

Service Quality in Business Processes: Let the customer’s voice be heard!

by

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Abstract

Organizations do not exist for their own sake. Organizations deliver something for somebody. In contemporary research about perspectives and methods for business processes management the performance of value-adding activities for customers has been stressed. The question however is whether such approach is enough. Isn't there a need to a larger extent consider the customer's situation together with how the customer perceive the value in his/her interaction with the company? In this paper we contrast service quality oriented research with business process oriented research in order to reach a synthesis that acknowledge service quality in business processes.

Keywords: Service quality, Business process, Business Interaction, Functional Quality, Commitment

1 Introduction

Service encounters are a critical determinant of customers' satisfaction with the service (Czepiel et al, 1985) and customers' evaluation of the service often depends on the evaluation of the specific interactions (Bitner, 1990). Similar emphasis is put forward within contemporary research relying on conceiving organisational action as business processes. One stream of this research emphasise business processes as interaction constituted by communicative and material actions stemming from American pragmatism (Dewey, 1931).

In service oriented research the concept of customer service has to a large extent been studied from the basis of how customers perceive the quality of the service and interaction process. According to Grönroos (1984) both what the customer receives through the service (technical quality) and how the customer receives the service (functional quality); i.e. customers access to contact personnel and what they say and how they say it, have an impact on the customer's view of the service. Researchers such as Parasuraman, Zeithaml and Berry (1985; 1988; 1991) have done extensive empirical studies in the form of interviews with management and customers and also questionnaires in order to examine how the functional quality in service is perceived on consumer markets.

In the business process management literature it should be noted that such approach for understanding and conceiving perceived customer value delivered by one or several organisations is not acknowledged. In this paper we will therefore primarily look into how business process oriented approaches would benefit from including concepts stemming from the service oriented research. Since service oriented research focus on the interaction between the customer and one or several organisations a special focus will be put upon conceiving business processes as interaction. This means that commitment will be used as the unit of analysis.

Grönroos (2000), as well as researchers emphasising communicative dimensions in business processes (e.g. Dietz, 1999; Medina-Mora et al, 1992), describe the importance of commitments and communication in the interaction process (c.f. also Eriksson & Lind, 2007).

Business relationships are constituted by the establishment of mutual expectations through communication, the fulfilment of commitments as well as the evaluation of fulfilled commitments. The management of commitments through communication can thus be seen as an essential part of service quality. Habermas (1984) means that a mutual understanding between the actors is evaluated and reached based on the validity claims that they make in the conversation.

Today there exist several frameworks for evaluating and designing business interaction (c.f. Goldkuhl & Lind, 2004 for an overview). In these frameworks there is however little emphasis put upon the functional quality for reaching commitments. It is thus a need to highlight such dimension of business interaction.

Another important difference between the two approaches is that the service oriented research, to a large extent, takes the customers situation as the starting point, while the business process oriented thinking takes the organisation as the starting point thinking about the customer. Here we believe that there is a great opportunity to establish a synthesis between the two approaches – deriving how value for the customer's situation could be delivered by one or several organisations.

In this paper we are driven by a dialectic approach (Skirbekk & Gilje, 2001) striving towards deriving a synthesis. In this dialectical process business process thinking is regarded as the thesis, the service oriented approach as the antithesis. Theories and models are used as important tools for conceptualisation. As empirical illustration a conversation recorded between customer service representatives (CSRs) and customers in an industrial manufacturing company in the building industry where the CSRs work is used.

The paper is structured as follows. In the next section we look into interactional dimensions of business processes identifying different frameworks for evaluating and designing business interaction presented by different scholars. Following that section we will look into what aspects of quality that is identified in the quality service literature. In section four we will reason about service quality in business process, derive a model for putting the customer in focus to a higher extent, and give an illustrative example of a conversation for discussing functional quality. The paper is concluded by some reflections and some directions of further research.

2 Interactional dimensions of business processes

2.1 Different views of business processes

During the 90's a number of customer-oriented approaches for business development have gained much interest. Examples of such approaches are Business Process Reengineering, Total Quality Management, and Process Management. All these approaches emphasise a focus on business processes as the holistic concept for addressing the actual work that is performed by one or several organisations. By regarding the performance of work in business processes one puts special emphasis on the customer, on value-creating activities as well as on the flow of material and information. By such a focus the performance of work is in the foreground and the way of organising is in the background. Business processes are cross-functional spanning the white spaces in the organisation chart (Rummler & Brache, 1995).

The industrial view on business processes is still dominant, where input (raw material) is transformed into output (finished products) (e.g. Hammer, 1990; Davenport, 1993). This is however not the only possible view on business processes as Keen & Knapp (1996) have noted. They have contrasted two different views on business processes; "process as

workflow” vs “process as the coordination of work” (c.f. also Ljungberg, 1997). The coordination view on business processes is mainly based on the language/action perspective (Winograd & Flores, 1986) where coordination, agreements and commitments are emphasized.

Initiatives has been taken by several scholars to integrate these two views (c.f. e.g. Lind, 2002). One approach towards such integration is to acknowledge both material and communicative acts as the constituents of business processes. Such an ontological viewpoint is advocated for in social action theories (such as Goldkuhl & Röstlinger, 2002) stemming from American pragmatism (Dewey, 1931). Such standpoint means that both communicative and material are regarded as social actions establishing social states. Transformational dimensions of business processes are many times governed by communicative acts issued between different parties. Scholars emphasising communicative dimensions of business processes describe the importance of commitments and communication in the interaction process (e.g. Dietz, 1999; Medina-Mora et al, 1992; Eriksson & Lind, 2007). The establishment of mutual expectations, the fulfilment of such expectations as well as the evaluation of such fulfilled commitments are often conceived as *the* units of analysis for studying the development of business relationships. Communicative dimensions of business interaction have been studied for a long time, but it is also a need to go beyond propositional content and illocutionary forces as units of analysis to study such interaction. Our hypothesis is that aspects of technical and functional quality from the service quality literature can deepen the understanding of how business processes as interaction could be conceived with quality. Let us start with understanding business processes as interaction.

2.2 Business processes as interaction

2.2.1 Frameworks for business interaction

Within the language/action (LAP) community there is an interest for business interaction. Several frameworks have over the years been developed and proved to be fruitful. The strength of the language/action perspective is that it is based on the idea that communication is not just transfer of information. When you communicate you also act (Searle, 1969). In business interaction, actions are performed in order to establish and fulfil mutual expectations between business parties. The management of agreements is to be regarded as the backbone of LAP-approaches. Both agreements on what to do and agreements on performed actions are accentuated.

Sometimes agents, other than human beings, act on behalf of the organisations. Since virtual servants might establish expectations it is vital that virtual servants also perform desired actions. Otherwise the relationship between the organisation and its customers might be harmed.

The different frameworks, that have their foundations in the LAP-community, are Action Workflow (AW) (Medina-Mora et al, 1992), DEMO (Dietz, 1999) and Business interAction and Transaction Theory (BAT) (Goldkuhl & Lind, 2004). Common characteristics between these different frameworks are that there is an emphasis on interaction between two different roles coming to and fulfilling agreements, the interaction is structured in several phases, and that communicative acts are regarded as the co-ordinating mechanism. As Goldkuhl mentions: “The general idea is to get a business model of how people, through conversation, coordinate their work. Such a business model, focusing on coordination, should be seen as foundational for the development of supporting software. The LAP (spirit is to consider software as a tool for coordination” (Goldkuhl, 1996, p. 53).

Language/action based frameworks for business interaction are promising since these focuses on communication and the creation of commitments between different business parties. In business interaction communication cannot be restricted to mere information transfer. There are also other initiatives for frameworks of business interaction. Originally outside the language/action tradition, Schmid & Lindemann (1998) have presented a reference model for electronic markets. This reference model has in later works (c.f. e.g. Lechner & Schmid, 2000) been expanded to a more general framework - a media reference model. Building on an explicit LAP-orientation Schoop (2002) has presented a framework for complex negotiations. This framework is based on the idea that business interaction consists of three phases; the search phase, the negotiation phase and the fulfilment phase.

Based on the criticism put forward by Goldkuhl & Lind (2004) and Goldkuhl (1996; 1998) we have chosen to use the BAT-model as a structure of the interaction process. The main reason is that the BAT-model acknowledges communicative as well as material acts in the interaction process, that the exchange character of business interaction is emphasised, and that a symmetric view on business parties and their interaction is adopted (Goldkuhl & Lind, 2004). In this way we can also determine the role different service quality dimensions would have in creating a good understanding of how business interaction can be performed with quality. It is claimed that the BAT-model is a solution for a number of deficiencies in the other frameworks (AW and DEMO). The BAT-model has been applied in many different studies and in this way been further refined (Axelsson et al, 2000; Goldkuhl & Melin, 2001; Lind, 2002; Haraldson & Lind, 2005).

2.2.2 Business interaction as social interaction

The BAT-model was introduced in the mid-nineties (c.f. Goldkuhl, 1996;1998) originally as a six-phase model describing generic business interaction logic. The model described interaction between a supplier and a customer. Based on experiences derived from several case-studies when the model has been put into application, the model has been refined as a framework consisting of three different models. The framework (Goldkuhl & Lind, 2004) distinguishes (see figure 1) between a market level (interaction between potential customers and potential suppliers) and two types of dyadic interaction; *frame contracting* and *separate (single) transaction order*.

On a market level a supplier interacts in relation to potential customers and vice versa (search phase). In the BAT-model there is an emphasis on adopting both a supplier and customer perspective (a symmetric view). The role of a customer arises from a lack of capability. There is something in the customer's activities, which need to be resolved, and this may be done through purchase of a product. The customer searches for knowledge about potential products and potential suppliers to meet the demands. Through these knowledge search activities, the customer's understanding of the product requirements may emerge. The customer may more directly expose the desire to get into contact with potential suppliers. This market interaction is driven by general business interests of both suppliers and customers. When a contact is reached between a supplier and a customer this interaction may proceed to the dyadic interaction.

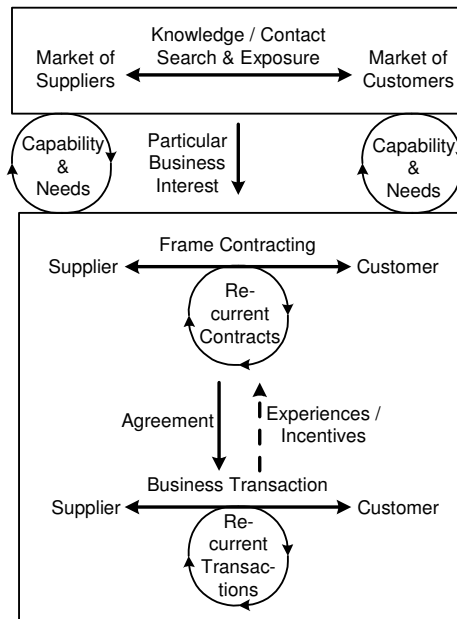


Figure 1: Two levels of business interaction (Goldkuhl & Lind, 2004)

Moving into the dyadic level two different levels of business interaction can be identified; frame contracting and business transaction (for the constituents of business transactions c.f. figure 2). The frame contract is an agreement that governs the subsequent recurrent business transactions. On the dyadic level interaction occurs between a particular supplier and a particular customer, where the interaction is structured as consisting of several (communicative and material) exchanges; exchanges of proposals, commitments, fulfilments and assessments. Agreements are established through exchanges of proposals and commitments. Exchange of proposals means negotiation between the two parties. Exchange of commitments means the establishment of each party's obligations within the scope of the dyadic interaction. These obligations concern the expected future business actions of each party. The exchange of fulfilments means the exchange of value. It is only on this level that the exchange of value (goods and/or services in the exchange for money) occurs. If either part is not satisfied with the fulfilment, a reclaim might be directed to the other party, which occurs during the assessment phase. Of course, appreciative assessments may also be exchanged.

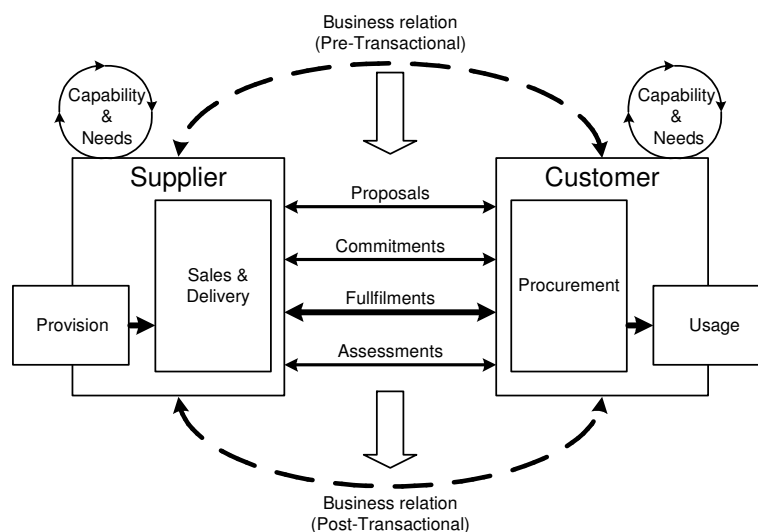


Figure 2: The constituents of the business transaction (Goldkuhl & Lind, 2004)

There may be a recurrence of dyadic interaction between the particular supplier and customer over time. This means also a continual development of business relations. Before the dyadic interaction begins there exists some type of business relation between the two parties. If the parties have traded earlier experience-based business relations exist and these form pre-contractual relations giving expectations for the next turn of business interaction. This also means that post-contractual relations become pre-contractual when the parties enter a new dyadic interaction. As Keen et al (2000) state, trusting relations are of key importance in e-interactions.

The reason why communication is important and generic both at the market and dyadic level is that communication is used to perform generic business acts like to request, to offer, to order or to confirm an order (Goldkuhl, 1998), which creates commitments that have to be fulfilled in the course of the business transaction. These communicative acts create agreement that has to be fulfilled by means of subsequent actions. The supplier is responsible for delivering a product in a certain point in time, and the customer must pay for the product.

This means that the ability to create business agreements and to fulfil these agreements is generic for the business transaction, which implies that it is very important to be able to create agreements of a high quality and to fulfil commitments made in a reliable way.

3 Quality in the service and interaction process

In the frameworks described above important states (such as made proposals, commitments, fulfilments and evaluations) are acknowledged. These states are the backbone of business interaction processes. It is however important to acknowledge how such states are reached and how the customer can perceive the quality of such interaction. Grönroos (1984; 2000; 2001a) put forward that service quality as customers perceive it has two main dimensions: a technical or result based dimension and a functional or process based dimension. Both *what* (technical quality) the customer receives through the service and *how* (functional quality) the customer receives the service have an impact on the customer's view of the service. Rust and Oliver (1994) mention a third quality dimension - *where* - which is the physical environment where the service takes place.

Grönroos (1984, p. 39) describes the functional quality as "[...] what they say and how they say it do also have an impact on the customer's view of the service". Zeithaml, Berry and Parasuraman (1988) emphasize that the quality is dependent of the persons that perform the service. How it is performed is as important as what is performed (Grove, Fisk and John, 2000). The technical and functional quality together with customer's perception of the delivering organisation is the total quality that the customer experiences (Grönroos, 1998). Grönroos (2000) state that it is the interaction between seller and buyer, the service encounter, which decides the level of the functional quality.

Parasuraman, Zeithaml och Berry (1985, 1988, 1991) focused on the functional quality when they made empirical studies (interviews with management and customers and questionnaires) about how quality in the service performance on consumer markets were perceived. These studies resulted in the well known instrument called SERVQUAL that quantifies the gap between customers expectations and experiences in five generic dimensions: (1) *reliability* – the personnel's ability to perform the promised service in a dependable and accurate way; (2) *responsiveness* – the willingness to help customers and provide prompt service; (3) *assurance* – the personnel's knowledge and courtesy and their ability to inspire trust and confidence; (4) *empathy* – the caring and individualised attention that the company provide their customers; and (5) *tangibles* – appearance of physical facilities, equipment, personnel, and communication materials (Parasuraman, 1998).

A closely related concept to functional quality is Gummesson's (1993) use of relationship quality in his 4 Q-model for quality offerings. The model takes its stand in that both services and products is part of the services that are being offered. As businesses are being more and more service oriented it is becoming increasingly difficult keep products and services apart. Relationship quality is the quality that the customer experiences during the service process. Service personnel that are customer oriented, pay attention, show compassion and demonstrate competence and skill are those who create a good relationship quality (Grönroos, 2001b).

4 Service quality in business processes

4.1 The choice of perspective – supplier or customer?

As can be noted from the business process management literature there is a strong emphasis on trying to understand the customer situation from an organisational point of view. On the other hand, the service oriented research focus the situation of the customer (i.e. the customer's perception and experience of interaction with organisation(s)) and then takes organisational consequences of such identified situations. As a consequence of this extreme customer orientation we believe it is important to see the customer rather as a client since such role put emphasis on the utilisation of products made available by one or several organisations (c.f. e.g. Goldkuhl & Röstlinger, 2002). Often customer is a compound concept including the three roles of being a financer, assigner and receiver of the result. We need to be careful to ensure that the perception of customer is oriented towards the utilisation of products rather than legal aspects of the business deal. Sometimes the customer even is seen as a co-producer (Normann and Ramirez, 1993). For example the service provider and the customers cooperate in the service encounter in order to create value and quality intended (e.g. Gummesson, 2002).

As a customer you often not only interact with one organisation but several in order to receive the value intended from the product or service. For example if you want to buy a car you not only interact with the car dealer but also with the bank (to finance it) and perhaps with an insurance company. Thus, there are several stakeholders involved in order for the client to achieve intended value. Gummesson (2002) uses an example of a broken toilet where the customer had to interact with both the plumber and the manufacturer of the toilet to illustrate the need to know the customer's customer (from an organisational point of view). It can also be seen as an example of a customer interacting with several companies. When it comes to service the distinction of several stakeholders at the moment of service – in the service encounter - is not as clear. However in order to receive a service you often need to engage with different companies. Take for example that you need a haircut. In order to get to the hairdresser you may need to take a bus to the town. When you arrive you discover that you need to withdraw some money from the nearest ATM. In this case you have interacted with a transport company and a bank's service system in order to be able to get the haircut. The perceived value by the client, in terms of different quality dimensions, in all these interactions is important. A number of different applications that take on such a perspective have been acknowledged in latter research (as e.g. Albinsson et al, 2006ab; Lind et al, 2007). From this discussion it can be derived that customers many times aim towards a linked sequence of acts, dependent on different organisations, in order to achieve value in what is to be achieved.

From studying both more organizational oriented literature and more service oriented literature we find a need to come up with a framework that can handle both dimensions. The BAT-model does give important contextual dimensions to the interaction process, but does today not include any dimensions for *how* different communicative (social) states are reached.

Here we believe that influencing the BAT-model with such client-oriented quality dimensions is important. We can also see that the service oriented view on business interaction would benefit from adopting such contextual dimensions expressed by frameworks such as the BAT-model – especially with the use of commitment as one (and the most important) unit of analysis.

4.2 Different quality dimensions of business interaction – towards a synthesis

From the two different points of departure there are of course aims that should be fulfilled. From an organisational point of view there is a strive for the organisation (potentially together with other organisations) to ensure a continual (positive) development of business relationships with customers. As indicated in the BAT-model the key to such development of business relationships are the *establishment and fulfilment of valid commitments* between the two parties. Building on theories within social interaction (c.f. e.g. Linell, 1998 Lind & Goldkuhl, 2003) *congruent patterns of interaction* becomes an important quality dimension (Haraldson & Lind, (2005) as well as acknowledging that there are often several organisations involved in satisfying customers' needs (c.f. Haraldson & Lind, 2006). As indicated by Eriksson & Lind (2007) the *management of competing commitments* (about the same resources) in several parallel transaction involving several customers is crucial for the long-term development of the organisation.

Such quality ideals are however dependent on how the customer perceives the interaction as such (with one organisation) and the role that the service have from the customer's point of view. Given a service quality perspective we also need to acknowledge that clients often are involved in a lot of parallel (in different states) business transactions fulfilling a multiple service need. We therefore believe that there is a need to acknowledge, i.e. let the customer's voice be heard regarding:

- The role a single service has in the context of the total value of all services needed for a certain situation (contextual quality)
- The functional quality the customer perceives and experience in reaching the different social states in the interaction process with one organisation (intra-interactional functional quality)
- The functional quality the customer perceives and experience with regards to (inter- interactional functional quality) identifying and co-ordinating needs for interaction with several organisations.
- The acknowledgment, reception and management of feedback from customers throughout the interaction process.
- The synchronisation of different commitments to be established and fulfilled by several organisations in order to support the customer's sequence of acts.

In the figure below we have the ambition to show that clients, based on their identified sequence of action, are involved in several parallel business transactions (at different states) all depending on arriving at commitments for fulfilling the realisation of a pattern of acts. In the figure four states are indicated and the path towards reaching these states involves four interaction processes (which could be with same or with different organisations).

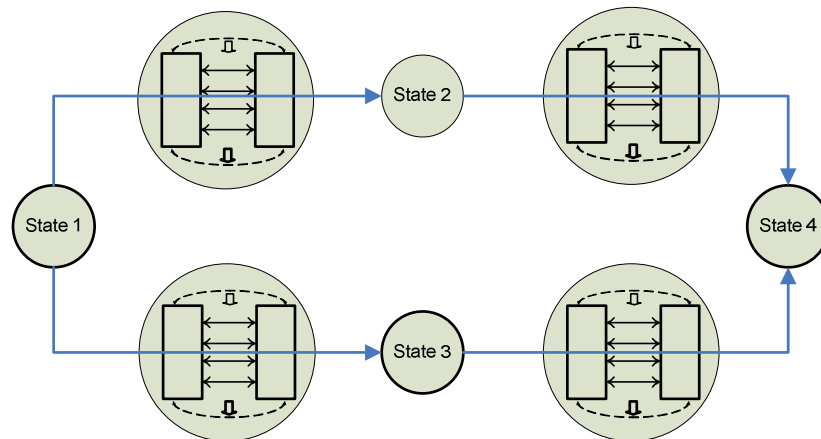


Figure 3: Several business interactions (transactions) for fulfilling a multiple service need of the customer

In the figure above four desired states for the customer are depicted as an example. The initial state is depicted on the left hand side of the figure. This initial state is the driver for initiating two parallel interactions with one or several organisations in order to arrive at two states. These different states form the basis for two more parallel interactions. Each of the four interactions depicted in figure 3 is a simplification of the constituents of a business transaction (see figure 2). One example of this could be that the customer needs a new car (state 1), the customer needs both to sell an old car (interaction for arriving at state 2), get money from the bank (interaction for arriving at state 3), buy the new car and set up an insurance with some insurance company (two parallel interactions for arriving at state 4). By this short example it could be noted that many organisations of today have identified different states that is needed for the multiple service. For example, many car dealers offer all these services to a more compound service.

4.3 Empirical illustration

As indicated above, functional quality is an important quality dimension for arriving at successful business processes. Since functional quality is determined upon what is said and how this is said we argue that one approach for identifying functional quality is to study actual performed conversations. In order to exemplify this we have taken a recorded telephone conversation that shows the actual interaction between a CSRs and a customer. The conversation takes place in a Swedish industrial manufacturing company (B-company) in the building industry where the CSRs work. The customers usually have long-term contracts and call the customer service representatives to place sub-orders within the frame of these contracts. The conversations thus take place in an institutional and work practice related context. The conversation represents an order situation where a customer, Anders (A, a wholesaler), calls Ulrika (U) at B-company's customer service department to order a specific type of product.

- 1 U B-company, Ulrika.
- 2 G Hello Anders L-company.
- 3 U Hello.
- 4 G I need some S-products again.
- 5 U You need some S-products again yes. (2.0) ((Ulrika makes a note in her notebook)) Yes.
- 6 G Two xx-meters' R-package E-format.

- 7 U Mm : : Yes. I will just check that- What did you say the company name was? It is called-
- 8 G Göran Jensén Entreprenad.
- 9 U Let's see. (1.0) ((Ulrika make a search in the ERP-system)) There we have it. And you want it to the address in Arneby?
- 10 G Aneby. Otherwise it was right.
- 11 U I thought it looked strange yes. ((laughter)) Okay. Then I will change it. Let's see. Two items you said 200-xx yes. Mm : :
- 12 G And you also send my cellular number because there is always something that goes wrong.
- 13 U Yes exactly.
- 14 G 073-123456
- 15 U Yes. Then we will do that.
- 16 G They are hopeless.
- 17 U They are that yes.
- 18 G They need a road description.
- 19 U Okay. I can try to get them to deliver with Schenker instead.
- 20 G Yes,
- 21 U But the zip code is correct or? 57894 or?
- 22 G That is correct.
- 23 U That is correct yes.
- 24 G Lindberg.
- 25 U Li- That was very- Then we will change that also. Mm : :
- 26 G Do you have it in stock?
- 27 U Let us check here- (1.0) ((Ulrika make a search in the ERP-system)) Yes that is no problem.
- 28 G No problem?
- 29 U No. It will be delivered from me tomorrow.
- 30 G Great.
- 31 U Mm : : Yes.
- 32 G Perfect.
- 33 U Okay.
- 34 G Thank you.
- 35 U Thanks. Bye.

After the initial greetings the customer announces that he needs a specific kind of product (again) and Ulrika repeats that in the next turn. Her repetition of the question gives the customer a chance to correct any misunderstandings. In turn 6 the customer mentions the number of products and what format. He is precise in what he wants and Ulrika can act on behalf of that. In turn 7 Ulrika confirms the customers request with a prolonged "Mm" and asks the customer to repeat the name of the company. The customers answer is interesting since the company's name is not the same as the one mentioned at first in the conversation. The customer that calls Ulrika is a wholesaler and therefore the address is to the customer's customer. The fact that Ulrika does not make a correction in the next turn regarding this new

address indicate that she have been in contact with this customer before. She also asks if the place of delivery is correct which can be seen as an assurance that the products are delivered to the right place. The customer responds that the town is misspelled. Ulrika's initial reaction in turn 11 is laughter together with "I thought it looked strange yes". Laughter can be seen as a way to "save" the situation. In turn 12 the customer requests that Ulrika also send his cellular number because there is always something that goes wrong. This can be seen as a strong statement from the customer. He mentions that something "always" goes wrong which indicate a potentially unhappy customer. Ulrika's response is to agree with the customer: "Yes exactly". She thus acknowledges that there is a problem. What the problem consist of is however so far not clear. In turn 15 Ulrika makes a commitment that she will send the customer's cellular number. The customer then emphasises that there use to be a problem, "They are hopeless", and Ulrika agrees again. In turn 18 the customer gives an explanation that the problem is that the transport company can't find the way. Ulrika's response is to offer a solution where she tries to get it delivered with another transport company. The customer has thus shown dissatisfaction in two turns (12 and 16) and Ulrika has offered a solution to this which the customer accepts in turn 19. Then there is a sequence (turn 21-25) where Ulrika checks, corrects and confirms other forms of information about the customer. In turn 26 the customer asks if there are products in stock. Ulrika confirms that and makes a commitment that the products will be delivered the following day. The customer expresses acceptance and reinforce that with "great" and "perfect".

Besides that the conversation illustrates how commitments are reached (at least a commitment by the organisation) it also shows that Ulrika becomes a co-ordinator in starting up interactions with other organisations (Schenker as the new deliverer). In this situation Ulrika acts on behalf of Schenker. In this sense B-company through Ulrika's verbal actions and through her interaction with customer, has acknowledged two needs; supplying products and getting the products delivered to the customer. She also makes a commitment towards the customer's customer when she promises to arrange a delivery directly to the workplace.

Ulrika expresses, in relation to the concept of functional quality, a will to help the customer to solve the potential problem with the transport by offering her self to try to find a solution with another transport company. She also makes a commitment that the products will be delivered the following day. She thus shows responsiveness towards the customer; a willingness to help customers and provide prompt service. The customer expresses his appreciation for the offered solution. Based on that Ulrika also seems to provide assurance that is based on her knowledge about B-company's products and possible transports; her courtesy in the conversation; and her ability to inspire trust and confidence. Again, based on the conversation, the customer seems pleased with the solution. She also shows empathy towards the customer when she offers him a solution of the transport problem and thus gives him the individualized attention needed in the interaction. The reliability - the personnel's' ability to perform the promised service in a dependable and accurate way - is more difficult to assess in this conversation since we don't have the actual result from the commitments made by Ulrika in the conversation. Since the conversation takes place over the telephone the tangibles such as appearance of physical facilities, equipment, personnel, and communication materials are not relevant in this kind of interaction.

5 Concluding remarks

In this paper we have conceptually reasoned about how service quality in business processes could be derived. One important conclusion is that the focus on the customer in business process oriented thinking is not enough. This approach takes its starting point in the organisation when it comes to what value it can supply to the customers. We believe that the

structure of how the business interaction process is done, for a certain business transaction, is highly relevant, but there is a need to take the customer's situation as the starting point. By doing so – a linked sequence of acts, to be performed by the customer, should be identified and communicated to different suppliers fulfilling (partial) needs in such sequence. Interestingly, such an approach might also mean that other non-core acts to be performed by the supplier could be identified, instead of letting the customer interact with other organisations for such purpose.

After having identified which role different suppliers could have in fulfilling several needs of the customer, the different interaction processes could be initiated and synchronised. These interaction processes would benefit from being structured around reaching several different social states, in which commitment is the most important co-ordinating mechanism. In this paper we have however identified a strong need to acknowledge different service quality dimensions which are determining the success of reaching the social states in a valid way. Thus it is important, for both supplier and customer, to strive towards a continual positive development of business relationships. Such development could be satisfied by valid fulfilments of made commitments together with the process of reaching commitments and fulfilling the commitments governed by functional quality ideals.

We claim that such an approach, that is to both consider the situation of the customer and how different social states are reached in the interaction process, would drive a higher service quality in business process. In this sense the customer's voice need to be heard.

The work reported in this paper has been mainly theoretical informed by earlier empirical studies. The next step is now to take this approach further and empirically validate this line of thinking and consider which practical effects that would have. Since the approach claimed for in this paper ultimately would involve several organisations in a more networked society it would be good to further relate the line of thinking reported to the network approach according to e.g. Håkansson & Snehota (1995).

References

- Albinsson L., Lind M., Forsgren O., and Ozan H. (2006a) Turning the internet around - e-Me: The Students ideal e-Service, *Accepted to eChallenges (e*2006)*, 25-27 October 2006, Barcelona, Spain.
- Albinsson L., Forsgren O., Lind M., and Salomonson N. (2006b) Public e-services: A value model & trends based on a survey, *Vinnova Report 2006:15*, Stockholm, Sweden.
- Axelsson K., Goldkuhl G., and Melin U. (2000) Using Business Action Theory for Dyadic Analysis, *Accepted to the 10th Nordic Workshop on Interorganisational Research*, 18-20/8, Trondheim.
- Bitner M.J. (1990) Evaluating service encounters: the effects of physical surroundings and employee responses, *Journal of Marketing*, Vol. 54, April, pp. 69-82.
- Czepiel J. A., Solomon R., Bitner M. J., and Surprenant C. F. (eds.), (1985) *The Service Encounter: Managing employee/customer interaction in service business*, Lexington, Mass.: Lexington Books.
- Davenport T. H. (1993) *Process Innovation – Reengineering Work through Information Technology*, Harvard Business School Press, Boston.
- Dewey J. (1931) The development of American pragmatism, included in Dewey J (1931), *Philosophy and civilization*, New York: Minton, Balch & Co.
- Dietz, J. L. G. (1999) Understanding and Modelling Business Processes with DEMO, *The 18th International Conference on Conceptual Modeling (ER'99)*, Paris.
- Eriksson O., and Lind M. (2007) Commitment Management in the Context of Parallel Business Transaction Instances, *Systems, Signs & Action*, Vol 3 (1).

- Goldkuhl G. (1996) Generic Business Frameworks and Action Modelling, In Verharen E., Rijst N. van, Dietz J. (eds.) *Proceedings of the International Workshop on the Language/Action Perspective on Communication Modeling*, Oisterwijk, The Netherlands.
- Goldkuhl G. (1998) The Six Phases of Business Processes – Business Communication and the Exchange of Value, *Accepted to The 12th Biennial ITS (ITS'98) conference – Beyond convergence*, Stockholm.
- Goldkuhl G., and Lind, M. (2004) Developing e-interactions – a framework for business capabilities and exchanges, *Accepted to the 12th European Conference on Information Systems, June 14 – 16 2004, Turku, Finland*.
- Goldkuhl G., and Melin U. (2001) Relationship Management vs Business Transactions: Business Interaction as Design of Business Interaction, *Accepted to the 10th International Annual IPSERA Conference, 9-11 april 2001, Jönköping International Business School*.
- Goldkuhl G., and Röstlinger A. (2002) Towards an integral understanding of organisations and information systems: Convergence of three theories, in *Proc of the 5th International Workshop on Organisational Semiotics*, Delft.
- Grönroos C. (1984) A Service Quality Model and Its Marketing Implications, *European Journal of Marketing*, Vol. 4, pp. 36-45.
- Grönroos C. (1998) Marketing services – the case of a missing product. *Journal of business & Industrial Marketing*, Vol.13:4/5, pp. 322-338.
- Grönroos C. (2000) *Service Management and Marketing: A Customer Relationship Management Approach*, Chichester: Wiley .
- Grönroos C. (2001a) A Service Quality Model and its Marketing Implications, *European Journal of Marketing*, 18 (4), pp. 36-44.
- Grönroos C (2001b) *Service Management and Marketing: A customer relationship management approach*. Chippenham: John Wiley & sons, Ltd.
- Grove S J., Fisk R P., and John J. (2000) Services as Theater: Guidelines and Implication. In Swartz T A., & Iacobucci, D. (eds.). *Handbook of Services Marketing & Management*, Thousand Oaks, California: Sage. pp. 21-35.
- Gummesson E. (1993) *Quality Management in Service Organizations*, New York: ISQ, A International Service Quality Association.
- Gummesson E. (2002) *Total Relationship Marketing: Marketing Management, Relationship Strategy and CRM Approaches for the Network Economy*. Oxford: Butterworth-Heinemann.
- Habermas J. (1984) *The theory of communicative action 1, Reason and the rationalization of society*, Beacon Press.
- Håkansson H., and Snehota I. (Eds, 1995) *Developing Relationships in Business Networks*. International Thomson Business Press, Cornwall.
- Hammer M. (1990) Reengineering work: Don't automate, obliterate, *Harvard Business Review*, pp. 104-112.
- Haraldson S., and Lind M. (2005) Broken Patterns, in Goldkuhl G., Lind M., and Haraldson S. (Eds.) *Proceedings of the 10th International Working Conference on The Language Action Perspective on Communication Modelling*, Linköping University and University College of Borås, Sweden.
- Haraldson S., and Lind M. (2006) Contextual Understanding of Dyadic Relationships, accepted to 4th *Intl Conf on Action in Language, Organisations and Information Systems (ALOIS)*, University College of Borås
- Keen PGW, and Knapp EM (1996) *Every manager's guide to business processes – a glossary of key terms & concepts for today's business leaders*, Harvard Business School Press, Boston.
- Keen P., Ballance C., Chan S., and Schrupp S. (2000) *Electronic commerce relationships: Trust by design*, Prentice-Hall, Upper Saddle River.
- Lechner U., and Schmid B. F. (2000) Communities and Media – Towards a Reconstruction of Communities on Media, in Sprague E. (Eds.) *Hawaiian Int. Conf. on System Sciences (HICSS'00)*, IEEE Press.

- Lind M. (2002) Dividing Businesses into Processes – Foundations for Modelling Essentials, In: Liu K., Clarke R. J., Andersen P. B., Stamper R. K. (Eds.) *Organizational Semiotics – Evolving a Science of Information Systems*, IFIP TC8/WG8.1, Kluwer Academic Publisher, pp. 211-230.
- Lind M., and Goldkuhl G. (2003) The constituents of business interaction - generic layered patterns, *Data & Knowledge Engineering*, Vol 47, No 3, pp. 299-40.
- Lind M., Forsgren O., Salomonson N., and Albinsson L. (2007) The e-Co model – citizens driving e-service quality, *accepted to The 51st Annual Meeting of the International Society for the Systems Sciences*, Tokyo, Japan.
- Linell P. (1998) *Approaching dialogue. Talk, interaction and contexts in dialogical perspectives*, John Benjamins Publ, Amsterdam.
- Ljungberg J. (1997) *From workflow to conversation*, Ph D diss, Dep of Informatics, Göteborg University.
- Medina-Mora R., Winograd T., Flores R., and Flores F., (1992) The Action Workflow Approach to Workflow Management Technology, In Turner J., Kraut R. (Eds.), *Proceedings of the Conference on Computer-Supported Cooperative Work, CSCW'92*, ACM Press, New York.
- Norman R., and Ramirez R. (1993) From Value Chain to Value Constellation: Designing Interactive Strategy, *Harvard Business Review*, July/August, pp. 65-77.
- Parasuraman A. (1998) Customer service in business-to-business markets: an agenda for research. *Journal of Business & Industrial Marketing*. Vol. 13, Nr. 4/5, pp. 309-321.
- Parasuraman A., Zeithaml V.A., and Berry L.L. (1985) A conceptual model of service quality and its implications for future research, *Journal of Marketing*, Vol. 49, Spring, pp. 41-50.
- Parasuraman A., Zeithaml V.A., and Berry L.L. (1988) SERVQUAL: a multi-item scale for measuring consumer perceptions of service quality, *Journal of Retailing*, Vol. 64, Spring, pp. 12-40.
- Parasuraman A., Zeithaml V.A., and Berry L.L. (1991) Refinement and reassessment of the SERVQUAL scale, *Journal of Retailing*, Vol. 67, Winter, pp. 420-450.
- Rummler G. A., Brache A. P. (1995) *Improving performance. How to manage the white space on the organization chart*, Jossey-Bass, San Fransisco.
- Rust R.T. and Oliver R.L. (1994) Service Quality: Insights and Managerial Implications From the Frontier, in Rust R.T. and Oliver R.L., (eds.), *Service Quality: New Dimensions in Theory and Practise*. Thousand Oaks, CA, Sage Publications.
- Schmid B. F., and Lindemann M.A. (1998) Elements of a Reference Model for Electronic Markets, in Sprague E. (Eds.) *Proceedings of the 31st Hawaii Int. Conf. on System Science (HICSS'98)*.
- Schoop M. (2002) Electronic Markets for Architects – The Architecture of Electronic Markets, *Information Systems Frontiers* 4:3, pp. 285-302.
- Searle J. R. (1969) *Speech Acts. An Essay in the Philosophy of Language*, Cambridge University Press, London.
- Skirbekk, G., and Gilje, Nils., (2001) *History of Western Thought: An Introduction to the Philosophical Roots of Modernity*. Taylor & Francis Books Ltd.
- Winograd T. , and Flores F. (1986) *Understanding Computers and Cognition: A New Foundation for Design*, Ablex, Norwood NJ
- Zeithaml V. A., Berry L. L., and Parasuraman A. (1988) Communication and Control Processes in the Delivery of Service Quality. *Journal of Marketing*. Vol. 52, April, pp. 35-48.