in the frontline. The employees participated anonymously in the study. Managers introduced the study to the employees and asked them to participate, after which the employees received personalized e-mails with a link to the online survey. The number of respondents for each of the six samples ranges from 65 to 135 (response rates of 49–72%), and their average age is between 30 and 41 years, as outlined in Table 3.7. We also validate the representativeness

of the samples with other background characteristics and find that all six samples are representative of employees who work in the CCC.

Table 3.7. Sample characteristics of the six organizations

	Bank 1	Health Insurer 1	Telecom provider	Bank 2	Health Insurer 2	Government Agency
# Selected	224	161	229	102	79	209
# Respondents	135	99	112	65	58	108
% response	60%	61%	49%	61%	72%	51%
% male	39%	11%	69%	61%	22%	16%
% female	61%	89%	31%	39%	78%	84%
avg. age	38	41	30	40	35	37

We analyze the six samples using CFA (AMOS 16). We discard one item because of its low item reliability. The final CFA model provides the following fit statistics: $\chi^2(1496) = 3118.579$, $p = .000$, root mean residual (RMR) = 0.098, goodness-of-fit index (GFI) = 0.839, adjusted goodness-of-fit index (AGFI) = 0.816, normed fit index (NFI) = 0.865, nonnormed fit index (NNFI) = 0.917, comparative fit index (CFI) = 0.924, incremental fit index (IFI) = 0.925, and root mean square error of approximation (RMSEA) = 0.044, with a 90% confidence interval ranging from 0.041 to 0.046 (p -close = 1.000). We find evidence of convergent validity in the factors' AVEs, which ranged between 0.518 and 0.778, well above the criterion of 0.500 (Fornell and Larcker 1981). In addition, we use CFA to check the discriminant validity by fixing each of the 66 factor correlations to 1 (i.e. one degree of freedom), such that any merger of two constructs would lead to a significant and strong deterioration of model fit. With this method, we determined that the coaching and superior factors do not discriminate. Because they appear to measure a single factor, we joined them into a superior feedback factor. The results of the CFA appear in Table 3.8.

Table 3.8. Confirmatory factor analysis of pooled data

Factor	Item	Loading	Alpha	AVE
Role Ambiguity	I have clear, fixed goals in my work.	0.701	0.926	0.630
	I know my responsibilities in my work.	0.850		
	I know exactly what is expected from me in my work.	0.844		
	I receive clear explanation of what is expected of me in my work.	0.722		
	I know what is expected from me during contact with customers.	0.855		

Table 3.8. *Continued*

Factor	Item	Loading	Alpha	AVE
	I know how much service to give to customers.	0.814		
	I know how to handle objections of customers.	0.780		
	I know how to handle unexpected situations or problems.	0.779		
	I know how to handle criticism of customers.	0.779		
Information sharing	I think the teams inform one another on a regular basis.	0.619	0.895	0.584
	We as customer service receive sufficient cooperation of other departments.	0.804		
	There is good communication between customer service and other departments.	0.830		
	We share information from customer service with other departments.	0.802		
	Other departments use the information they receive from customer service.	0.824		
	We as customer service are informed in time about activities from other departments that have an impact on customer service.	0.692		
	Within company x all departments collaborate well.	0.847		
	The good quality of the products and services of other departments make sure that we do not receive unnecessary calls from our customers.	0.656		
Role conflict	I have to do things that should be done differently.	0.598	0.868	0.519
	I have to do tasks without having the authority to do so.	0.661		
	I have to go against rules to do my tasks.	0.770		
	I work with two or more teams that work very differently.	0.699		
	I receive contradictory assignments from two or more people.	0.750		

Table 3.8. *Continued*

Factor	Item	Loading	Alpha	AVE
	I do things that one accepts but the other doesn't.	0.770		
	I receive assignments without the means to execute them.	0.775		
	I engage myself in needless matters.	0.720		
Superior and feedback	My superior has faith in my abilities.	0.798	0.920	0.676
	My superior is there for me when I have questions.	0.836		
	I experience positive stimulus from my superior.	0.879		
	My superior takes me seriously.	0.855		
	My coach / superior communicates and informs me well.	0.819		
	I receive sufficient feedback about what I do well.	0.815		
	I receive sufficient feedback about what I can improve.	0.750		
Learning from customers	Company X offers a good product portfolio to its customers.	0.747	0.863	0.646
	Company X stays in touch with customers regularly to inform itself about its customers' needs.	0.779		
	Company X uses the input of its customers to better match its products and services with the needs of the customers.	0.854		
	Company X takes action based on the customers' complaints.	0.815		
	Company X learns from its customers' signals.	0.820		
Learning from employees	I am regularly being asked how I think we can improve our organisation.	0.806	0.857	0.778
	I feel that my suggestions are being used.	0.934		
	I receive feedback about the suggestions that I have made.	0.901		
Opportunity and challenge	I have sufficient growth opportunities with company X.	0.751	0.763	0.678

Table 3.8. *Continued*

Factor	Item	Loading	Alpha	AVE
	I feel that my work is meaningful.	0.811		
	I am sufficiently challenged in my work.	0.903		
Enjoying the work	My work is diverse.	0.861	0.762	0.680
	I have enough fun in my work.	0.910		
	We often share information between among ourselves.	0.683		
Easy tooling	I have enough easily accessible tools to answer the questions of the customers.	0.661	0.720	0.649
	I have easy tools to register the contacts with the customers.	0.891		
	There is enough distance between the workplaces.	0.847		
Empowerment	I am stimulated to take initiative.	0.904	0.850	0.770
	It is allowed to take initiative.	0.913		
	They trust me to make the right assessment.	0.811		
Integrity	Company X is customer oriented.	0.862	0.832	0.749
	Company X is honest towards its customers.	0.879		
	Company X is honest towards its employees.	0.855		
Atmosphere	The collaboration with my colleagues is pleasant.	0.878	0.767	0.809
	There is a good work climate in the customer service department.	0.920		

The following item was deleted:

- I can answer questions of our customers the first time.

Notes: Model fit: $\chi^2 = 3118.579$, d.f. = 1496; CFI = 0.924; NNFI = 0.917; IFI = 0.925; RMSEA = 0.044.

The CFA of the pooled data shows that the higher-order construct of CCC job quality consists of 12 sustainable factors: opportunity and challenge, learning from employees, information sharing, integrity, role ambiguity, learning from customers, role conflict, superior feedback, atmosphere, empowerment, easy tools, and enjoying the work. Each

factor consists of multiple items, from two (atmosphere) to nine (role ambiguity). In total, our proposed scale for CCC job quality consists of 57 items and exhibits good robustness, validity, reliability and generalizability in the CCC context as demonstrated by its stable application across several samples collected in different industries.

3.4 Discussion and Theoretical Implications

In this study, we conceptualize job quality, validate existing and add new dimensions that apply to the CCC setting and develop a scale to measure job quality in CCCs. Moreover, in the managerial implications paragraph, we provide managerially relevant guidelines for monitoring and improving CCC job quality as a means to improve employee satisfaction, decrease employee turnover, and contribute to the performance of the service organization.

We conceptualize CCC job quality according to the confirmation–disconfirmation paradigm from service quality research, such that employees have an expectation about their jobs and then perceive its experience, which leads to their perceptions of high or low job quality.

We find overlap, as well as some significant differences, between job quality in a generic service setting and CCC job quality. In particular, higher levels of stress and constantly confronting the flaws of the organization influence the experienced job quality of CCC employees. In this study, we address the specific dimensions of job quality in the CCC setting, that was missing in previous studies. The 12 dimensions of CCC job quality we identify can be measured with the 57-item scale we propose. Furthermore, we expected to find three additional dimensions, but our data indicate five additional dimensions that have not appeared in prior research: learning from customers, learning from employees, information sharing, integrity and ease of tools.

Several of the dimensions that we found are found in most studies operationalizing job quality or related constructs, such as opportunity and challenge, role ambiguity, role conflict, superior feedback, atmosphere, enjoying the work, and empowerment. This confirms our broad approach to developing the construct of job quality based on the many related constructs from previous studies. Also, apparently, the CCC setting is not unique when it comes to these dimensions, though the relative importance of the factors

might differ between service settings. For these existing dimensions, this study enriches consideration of their underlying items in the specific context of CCCs.

We identify five additional dimensions that are unique to this study of CCCs. First, the learning from employees dimension indicates that an organization should demonstrate that it values the input of employees. Scale items such as ‘regularly being asked how we can improve our organization’ and ‘feeling that suggestions are being used’ do not appear in previous studies on CCC job quality, yet no other function in the organization deals with organizational flaws as constantly. Therefore, being able to influence service improvements is even more important for CCC employees than for other service workers. Some studies cite an impact of participation (Matzler *et al.* 2004), which might overlap with learning from employees, but this dimension usually refers instead to participative decision making in relation to one’s own job, not participating in improving the performance of the organization.

Second, information sharing includes both teams within the CCC and functions across the organization. This dimension does not appear in previous studies, which might reflect the extreme dependence of the CCC on the actions of other departments. For example, when the marketing department launches a new campaign without informing the CCC, the CCC receives questions from customers that employees cannot answer. No other department in an organization is so dependent on information sharing with other departments.

Third, learning from customers has to do with receiving signals of customers, giving proactive advice, and acting on complaints. Although these aspects often emerge in customer-oriented studies, they seem absent in employee-oriented studies. However, because CCC employees constantly confront the flaws of their organization, they experience negative impacts if they do not learn from customers on a constant basis.

Fourth, integrity pertains to the experienced level of organizational honesty towards customers and employees. Previous studies might not include a specific integrity factor, but social identity research implies a need to feel proud of an employing organization. In such research, integrity consists of items such as ‘the organization is honest toward customers’ and ‘the organization is honest toward employees’. Knowing the organization is honest can

make employees proud to work for that firm. This effect should be strong especially in a CCC setting because employees constantly consider the honesty of the organization towards not just themselves but also the customers they talk to daily.

Fifth, ease of tools refers to a specific CCC job quality dimension that seems rather obvious, because CCC employees must depend completely on automated tools. They use tools to register each customer contact, answer questions, and find answers in the system. When the tools are difficult to use or the systems crash regularly, their work is immediately and negatively impacted. In other service settings, the dependence on tools is relatively lesser.

We present in Table 3.9 an overview of the job quality dimensions from previous studies and those we include in our proposed CCC job quality scale. Most dimensions in previous studies link partially or completely to the dimensions we find in this study, though we also have added five dimensions. Furthermore, our scale offers a reliable and valid measure of CCC job quality, focused on a specific context, not just generic elements.

Table 3.9. Overview of previous dimensions and the dimensions found in the CCC job quality scale

Previous dimensions	CCC Job quality dimensions
Achievement	Opportunity and challenge
Advancement	Opportunity and challenge
Growth	Opportunity and challenge
Recognition	Superior coaching
Responsibility	Empowerment
The work itself	-
Pay	<i>Was deleted</i>
Company policy	<i>In part</i> Integrity
Supervisory style	Superior coaching
Status	-
Security	-
Working conditions	Spread across several dimensions
Financial reward	<i>Was deleted</i>
Variety	<i>In part</i> Enjoying the work
Autonomy	Empowerment
Task identity	<i>In part</i> Opportunity and challenge
Feedback	<i>In part</i> Coaching superior
Significance	<i>In part</i> Opportunity and challenge
Role ambiguity	Role ambiguity
Role conflict	Role conflict
Empowerment	Empowerment

Table 3.9. *Continued*

Previous dimensions	CCC Job quality dimensions
Superior	Superior coaching
Training	<i>In part</i> Opportunity and Challenge
Training	<i>In part</i> Opportunity and Challenge
Decision making power	Empowerment
Role stress	Role conflict and ambiguity
Performance monitoring	<i>Was deleted</i>
Role clarity	Role ambiguity
Self efficacy	<i>In part</i> Empowerment
Responsibility	<i>In part</i> Empowerment
Firm	-
-	Easy tooling
-	Information sharing
-	Learning from employees
-	Learning from customers
-	Integrity

3.5 Managerial Implications

Job quality plays an important role in creating satisfied, committed, high-performing employees. It can also reduce employee turnover, which remains a significant challenge to CCCs. This study gives managers of CCCs clear insights into the dimensions that lead to high-quality jobs and offers an instrument for assessing CCC job quality. Managers should realize that in the CCC setting, specific factors are important to support employees' evaluations of job quality. Therefore, to describe the managerial implications of the different dimensions, we group some closely related dimensions to describe potential improvements to CCC job quality.

The opportunity and challenge dimension is not easy in a CCC domain, because it requires employees to play agent roles, and there are few potential growth opportunities. For example, roles such as coach, team manager, planner, or CCC manager are scarce. To create an appealing challenge, managers therefore should attempt to broaden the role of the employee. Some creativity is needed to realize this opportunity and challenge, but it is possible, perhaps by giving employees a more active role in the continuous improvement of the CCC and the organization. By asking them what might be improved and making them

responsible for an improvement project, the organization can offer these employees growth opportunities that challenge them.

In the CCC, both role ambiguity and role conflict tend to be associated with the difficult balance between satisfying customers and achieving internal goals, such as average call times. The CCC manager should realize that focusing on call times cannot give employees an incentive to create satisfied customers. Managers might fear that ignoring call time and focusing on the customer experience will increase the duration of calls dramatically, which would increase costs. Yet several organizations have experimented with such a focus and found that the duration of the calls did not increase, whereas customer satisfaction did. Therefore, CCCs should ensure that their strategy is in line with their operations; if the strategy is to improve customer satisfaction, the operations must focus on satisfaction, not call times. Such alignment can lower role ambiguity and role conflict for CCC employees.

Enjoying the work dimension relates to both atmosphere and easy tools. A pleasant atmosphere might result from the provision of fun ways to spend breaks, such as table tennis tables, dartboards, and so on. Another method would focus attention on rewarding employees who do a good job and making this reward public for everybody to see. However, the most important element of creating a good atmosphere is ensuring a culture of cooperation and assistance. When employees know that their colleagues will help them if they have a problem, the atmosphere becomes positive. This effect can be strengthened by encouraging employees to work together instead of just competing. Improving the tools might be more difficult; there is only so much a company can do to improve standard software. However, the organization might ensure that it uses the optimal tools by involving employees in the selection process. They work with the automated tools daily; so they should be able to identify their exact functional demands. This active involvement should make the CCC employees much more willing to use the tools, to the benefit of both the employees and the organization. That is, employees can better help customers, and the organization generates useful managerial information to improve the CCC.

In the CCC, employees' tasks often are split into small, easy-to-understand subtasks, and scripts define their answers to most general questions. If customer asks something beyond this normal service, most employees must divert the question to a more empowered

superior who can help the customer. When the CCC makes the employees responsible for all kinds of contacts though, both the customer and the employee can benefit. For example, organizations that give employees yearly budgets to disburse, as they see fit, to customers who have not been treated fairly, achieve significant increases in both customer and employee satisfaction because of the greater empowerment.

Several of the newly identified factors, namely learning from employees, learning from customers, and information sharing, relate to a learning environment. Most CCCs do not prioritize these factors; instead, they focus on first-time fixes and average call times. But to create high-quality jobs, managers must implement these learning factors. Doing so not only increases the well-being of employees but also enhances the value of the CCC and the organization as a whole. Learning from customers and employees and involving them in continuous learning provides a great source of improvement suggestions. On average, CCC employees might talk to 15,000 customers annually, and these customers can provide great insights into methods for service improvement. When the CCC and the entire organization want to improve their service, customer contact employees likely know better than anyone else in the service organization where to start.

The CCC can proactively prevent errors and unsatisfying customer and employee experiences by sharing information. For example, if the marketing department informs the CCC that a promotional flyer will be sent to a group of customers on a certain date, the CCC can prepare by predicting the types of questions it will receive about the marketing activity. The CCC should use the information it possesses to help other departments improve their products and services as well. For example, analysing the questions and complaints that the CCC receives would be a valuable source of improvement suggestions for other departments.

Finally, the integrity dimension mostly involves the company's apparent honesty, towards employees and customers. If CCC employees recognize organizational dishonesty towards customers, they might doubt its overall integrity and experience low job quality. This dimension reflects the very culture of the organization, but integrity can be improved by rewarding employees equally or simplifying the reimbursement process for customers. One insurance organization chose to simplify the process of filing claims and trust its customers,

based on extensive research that showed only approximately 5% of customers defraud. Therefore, customers who filed a claim received their reimbursement within a couple of days. This change not only increased customer satisfaction but also resulted in cost savings, because employees did not have to process the same volume of paperwork or handle complaints when reimbursements were delayed. It also increased perceptions of the integrity of the organization towards and among both customers and employees.

3.6 Limitations and Further Research

This study contains some limitations that should be taken into account when interpreting the results.

First, the organizations that participated in our study represent a limited number of industries, which has consequences for the generalizability of the scale. The CFA analysis included six participating organizations, representing four specific service industries: health insurance, banking, telecom, and government. The higher internal validity of the CCC job quality scale, compared with job quality scales for generic service settings, also entails a minor decrease in generalizability because of our singular focus on the CCC setting. Further research should include other departments within the organization and organizations from other industries to test the generalizability of our proposed scale.

Second, we do not distinguish between employees with a contract and those who work on a temporary basis, though there might be some differences between these groups, especially in terms of their commitment towards the organization. Because CCCs commonly use temporary employees, this consideration should be of interest in further research.

Third, we have focused on in-house contact centers, whereas many organizations use outsourced CCCs. It therefore might be valuable to investigate whether employees of outsourced contact centers value other factors to determine their job quality.

Fourth, with our focus on scale development, we do not test whether the 12 identified factors influence employee satisfaction or loyalty, which should be a goal for additional research. Turnover continues to be a great concern for CCCs, and recognizing the

impact of these factors would enable managers to better understand the drivers of employee turnover.

Customer Contact Centers as Relationship Marketing Instruments: the Role of Customer Contact Center Quality

In Chapter 4, the research question of the impact of customer contact center quality on relationship quality and customer loyalty is answered. Customer contact centers play an increasingly important role as the public faces of the company. In the recent past, such centers have been switching from transaction-oriented cost centers into relationship-oriented value centers. This article investigates whether, to what extent, and how customer contact centers influence customer–firm relationships by introducing the concept of customer contact center quality. The proposed model compiles direct and indirect effects of this form of quality on focal relationship marketing constructs, including customer satisfaction, trust, affective commitment, and customer loyalty. A survey of 1,589 customers of three service firms in different industries provides a test of the model using structural equation modeling. The results indicate that customer contact center quality is a relational instrument with a positive, direct influence on relationship quality. Its substantial positive effect on customer loyalty is indirect, mediated by relationship quality. Thus customer contact centers can contribute to stronger customer relationships, if they are well managed. These findings have important implications for theory and practice.

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4.1 Introduction

The importance of service delivery as a strategic differentiator in competitive markets has been growing rapidly. Organizations realize more and more that their products and prices can be copied in an instant, whereas the services they deliver are far more difficult to copy. Thus, service delivery represents a preeminent tool for creating long-term customer relationships (Hennig-Thurau *et al.* 2002). Moreover, the quality of the service delivered strongly affects relationship quality (i.e., customer satisfaction, trust, and affective commitment) and outcomes (customer loyalty, repurchase intentions, positive word of mouth), which puts even more pressure on organizations to deliver the best service possible (Rust *et al.* 1995; Sharma and Patterson 1999; Spreng and Mackoy 1996). To better understand customers' evaluations of service quality, researchers thus have devoted considerable effort to studying service quality (e.g., Cronin and Taylor 1992; Parasuraman *et al.* 1985; 1988).

In this setting, many organizations use customer contact centers as important instruments for delivering their services, whether partially or totally (Anton 2000; Holman *et al.* 2007; Miciak and Desmarais 2001), and the number of customer contact centers is increasing substantially (Whitt 1999). Average growth rates in the customer contact center industry for Europe, the Middle East, and Africa ranged around 130% in the period from 1999 to 2005 (Datamonitor 2007). Such rapid growth coincides with a shift in the accessibility of organizations, such that fewer customers interact with a single contact person, such as a salesperson or an account manager, and many service companies have reduced or abandoned the idea of physical service encounters. Thus on average, 80% of a firm's interactions with its customers take place through a customer contact center, and 92% of customers form opinions about an entire organization based solely on their experience with the customer contact center (Anton *et al.* 2004).

The current situation thus appears somewhat paradoxical: Scholars and practitioners alike agree that human interactions facilitate long-term customer relationships, but traditional, interpersonal means for establishing customer relationships, such as account managers and physical stores, are becoming more scarce. Tasks formerly performed by

account managers or service encounters have been transferred to customer contact centers. Even without the benefits of physical proximity, customer contact centers must substitute for more traditional sales instruments and create long-term customer relationships. But how can they accomplish this task and through what mechanisms? Extant literature on customer contact centers has largely neglected this question.

In light of this gap, the contribution of our article is fourfold. First, we broach the issue of customer contact centers' changing role and show that as marketing instruments, these centers are in the midst of a transformation from transaction-oriented cost centers to relationship-oriented value centers. Second, we introduce and operationalize customer contact center quality to explain customer contact centers' impact on customer–firm relationships. Third, by relying on relationship marketing theory and service quality research, we develop a model that incorporates the direct and indirect effects of customer contact center quality on relationship quality and customer loyalty. Fourth, our extensive empirical study shows that the influence of customer contact center quality on customer loyalty is fully mediated by relationship quality. That is, customer contact centers cannot per se guarantee loyal customers; rather, they help improve relationship quality, which leads to an increase in customer loyalty.

4.2 The Transformation from Cost to Value Centers

In the mid-1980s, most customer contact centers started out as cost centers, so their primary objective was to handle customer contacts as efficiently as possible to save money for the organization (Gans *et al.* 2003). With this perspective, practitioners and scholars embraced concepts such as staffing costs minimization or customer contact center offshoring (Aron 2005; Atlason *et al.* 2004). The typical unit of analysis was the transaction: A customer approaches the customer contact center, the customer contact center answers the question or solves the problem as quickly as possible, and the transaction ends. Performance indicators used by such customer contact centers reinforce the efficiency- and transaction-oriented cost perspective, such as average handling time, which calculates the time that the customer contact center agent spends on the phone with the customer to answer his or her question or solve a problem. Managers of customer contact centers constantly monitor

average handling time, because the shorter each call, the more calls each employee can handle in a specific amount of time, which increases the center's efficiency and lowers its costs. In this setting, if service quality is considered at all, it plays a rather static role, such that the customer contact centers attempt to adhere to a sharply defined balance between agent efficiency and service quality (Brown *et al.* 2005). Minimizing costs may have a positive effect on the bottom-line in the short-term but may not lead to the optimal, long-term output for organizations. Many customer contact centers continue to function as obligations that organizations cannot escape from, rather than a marketing instrument that they could design to achieve their marketing objectives through long-term customer relationships.

In the past decade though, the service industry context has changed significantly, particularly with regard to the accessibility of organizations. In the past, long-term customer relationships resulted only through contact with the account manager or personnel in a physical store. But fewer organizations in business-to-consumer markets still provide account managers or run a physical store to allow for interactions with a firm contact. Especially considering the growth of the pure Internet companies, customers often must depend completely on the customer contact center for all contacts (Laroche *et al.* 2005), which means they rarely speak to the same contact employee in multiple calls. Nor do customers know the names of their firm contacts, let alone have any idea of who they really are. Therefore, the important tasks of developing, maintaining, and enhancing customer relationships now lies in the hands of a mostly impersonal customer contact center.

Various changes in the service industry context and the increased expectations of customer contact centers call for changes in perspectives on customer contact centers. To create loyal customers, a concentration on low-cost, short-term transactions is insufficient, and operational, transaction-oriented performance indicators (e.g., average handling time) have no relation with customers' satisfaction with the organization (Feinberg *et al.* 2000; Marr and Parry 2004). To create long-term customer relationships, organizations instead must implement relationship-oriented performance indicators, such as customer satisfaction, trust, and affective commitment (Alexander and Colgate 2000; Coviello and Brodie 1998; Morgan and Hunt 1994). The customer contact center needs to transform from a cost center into a value center, focused not only on transaction-oriented performance

indicators but also on relationship-oriented indicators that encourage long-term relationships with customers.

This shift is not unique to the customer contact center context; it already has occurred in marketing and service quality settings, in parallel with the transition from an inside-out to an outside-in organizational perspective. An inside-out perspective is a primarily internal view that focuses on processes, quality, R&D, and learning (Knox and Bickerton 2003; Luo and Bhattacharya 2006; Noble *et al.* 2002; Olson *et al.* 2005), similar to the cost center perspective. In contrast, an outside-in perspective is an external, customer-driven view that focuses on customer-oriented behaviors (Day 1994; Knox and Bickerton 2003), parallel to the value center perspective. Today, many organizations adopt the outside-in, value-based perspective by shifting toward relationship marketing (Alexander and Colgate 2000; Payne and Frow 2005), recognizing that the short-term, transaction-oriented perspective cannot suffice anymore and that customer relationship management is needed to succeed in the long run (e.g., Hennig-Thurau *et al.* 2002; Payne and Frow 2005; Ryals 2005). Specifically, customer relationship management focuses on long-term customer relationships through a process of value creation that consists of three key elements: (1) determining what value the company can provide to its customers, (2) determining what value the company can receive from its customers, and (3) managing this value exchange relationship successfully to maximize the lifetime value of customers (Nasution and Mavondo 2008; Payne and Frow 2005; Venkatesan and Kumar 2004). From this perspective, the customer is a co-creator and co-producer instead of merely a recipient in the production process (Payne and Frow 2005; Porter and Kramer 2011).

The evolution from an inside-out to an outside-in perspective (i.e., from a cost center to a value center perspective) appears in prior research on customer contact centers as well, starting around 2000 (e.g., Burgers *et al.* 2000; Feinberg *et al.* 2000; De Ruyter and Wetzels 2000). The initial transaction-oriented perspective led to a focus on efficiency, so research primarily addressed (optimizing) performance indicators related to challenging issues such as handling time (Feinberg *et al.* 2000; Marr and Parry 2004), queuing (Avramidis *et al.* 2004; Bassamboo *et al.* 2006; Brown *et al.* 2005; Whitt 1999; 2005; 2006), forecasting (Avramidis *et al.* 2004; Whitt 1999), and staffing (Atlason *et al.* 2004; Whitt 2006). Then Feinberg *et al.*

(2000), Miciak and Desmarais (2001), and Marr and Parry (2004) began to realize that there was hardly any relationship between these cost-reduction performance indicators and customers' satisfaction. Moreover, the impact on a customer's experience with internal aspects, such as service levels, total calls, and average talk time, is minimal (Feinberg *et al.* 2000; Heinen 2006; Holland 2003; Marr and Parry 2004; Miciak and Desmarais 2001). Apparently, satisfied customers result from determinants other than those studied from a cost center approach; a value center approach would be needed to address the determinants that actually ensure long-term customer relationships.

From the value center perspective, the research focus shifted to customers' perceptions. De Ruyter and Wetzels (2000) investigate employee performance, the customer contact center representative, and the specific impact of perceived listening by the representative on customer satisfaction with and trust in the organization. They define perceived listening according to three dimensions: attentiveness, perceptiveness, and responsiveness. Attentiveness and responsiveness both have direct impacts on customer satisfaction, and receptiveness and responsiveness have direct impacts on customer trust. The three dimensions likely influence customers' overall evaluations of the quality of the contact center as well. Burgers *et al.* (2000) consider the role of the representative in a broader sense: What does the customer expect of a customer contact center representative? They find four dimensions of customer expectations of customer contact centers: adaptiveness, assurance, empathy, and authority. In addition to basic service aspects, such as solving the problem, being friendly, and explaining the steps in the process, Dean (2004) identifies customer feedback and customer focus as two new dimensions of customer contact center quality. Customer feedback encompasses items such as regular monitoring of customer satisfaction, encouragement of informal feedback, and informing customers of changes. Customer focus addresses understanding the needs of the customer, constantly creating value for the customer, and adopting as a main objective the goal of keeping the customer satisfied.

These studies thus concentrate on particular aspects of the quality of the customer contact center, which have impacts on relationship quality. They were among the first to indicate that customer contact center quality positively influences long-term customer

relationships, which implies that they can function as value centers and therefore as key relationship marketing instruments.

4.3 Theoretical Background

More and more organizations are experiencing scenarios in which creating long-term relationships with customers is ever more important (Alexander and Colgate 2000; Coviello and Brodie 1998). By focusing on long-term relationships, both organizations and customers benefit. Customers benefit through reduced costs (e.g., monetary, time, effort, mental stress) and added value because organizations can better recognize customer needs and expectations to offer customized products and services. Organizations benefit from reduced costs (e.g., labor, capital, investments, ongoing expenses) and the extra profits that loyal customers generate through repurchase intentions and positive word of mouth (e.g., Reichheld 1996).

The customer relationship management perspective in turn contends that long-term relationships are based on customer satisfaction, trust, and affective commitment (Hennig-Thurau *et al.* 2002). Customer satisfaction with an organization is the result of a psychological comparison process in which the perceived benefits obtained from an organization get weighed against expectations (Oliver 1980; Yi 1990). Trust in our context encompasses the perceived credibility and benevolence of an organization (Doney and Cannon 1997). Affective commitment refers to a feeling of belonging to the organization and caring about its long-term success (Garbarino and Johnson 1999). Customer loyalty focuses on customers' future intentions, in the form of repurchase and positive word of mouth (Zeithaml *et al.* 1996). Several studies show that customer satisfaction, trust, and affective commitment are important mediators in creating loyal customers (e.g., Caceres and Pappas 2007; Garbarino and Johnson 1999; Morgan and Hunt 1994), through an attitudinal process in customers' minds, such that customers develop so-called true customer loyalty—a more sustainable form than the spurious customer loyalty created by inertia (Bloemer and Kasper 1995; Dick and Basu 1994).

Because most modern organizations strive for long-term customer relationships, they need to change their focus and work to enhance the satisfaction, trust, and affective

commitment of their customers. Instead of focusing on, say, price offers to influence customers' inertia, they should improve service delivery levels to increase relationship quality. Moreover, customer contact centers are key to service delivery processes, so their challenge is to fulfill their value-creating role by exerting a positive impact on long-term customer relationships through customer satisfaction, trust, and affective commitment. Because customer contact center quality aspects have a positive impact on relationship quality, we introduce, conceptualize, and operationalize the concept of customer contact center quality as the main determinant of customer contacts centers' impact on long-term customer relationships.

4.3.1 Customer Contact Center Quality

We define customer contact center quality as *the overall evaluation of the customer contact center, as perceived by customers*. The theoretical basis of customer contact center quality is analogous to the dominant conceptualization of service quality, namely, the confirmation–disconfirmation paradigm (Parasuraman, Zeithaml, and Berry 1985). The concept of quality began to emerge in the late 1970s, with a primary focus on goods. Because services differ from goods on key features, such as intangibility (Shostack 1977), heterogeneity (Booms and Bitner 1981), and inseparability (Grönroos 1978), researchers needed a separate concept of service quality. Two early conceptualizations by Grönroos (1982) and Smith and Houston (1982) used the confirmation–disconfirmation paradigm suggested by Churchill and Suprenant (1982), which contends that service evaluations relate to the size and direction of the disconfirmation experience. This disconfirmation necessarily pertains to a customer's initial expectations. Therefore, in line with the confirmation–disconfirmation paradigm, Grönroos (1982) argues that customers compare the service they expect with the service they receive to evaluate quality. When the service delivered does not meet initial expectations, the customer is dissatisfied, whereas if the service meets or exceeds those expectations, he or she is satisfied. This paradigm also paved the way for the seminal work by Parasuraman *et al.* (1985; 1988) on service quality and its measurement with the SERVQUAL instrument.

Although SERVQUAL is generic and therefore, in principle, applicable to a wide field of services, the dimensions of service quality are less generalizable across contexts than the

dominance of the SERVQUAL instrument might suggest (Grönroos 1990; Johnston 1995). Moreover, the specific context of customer contact centers creates some conceptual differences. Van Dun *et al.* (2011) take a holistic view of customer contact center quality to study its dimensionality and recommend adapting the service quality construct to the customer contact center context. Their proposed customer contact center quality measurement scale consists of seven dimensions (see Table 4.1), each of which contributes to overall customer contact center quality.

Table 4.1. Confirmatory factor analysis of quantitative customer contact center quality

Factor	Item	Loading	Alpha	Average Variance Extracted
Accessibility	The phone number of the contact center of organization X is easy to find.	0.877	0.72	0.72
	The opening hours of the contact center of organization X are sufficient.	0.893		
Waiting	When I call the waiting time is made clear to me.	0.588	0.67	0.61
	The waiting time of the contact center of organization X is acceptable.	0.891		
	The costs of calling the contact center are acceptable.	0.826		
Voice response unit	The VRU is logically ordered.	0.934	0.90	0.83
	The VRU is clear.	0.930		
	The VRU is not too long.	0.869		
Knowing the customer	As soon as I talk to an employee, I notice that the employee:		0.86	0.59
	- knows me as their customer.	0.656		
	- immediately has my data at his disposal.	0.806		
	- has insight into my personal data.	0.833		
	- has insight into my product data.	0.831		
	- knows when and why I contacted the contact center previously.	0.721		
	- knows what other contacts I have had with the organization (e.g., letters, email, visit to the office).	0.741		

Table 4.1. *Continued*

Factor	Item	Loading	Alpha	Average Variance Extracted
Empathy	The employee I talk to:		0.97	0.72
	- says his name.	0.600		
	- is friendly.	0.788		
	- is patient.	0.842		
	- understands me correctly.	0.885		
	- listens well.	0.906		
	- takes me seriously.	0.907		
	- puts himself in my situation.	0.896		
	- knows my needs.	0.798		
	- gives me personal attention.	0.883		
	- makes me feel my question is important.	0.882		
	- takes my level of knowledge into account.	0.788		
	- is solution-oriented.	0.879		
- thinks along with me.	0.886			
Reliability	The employee can quickly find the information to answer my question.	0.855	0.94	0.63
	The employee tells me what I can expect.	0.825		
	The employee knows his own organization well.	0.835		
	I can trust the knowledge of the employee.	0.893		
	The employee can answer all my questions.	0.897		
	The employee can promise next steps that the organization actually follows through.	0.822		
	I do not have to call more than once to receive an answer to my question.	0.834		
	When I speak to an employee, my question is answered at once.	0.853		
	When the employee is not able to answer my question, I am being redirected to an employee who can.	0.785		
	I receive a written confirmation of important agreements.	0.659		
	The employee asks the right questions to get to the heart of my question/problem.	0.807		

Table 4.1. *Continued*

Factor	Item	Loading	Alpha	Average Variance Extracted
Customer focus	The employee asks me whether the answer is clear.	0.736	0.88	0.54
	The employee asks me whether my question has been answered.	0.721		
	The employee asks me whether I am satisfied at the end of the conversation.	0.666		
	When I have had contact with the contact center, some time after this contact I am being asked whether this contact was to my satisfaction.	0.613		
	The contact center of organization X learns from the signals it receives from its customers.	0.802		
	I receive proactive advice on what products would suit my situation.	0.717		
	The contact center of organization X always keeps its promises.	0.812		
	The information I receive is consistent, even when I talk to another employee.	0.807		

Notes: Model fit: $\chi^2 = 3840.275$, d.f. = 946, confirmatory fit index = .932; nonnormed fit index = .922; incremental fit index = .932; root mean square error of approximation = .055.

The first dimension is *reliability*, or the customer's sense that the customer contact center performs at a constant level. It comprises aspects such as answering questions, being able to trust the employee's knowledge, and consistency of information. The second dimension of customer contact center quality, *empathy*, pertains to the ability of the employee to make the customer feel that he or she is taken seriously and that the employee is able to put him- or herself in the customer's shoes. It includes friendliness, listening, and understanding.

As a third dimension, customer contact center quality consists of *customer knowledge*. The customer should believe that the customer contact center really knows him or her and uses information to benefit that customer. Its aspects make customers feel as if the organization knows them. The fourth dimension of customer contact center quality instead pertains to *customer focus*, which shows the customer whether the customer

contact center has his or her interests at heart. It comprises giving proactive advice, providing information to enhance customer satisfaction, and making sure the customers' questions get answered.

Accessibility, the fifth dimension of customer contact center quality, indicates whether the customer contact center is easy to access for customers when they need it, based on the ease of finding the phone number and the operating hours of the customer contact center. Because some customers must wait for this access, the sixth dimension of customer contact center quality is *waiting cost*. It involves the effort the customer must make to reach the center, which includes not only waiting time but also the cost of calling. Finally, the seventh dimension of customer contact center quality is *user friendliness of the voice-response unit (VRU)*. This dimension consists only of aspects related to the VRU, that is, the automated menu through which customers must proceed before they can speak to an employee.

4.3.2 The Consequences of Customer Contact Center Quality

Instead of focusing on individual aspects or dimensions of customer contact center quality, we investigate more comprehensively the impact of customer contact center quality on long-term customer relationships. We take a holistic view and focus on direct and indirect impacts on relationship quality (customer satisfaction, trust, and affective commitment) and customer loyalty (repurchase intentions and positive word of mouth) (Chiou and Droge 2006; Fullerton 2005; Johnson *et al.* 2001; Sharma and Patterson 1999).

Satisfaction. In relationship marketing literature, most studies on service quality indicate a positive relationship between service quality and customer satisfaction (e.g., Rust *et al.* 1995; Spreng and Mackoy 1996). Studies that focus on aspects of customer contact center quality also find positive relationships with customer satisfaction. For example, De Ruyter and Wetzels (2000) note the impact of a customer contact center representative's listening skills on customer satisfaction. Customers value the feeling of being understood by the employee and the feeling of empathy they receive. Feinberg *et al.* (2000) find that the number of calls closed on first contact (i.e., first-time fixes) and average abandonment have positive impacts on customer satisfaction. The first-time fix measure appears in almost every performance management index for customer contact centers. Customers want an answer

to their question or a resolution to their problem before they end the call. As derived from these aspects, customer contact center quality should have a positive impact on customer satisfaction with the organization, because positive evaluations of customer contact center quality improve overall attitudes toward the organization (Cronin and Taylor 1992). We propose:

H1: Customer contact center quality has a positive impact on customer satisfaction with the organization.

Trust. Trust plays a crucial role in relationship marketing and beyond (Caceres and Pappas 2007; Garbarino and Johnson 1999; Morgan and Hunt 1994). According to Sharma and Patterson (1999), a positive relationship exists between service quality (measured as functional and technical quality) and trust. Coulter and Coulter (2003) also find that personality- and performance-related dimensions of service quality have positive impacts on trust. Chiou and Droge (2006) confirm these findings by discovering that the impact of interactive service quality on trust is significant.

In the context of the customer contact center, a customer's dependence plays a crucial role in strengthening or diminishing the feeling of trust in the organization. Many customers have nowhere else to go to, in that the customer contact center is the only point of contact. During a moment of truth then, the customer contact center utterly determines the trustworthiness of the organization. According to Doney and Cannon (1997), there are five processes for creating trust: calculative, prediction, capability, intentionality, and transference. All of them play a role for customer contact centers. That is, customer contact center quality induces trust by not cheating customers (calculative process), acting as promised (prediction process), acting in the best interest of the customer (intentionality process), and meeting obligations (capability process), and then this trust can transfer from the customer contact center to the organization (transference process).

When the customer contact center fails the customer though, such as by failing to resolve a problem, it damages customers' sense of trust in the entire organization. Alternatively, a high quality customer contact center can enhance feelings of trust. For example, imagine that a customer has experienced a product failure that damaged his or her

feeling of trust in the organization. When the customer contact center responds correctly to this failure, trust in the organization can be restored. We therefore propose that customer contact center quality has a positive impact on trust in the organization, because it positively reinforces trust-generating processes and thereby exerts a positive effect on evaluations of the perceived credibility and benevolence of the organization. Therefore, we posit:

H2: Customer contact center quality has a positive impact on trust in the organization.

Affective commitment. Affective commitment has a crucial role in relationship marketing (Caceres and Paparoidamis 2007; Garbarino and Johnson 1999; Morgan and Hunt 1994). Sharma and Patterson (1999) recognize that technical quality has a positive impact on commitment, and the impact of service quality on affective commitment appears in studies by Fullerton (2005), Harrison-Walker (2001), and Johnson *et al.* (2001).

Affective commitment entails an emotional bond between the customer and the organization. The customer feels that he or she belongs to the organization and cares about its long-term success. The quality of the customer contact center might enhance or diminish this affective commitment, especially if the relationship features the use of pledges. According to Anderson and Weitz (1992), pledges have a significant effect on the degree to which parties are committed to relationship partners. Customers regard the provision of a certain level of customer contact center quality as an idiosyncratic investment in the customer–firm relationship, which should encourage their affective commitment to the organization. Therefore, we propose:

H3: Customer contact center quality has a positive impact on affective commitment to the organization.

Customer loyalty. According to Bloemer *et al.* (1998), Cronin and Taylor (1992), Dabholkar *et al.* (2002), Patterson *et al.* (1997), Olson (2002), Sivadas and Baker-Prewitt (2000) and Zeithaml (2000), relationship quality mediates the relationship between customer contact center quality and customer loyalty. In line with these findings, we propose a model in which customer contact center quality has an indirect impact on customer loyalty, which also is in line with the cognition-affect–behavior hierarchy in expectancy value theory (Eagly and

Chaiken 1993), supports the cumulative satisfaction approach (Johnson *et al.* 2001), and accords with the loyalty phase framework (Oliver 1999). We thus anticipate that customer contact center quality affects customer loyalty through organizational customer satisfaction, trust, and affective commitment. Customers use their evaluations of customer contact center quality as input to determine their satisfaction with, trust in, and affective commitment toward the organization. However, for directly driving true loyalty toward the organization (i.e., repurchase intentions and positive word of mouth), the impact of customer contact center quality is limited.

4.3.3 Relationships of Customer Satisfaction, Trust, Affective Commitment, and Customer Loyalty

Many studies have focused on the relationships of the key components of relationship marketing and customer loyalty (Chiou and Droge 2006; Garbarino and Johnson 1999; Lam *et al.* 2004). Although some studies find that trust and affective commitment mediate the relationship between customer satisfaction and customer loyalty (e.g., Bansal, Irving, and Taylor 2004; Morgan and Hunt 1994), others indicate that customer satisfaction has a direct impact on affective commitment (Garbarino and Johnson 1999) or customer loyalty (Chiou and Droge 2006; Lam *et al.* 2004). Because our goal is to explore the impact of customer contact center quality on customer satisfaction, trust, affective commitment, and customer loyalty, we do not discuss the details of these relationships but instead use previously proposed interrelationships (Caceras and Pappas 2007; Nijssen *et al.* 2003) as a starting point to explore the relationships among the four key components. We propose:

H4: Customer satisfaction with the organization has a positive influence on trust in the organization.

H5: Customer satisfaction with the organization has a positive influence on affective commitment toward the organization.

H6: Customer satisfaction with the organization has a positive influence on customer loyalty toward the organization.

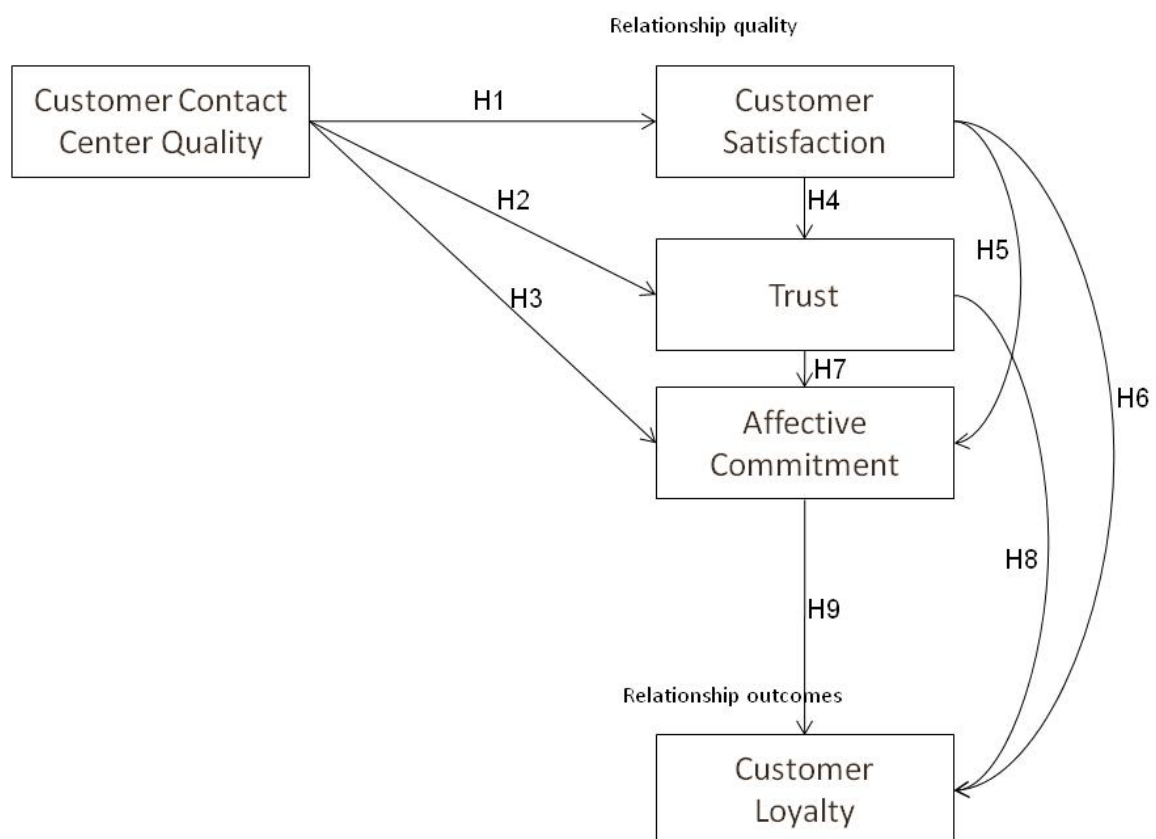
H7: Trust in the organization has a positive influence on affective commitment toward the organization.

H8: Trust in the organization has a positive influence on customer loyalty toward the organization.

H9: Affective commitment toward the organization has a positive influence on customer loyalty toward the organization.

Figure 4.1 depicts our conceptual model, including the links between customer contact center quality and focal relationship quality components (customer satisfaction, trust, and affective commitment) and outcomes (customer loyalty: repurchase intentions and positive word of mouth).

Figure 4.1. Conceptual model



4.4 Research Design and Method

Considering our conceptualization of customer contact center quality as a perceptual construct, the most appropriate research method is a survey. As our unit of analysis, we use an individual customer who recently experienced the performance of a customer contact center. To ensure our results are generalizable across different service industries, we selected customers from three service industry organizations: health insurance, financial services, and telecom. The three industries differ on several levels. For example, health insurance for most customers is something they deal with incidentally and rarely, so there are relatively few touchpoints between customers and health insurers. If customers have no health concerns over the course of a year, their yearly premium offer might be their only contact with the insurer. The telecom branch represents the opposite scenario: These firms offer Internet, telephony, and television services, so customers likely engage in multiple contacts pertaining to all three services. Finally, the contact rate with financial services should lie between these two extremes. Most banks have Internet banking, and many customers use these services on a daily, weekly, or monthly basis. However, a professional Internet channel also can minimize the amount of customer contacts to ask questions. Most banks are in the midst of their transformation to offering full services through the Internet. Because our focus is customer contact centers, testing our results across these three industries should strongly enhance the external validity of our results.

4.4.1 Sampling and Data Collection

The employees of organizations in the three service industries were asked, during a specific period, to ask customers who contacted the contact center to provide their e-mail addresses, so that we could approach them for our study. The time between the request for their e-mail address and arrival of the e-mailed survey was never longer than one week, so their evaluations should be recent in their minds. Ultimately, 7,535 customers agreed to provide their e-mail address, and we received in response to personalized e-mails with a link to the online survey 1,589 responses: 472 pertaining to telecom, 558 to health insurance, and 559 to financial services. Of the respondents, 65% were men, and their ages ranged from 18 to 86 with an average age of 46 years.

4.4.2 Measures

We adopted the 47-item scale of customer contact center quality from Van Dun *et al.* (2011) (see Appendix C) to measure customers' perceptions of customer contact center quality. The measures of the key components of relationship quality and outcomes are based on existing scales that had been proven valid and reliable. Customer satisfaction uses one item, "I am satisfied with company X as a whole." This single-item measurement appears reasonable here, because customer satisfaction is a concrete marketing construct that is easy to understand and assess for customers (Bergkvist and Rossiter 2007; Rossiter 2002). For trust, we build on Garbarino and Johnson (1999) and use three measurement items. For affective commitment, we again turn to Garbarino and Johnson (1999) and adopt their four-item scale. For the operationalization of customer loyalty, we use the scale developed by Zeithaml *et al.* (1996), which features three items for word of mouth and two items for repurchase intentions.

For all items in our questionnaire, we used seven-point Likert-type scales ranging from 1 ("completely disagree") to 7 ("completely agree"). For an overview of these items, see Appendix C.

4.5 Analysis and Results

Before running the structural model using AMOS 16, we examined whether the three samples could be pooled or demanded three separate analyses. The results of a multi-group comparison in Table 4.2 indicate metric invariance, which implies that the three samples represent the same general population. Therefore, we proceed with an analysis based on pooled data.

Table 4.2. Significance of differences in covariance structure across three samples

Model	df	CMIN	<i>p</i>	Δ NFI	Δ IFI	Δ RFI	Δ NNFI
Equal loadings	172	37.648	1.000	.001	.001	-.008	-.009
Equal structural covariances	240	250.825	.303	.006	.006	-.006	-.007
Equal measurement residuals	364	1761.362	.000	.040	.043	.023	.024

First, we assessed the validity of the measurements and find support for internal consistency on the basis of the Cronbach's alpha values. As we show in Table 4.3, all

coefficient alpha values are greater than the .7 threshold (Nunnally and Bernstein 1994). Composite reliability represents the shared variance among a set of observed variables that measure underlying constructs (Fornell and Larcker 1981). The requirement of a composite reliability of at least .6 (Bagozzi and Yi 1988) and the average variance extracted threshold of .5 (Fornell and Larcker 1981) is met by all our factors.

Table 4.3. Measurement information

Construct	Number of Items	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Customer contact center quality				
- Accessibility	2	0.72	0.88	0.72
- Waiting cost	3	0.67	0.81	0.61
- User-friendliness of VRU	3	0.90	0.94	0.83
- Customer knowledge	6	0.86	0.90	0.59
- Empathy	13	0.97	0.97	0.72
- Reliability	11	0.94	0.95	0.63
- Customer focus	8	0.88	0.90	0.54
Affective commitment	4	0.96	0.97	0.90
Customer loyalty	5	0.92	0.94	0.75
Customer satisfaction	1	-	-	-
Trust	3	0.91	0.94	0.85

We also tested for discriminant validity by comparing the squared factor correlations with the two values of each average variance extracted pair. All squared correlations are below the average variance extracted (Fornell and Larcker 1981), in support of the discriminant validity of the constructs. We provide the factor correlation matrix in Table 4.4. Overall, the measurement model meets conventional psychometric requirements.

Table 4.4. Factor Correlation Matrix

	1	2	3	4	5
1 Affective commitment	1				
2 Customer contact center quality	0.63	1			
3 Customer loyalty	0.80	0.66	1		
4 Customer satisfaction	0.69	0.72	0.75	1	
5 Trust	0.74	0.75	0.81	0.82	1

The overall fit values indicate that the proposed model represents the data structure well: $\chi^2(68) = 567.568$, $p = .000$, goodness-of-fit index (GFI) = .949, comparative fit index (CFI) = .980, and root mean square error of approximation (RMSEA) = .068. The results we obtained by estimating the hypothesized model are in Table 4.5.

Table 4.5. Structural Equation Modeling results for hypothesized model

Hypothesis	Path	Model 1		Model 2	
		β	<i>t</i> -value	β	<i>t</i> -value
1	Customer contact center quality → Satisfaction	0.697	38.706***	0.697	38.706***
2	Customer contact center quality → Trust	0.322	17.059***	0.321	16.865***
3	Customer contact center quality → Affective Commitment	0.051	1.861*	0.051	1.883*
4	Satisfaction → Trust	0.627	31.840***	0.628	31.756***
5	Satisfaction → Affective Commitment	0.115	3.253***	0.115	3.259***
6	Satisfaction → Loyalty	0.100	3.773***	0.100	3.759***
7	Trust → Affective Commitment	0.637	14.988***	0.636	14.991***
8	Trust → Loyalty	0.577	15.088***	0.570	13.861***
9	Affective Commitment → Loyalty	0.280	11.786***	0.280	11.797***
10	Customer contact center quality → Loyalty			0.009	0.460 (<i>ns</i>)
<u>Fit indices</u>					
	χ^2		567.568		567.357
	df		68		67
	Comparative fit index		0.98		0.98
	Goodness-of-fit index		0.95		0.95
	Root mean squared error of approximation		0.07		0.07

* $p < .1$. ** $p < .05$. *** $p < .01$.

We tested all hypotheses by examining the significance of the respective path coefficients. Direct positive effects of customer contact center quality on customer satisfaction, trust, and affective commitment emerge, in support of H1–H3. Customer contact center quality has the greatest impact on customer satisfaction ($\beta = .697$) and trust ($\beta = .322$). The impact of customer contact center quality on affective commitment, though significant at the .1 level, is very low ($\beta = .051$). That is, customer contact center quality clearly strengthens the level of customer satisfaction throughout the organization and has a positive impact on trust. However, its influence on affective commitment to the organization is limited. In addition, all paths describing the interrelationships among customer satisfaction, trust, affective commitment, and customer loyalty are significant, in support of H4–H9.

Relationship quality mediates the effect of customer contact center quality on customer loyalty; to verify this effect, we tested a second model (Model 2) in which we add a direct path between customer contact center quality and customer loyalty. The comparison between models reveals that omitting the direct relationship between customer contact center quality and customer loyalty does not lead to a significantly worse fit, as confirmed by the model fit indices, which barely differ across models. Moreover, the indirect effect of customer contact center quality on customer loyalty is significant ($p < .001$), according to bootstrapping tests (Preacher and Hayes 2008). Relationship quality thus mediates the relationship between customer contact center quality and customer loyalty, confirming our premonition that the customer contact center is a crucial instrument that can create customer loyalty through its positive direct impact on relationship quality.

4.6 Discussion

We began this article by arguing that customer contact centers are important instruments for organizations to deliver services to customers. They increasingly substitute for traditional sales instruments to create long-term customer relationships as traditional means for relationship management, such as account managers and physical stores, are becoming scarce. We therefore pose two questions: How can customer contact centers accomplish this task, and what mechanism is at work? In answering these questions, we make a fourfold contribution to service marketing literature.

First, we show that the customer contact center as a service marketing instrument is transitioning, from a transaction-oriented cost center to a relationship-oriented value center. Recent studies that adopt a value perspective on customer contact centers indicate that specific aspects of customer contact center quality positively influence long-term customer relationships (De Ruyter and Wetzels 2000). They show that customer contact centers might be able to function as relationship-oriented value centers and key relationship marketing instruments; we extend their efforts by offering a holistic view of customer contact center quality.

Second, we introduce, conceptualize, and operationalize the concept of customer contact center quality to explain customer contact centers' impact on long-term customer

relationships. Customer contact center quality serves as the major explanans of customer contact centers' impact on customer relationships. In line with Van Dun *et al.* (2011), we take a holistic view and conceptualize and operationalize the construct according to the scale they developed.

Third, incorporating relationship marketing theory and service quality research, we develop a model of the direct and indirect effects of customer contact center quality on relationship quality and customer loyalty. We argue that customer contact center quality has a direct impact on relationship quality in the form of customer satisfaction (Cronin and Taylor 1992), trust (Doney and Cannon 1997), and affective commitment (Anderson and Weitz 1992), as well as an indirect impact on customer loyalty in the form of repurchase intentions and positive word of mouth (Eagly and Chaiken 1993; Johnson *et al.* 2001; Oliver 1999).

Fourth, our extensive empirical study confirms our hypothesized relationships. We thus add to the understanding of a customer contact center's quality and its impact on customer loyalty, which is fully mediated by relationship quality. Customer contact centers may not guarantee loyal customers, but they help improve relationship quality, which then increases customer loyalty. This finding is clearly in line with our theoretical arguments and reinforces prior studies that report mediating effects of satisfaction, trust, and affective commitment in the relationship between quality and loyalty (Bloemer *et al.* 1998; Cronin and Taylor 1992; Dabholkar *et al.* 2002; Olson 2002; Patterson *et al.* 1997; Sivadas and Baker-Prewitt 2000; Zeithaml 2000). Furthermore, we detail the direct impacts of customer contact center quality on customer satisfaction, trust, and commitment. Although the impact on satisfaction is clearly the strongest, the effect on trust within the organization is substantial too, whereas the influence on affective commitment, though significant, is limited. These results are in line with expectations based on expectancy value theory (Eagly and Chaiken 1993) and with research that indicates a diminishing effect of quality on customer satisfaction, trust, and affective commitment (Garbarino and Johnson 1999; Morgan and Hunt 1994)

The main contribution of this article therefore lies in its clarification of whether and how a customer contact center, as a service delivery instrument, can contribute to long-term

customer relationships. Customer contact center quality enhances positive evaluations in terms of customer satisfaction with the organization as a whole. It creates a feeling of trust in the organization for customers who depend on the customer contact center for service and problem solving. Moreover, customers feel as if they belong to the organization, feel proud of the organization, and care about its long-term success. Because satisfaction, trust, and affective commitment toward an organization are enhanced by greater customer contact center quality, we confirm that customer contact center quality is instrumental in developing, maintaining, and enhancing long-term customer loyalty toward the organization, based on relationship quality as opposed to short-term customer loyalty based on inertia.

4.7 Managerial Implications

Our study provides important implications for service marketing strategy, marketing management, and customer contact center management. From a service marketing strategy perspective, our most important finding is the importance of customer contact center quality for the whole organization. Investing in customer contact center quality is more than worthwhile for the firm. Organizations that want to create long-term customer relationships should implement a customer contact center and deliver service through it with a focus on its relational, not transactional, role. Customer contact centers cannot be perceived as an obligation for organizations. Instead, they are marketing instruments that can support the achievement of marketing objectives, such as long-term customer relationships.

Our findings also offer marketing managers insight into how customer contact center quality contributes to customer relationship quality and customer loyalty. Customer contact centers play pivotal roles for organizations that strive to develop, maintain, and enhance customer–firm relationships. Every contact can be a “moment of truth,” so its role in increasing customer satisfaction, trust, and affective commitment cannot ever be overlooked. Moreover, the effectiveness of customer contact centers as relationship marketing instruments depends on customer contact center quality, so marketing and sales budget allocation decisions should account for optimal configurations and levels of customer contact center quality.

To exploit the potential of customer contact centers as relationship marketing instruments, managers should pay attention to all dimensions of customer contact center quality if they hope to maximize customer satisfaction, trust, and affective commitment, and thus customer loyalty. In so doing, they should transform the customer contact center into a true value center. The customer contact center quality scale gives managers concrete insights in each aspect they should manage. All seven dimensions should be addressed to improve customer contact center quality and help the customer contact center fulfill its relational role optimally. For customer contact center quality to have a positive impact on relationship quality and customer loyalty, customers must evaluate all of the dimensions of the customer contact center favorably (i.e., reliability, empathy, customer knowledge, customer focus, accessibility, waiting cost, and user friendliness of VRU). For example, the customer contact center should systematically monitor its quality to ensure that the customer can easily find the customer service phone number, does not have to wait too long for service, and finds the VRU clear and easy to use.

Using these seven dimensions of customer contact center quality, managers might create sustainable value for the entire organization and move away from the constant cost discussion, to focus on value creation. An efficiency- and transaction-oriented cost perspective cannot do justice to the role of customer contact center quality. But this measure is an important instrument for enhancing customer satisfaction, trust, and affective commitment, and the customer contact center can serve as a value creator and key relationship marketing instrument that improves long-term customer relationships.

4.8 Limitations and Further Research

Some limitations of our study should be taken into account when interpreting our results. First, the organizations that participated in our study represent just three industries, health care, financial services, and telecom. Further research might include other industries to confirm or challenge the generalizability of our findings. Second, in order to avoid confounding effects evoked by the service recovery paradox, we excluded customers who called the contact center with a complaint. Their state of mind and emotions differ substantially from those of customers with questions, so our results apply only to customers

who have a question or a remark, not to those with a complaint. Further research might address complaint handling by the customer contact center, explore to what extent customer contact center quality can explain the service recovery paradox, and investigate whether the seven identified dimensions of customer contact center quality are applicable in a complaint setting. Third, our study specifically focuses on so-called in-house contact centers, not outsourced versions. We did not take into account possible differences, even though extant literature has highlighted several peculiarities of outsourced customer contact centers (Aron and Singh 2005). Additional research should investigate the extent to which our findings apply to outsourced customer contact centers. Fourth, our study is based on a survey that yields cross-sectional data. Further research with a longitudinal approach would offer an even better understanding of the effect of customer contact center quality on long-term customer relationships.

Despite these limitations, our study contributes to service management and relationship marketing literature by showing that customer contact center quality is a key explanation of customers' satisfaction with, trust in, and affective commitment toward service companies. By improving the quality of customer–firm relationships, customer contact center quality increases customer loyalty, thereby adding to a company's market success. Customer contact centers should no longer be regarded as mere cost centers that solve customers' issues. Instead, customer contact centers are viable relationship marketing instruments that can help service organizations create value and achieve their market objectives.

Reducing Employee Turnover through Customer Contact Center Job Quality

In Chapter 5, the research question of the impact of customer contact center job quality on job satisfaction, affective commitment, and employee turnover is answered. Despite the rapid growth of customer contact centers, high quality jobs for employees of such centers remain a challenge, as evidenced by the high employee turnover rates in this industry. This study therefore conceptualizes and operationalizes a customer contact center job quality construct to determine its impact on job satisfaction, affective commitment, and employee turnover, using a sample of 577 contact center employees. An extensive quantitative study using structural equation modeling reveals that customer contact center job quality has a direct impact on job satisfaction and affective commitment and a strong indirect effect on employee turnover. Thus job quality is crucial for reducing employee turnover rates; this study offers managers clear guidelines on how to improve that quality.

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5.1 Introduction

An issue of growing concern for many organizations and national economies is the quality of jobs available. Better jobs constitute a primary objective of the EU employment strategy, because they encourage social inclusion and strengthen economies (European Commission 2001). Another growing element in many countries is the presence of customer contact centers (CCC), which more and more organizations use to deliver service and manage contacts with their customers (Anton 2000; Holman *et al.* 2007; Miciak and Desmarais 2001). From 1999 to 2005, the CCC growth rate in Europe, the Middle East, and Africa reached 130% (Datamonitor 2007), and such rapid growth has had significant consequences for job quality. The term “sweatshop” is not an uncommon description of the work environment (e.g., Taylor and Bain 1999). Employees call CCC jobs monotonous, in that they repeatedly answer similar questions, without any variety in their tasks (Budhwar *et al.* 2009; Lawler and Hackman 1971), and stressful, in that they are constantly monitored on a minute-to-minute basis (Holman *et al.* 2002). The quality of these jobs thus demands attention.

Such attention is particularly warranted considering the consequences of low quality CCC jobs. The most pressing outcome is extreme employee turnover rates of 20–40% (Hillmer *et al.* 2004; Malhotra and Mukherjee 2004; Metter 2008; Whitt *et al.* 2004), or even higher (Taylor and Bain 1999). For the organization, the internal consequences of high employee turnover rates are mainly financial, including the high costs associated with training and recruitment of new employees (e.g., Glebbeek and Bax 2004; Hillmer *et al.* 2004; Robinson and Morley 2006). An employee turnover rate of 20–40% implies that the entire staff changes every three to five years, which in turn implies an enormous loss of knowledge. To mitigate that loss, the firm must undertake extensive training of new employees, which Budhwar *et al.* (2009) estimate costs approximately \$10,000 per employee. A CCC that employs 500 call center agents and experiences an average employee turnover rate of 30% thus expends ($500 \times 0.3 \times \$10,000 =$) \$1.5 million each year just on training. Recruitment—including advertising, time invested in interviews, and assessments—represent further costs of employee turnover. Robinson and Morley (2006) thus estimate that total turnover costs are \$12,000 per employee; Hillmer *et al.* (2004) instead estimate

approximately \$25,000 per employee. These estimates imply our hypothetical company could spend \$3.75 million annual, just to deal with employee turnover.

Furthermore, high employee turnover harms customers. New employees receive training, but there is a time lag before they can function at the same standard as employees with work experience. This gap reduces productivity and service quality, which leads—according to service profit chain theory—to poorer service delivered to customers. The results likely include low customer satisfaction and high customer turnover (e.g., Heskett *et al.* 1997; Rust *et al.* 1995; Spreng and Mackoy 1996), which offers another reason for a sense of urgency in the quest to reduce employee turnover in CCCs.

In this pursuit, several studies have shown that job quality is an important antecedent of job satisfaction and affective commitment, which then influence turnover (e.g., Agho *et al.* 1993; De Ruyter *et al.* 2001; Matzler *et al.* 2004; Tett and Meyer 1993). Therefore, we consider whether improving CCC job quality, which should enhance job satisfaction and affective commitment, can reduce employee turnover rates. That is, our central research question focuses on whether CCC job quality is an effective instrument for reducing employee turnover. By exploring the role of CCC job quality and its impact on job satisfaction, affective commitment, and employee turnover, we help discern whether CCC job quality can provide a lever to reduce employee turnover rates.

The findings of our study have implications for both scholars and practitioners. From a theoretical perspective, we add to existing literature by offering a better understanding of the concept of CCC job quality and its impact on key outcomes. From a managerial perspective, we offer clear insights into the impact of CCC job quality on job satisfaction, affective commitment, and employee turnover, which gives managers a sense of what they actually can do to improve CCC job quality and lower employee turnover rates. In particular, we provide a conceptualization and operationalization of CCC job quality and its role in reducing employee turnover.

The remainder of the article is organized as follows: First, we outline our theoretical background regarding job quality and CCC job quality. Second, we describe the likely impact of CCC job quality on job satisfaction, affective commitment, and employee turnover, which leads to our conceptual model and hypotheses. Third, we describe the methodology and

results of our study and discuss the findings and their managerial implications. Fourth, we conclude with some of the study's limitations and suggestions for further research.

5.2 Theoretical Background

In the past two decades, several studies have explored job quality in a CCC setting (e.g., Holman *et al.* 2002; Mukherjee and Malhotra 2006; Singh *et al.* 1994) and identified the level of stress in CCCs as significantly higher than that for other service workers (Cordes and Dougherty 1993; De Ruyter *et al.* 2001; Holdsworth and Cartwright 2003). Stress for CCC workers results particularly from their role ambiguity and role conflict (De Ruyter *et al.* 2001). Other research considers alternative dimensions, such as empowerment (De Ruyter *et al.* 2001) and role clarity (Mukherjee and Malhotra 2006), though usually by noting the dimensions that constitute CCC job quality in isolation. A holistic view on CCC job quality thus far has been missing. Van Dun *et al.* (2012) explore the spectrum of the CCC job quality construct and identify 12 dimensions, including 5 new ones specific to a CCC context that had not appeared in previous studies. We use this spectrum of CCC job quality as a starting point.

5.2.1 Job Quality

Although job quality is a central issue for both scholars and practitioners, we still know relatively little about what constitutes it (Burgess and Connell 2008). We first conceptualize job quality according to the confirmation–disconfirmation paradigm for service quality (Parasuraman *et al.* 1985). Just as service quality does, job quality results from a comparison of the employee's expectation about the quality of the job and the actual experienced level of job quality. When the actual experience is better than expected, evaluations of job quality are positive; if the actual experience is worse than expected, evaluations tend to be negative. Therefore, we define job quality as the *overall evaluation of the job experience as perceived by employees*.

Herzberg (1966, 1968) also proposes that job quality consists of several dimensions, including various motivators and hygiene factors. Lawler and Hackman (1971) note six job quality dimensions: variety, autonomy, task identity, feedback, dealing with others, and friendship opportunities. Their research also produced two popular job quality scales, the

job diagnostics survey (JDS) and job characteristics inventory (JCI). The JDS scale consists of variety, autonomy, identity, feedback, and significance (Hackman and Oldham 1975); the JCI scale contains only the first four constructs (Sims *et al.* 1976).

Updates of these scales uncover additional dimensions. Agho *et al.* (1993) suggest eleven dimensions that largely confirm those in prior studies but also add new dimensions, such as role ambiguity and role conflict, as well as empowerment (Spreitzer *et al.* 1997; Thomas and Velthouse 1990). Matzler *et al.* (2004) explore nine dimensions, five of which help create satisfied employees: superior, job, remuneration, responsibility, and firm. The question though is whether these dimensions are applicable in a CCC setting, which differs in certain respects from other service settings.

5.2.2 Job Quality in a Customer Contact Center Context

To understand the role of job quality in a CCC setting, we need to detail the specific characteristics of the setting and its differences with other service settings, in terms of stress levels, continuous performance monitoring, and constant reminders of organizational flaws.

Cordes and Dougherty (1993) find that CCC employees experience higher levels of burnout, and Singh *et al.* (1994) note that customer service representatives experience more emotional exhaustion than other service workers. Holdsworth and Cartwright (2003) also reveal that stress levels are higher among CCC employees, whereas their perception of empowerment is lower than that in the general working population. Enhancing the level of empowerment might reduce stress levels; De Ruyter *et al.* (2001) similarly argue that role stress, as a result of conflicting demands, declines when employees are empowered by higher levels of autonomy.

Another specific CCC characteristic that increases the level of stress even more is continuous performance monitoring. On a minute-to-minute basis, employees undergo monitoring to ensure their average handling time is at the mandated service level. Holman *et al.* (2002) note three elements of performance monitoring: performance-related content (i.e., immediacy of feedback, clarity of performance criteria), beneficial purposes (developmental instead of punitive), and perceived intensity. The perceived intensity of performance monitoring has a negative impact on employee well-being.

Finally, CCC employees constantly confront the flaws of their organization through their contacts with customers who are voicing complaints about the firm. If the organization does not resolve these flaws, despite complaints and other customer signals, employees keep addressing the same flaws and dissatisfied customers, over and over again. Yet the nature of their job generally prevents CCC employees from initiating any change to address these customer concerns. In contrast, a hotel desk clerk, for example, often is empowered to help guests on the spot. In this sense, CCC employees function only as damage controllers.

5.2.3 Customer Contact Center Job Quality

In line with our overall definition of job quality, we define CCC job quality as the *overall evaluation of the job experience within the customer contact center, as perceived by employees*. This conceptualization aligns with the confirmation–disconfirmation paradigm, though we must adapt our operationalization of CCC job quality to fit the specific characteristics of the CCC context.

Most previous studies on the dimensions of CCC job quality focus on specific elements. Van Dun *et al.* (2012), using extensive qualitative and quantitative studies, uncover 12 pertinent factors, several of which are specific to the CCC context: opportunity and challenge, learning from employees, information sharing, integrity, role ambiguity, learning from customers, role conflict, superior feedback, atmosphere, empowerment, ease of tools, and enjoying the work. Seven of these dimensions have appeared in previous studies (i.e., opportunity and challenge, role ambiguity, role conflict, superior feedback, atmosphere, enjoying the work, and empowerment), which implies the CCC setting is not unique when it comes to these dimensions, though their relative importance might differ across service settings. We detail the five dimensions that do not appear in previous studies and seem specific to CCC.

First, learning from employees indicates that an organization should demonstrate that it values employee input. Scale items such as “regularly being asked how we can improve our organization” and “feeling that suggestions are being used” do not appear in previous studies, yet no other function in the organization deals with organizational flaws as constantly as does the CCC. Being able to influence service improvements thus should be particularly important for CCC employees.

Second, information sharing occurs between teams within the CCC as well as among functions across the organization. This dimension does not appear in previous studies, perhaps due to the extreme dependence of the CCC on other departments. For example, when the marketing department launches a new campaign without informing the CCC, the CCC receives questions from customers that employees cannot answer. No other department in an organization is so dependent on information shared by other departments.

Third, learning from customers entails receiving signals from customers, giving proactive advice, and acting on complaints. Although these aspects often emerge in customer-oriented studies, they seem absent in employee-oriented studies. Because CCC employees constantly confront the flaws of their organization though, they likely experience negative impacts if they do not constantly learn from customers.

Fourth, integrity pertains to the level of organizational honesty that CCC employees experience, toward both customers and themselves. Although previous studies lack a specific integrity factor, social identity research implies the importance of feeling proud of an employing organization. In our research, integrity consists of items such as “the organization is honest toward customers” and “the organization is honest toward employees.” Knowing the organization is honest can make employees feel proud to work for the firm. This effect should be especially strong in a CCC setting, because employees constantly consider the honesty of the organization toward not just themselves but also the customers they talk to daily.

Fifth, ease of tools refers to a specific CCC job quality dimension that seems rather obvious; CCC employees depend completely on automated tools. They use tools to register each customer contact, answer questions, and find answers in the system. When the tools are difficult to use or the systems crash regularly, their work is immediately and negatively affected. In other service settings, dependence on tools may be relatively lesser.

We thus conclude that CCC job quality contains unique job quality dimensions compared with other service settings. However, the study of CCC job quality and its different dimensions is not a goal in itself. Rather our central research question is whether CCC job quality is an effective instrument for reducing employee turnover rates. Therefore, and in line with our conceptualization, we study CCC job quality from an overall perspective.

5.2.4 Effects of Customer Contact Center Job Quality on Employee Turnover

As noted in the introduction, extremely high CCC employee turnover rates lead to substantial internal and external consequences. To study the impact of CCC job quality on employee turnover, we must take two additional constructs into account: job satisfaction and affective commitment. Most turnover models indicate that job satisfaction and commitment mediate various pertinent relationships with turnover (e.g., Hom and Griffeth 1995; Luna-Arocas and Camps 2008). Affective commitment in particular is well established as an important antecedent of turnover (Tett and Meyer 1993; Whitner 2001). In line with these findings, and as we depict in Figure 5.1, we argue that CCC job quality has a direct impact on job satisfaction and affective commitment and then an indirect effect on turnover.

Direct effects of CCC job quality. To define *job satisfaction*, we turn to one of the most widely used definitions, from Locke (1969:): “an emotional state resulting from an appraisal of the employee’s job in the customer contact center.” Many studies have focused on the antecedents of job satisfaction (e.g., Agho *et al.* 1993; Christen *et al.* 2006; Matzler *et al.* 2004). For example, Matzler *et al.* (2004) cite five variables, part of the job quality construct, that have positive impacts on job satisfaction: superior (is supportive, fair, provides challenges, etc.), job (is challenging, rewarding, useful, etc.), remuneration (pay is fair, adequate, etc.), responsibility (decision-making power, scope of action, etc.), and firm (pleasant work environment, firm is strategy oriented, etc). Other studies focus on the role of empowerment; Spreitzer *et al.* (1997) specify that the meaning dimension of empowerment has a strong impact on job satisfaction.

Some elements, such as superior, responsibility, and empowerment, are part of the CCC job quality construct. In addition, several articles consider specific job quality elements present in the CCC. For example, De Ruyter *et al.* (2001) study the role of stress and its impact on job satisfaction; both role ambiguity and role conflict exert strong influences on job satisfaction in their study.

Figure 5.1: Conceptual Model



Whether generic or CCC-specific, these elements constitute the CCC job quality construct, and thus, we expect that CCC job quality has a positive impact on job satisfaction. When employees evaluate their overall job experience by comparing their job expectations with their actual job experience and their appraisal is positive, job quality is high. This positive, cognitive appraisal leads to a positive change in their emotional state, increasing their level of job satisfaction. We hypothesize:

H1: CCC job quality has a positive impact on job satisfaction.

To investigate the influence of affective commitment, we first must clarify its meaning, in contrast with normative or continuance commitment. Normative commitment pertains to a sense of duty and responsibility toward the organization, arising from agreements or norms shared by the employee with the organization (Allen and Meyer 1990; Bansal *et al.* 2004; Martin 2008). Continuance commitment indicates an intention to continue to work for the same organization because of need, such as when a person's age or work experience gives him or her little chance to find a job outside the current organization (Martin 2008). Instead, affective commitment reflects an employee's emotional involvement with the goals and values of the organization and thus his or her identification with that organization (Allen and Meyer 1990; Bansal *et al.* 2004; Martin 2008). An employee needs to

feel a sense of belonging to perform well and even simply enjoy work; therefore, we focus on affective commitment, which has a strong impact on employee turnover (e.g., Tett and Meyer 1993), stronger than the impact of continuance commitment (Suliman and Al-Junaibi 2010).

Allen and Meyer (1990) indicate that the most important antecedents of affective commitment are job related. In their meta-analysis, Meyer *et al.* (2002) confirm that work experience variables have a stronger impact on affective commitment than do employees' personal characteristics. The work-related variables also correlate more strongly with affective commitment than with normative or continuance commitment. They find that role conflict, role ambiguity, organizational support, and leadership all have strong correlations with affective commitment. Because these variables are all part of CCC job quality, we expect that other dimensions of CCC job quality have positive impacts on affective commitment as well, just as they do on overall evaluations. Moreover, if the overall evaluation of CCC job quality is positive, it should enhance the employee's emotional involvement and identification with the organization. We formulate the following hypothesis:

H2: CCC job quality has a positive impact on affective commitment.

Indirect effects of CCC job quality. The relationships among job satisfaction, affective commitment, and employee turnover have been widely studied. Employees who are satisfied with their job and enjoy their work are less eager to leave the organization (De Ruyter *et al.* 2001; Griffeth *et al.* 2000; Hom *et al.* 1992; Tett and Meyer 1993). Employees who are satisfied with their jobs have no reason to search for even better jobs that might be available with other organizations, so they are likely to stay with their current employer. Such job satisfaction also has a positive impact on affective commitment (Bansal *et al.* 2004; Donovan *et al.* 2004; Dunham *et al.* 1994). When employees feel satisfied with their jobs, they are more involved with the goals and values of the organization, which gives them a sense of belonging.

The relationship between affective commitment and employee turnover also has been studied in prior research (Ganesan and Weitz 1996; Mathieu and Zajac 1990; Mobley *et al.* 1978; Suliman and Al-Junaibi 2010; Wong *et al.* 2001; Yousef 2002), which indicates a

negative relationship, such that the more committed employees feel toward the organization, the less likely they are to leave it. On the basis of these studies, we propose:

H3: Job satisfaction has a negative impact on employee turnover.

H4: Job satisfaction has a positive impact on affective commitment.

H5: Affective commitment has a negative impact on employee turnover.

5.3 Method

5.3.1 Data Collection

We collected data from frontline employees of six service industry organizations, who work in the in-house customer contact centers. The six organizations include two banks, two health care providers, a government agency, and a telecom provider. In Table 5.1, we offer some background information about the organizations.

Table 5.1. Background information on the participating organizations

	Bank 1	Health Insurer 1	Telecom provider	Bank 2	Health Insurer 2	Government Agency
# Customers	7 million	2.6 million	2 million	2 million	440,000	2.5 million
# Phone calls per year	12.5 million	4 million	3.5 million	700,000	500,000	4.5 million
# Employees	2000	200	575	98	60	700

We selected employees who daily answered customer questions by telephone. The employees participated anonymously. Managers introduced the study to the employees and asked them to participate, after which the employees received an e-mail with a link to the online survey. The number of respondents for the six samples ranges from 65 to 135 (response rates of 49–72%), and their average age is between 30 and 41 years, as we detail in Table 5.2. We validate the representativeness of the samples with other background characteristics and find that all six samples are representative of employees who work in CCCs.

Table 5.2. Sample characteristics of the six organizations

	Bank 1	Health Insurer 1	Telecom provider	Bank 2	Health Insurer 2	Government Agency
# Selected	224	161	229	102	79	209
# Respondents	135	99	112	65	58	108
% response	60%	61%	49%	61%	72%	51%
% male	39%	11%	69%	61%	22%	16%
% female	61%	89%	31%	39%	78%	84%
avg. age	38	41	30	40	35	37

5.3.2 Measures

The questionnaire consists of 68 items, all measured on a seven-point Likert-type scale that ranged from 1 (“completely disagree”) to 7 (“completely agree”). The items represent the following constructs:

- CCC job quality
- Job satisfaction
- Affective commitment
- Employee turnover

Following Van Dun *et al.* (2012), whose scale is valid and reliable according to their extensive qualitative and quantitative investigation, we operationalize CCC job quality with their 12 dimensions. Moreover their scale appears generalizable across different CCCs. The job satisfaction measure includes two items from Hackman and Oldham (1974) and Dubinsky *et al.* (1986). For affective commitment, we turn to Ganesan and Weitz (1996) and Garbarino and Johnson (1999) to develop a scale with four items. To operationalize employee turnover, we use the scale developed by Ganesan and Weitz (1996), which consists of five items. We provide an overview of the questionnaire items in Appendix B.

5.4 Results

Before running the structural model (with AMOS 16), we tested the validity of the measurements. For the internal consistency measures, we relied on Cronbach’s alpha values. As we show in Table 5.3, all coefficient alpha values are greater than 0.85. Composite

reliability, which represents the shared variance of a set of observed variables measuring an underlying construct (Fornell and Larcker 1981), is confirmed because all factors exceed the recommended level of 0.6 (Bagozzi and Yi 1988). The average variance extracted is greater than 0.5 for all factors.

Table 5.3. Measurement information

	Number of items	Cronbachs Alpha	Composite Reliability	AVE
CCC Job Quality	57	0.92	0.92	0.68
Job Satisfaction	2	0.85	0.93	0.87
Affective commitment	4	0.89	0.93	0.76
Employee Turnover	5	0.86	0.90	0.65

We also tested for discriminant validity by comparing the squared factor correlations with the two average variance extracted values. All squared correlations are less than the average variance extracted. Table 5.4 contains a factor correlation matrix; the results indicate that the internal validity, composite reliability, and discriminant validity of the measurement items are sufficient to enable us to continue with a test of the structural model.

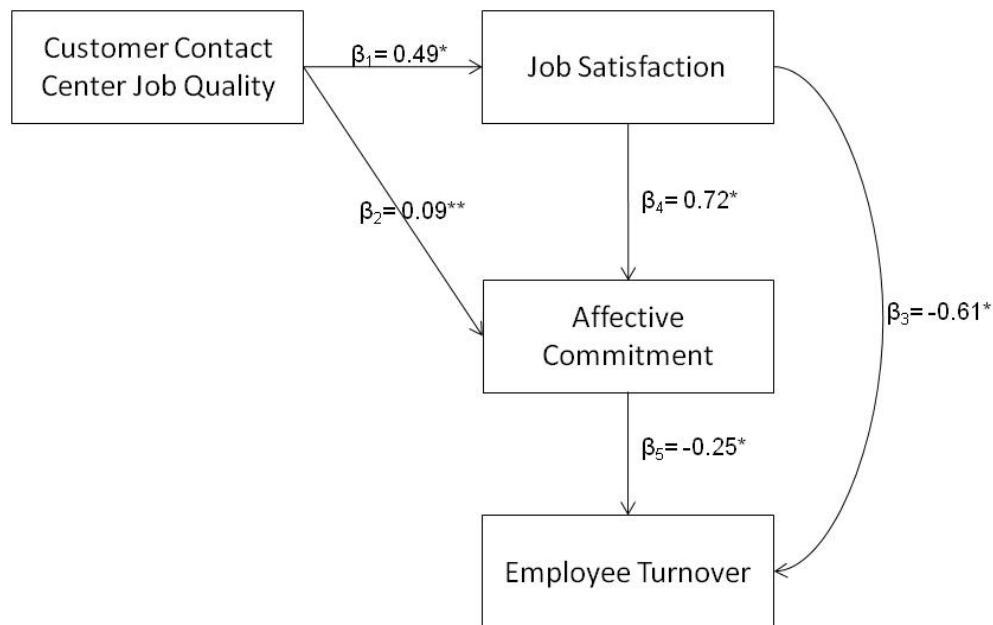
Table 5.4. Factor Correlation Matrix

	Affective Commitment	CCC Job Quality	Job Satisfaction	Employee Turnover
Affective commitment	1.00			
CCC Job Quality	0.67	1.00		
Job Satisfaction	0.72	0.69	1.00	
Employee Turnover	-0.56	-0.47	-0.64	1.00

The overall model fit indicates that the proposed model is an acceptable representation of the structures underlying the data: $\chi^2(47) = 151.710$, $p = .000$, root mean residual = .071, goodness-of-fit index = .952, adjusted goodness-of-fit index = .920, normed fit index = .966, comparative fit index = .976, incremental fit index = .976, and root mean square error of approximation = .069, with a 90% confidence interval ranging from .057 to .081 (p -close = .005). The results derived from the effects appear in Figure 5.2.

All five hypothesized effects are significant and in the presumed direction. That is, CCC job quality has a strong, direct, and positive impact on job satisfaction. The direct impact of CCC job quality on affective commitment, though significant, is small. Job satisfaction has a strong impact on affective commitment. Job satisfaction and affective commitment both have negative direct impacts on employee turnover. Improving CCC job quality does not appear to influence the level of turnover of employees directly. However, CCC job quality has a direct impact on the attitude of employees, in terms of its positive impact on job satisfaction and affective commitment, which then exerts a negative influence on the intention to leave. This indirect effect of CCC job quality on employee turnover is rather strong (0.40).

Figure 5.2. The Causal Effects



Note: standardized solutions are reported
* $p < 0.01$; ** $p < 0.05$

$\chi^2(47) = 151.710, p = .000$, goodness-of-fit index (GFI) = .952, adjusted goodness-of-fit index (AGFI) = .920, comparative fit index (CFI) = .976.

5.5 Discussion

5.5.1 Theoretical Implications

The central question for this study is whether CCC job quality is an effective instrument for reducing employee turnover. By exploring the role of CCC job quality and its impact on job satisfaction, affective commitment, and employee turnover, we confirm that CCC job quality is a tool to reduce employee turnover rates in CCCs. We thus contribute to a

better understanding of the conceptualization and operationalization of job quality in a CCC context and its role in reducing employee turnover rates.

The internal and external consequences of extreme employee turnover rates, including high recruitment and training costs for the CCC and the risk of reduced service quality, can be mitigated by increasing CCC job quality. Accordingly, increasing job quality and reducing employee turnover can help ensure that the CCC is staffed by experienced employees who function at a high level, in terms of both productivity and output quality. The improved service quality that results from such output should enhance customer satisfaction and loyalty, such that ultimately, reducing employee turnover also reduces customer turnover.

In the context of this chain of effects, our study clearly shows that CCC job quality has a strong direct, positive impact on job satisfaction. These results are in line with previous findings that indicate the individual dimensions of CCC job quality exert a positive impact on job satisfaction (e.g., De Ruyter *et al.* 2001), though our investigation is the first to study them in combination. Our finding that CCC job quality has a significant but small positive impact on affective commitment contrasts somewhat with studies that reveal a stronger impact of job quality dimensions on affective commitment, perhaps due to methodological differences. For example, Meyer *et al.* (2002) use correlations to estimate the relations between CCC job quality and affective commitment. Alternatively, the CCC setting might demand more effort to create affective commitment. Employees in the CCC may feel committed to the customer service department, but to create a feeling of belonging to the organization, they need more than better job quality.

5.5.2 Managerial Implications

For CCC managers, perhaps the most important finding in our research is that CCC job quality reduces employee turnover. Even though this impact is indirect, through job satisfaction and affective commitment, CCC job quality clearly contributes to lowering employee turnover rates, which means that it is worthwhile to invest in improving CCC job quality. With our focus on CCC job quality as an overall concept, we cannot distinguish the

exact impact of its 12 separate dimensions, but we suggest ways to improve each dimension and thus improve overall CCC job quality.

To increase *opportunity and challenge*, managers should involve employees in continuous improvement efforts focused on service quality by the CCC. *Learning from employees* is easy to implement, such as by organizing monthly employee focus group sessions to ask for employee input about potential improvements or other observations relevant to improving the quality delivered. Effective *information sharing* is the responsibility of management; the CCC manager must ensure that employees in the department receive information in a timely manner from other departments, and the manager also should inform other departments about input received from customers. To reduce *role ambiguity* and *role conflict*, managers should ensure that the performance indicators used to assess employees are closely aligned, not contradictory. For example, it is virtually impossible to achieve customer satisfaction but also spend as little time as possible on each customer contact. *Learning from customers* relates to *ease of tools*: To learn from customers, all customer contacts must be registered. Tools therefore should facilitate ease of registration for the employees and ease of reporting for management. By constantly analyzing problems and support questions, the company can identify necessary improvements and reduce contacts. *Superior feedback* and *empowerment* are also related. Several organizations have experimented with granting employees a specific budget (e.g., €1,000) that they can spend however they choose to please customers who have encountered a problem. As a result of such initiatives, employees feel empowered, and customers are pleasantly surprised when employees decide on the spot to recompense them with a gift certificate or refund, without needing the approval of a superior. An important element of the *atmosphere* is collaboration with colleagues, which can be stimulated by management. Finally, to influence *enjoying the work*, management should improve job diversity for employees of the CCC.

By focusing on these dimensions, managers can increase the satisfaction of employees with their jobs, thus increasing their feeling of affective commitment and lowering employee turnover rates. Moreover, increasing the level of job satisfaction should enhance the service quality they deliver, which improves customer experiences and ultimately leads to more satisfied and loyal employees and customers.

5.5.3 Limitations and Further Research

Our study contains some limitations that should be taken into account when interpreting our results. First, the organizations that participated in our study represent just a few industries, which has consequences for the generalizability of our scale. Further research should include other industries to test the generalizability of our findings. We anticipate some generalizability, yet other studies still should confirm our findings in other CCC contexts—or even unrelated contexts.

Second, we do not distinguish between employees with a contract and those who work on a temporary basis, though there might be some differences between these groups, especially in terms of their commitment to the organization. Because CCCs commonly use temporary employees, this consideration should be of interest in further research.

Third, we focused on in-house contact centers, whereas many organizations use outsourced CCCs. The employees in these latter CCCs work for different organizations at the same time, so their commitment to deliver top quality for all the organizations might be limited. It would be interesting to investigate whether employees of outsourced CCC use other factors to determine their job quality.

Fourth, our study is based on cross-sectional data. Thus far we have been unable to gather longitudinal data. However, such longitudinal data could provide even better insights into whether improvements over time in the level of CCC job quality lead to lower turnover levels.

Chapter 6

Conclusion

In this chapter, I summarize the main findings of this dissertation and focus on the central research question. I also present an overview and a discussion of the implications of the findings for marketing academics and practitioners. In conclusion, I point out some limitations and offer suggestions for future research.

6.1 Synopsis

Service has grown into a crucial instrument of relationship marketing that supports the creation of long-term customer relationships. Service is difficult for competitors to copy, so an organization that offers excellent service enjoys a sustainable competitive advantage. Since the mid-1980s, organizations have delivered increasing proportions of their service through customer contact centers (Anton 2000; Holman *et al.* 2007; Miciak and Desmarais 2001), leading to extreme growth in this sector (Datamonitor 2007; VCN 2010), along with changing roles for centers and their employees.

Because customer contact centers previously focused on handling as many transactions as they could as quickly as possible, they started out as efficiency-driven cost centers. In the past decade though, many studies have shown that value for customers, and thus for the service organization, requires more than focusing on individual transactions and their costs. For example, Feinberg *et al.* (2000), Miciak and Demarais (2001), and Marr and Parry (2004) show that none of the operational, transaction-oriented performance indicators (e.g., average handling time, service levels) actually influence customer satisfaction. Instead, to add value, customer contact centers need to focus on enhancing long-term customer relationships (Alexander and Colgate 2000; Coviello and Brodie 1998; Morgan and Hunt 1994). Therefore, the central research question that this dissertation has addressed is:

How can the customer contact center perform as a relationship-oriented value center, instead of a transaction-oriented cost center, for both customers and employees?

This central question comprises the following related research questions:

1. *How can customer contact center quality be conceptualized, and which dimensions are part of the operationalization of customer contact center quality? (Chapter 2)*
2. *How can customer contact center job quality be conceptualized, and which dimensions are part of the operationalization of customer contact center job quality? (Chapter 3)*
3. *What is the impact of customer contact center quality on relationship quality and customer loyalty? (Chapter 4)*

4. *What is the impact of customer contact center job quality on job satisfaction, affective commitment, and employee turnover? (Chapter 5)*

To address these research questions, Chapters 2–5 describe four main studies.

The focus in Chapter 2 was on conceptualizing customer contact center quality and its dimensions. Extensive qualitative and quantitative studies revealed seven dimensions that constitute the customer contact center quality construct, including two new dimensions that have not appeared in previous studies and appear to be specific to the customer contact center context: *customer focus* and *user friendliness of the voice-response unit*.

Chapter 3 relied on the same procedure as Chapter 2 but focused instead on the customer contact center job quality construct. Twelve dimensions emerged, including five new dimensions that appear unique to customer contact center employees: *learning from employees*, *learning from customers*, *information sharing*, *integrity*, and *ease of tools*.

Chapter 4 outlined the impact of customer contact center quality on customer satisfaction, trust, affective commitment, and customer loyalty (i.e., word of mouth and repurchase intentions) to verify whether customer contact center quality plays a crucial role in relationship marketing. Customer contact center quality enhances loyalty, but only indirectly through customer attitudes. The relationship is fully mediated by relationship quality. By positively influencing customer satisfaction, trust, and affective commitment directly, customer contact center quality indirectly creates sustainable, true loyalty.

Chapter 5 analyzed the impact of customer contact center job quality on the serious issue of employee turnover. The exploration of the impact of customer contact center job quality on job satisfaction, affective commitment, and employee turnover revealed a direct impact of customer contact center job quality on job satisfaction and affective commitment and a strong indirect impact on employee turnover.

6.1.1 Customer Contact Center Quality

The theoretical basis of customer contact center quality is analogous to the dominant conceptualization of service quality, namely, the confirmation–disconfirmation paradigm (Parasuraman *et al.* 1985). However, the specific context of customer contact centers makes

some conceptual differences likely. The impersonal nature of the customer contact center, not being able to have face to face contact, and talking to a new employee for each contact are all specific elements of the customer contact context. Therefore, the focus of the first study was to develop a multidimensional scale of customer contact center quality. I find seven pertinent dimensions: *reliability*, *empathy*, *customer knowledge*, *customer focus*, *waiting cost*, *user friendliness of VRU*, and *accessibility*. Some dimensions also appeared in prior studies, whereas two new dimensions are found that appear to be specific for the customer contact setting. For the existing dimensions, my dissertation enriches consideration of the underlying items in the specific context of the customer contact center.

Reliability and *empathy* appear in most other service quality scales; I have reformulated them to apply to the specific context of customer contact centers. In the customer contact center context, *reliability* entails qualities such as answering customers' questions in a single call and being trustworthy in terms of employees' knowledge. *Empathy* focuses on specific employee behaviors, such as listening skills, being friendly, ensuring understanding of the customer's question, and so on.

Customer focus is a new dimension. The organization needs to demonstrate that it really puts customers' interests first. Items such as "the organization learns from the signals of its customers," "the organization gives me proactive advice about which products best suit my situation," and "after a period of time, the organization asks me whether the contact was handled to my satisfaction" have not appeared in previous studies of customer contact center quality.

Accessibility is an adjusted dimension, as the SERVQUAL 10-dimension scale (Parasuraman *et al.* 1985) mentions a dimension also called "accessibility." In my dissertation though, accessibility consists of two items, opening hours and the easiness of finding the number to call; in SERVQUAL, it consists of items pertaining to the waiting experience. Although I find some evidence of waiting experience, it represents a separate dimension, defined by *waiting cost*.

Another new dimension, *user friendliness of the VRU*, is only present in a customer contact center context, which makes it logical that this dimension has not been found in other studies. No other departments in an organization use a VRU, so its user friendliness is exclusively a customer contact center dimension.

The *customer knowledge* dimension also differs from that in prior research. In the 10-dimension SERVQUAL, it appears as a separate dimension, but in the final five-dimensional scale, this knowledge gets incorporated into empathy. My study instead suggests that three dimensions—*waiting cost*, *accessibility*, and *customer knowledge*—should be measured as separate dimensions in the customer contact center quality scale.

6.1.2 Customer Contact Center Job Quality

From a conceptual perspective job quality results from a comparison of the employee's expectation about the job and the actual experienced job . When the actual experience is better than expected, evaluations of job quality are positive; when the actual experience is worse than expected, evaluations tend to be negative. There is some overlap, as well as some significant differences, between job quality in a generic service setting and customer contact center job quality. In particular, higher levels of stress and constant confrontation of the flaws of the organization influence the job quality experienced by customer contact center employees.

Therefore, the focus of the second study was to develop a multidimensional scale of customer contact center job quality. I find twelve dimensions, seven of which have also been found in previous studies, while five appear to be specific for the customer contact center setting.

The dimensions that are also found in studies that operationalize job quality or related constructs, are *opportunity and challenge*, *role ambiguity*, *role conflict*, *superior feedback*, *atmosphere*, *enjoying the work*, and *empowerment*. For these existing dimensions, this study enriches the consideration of their underlying items in the specific context of customer contact centers.

Regarding the five additional dimensions unique to this study of customer contact centers, the *learning from employees* dimension indicates that an organization should demonstrate that it values the input of employees. Scale items such as “regularly being asked how we can improve our organization” and “feeling that suggestions are being used” do not appear in previous studies of customer contact center job quality, yet no other function in the organization deals with organizational flaws as constantly. Therefore, being able to influence service improvements may be more important for customer contact center

employees than for other service workers. Some studies cite an impact of participation (Matzler *et al.* 2004), which might overlap with *learning from employees*, but this dimension usually refers to participative decision making in relation to one's own job, not participating in improving the performance of the organization.

Information sharing refers to information shared between teams within the customer contact center and between departments across the organization. This dimension does not appear in previous studies, which might reflect the extreme dependence of the customer contact center on the actions of other departments. For example, when the marketing department launches a new campaign without informing the customer contact center, the customer contact center receives questions from customers that employees cannot answer. No other department in an organization is so dependent on information sharing with other departments.

Learning from customers has to do with receiving signals, giving proactive advice, and acting on complaints. Although these aspects often emerge in customer-oriented studies, they seem absent in employee-oriented studies. Because customer contact center employees constantly confront the flaws of their organization, they experience negative impacts if they do not learn from customers on a constant basis.

Integrity pertains to the experienced level of organizational honesty toward both customers and employees. Previous studies might not include a specific integrity dimension, but social identity research reveals people's need to feel proud of their employer. For this research, integrity consists of items such as "the organization is honest toward customers" and "the organization is honest toward employees." Knowing the organization is honest can make employees proud to work for it. This effect should be especially strong in a customer contact center setting, because employees constantly consider the honesty of the organization toward not just themselves but also the customers to whom they talk daily.

Ease of tools is a specific customer contact center job quality dimension that seems rather obvious; customer contact center employees depend completely on automated tools. They use these tools to register each customer contact, answer questions, and find answers in the system. When the tools are difficult to use or the systems crash regularly, their work is immediately and negatively impacted. In other service settings, dependence on such tools is relatively lesser.

6.1.3 Customer Contact Center Quality's Impact on Long-Term Customer Relationships

Although it is crucial to manage the quality of the customer contact center as perceived by the customers, improving the quality is not a goal in itself. It serves a higher purpose. This purpose is to add value in creating and maintaining long-term customer relationships.

This study shows that the customer contact center as a service marketing instrument is able to add value as a relationship-oriented value center. Recent studies that adopt a value perspective indicate that specific aspects of customer contact center quality positively influence long-term customer relationships (De Ruyter and Wetzels 2000). Customer contact centers thus can function as relationship-oriented value centers and key relationship marketing instruments; I extend these efforts by offering a holistic view of customer contact center quality. Previous studies have studied separate elements of customer contact center quality in isolation, such as the listening skills of the CCR. The present study is the first to develop a holistic construct of customer contact center quality.

Based on relationship marketing theory and service quality research, I find that customer contact center quality has a direct impact on relationship quality in the form of customer satisfaction (Cronin and Taylor 1992), trust (Gabarino and Johnson 1999), and affective commitment (Anderson and Weitz 1992), as well a strong indirect impact on customer loyalty in the form of repurchase intentions and positive word of mouth (Eagly and Chaiken 1993; Johnson *et al.* 2001; Oliver 1999).

The results of this study add to understanding of a customer contact center's quality and its impact on customer loyalty, which is fully mediated by relationship quality. Customer contact centers may not guarantee loyal customers, but they help improve relationship quality, which then increases customer loyalty.

6.1.4 Customer Contact Center Job Quality's Impact on Employee Turnover

Just as improving customer contact center quality is not a goal in itself, nor is just improving the quality of the jobs in the customer contact center. The higher purpose from the employee perspective is to positively influence the extreme turnover rates that present challenges for all customer contact centers.

This study clearly shows that customer contact center job quality has a strong, direct, positive impact on job satisfaction. The results are in line with previous findings that indicate that individual dimensions of customer contact center job quality exert a positive impact on job satisfaction (e.g., De Ruyter *et al.* 2001), though this dissertation represents the first attempt to study them in combination. Affective commitment is also directly influenced by customer contact center job quality, while its impact on turnover is indirect through satisfaction and affective commitment. Improving customer contact center job quality therefore is a crucial instrument in reducing turnover.

In addition to reducing turnover by improving customer contact center job quality, improving the quality of the work has additional benefits, that can be derived from reasoning in line with the service profit chain theory. The service profit chain contends that the quality of the job that the employee experiences, has an impact on the quality of the service that is delivered to the customer. By reducing the turnover rate, fewer new employees need to be hired and trained, ensuring a more constant level of (high) quality delivered since employees are more and more experienced in their work. This in turn leads to a more constant high level of service quality experienced by the customers enhancing customer satisfaction and loyalty.

The results indicate that the customer contact center, by enhancing job quality, is indeed able to add value for the employees, customers, and as a consequence the entire organization.

6.1.5 The Customer Contact Center as a Relationship-Oriented Value Center

By noting the strong impact of customer contact center quality on customer satisfaction, trust, affective commitment, and customer loyalty, as well as the effect of customer contact center job quality on job satisfaction, affective commitment, and

employee turnover, this dissertation shows that the customer contact center is able to function as a value center and to support the entire organization in creating long-term customer relationships.

Within the customer contact center quality construct, two dimensions clearly illustrate this change to a more relationship-driven asset for the organization: a *customer focus* and *customer knowledge*. To create long-term relationships, the customer contact center should ensure that the customer believes it has the best interest of that customer at heart. By giving proactive advice and learning from customers' signals—parts of the *customer focus* dimension—and by creating the feeling that the organization really knows the customer, the contact history, and the products the customer has bought—from the *customer knowledge* dimension—the customer contact center adds value for customers and therefore for the entire organization.

With regard to customer contact center job quality, *learning from customers*, *learning from employees*, and *information sharing* strongly relate to the shift to function as a value center. Whereas a cost center perspective would prioritize handling as many transactions as possible, the value center perspective aims to create long-term customer relationships. Purely focusing on the transaction is no longer sufficient. The customer contact center instead needs to improve the quality of its service continuously; the best way to do so is to learn from the customers and employees and then share information with other departments. The employees in the customer contact center speak to 15,000 customers each year, so if anyone knows how to improve the quality of the customer contact center to create satisfied and loyal customers, it is these employees. By sharing such information with, for example, the marketing department, the organization can proactively address and eliminate questions that plague customers, because the employees of the customer contact center validate the output of the marketing department before it goes to customers. These new dimensions mean the customer contact center adds value for employees, customers, and therefore the entire organization.

6.2 Discussion and Theoretical Implications

This dissertation has focused specifically on a customer contact center setting. The finding of new dimensions, according to both customer and employee perspectives, implies that the customer contact center indeed represents a different context than other departments; let alone service delivery or job quality in general. For customers, the dependence and impersonal setting of the customer contact center distinguishes it from other contact channels that they might have used previously, such as an account manager or store personnel, which could explain the finding of a new *customer focus* dimension. Because the customer contact center context is so impersonal, customers need to feel that the organization really has their interest at heart. For employees, there are three main differences between a customer contact center and other departments: the high level of stress, performance monitoring, and continuous confrontation with the flaws of the organization. No other role in the organization faces customer questions and problems eight hours a day, with virtually no empowerment to go beyond standard tasks to help the customer. These specifics of the customer contact center context are reflected in the newfound dimensions, such as *integrity*, *learning from customers*, and *learning from employees*.

In addition, *integrity* could be linked to the growing importance of corporate social responsibility (CSR). For employees, the need to identify with their organization plays a fairly large role, whether in the initial employment choice or in feelings of commitment to the organization once they start working there. Although no explicit dimension related to CSR appears from the customer perspective, modern developments indicate that CSR plays a role. Furthermore, firms' increasing dependence on their (often outsourced) customer contact centers prompts the media and even politicians to press for improved service quality. The growth of social media only enhances the pressure, because organizations run a greater and worldwide image risk if dissatisfied customers describe their negative experiences online and thus reach thousands of people in an instant. In this sense, the integrity of an organization might gain growing importance from a CSR standpoint, especially with the availability of social media.

Learning from employees and learning from customers also may suggest the importance of learning organization theory in a customer contact center setting. The customer contact center is the only department that receives so much information from customers about products, services, and their flaws, so these employees can learn from expansive input from customers. These well-learned employees in turn might be crucial to the long-term survival of organizations, because each question or problem that a customer voices is a source of a potential improvement to products and processes. Organizational learning theory should be applied elsewhere to determine if the customer contact center is a unique setting or if, when it comes to learning, it functions similarly to other departments in the organization.

For the first two studies (Chapter 2 and 3) I have used a holistic approach in developing both customer contact center quality and customer contact center job quality. By using focus group sessions and not just relying on previous studies in the literature, I was able to find the new dimensions of both constructs. In addition my holistic approach shows that it is not sufficient to focus on isolated elements of the constructs, such as for instance empowerment (employee perspective) or the listening skills of the CCR (customer perspective). On the contrary, in order to get a thorough understanding of the ability of customer contact center quality and customer contact center job quality to contribute to the performance of a customer contact center as a relationship-oriented value center, all dimensions need to be taken into account. Moreover, in order to achieve the results in reducing employee turnover or increasing customer loyalty, a holistic approach on customer contact center quality and customer contact center job quality is needed.

With regard to customer contact center quality, the results of this holistic approach – finding new and adjusted dimensions – leads to questioning the robustness of the SERVQUAL scale when applied in different settings. As Grönroos (1990) and Johnston (1995) already found, the SERVQUAL scale is less generalizable across contexts than the current dominance of the scale suggests. Based on the results of the first study in this dissertation (Chapter 2), it might be argued that for the customer contact center context, a modification of the SERVQUAL scale is needed. By adding the newfound dimensions of the customer contact center quality scale and by adjusting existing dimensions for the specific setting of

the customer contact center, a more reliable and valid measurement of the quality of the customer contact center is achieved.

The two newfound dimensions of customer contact center quality are *user-friendliness of the voice response unit* and *customer focus*. The *user-friendliness of the voice response unit* is such a specific customer contact center dimension, that it immediately explains why this dimension has not been found in previous studies. It is just not present in other service settings, such as a hotel or restaurant. Finding the *customer focus* dimension in this study and not in previous studies might be explained by the changing role of the customer contact center. As the role of the account manager or physical store is diminishing, the customer contact center now needs to substitute this feeling by focusing on the interest of the customer. As the customer is fully depending on the impersonal contact center, this dimension may be more prominent, than for example in a hotel setting, where the customer can talk to an employee face to face.

This leads to the discussion of how generalizable the customer contact center quality scale itself is. The scale has been tested across three different industries, which suggests its generalizability for the specific customer contact center context. Though, it may be argued that the customer contact center quality scale is applicable in other settings as well. For example an (IT) helpdesk may need to live up to the same standard as the customer contact center. In this situation the customer is also completely depending on support by phone, not having the possibility to go to a store or to get help at home from a mechanic. Although care needs to be taken using the customer contact center quality scale in other settings, I think the scale is worth to be tested in terms of validity and reliability in related settings.

In the present dissertation, the same conceptual basis has been used for job quality as for service quality – the confirmation disconfirmation paradigm - though a robust scale such as SERVQUAL was not yet available for job quality. Therefore, the holistic approach that has been used to define both constructs, was even more relevant for the customer contact center job quality construct. The fact that the dimensions found can be linked to several theoretical concepts, such as organizational learning and social identity research, confirms this diversity of the job quality research. Moreover, the fact that customer contact center job quality appears to consist of twelve dimensions, confirms the complexity of the job

quality construct. These findings call for a robust, holistic construct for generic job quality, not only for the customer contact center.

When it comes to the generalizability of the customer contact center job quality scale, it may be argued that it is generalizable for all jobs that include contact with customers. Mechanics, account managers, and complaint handlers for example, have a lot of contact with customers as well. The newfound dimensions of *learning from employees*, *learning from customers* and *information sharing* are also important for these employees, not only for employees of the customer contact center. Therefore, I think also this scale is worth to be tested in related settings.

Apart from the function or department where the scale could be applied, the industry in which the customer contact center operates is another element pertaining to the generalizability of the scales. In my dissertation I have focused on business to consumer service industry organizations. Although business to business (B2B) organizations are often organized somewhat different from business to consumer (B2C) organizations, more and more B2B organizations are also using customer contact centers. So the dimensions are applicable to B2B setting contact centers as well, although the impact may differ. Most B2B organizations, in contrast with B2C organizations, are still using account managers. So a B2B customer is not so fully dependent on an impersonal customer contact center as is the individual customer.

When it comes to the consequences of customer contact center quality and customer contact center job quality, there are also some theoretical implications that need to be discussed.

First, I find that the relationship between customer contact center quality and customer loyalty is mediated by relationship quality. This finding is clearly in line with theoretical arguments and reinforces prior studies that report mediating effects of satisfaction, trust, and affective commitment in the relationship between quality and loyalty (Bloemer *et al.* 1998; Cronin and Taylor 1992; Dabholkar *et al.* 2002; Olson 2002; Patterson and Spreng 1997; Sivadas and Baker-Prewitt 2000; Zeithaml 2000). Furthermore, though the impact of customer contact center quality on satisfaction is clearly the strongest, the effect on trust within the organization is substantial too, whereas the influence on affective commitment, though significant, is limited. These results are in line with expectancy value

theory (Eagly and Chaiken 1993) and research that indicates a diminishing effect of quality on customer satisfaction, trust, and affective commitment (Garbarino and Johnson 1999; Morgan and Hunt 1994).

Second, the finding that customer contact center job quality has a significant but small positive impact on affective commitment contrasts somewhat with studies that reveal a stronger impact of job quality dimensions on affective commitment. This is perhaps due to methodological differences. For example, Meyer *et al.* (2002) use correlations to estimate the relations between customer contact center job quality and affective commitment. Alternatively, the customer contact center setting might demand more effort to create affective commitment. Employees in the customer contact center may feel committed to the customer service department, but to create a feeling of belonging to the organization, they may need more than just the experience of good job quality. Therefore, proper methods need to be used and care needs to be taken not to overestimate the impact of customer contact center job quality on affective commitment towards the entire organization.

6.3 Managerial Implications

This dissertation gives managers of customer contact centers clear insights in how their customer contact center can function as a relationship-oriented value center instead of a transaction-oriented cost center. What is more, it encourages marketing managers to invest part of their marketing budget in enhancing the quality of the customer contact center, because it can create long-term customer relationships.

6.3.1 Managing the Customer Contact Center: Customer Perspective

The present dissertation gives clear guidelines in the dimensions that management needs to focus on in order to create a positive customer experience with their customer contact center. By focusing on the seven dimensions that are part of the customer contact center quality construct, the customer contact center is able to add value by creating satisfied and loyal customers.

The *reliability* of the customer contact center depends on whether customers need to call more than once to receive an accurate answer. Employees who talk to customers must have all required information at their disposal, including product information, service

information, customer history, and so forth. With this knowledge, the employees can answer customers' questions quickly and consistently.

Employee *empathy* refers to interpersonal skills possessed by employees. Organizations might improve their employees' empathy by training them to listen to and reassure customers, as well as by making employees aware of their impact on the customer experience.

Accessibility consists of two aspects: operating hours and ease of finding the telephone number. Customers can indicate their preferences for operating hours, and firms might experiment with longer or shorter times. The firm's contact number should appear in all communication (flyers, letters, bills), its Web site, and in stores or branches. It should be extremely easy to find any time the customer needs to contact the organization.

Waiting cost entails both time and monetary aspects of the waiting experience. As the focus group sessions indicated though, no agreement exists about an acceptable length of time to wait. Therefore, contact center managers should ask their own customers about their expectations.

The *user friendliness of the VRU* should be sufficient to direct customers easily to the answer to their questions. Most customers do not mind such tactics, as long as the VRU is user friendly, not overly long, and easy to understand. When the VRU helps customers access employees who can help them immediately, its use is beneficial.

Customer knowledge refers to the ability to make the customer feel like the organization knows him or her. For example, a customer contact center employee should know about previous contacts the customer has had and the status of an application or order the customer has sent. Making the history of each customer available to employees is not sufficient though; employees must be proactive with this knowledge. An employee who mentions that the customer sent an e-mail the previous week about a particular topic should give the customer the feeling that the organization knows him or her.

Finally, through *customer focus*, customers consider whether they have received proactive advice, if the firm appears to have learned from previous signals, and if they periodically can indicate whether their contact was satisfactory. These items and aspects can be implemented easily with the right tools. For example, learning from customers' signals is possible only if the firm registers the questions posed by customers: What are the top 10 questions we receive? What are the characteristics of customers who contact us frequently?

Analyses of such information can help the organization prevent unnecessary customer contacts and thus minimize costs and improve the customer experience.

By focusing on these seven dimensions of customer contact center quality, customer contact center managers can ensure that they add value for customers, which enhances their satisfaction and loyalty and creates value for the entire organization.

For the management of customer contact centers, the most important finding in this dissertation is the importance of customer contact center quality for the entire organization. The results offer customer contact center managers insights into how their quality contributes to relationship marketing, including its crucial role for organizations that want to strengthen their customer relationships to create true loyalty. The customer contact center can increase customer satisfaction, trust, and affective commitment to the organization. Contact with a customer contact center is a so-called moment of truth, and the role of the customer contact center for increasing customer satisfaction, trust, and affective commitment is substantial, making the customer contact center function as a true value center.

6.3.2 Managing the Customer Contact Center: Employee Perspective

A manager of the customer contact center needs to focus on the customer as well as the employee perspective. The present dissertation offers specific guidelines on how to improve the quality of the jobs from an employee perspective and thus how to reduce the turnover rates in the customer contact center. By focusing on the twelve dimensions that are part of the customer contact center job quality construct, the customer contact center is able to reduce the likelihood that employees will leave the organization.

The *opportunity and challenge* dimension is not easy in a customer contact center domain though, because it requires employees to play agent roles, and there are few potential growth opportunities. For example, roles such as coach, team manager, planner, or customer contact center manager are scarce. To create an appealing challenge, managers therefore should attempt to broaden employees' roles. Some creativity is needed to realize this opportunity and challenge, but it is possible, perhaps by giving employees a more active role in the continuous improvement of the customer contact center and the organization. By

asking them what might be improved and making them responsible for an improvement project, managers can offer these employees growth opportunities that challenge them.

In the customer contact center, both *role ambiguity* and *role conflict* tend to be associated with the difficult balance between satisfying customers and achieving internal goals, such as average call times. The customer contact center manager should realize that focusing on call times cannot give employees an incentive to create satisfied customers. Managers might fear that ignoring call time and focusing on the customer experience will increase the duration of calls dramatically, which would increase costs. Yet several organizations have experimented with such a focus and found that the duration of the calls did not increase, whereas customer satisfaction did. Therefore, customer contact centers should ensure that their strategy is in line with their operations; if the strategy is to improve customer satisfaction, the operations must focus on satisfaction, not call times. Such alignment can lower *role ambiguity* and *role conflict* for customer contact center employees.

The *enjoying the work* dimension relates to both *atmosphere* and *easy tools*. A pleasant atmosphere might result when managers provide fun ways to spend breaks, such as table tennis, dartboards, and so on. Another method would focus attention on rewarding employees who do a good job and making this reward public for everybody to see. However, the most important element of creating a good atmosphere is ensuring a culture of cooperation and assistance. When employees know that their colleagues will help them if they have a problem, the atmosphere becomes positive. This effect can be strengthened by encouraging employees to work together instead of just competing.

Improving the *ease of the tools* might be more difficult; there is only so much a company can do to improve standard software. However, the organization might ensure that it uses the optimal tools by involving employees in the selection process. They work with the automated tools daily; they can best identify their exact functional demands. This active involvement should make the customer contact center employees much more willing to use the tools, to the benefit of both the employees and the organization. That is, employees can better help customers, and the organization generates useful information to improve the customer contact center.

In the customer contact center, employees' tasks often are split into small, easy-to-understand subtasks, and scripts define their answers to most general questions. If a customer asks something beyond this normal service, most employees must divert the

question to a more empowered superior who can help the customer. When the customer contact center makes the employees responsible for all kinds of contacts though, both the customer and the employee can benefit from the improvement to their level of *empowerment*. For example, organizations that give employees yearly budgets to disburse, as they see fit, to customers who have not been treated fairly, achieve significant increases in customer and employee satisfaction because of the greater empowerment they enjoy.

The dimensions, *learning from employees*, *learning from customers*, and *information sharing*, are relatively easy to implement in a customer contact center context, though most customer contact center managers do not currently focus on them. A practical way of implementing *learning from employees* is by organizing monthly focus group sessions with employees, asking them to mention all ideas that might be valuable in improving the quality of the customer contact center and therefore the experience of the customer. *Learning from customers* can follow similar focus group-type procedures with customers, though the customer contact center already possesses many signals, such as questions, complaints, and customer satisfaction research. The customer contact center should learn from customers by analyzing these signals to identify improvements that customers value.

The *information sharing* dimension could be more difficult, because there might be some IT consequences. For example, the customer contact center needs status updates related to customer orders, usually implemented through a workflow system that can be accessed by customer contact center employees, who then can inform customers more fully. But there are also some easy solutions. For example, some organizations have improved communication between marketing and the customer contact center by publishing a marketing calendar. The employees thus can see exactly when specific marketing actions are executed and prepare for the questions that customers are likely to ask.

Finally, the *integrity* dimension mostly involves the company's apparent honesty, toward employees and customers. If customer contact center employees recognize organizational dishonesty toward customers, they might doubt its overall integrity and experience low job quality. This dimension reflects the very culture of the organization, but integrity also can be improved by rewarding employees equally or simplifying the reimbursement process for customers. One insurance organization therefore chose to simplify the process of filing claims and trust its customers, based on extensive research that showed that only 5% of customers defrauded. Customers who filed a claim received their

reimbursement within a few days; this change not only increased customer satisfaction but also resulted in cost savings, because employees did not have to process the same volume of paperwork or handle complaints when reimbursements were delayed. It also increased perceptions of the integrity of the organization among both customers and employees.

By focusing on these twelve dimensions of customer contact center job quality, managers can reduce turnover, through the greater satisfaction and affective commitment of their employees.

6.3.3 Managing the Customer Contact Center as a Relationship-Oriented Value Center

By integrating the findings from the customer and the employee perspectives, managers of customer contact centers gain valuable instruments for analyzing where they stand in their ambition to function as a value center. The customer contact center quality scale and customer contact center job quality scale are practical instruments for assessing internal and external quality on all the dimensions that play a role in creating high quality, according to both employee and customer perspectives. The customer contact centers thus can increase the satisfaction of customers by enhancing their loyalty through trust and affective commitment; furthermore, managers can minimize turnover levels by improving job satisfaction and affective commitment.

Because most current management of customer contact centers relies on a cost perspective, focused on handling transactions as efficiently as possible, a challenge lies ahead if they want to run their customer contact center as a value center. In particular, changes are necessary in the management tactics widely in use today. In essence, from a customer perspective, the customer contact center must be able to focus on the interest of the customer at all times; from an employee perspective, management needs to involve employees actively in improving the quality offered. It is not an easy challenge, but the four studies in this dissertation show that it is well worth the effort. The studies also provide clear guidelines about how to improve all the dimensions that need attention to add sustainable value for customers, employees, and thus for the entire organization.

6.4 A perspective on further research

Although all research focuses on delivering optimal valid and reliable results, there are always some limitations that need to be taken into account when interpreting the results.

First, the organizations that participated in the studies represent a limited number of industries. In the four studies, I focused on business-to-consumer service industry organizations from healthcare, telecom, government, and financial services. Perhaps business-to-business organizations or business-to-consumer organizations in the fast moving consumer goods industry have different needs than customers of service industry organizations. Further research should include other industries to test the generalizability of the proposed customer contact center quality and customer contact center job quality scales.

Second, the customer-oriented studies excluded customers who called the contact center with a complaint. The state of mind and emotions of complaining customers differ from those of customers with questions, and so the results apply only to customers who have a question or a remark, not those with a complaint. Further research certainly should address complaint handling by the customer contact center to determine whether the seven identified dimensions remain applicable.

Third, in the employee-oriented studies, I did not distinguish between employees with a contract and temporary workers, though there might be some differences between these groups, especially in terms of their commitment to the organization. Because customer contact centers commonly use temporary employees, this consideration should be of interest in further research.

Fourth, the studies in the dissertation specifically focus on in-house contact centers, without considering the likely differences of outsourced customer contact centers. Because outsourcing constitutes an entirely different business model, it might have consequences related to the study findings. Employees that work for outsourced customer contact centers usually answer calls of the customers of more than one organization. Maintaining a robust quality level in these circumstances is definitely a challenge, as is encouraging commitment from employees who actually work for several organizations at the same time. The market

for outsourced customer contact centers is substantial, so further research should include these forms to test the reliability of the findings from this dissertation.

Fifth, the studies are all based on cross-sectional data. Thus far I have been unable to gather longitudinal data. However, such longitudinal data could provide even better insights into whether improvements over time in the level of customer contact center quality leads to more loyal customers and whether improvements in the level of customer contact center job quality leads to lower turnover levels.

Finally, this dissertation has focused on the impact of the customer contact center quality and customer contact center job quality constructs on satisfaction and other consequences. In neither case did I distinguish the different dimensions of each construct or their specific impacts on customer and employee satisfaction. For both academics and practitioners, these relevant insights would be beneficial subjects for further research.

Limitations mentioned here are not comprehensive, the limitations mentioned in the chapters 2 to 5 are also applicable.

Appendix A

Customer Contact Center Quality scale items

Descriptive Statistics

Appendix A: Customer Contact Center Quality Scale Items – Descriptive Statistics

Variabele	Mean	Std.	Skewness		Kurtosis	
	Statistic	Deviation Statistic	Statistic	Std. Error	Statistic	Std. Error
Access1	3,77	1,14	-0,78	0,14	-0,04	0,28
Access2	4,06	0,86	-0,95	0,14	1,11	0,28
Access3	2,81	1,33	0,05	0,14	-1,13	0,28
Access4	2,94	1,35	-0,20	0,14	-1,23	0,28
Access6	3,18	1,37	-0,39	0,14	-1,06	0,28
VRU1	3,35	0,99	-0,24	0,14	-0,21	0,28
VRU2	3,41	1,00	-0,33	0,14	-0,31	0,28
VRU3	3,14	1,06	-0,28	0,14	-0,40	0,28
Knowing1	2,61	1,22	0,23	0,14	-0,93	0,28
Knowing2	3,55	1,12	-0,58	0,14	-0,42	0,28
Knowing3	3,49	1,12	-0,57	0,14	-0,31	0,28
Knowing4	3,45	1,16	-0,57	0,14	-0,35	0,28
Knowing5	3,02	1,18	-0,09	0,14	-0,68	0,28
Knowing6	2,67	1,04	-0,06	0,14	-0,39	0,28
Empathy1	4,36	0,88	-1,53	0,14	2,49	0,28
Empathy2	4,15	0,92	-1,19	0,14	1,42	0,28
Empathy3	3,96	1,09	-1,08	0,14	0,58	0,28
Empathy4	3,78	1,06	-0,59	0,14	-0,35	0,28
Empathy5	3,73	1,05	-0,61	0,14	-0,04	0,28
Empathy6	3,83	1,10	-0,93	0,14	0,40	0,28
Empathy7	3,88	1,06	-0,92	0,14	0,46	0,28
Empathy8	3,50	1,15	-0,59	0,14	-0,21	0,28
Empathy9	3,25	1,13	-0,25	0,14	-0,58	0,28
Empathy10	3,57	1,12	-0,50	0,14	-0,39	0,28
Empathy11	3,47	1,20	-0,43	0,14	-0,62	0,28
Empathy12	3,49	1,14	-0,40	0,14	-0,43	0,28
Empathy13	3,71	1,13	-0,81	0,14	0,01	0,28
Empathy14	3,67	1,14	-0,76	0,14	-0,14	0,28
Empathy16	3,51	1,15	-0,56	0,14	-0,41	0,28
Knowing7	3,21	1,27	-0,30	0,14	-0,93	0,28
Empathy15	3,54	1,18	-0,59	0,14	-0,37	0,28
Expert1	3,53	1,09	-0,55	0,14	-0,21	0,28
Expert2	3,33	1,12	-0,50	0,14	-0,32	0,28
Expert3	3,50	1,18	-0,53	0,14	-0,51	0,28

Variabele	Mean	Std.	Skewness		Kurtosis	
	Statistic	Deviation Statistic	Statistic	Std. Error	Statistic	Std. Error
Expert4	3,19	1,29	-0,25	0,14	-1,01	0,28
Expert5	3,36	1,28	-0,56	0,14	-0,63	0,28
Answer1	2,88	1,54	0,09	0,14	-1,51	0,28
Answer2	2,92	1,35	0,07	0,14	-1,21	0,28
Answer3	3,51	1,22	-0,70	0,14	-0,34	0,28
Answer8	3,52	1,13	-0,57	0,14	-0,34	0,28
Generic1	3,42	1,19	-0,56	0,14	-0,40	0,28
Generic3	2,97	1,21	-0,01	0,14	-0,79	0,28
Generic4	2,94	1,08	-0,16	0,14	-0,31	0,28
Generic5	3,29	1,26	-0,52	0,14	-0,71	0,28
Generic10	3,16	1,16	-0,32	0,14	-0,43	0,28
Empathy17	3,51	1,23	-0,56	0,14	-0,56	0,28
Empathy18	3,59	1,24	-0,66	0,14	-0,53	0,28
Empathy19	3,67	1,21	-0,76	0,14	-0,30	0,28
Empathy20	3,32	1,28	-0,25	0,14	-0,93	0,28
Generic2	2,64	1,30	0,23	0,14	-0,97	0,28
Generic6	3,11	1,21	-0,51	0,14	-0,52	0,28
Generic7	1,68	0,83	1,72	0,14	3,45	0,28
Generic8	2,97	1,09	-0,17	0,14	-0,25	0,28
Generic9	2,79	1,07	0,08	0,14	-0,10	0,28

Appendix B

Customer Contact Center Job Quality scale items

Descriptive Statistics

Appendix B: Customer Contact Center Job Quality Scale Items – Descriptive Statistics

	Mean Statistic	Std.	Skewness		Kurtosis	
		Deviation Statistic	Statistic	Std. Error	Statistic	Std. Error
Role2	3,86	0,74	-0,74	0,20	1,32	0,39
Role4	4,13	0,64	-0,59	0,20	1,37	0,39
Role5	4,05	0,67	-0,58	0,20	1,00	0,39
Role6	3,95	0,72	-0,87	0,20	1,94	0,39
Role7	4,19	0,60	-0,30	0,20	0,44	0,39
Role8	4,13	0,71	-0,86	0,20	1,44	0,39
Role9	4,03	0,66	-0,31	0,20	0,26	0,39
Role10	3,96	0,72	-0,47	0,20	0,30	0,39
Role11	4,04	0,76	-0,71	0,20	0,61	0,39
Comm5	3,28	0,92	-0,08	0,20	-0,13	0,39
Infosharing1	2,94	0,93	-0,08	0,20	-0,33	0,39
Infosharing2	2,90	0,96	-0,17	0,20	-0,49	0,39
Infosharing3	3,16	0,87	-0,39	0,20	0,34	0,39
Infosharing4	3,07	0,83	-0,07	0,20	0,31	0,39
Infosharing5	3,10	0,93	-0,25	0,20	-0,16	0,39
Infosharing6	2,77	0,95	0,00	0,20	-0,37	0,39
Infosharing8	2,66	1,02	0,17	0,20	-0,52	0,39
Conflict1	3,03	0,90	-0,07	0,20	-0,01	0,39
Conflict2	2,28	0,92	0,54	0,20	0,05	0,39
Conflict3	2,15	0,97	0,64	0,20	-0,26	0,39
Conflict4	2,08	0,78	0,42	0,20	0,43	0,39
Conflict5	2,53	1,09	0,41	0,20	-0,37	0,39
Conflict6	2,74	1,03	0,09	0,20	-0,67	0,39
Conflict7	2,24	0,92	0,62	0,20	0,40	0,39
Conflict8	2,14	0,95	0,77	0,20	0,40	0,39
Superior1	4,06	0,73	-0,71	0,20	1,46	0,39
Superior2	4,12	0,80	-0,91	0,20	1,18	0,39
Superior3	3,85	0,92	-0,94	0,20	1,14	0,39
Superior4	4,15	0,76	-0,81	0,20	0,72	0,39
Company8	4,17	0,75	-0,87	0,20	0,93	0,39
Company9	3,47	0,91	-0,22	0,20	-0,32	0,39
Company10	3,47	0,93	-0,52	0,20	0,17	0,39
Infosharing7	3,44	0,94	-0,47	0,20	-0,14	0,39
Infosharing9	3,34	0,97	-0,64	0,20	0,03	0,39
LearnEmp1	3,21	1,05	-0,26	0,20	-0,42	0,39
LearnEmp2	3,17	0,93	-0,41	0,20	-0,12	0,39
LearnEmp3	3,20	1,02	-0,51	0,20	-0,01	0,39
Work6	2,99	1,08	-0,16	0,20	-0,50	0,39
Work7	3,41	1,10	-0,35	0,20	-0,54	0,39
Work8	3,46	1,10	-0,39	0,20	-0,37	0,39
Work9	3,77	0,79	-0,53	0,20	0,52	0,39
Work10	3,21	1,06	-0,26	0,20	-0,60	0,39
Work11	3,79	0,83	-0,49	0,20	-0,14	0,39
Work1	3,09	1,08	-0,01	0,20	-0,78	0,39
Workplace5	3,64	0,95	-0,94	0,20	0,81	0,39

	Mean Statistic	Std. Deviation Statistic	Skewness		Kurtosis	
			Statistic	Std. Error	Statistic	Std. Error
Workplace6	3,47	0,98	-0,80	0,20	0,33	0,39
Workplace8	2,66	1,14	0,03	0,20	-0,90	0,39
Empower2	3,60	0,83	-0,78	0,20	1,22	0,39
Empower3	3,68	0,79	-0,72	0,20	1,05	0,39
Empower4	3,80	0,75	-0,88	0,20	1,44	0,39
Company2	3,80	0,86	-0,75	0,20	0,72	0,39
Company3	3,66	0,86	-0,67	0,20	0,70	0,39
Company4	3,69	0,78	-0,22	0,20	-0,28	0,39
Atmosphere2	4,43	0,65	-0,87	0,20	0,40	0,39
Atmosphere3	4,30	0,79	-1,23	0,20	1,89	0,39
Comm2	3,90	0,91	-0,74	0,20	0,39	0,39
Comm3	3,66	0,99	-0,72	0,20	0,24	0,39
Comm4	3,99	0,78	-0,91	0,20	1,51	0,39

Appendix C

Customer Contact Center Quality scale

Appendix C: Customer Contact Center Quality scale items used for the measures

Construct	Measurement items
Customer contact center quality	
<i>Accessibility</i>	<p>The phone number of the contact center of organization X is easy to find.</p> <p>The opening hours of the contact center of organization X are sufficient.</p>
<i>Waiting</i>	<p>When I call the waiting time is made clear to me.</p> <p>The waiting time of the contact center of organization X is acceptable.</p> <p>The costs of calling the contact center are acceptable.</p>
<i>Voice response unit</i>	<p>The VRU is logically ordered.</p> <p>The VRU is clear.</p> <p>The VRU is not too long.</p>
<i>Knowing the customer</i>	<p>As soon as I talk to an employee, I notice that the employee:</p> <ul style="list-style-type: none"> - knows me as their customer. - immediately has my data at his disposal. - has insight into my personal data. - has insight into my product data. - knows when and why I contacted the contact center previously. - knows what other contacts I have had with the organization (letters, email, visit to the office).
<i>Empathy</i>	<p>The employee I talk to:</p> <ul style="list-style-type: none"> - says his name. - is friendly. - is patient. - understands me correctly. - listens well. - takes me seriously. - puts himself in my situation. - knows my needs. - gives me personal attention. - makes me feel my question is important. - takes my level of knowledge into account. - is solution oriented.

Construct	Measurement items
<i>Reliability</i>	<p data-bbox="722 237 1031 266">- thinks along with me.</p> <p data-bbox="722 309 1318 376">The employee can quickly find the information to answer my question.</p> <p data-bbox="722 389 1219 418">The employee tells me what I can expect.</p> <p data-bbox="722 432 1294 461">The employee knows his own organization well.</p> <p data-bbox="722 474 1238 504">I can trust the knowledge of the employee.</p> <p data-bbox="722 517 1246 546">The employee can answer all my questions.</p> <p data-bbox="722 560 1278 627">The employee can promise next steps that the organization actually follows through.</p> <p data-bbox="722 640 1318 707">I do not have to call more than once to receive an answer to my question.</p> <p data-bbox="722 721 1267 788">When I speak to an employee, my question is answered at once.</p> <p data-bbox="722 801 1294 902">When the employee is not able to answer my question, I am being redirected to an employee who can.</p> <p data-bbox="722 916 1262 983">I receive a written confirmation of important agreements.</p> <p data-bbox="722 996 1294 1064">The employee asks the right questions to get to the heart of my question/problem.</p>
<i>Customer focus</i>	<p data-bbox="722 1088 1270 1155">The employee asks me whether the answer is clear.</p> <p data-bbox="722 1169 1307 1236">The employee asks me whether my question has been answered.</p> <p data-bbox="722 1249 1302 1317">The employee asks me whether I am satisfied at the end of the conversation.</p> <p data-bbox="722 1330 1318 1431">When I have had contact with the contact center, some time after this contact I am being asked whether this contact was to my satisfaction.</p> <p data-bbox="722 1444 1302 1523">The contact center of organization X learns from the signals it receives from its customers.</p> <p data-bbox="722 1536 1246 1603">I receive proactive advice on what products would suit my situation.</p> <p data-bbox="722 1617 1318 1684">The contact center of organization X always keeps its promises.</p> <p data-bbox="722 1697 1318 1765">The information I receive is consistent, even when I talk to another employee.</p>
Customer Satisfaction	I am satisfied with organization X as a whole.
Trust	<p data-bbox="722 1883 1318 1951">The performance of organization X always meets my expectations.</p> <p data-bbox="722 1964 1318 2031">Organization X can be counted on to deliver good service.</p>

Construct	Measurement items
	<p>I cannot always trust the performance of organization X.</p> <p>Organization X is a reliable bank / internet provider.</p>
Affective Commitment	<p>I am proud to belong to organization X.</p> <p>I feel a sense of belonging to organization X.</p> <p>I care about the long-term success of organization X.</p> <p>I am a loyal patron of organization X.</p>
Customer Loyalty	
<i>Word of mouth</i>	<p>I will say positive things about organization X to other people.</p> <p>I will recommend organization X to someone who seeks my advice.</p> <p>I encourage friends and relatives to do business with organization X.</p>
<i>Repurchase intentions</i>	<p>I consider organization X my first choice to buy services.</p> <p>I will do more business with organization X in the next few years.</p>

All items are measured on a 7 point Likert scale.

Appendix D

Customer Contact Center Job Quality scale

Appendix D: Customer Contact Center job quality scale items used for the measures

Construct	Measurement items
Customer contact center job quality	
<i>Role Ambiguity</i>	<p>I have clear, fixed goals in my work.</p> <p>I know my responsibilities in my work.</p> <p>I know exactly what is expected from me in my work.</p> <p>I receive clear explanation of what is expected of me in my work.</p> <p>I know what is expected from me during contact with customers.</p> <p>I know how much service to give to customers.</p> <p>I know how to handle objections of customers.</p> <p>I know how to handle unexpected situations or problems.</p> <p>I know how to handle criticism of customers.</p>
<i>Information sharing</i>	<p>I think the teams inform one another on a regular basis.</p> <p>We as customer service receive sufficient cooperation of other departments.</p> <p>There is good communication between customer service and other departments.</p> <p>We share information from customer service with other departments.</p> <p>Other departments use the information they receive from customer service.</p> <p>We as customer service are informed in time about activities from other departments that have an impact on customer service.</p> <p>Within company x all departments collaborate well.</p> <p>The good quality of the products and services of other departments make sure that we do not receive unnecessary calls from our customers.</p>
<i>Role conflict</i>	<p>I have to do things that should be done differently.</p> <p>I have to do tasks without having the authority to do so.</p> <p>I have to go against rules to do my tasks.</p> <p>I work with two or more teams that work very differently.</p> <p>I receive contradictory assignments from two or more people.</p> <p>I do things that one accepts but the other doesn't.</p> <p>I receive assignments without the means to execute them.</p> <p>I engage myself in needless matters.</p>
<i>Superior feedback</i>	<p>My superior has faith in my abilities.</p>

Construct	Measurement items
	<p>My superior is there for me when I have questions.</p> <p>I experience positive stimulus from my superior.</p> <p>My superior takes me seriously.</p> <p>My coach / superior communicates and informs me well.</p> <p>I receive sufficient feedback about what I do well.</p> <p>I receive sufficient feedback about what I can improve.</p>
<i>Learning from customers</i>	<p>Company X offers a good product portfolio to its customers.</p> <p>Company X stays in touch with customers regularly to inform itself about its customers' needs.</p> <p>Company X uses the input of its customers to better match its products and services with the needs of the customers.</p> <p>Company X takes action based on the customers' complaints.</p> <p>Company X learns from its customers' signals.</p>
<i>Learning from employees</i>	<p>I am regularly being asked how I think we can improve our organisation.</p> <p>I feel that my suggestions are being used.</p> <p>I receive feedback about the suggestions that I have made.</p>
<i>Opportunity and challenge</i>	<p>I have sufficient growth opportunities with company X.</p> <p>I feel that my work is meaningful.</p> <p>I am sufficiently challenged in my work.</p>
<i>Enjoying the work</i>	<p>My work is diverse.</p> <p>I have enough fun in my work.</p> <p>We often share information between among ourselves.</p>
<i>Easy tooling</i>	<p>I have enough easily accessible tools to answer the questions of the customers.</p> <p>I have easy tools to register the contacts with the customers.</p> <p>There is enough distance between the workplaces.</p>
<i>Empowerment</i>	<p>I am stimulated to take initiative.</p> <p>It is allowed to take initiative.</p> <p>They trust me to make the right assessment.</p>
<i>Integrity</i>	<p>Company X is customer oriented.</p> <p>Company X is honest towards its customers.</p> <p>Company X is honest towards its employees.</p>

Construct	Measurement items
<i>Atmosphere</i>	The collaboration with my colleagues is pleasant. There is a good work climate in the customer service department.
Job Satisfaction	I am generally satisfied with the kind of work I do in this job. Generally speaking, I am very satisfied with this job.
Affective Commitment	I am proud to belong to Company X. I feel a sense of belonging to Company X. I care about the long-term success of Company X. I am a loyal patron of Company X.
Employee Turnover	I do not think I will spend my career with this organization. I intend to leave this organization within a short period of time. I have decided to quit this organization. I am looking at some other jobs now. If I do not get promoted soon, I will look for a job elsewhere.

All items are measured on a 7 point Likert scale.

Summary in Dutch

De laatste jaren maken steeds meer bedrijven gebruik van een customer contact center (CCC) om service aan hun klanten te verlenen. Van origine zijn deze CCC's vooral gericht op het afhandelen van zoveel mogelijk transacties: het zo snel mogelijk afhandelen van zoveel mogelijk vragen en problemen van klanten. Een zogenaamd cost center, gericht op optimale kostenefficiency. Maar de laatste 10 jaar is er een kentering gaande in de markt, namelijk een van meer transactie gerichte marketing naar meer relatiegerichte marketing. Dit heeft ook zijn consequenties voor de rol die het CCC invult voor de organisatie. Het CCC moet zich namelijk ontwikkelen tot een value center, gericht op maximale toegevoegde waarde voor klanten en daarmee voor de organisatie. De centrale doelstelling van dit proefschrift is dan ook te onderzoeken of het CCC in staat is om deze transformatie van cost center naar value center te maken om zo haar toegevoegde waarde in relatiemarketing waar te maken.

De centrale onderzoeksvraag voor dit proefschrift is dan ook:

Hoe kan het customer contact center fungeren als een relatiegericht value center, in plaats van een transactiegericht cost center, voor zowel klanten als medewerkers?

Deze centrale onderzoeksvraag zal worden beantwoord aan de hand van de volgende subvragen:

- 1. Hoe kan CCC quality worden geconceptualiseerd en welke dimensies zijn onderdeel van de operationalisatie van CCC quality? (Hoofdstuk 2)*
- 2. Hoe kan CCC job quality worden geconceptualiseerd en welke dimensies zijn onderdeel van de operationalisatie van CCC job quality? (Hoofdstuk 3)*
- 3. Wat is de impact van CCC quality op de kwaliteit van de relatie gemeten in tevredenheid, vertrouwen, betrokkenheid en loyaliteit? (Hoofdstuk 4, het klantperspectief)*
- 4. Wat is de impact van CCC job quality op het voorkomen van het hoge verloop onder medewerkers? (Hoofdstuk 5, het medewerkerperspectief)*

In de vier studies die we hebben uitgevoerd, worden deze vragen beantwoord.

Customer contact center quality: conceptuele basis en schaalontwikkeling

In hoofdstuk 2 doen we uitgebreid kwalitatief en kwantitatief onderzoek om te onderzoeken welke dimensies een rol spelen in CCC quality. Op basis van focusgroepen met klanten hebben we zoveel mogelijk items gegenereerd, die we vervolgens in een kwantitatief onderzoek hebben geanalyseerd op hun rol binnen CCC quality.

Uit de resultaten komt een betrouwbaar construct naar voren dat bestaat uit zeven dimensies: *betrouwbaarheid*, *empathie*, *klantfocus*, *klantkennis*, *toegankelijkheid*, *wachttijd* en *keuzemenu*. *Betrouwbaarheid* heeft te maken met elementen als het in één keer kunnen beantwoorden van de vraag en het kunnen vertrouwen op de kennis van de medewerker. *Empathie* heeft te maken met het gedrag van de medewerker. Is hij vriendelijk, luister hij goed, neemt hij de klant serieus, etc. *Klantfocus* is een combinatie van gesprekstechnieken, zoals het vragen of de vraag helder is en of de klant aan het eind van het gesprek tevreden is, maar ook met het proactief geven van advies, het leren van de signalen van klanten en het nakomen van afspraken. *Klantkennis* betreft het gevoel geven aan de klant dat hij geen nummer is, maar dat de organisatie hem kent. Bijvoorbeeld door zijn eerdere contactgegevens te gebruiken. *Toegankelijkheid* gaat over de openingstijden en de vindbaarheid van het telefoonnummer van het CCC. *Wachttijd* gaat om de tijd die de klant moet wachten voordat hij iemand aan de telefoon krijgt en het *Keuzemenu* is het geautomatiseerde menu waar de meeste organisaties gebruik van maken qua routing van de vragen naar de juiste medewerker.

Klantfocus en *klantkennis* zijn dimensies die niet expliciet in eerder onderzoek naar voren zijn gekomen en dus wellicht uniek zijn voor de CCC context.

Customer contact center job quality: conceptuele basis en schaalontwikkeling

In hoofdstuk 3 volgen we dezelfde procedure als in hoofdstuk 2, maar dan vanuit medewerker perspectief, namelijk CCC job quality. Na het kwalitatieve en kwantitatieve onderzoek onder medewerkers van het customer contact center, vinden we 12 dimensies die onderdeel uitmaken van CCC job quality.

Role ambiguity en *role conflict* hebben te maken met de lastige spagaat waarin de medewerkers zich vaak bevinden, bijvoorbeeld door het enerzijds gestuurd worden op tijd aan de telefoon, terwijl anderzijds van ze verwacht wordt dat ze streven naar het creëren van tevreden klanten. *Informatie delen* heeft betrekking op het delen van informatie tussen de afdelingen. Een

veelvoorkomende situatie is dat de afdeling Marketing een actie uitvoert zonder hier het CCC van op de hoogte te brengen, waardoor de medewerkers met allerlei vragen geconfronteerd worden die ze onvoorbereid moeten zien te beantwoorden. *Leidinggevende en feedback* heeft te maken met de manier waarop de leidinggevende met de medewerkers om gaat en ook de manier waarop de medewerker feedback ontvangt op zowel de zaken die goed gaan als de zaken die beter kunnen. *Leren van klanten* gaat over het idee dat de medewerker heeft dat de organisatie iets doet met alle signalen die ze van klanten krijgen en ook echt leert van bijvoorbeeld de klachten die ze ontvangen. *Leren van medewerker* betreft het actief betrokken worden bij het verbeteren van de dienstverlening van de organisatie en hier ook terugkoppeling over ontvangen. *Groei en uitdaging* gaat zowel over de door groei mogelijkheden binnen de organisatie als de uitdaging in het werk zelf. *Plezier in het werk* heeft zowel met plezier te maken, maar ook met voldoende afwisseling van het werk. *Gemak van tooling* is specifiek van belang in het CCC omdat de medewerkers continu met vele tools moeten werken om alle contacten te registreren. *Empowerment* gaat over het stimuleren van het nemen van eigen initiatief. *Integriteit* betreft de mate van eerlijkheid van de organisatie zowel naar klanten als medewerkers. En als laatste de *Sfeer* die zowel met de werksfeer zelf als ook de prettige samenwerking met de collega's te maken heeft.

Van deze twaalf dimensies zijn er vijf die niet uit eerder onderzoek naar voren zijn gekomen, dus die wellicht specifiek voor de CCC setting van belang zijn: *leren van klanten, leren van medewerkers, informatie delen, gemak van tooling* en *integriteit*.

De impact van CCC quality op tevredenheid, vertrouwen, betrokkenheid en loyaliteit

In hoofdstuk 4 onderzoeken we of CCC quality een belangrijk instrument is in relatie marketing. Relatie marketing richt zich op de lange termijn en op een winstgevende relatie met de klanten. Om deze duurzame vorm van loyaliteit (ware loyaliteit) te creëren, spelen vertrouwen en betrokkenheid een cruciale rol. We hebben daarom onderzocht wat de impact is van CCC quality op tevredenheid, vertrouwen, betrokkenheid en loyaliteit.

Uit de resultaten blijkt dat CCC quality een directe impact heeft op tevredenheid, vertrouwen en betrokkenheid en een indirecte impact op loyaliteit, gemeten in mond tot mond reclame en intentie tot herhalingsaankopen. Deze indirecte impact via vertrouwen en betrokkenheid bevestigt dat CCC quality inderdaad een belangrijke rol speelt in het vergroten van de ware loyaliteit van klanten, door het beïnvloeden van de houding van de klanten. Dit heeft een duurzame invloed op de loyaliteit van de klanten.

De impact van CCC job quality op tevredenheid, betrokkenheid en verloop

In hoofdstuk 5 onderzoeken we of CCC job quality een rol speelt in het verlagen van het verloop. In de contact center branche is het verloop een groot issue. Percentages liggen tussen de 20-40%, terwijl sommige organisaties informeel toegeven dat dit zelfs nog hoger ligt. Dit heeft zowel interne als externe consequenties voor het bedrijf. Intern heeft het behoorlijk wat financiële consequenties, aangezien de nieuwe mensen allemaal gezocht, aangenomen en getraind moeten worden. De externe consequenties hebben te maken met de impact op de klantervaring. Door het verloop zit er een tijdvertraging tussen het vertrek van de oude werknemers en het op hetzelfde niveau krijgen van de nieuwe medewerkers. Dit heeft een impact op de productiviteit en de kwaliteit van de output van de medewerkers, wat weer een direct invloed heeft op de geleverde service kwaliteit. Klanten evalueren deze service kwaliteit, waardoor hun klanttevredenheid en uiteindelijk hun loyaliteit in gevaar kan komen.

In dit onderzoek hebben we dan ook gekeken of CCC job quality, via tevredenheid en betrokkenheid, een rol kan spelen in het verlagen van het verloop onder de medewerkers in het contact center. Uit de resultaten blijkt dat CCC job quality een sterke directe impact heeft op tevredenheid en betrokkenheid en via beiden een sterke indirecte impact op het verlagen van het verloop. CCC job quality is dus inderdaad een belangrijk hulpmiddel in de strijd tegen het verloop binnen het contact center.

Conclusie

De doelstelling van de meeste bedrijven is het creëren van duurzame relaties met loyale klanten. Dit is vaak een verantwoordelijkheid vanuit Marketing. In dit proefschrift is gekeken naar de rol van het Customer Service in relatie marketing. Kan het contact center een bijdrage leveren aan het creëren van loyale klanten? En is het mogelijk het verloop onder medewerkers te verlagen? Het antwoord op beiden is ja. Uit het onderzoek komt naar voren dat de kwaliteit van de klantenservice, via tevredenheid, betrokkenheid en vertrouwen, een sterke invloed heeft op de loyaliteit van klanten. Daarnaast heeft ook de kwaliteit van het werk in het contact center, via tevredenheid en betrokkenheid, een sterk invloed op het verlagen van het verloop van medewerkers. Het onderzoek geeft ook concreet aan welke dimensies een rol spelen in de kwaliteit van de klantenservice en de kwaliteit van het werken in de klantenservice, zodat iedere organisatie hier concreet mee aan de slag kan.

Op basis van dit onderzoek kan de conclusie getrokken worden dat het de moeite waard is om een deel van het marketing budget te investeren in de kwaliteit van de klantenservice. Zeker voor

business-to-consumer dienstverleners met veel klantcontact, die ook de doelstelling hebben de loyaliteit te verhogen.

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About the author

About the author

Zanna van der Aa – van Dun was born on April 5th, 1978 in Wittem, the Netherlands. After finishing the HEAO – Information Technology and several years of working at PinkRocade as an e-business consultant, she decided to proceed to the university to study Marketing and received her master degree in Marketing at the Nijmegen School of Management in 2004. After working for half a year as a consultant at Capgemini, she started her Ph.D. research at the Nijmegen School of Management in April of 2005 while continuing to work fulltime as a CRM management consultant at Capgemini Consulting.

Her research focuses on the role of the customer contact in relationship marketing, from the customer, employee and organization perspective. She finished her Ph.D. after 6 years in the fall of 2011. Her work has been published in the Service Industries Journal and the Journal of Chinese Marketing and is under review for the Journal of Service Research and International Journal of Human Resource Management.

During 6 years her consultancy work has been in line with her research, as it also focuses on improving customer centricity. She has written a book on complaint management and written several articles and even an online column for Telecommerce. In January of 2010 she decided to start her own consulting company, called MindThem. Based on her Ph.D. research she has developed several concepts that allow organizations to improve their customer centricity. One of the concepts, she developed based on her findings is called 'Klantsignaalmanagement'. It is a concept that translates the findings of her research into practical steps for each organization to create customer and employee involvement. She has worked for several large service industry organizations, such as UWV, Kadaster, RVS, ING, ONVZ, Univé, T-Mobile, Aegon and SVB.

In juli 2011 she started the 'Geef Een Signaal' initiative. An initiative with the intention to restore trust between customers and organizations by helping organizations to learn from all the signals that customers give them to improve their products and services.

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