Interaction Patterns in Services Exchange –
Some Thoughts on the Impact of Different Kinds of Services on Buyer- Supplier Interfaces and Interactions

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Abstract

In the light of the increasing (economic) importance of the service sector and the growing 'servisation' of goods, this paper takes a closer look at the – possible - unique characteristics of the procurement (and marketing) of services. In doing so, we investigate the impact of how the service is being used by the customer; as a component, a raw material, a piece of equipment or a consumption service. We discuss the impact on interaction processes and the type of interaction and dialogues that go on (or should go on) between buyer and seller.

Some of the pioneering IMP-work on buyer-seller relations had a strong focus on dyadic interaction processes and the possible systematic similarities and differences in different contexts. One contextual aspect that has been investigated is the impact of the type of product being exchanged (raw material, components, equipment, etc) on interaction patterns.

At the same time, most literature in the area of purchasing and supply management has traditionally focused at the procurement of goods. Literature on service marketing, on the other hand, often pinpoints the characteristics of services as opposed to goods, often emphasising that services are produced in interactive processes between the seller and the buyer. That should, of course, have triggered interesting research into understanding those processes. However, so far we have not seen any large-scale efforts to investigate if there any specific patterns in the interaction processes around services, from a purchasing perspective.

This paper is based on a broader review of theory and practice regarding service procurement (Axelsson and Wynstra, 2000a; Axelsson and Wynstra, 2000b). In this way, it aims to provide some basic elements for future, original research into service procurement, an area relatively ignored by academics.

In section 1 of this paper, we take a closer a look at the specific nature of services and buying services. Interaction patterns and their general characteristics in the case of services are the topic of section 2. The third section discusses a typology of different services in terms of their application or usage and section 4 discusses the interaction between buyer and supplier for

these different service types. Finally, section 5 summarises our main conclusions and suggestions for further research.

1. What is so special about buying services?

Any investigation of service procurement has to start with a consideration of the specific nature of services. There have been various attempts at defining services, one of the most suitable in our opinion being:

'A service is an activity or a series of <u>activities</u> *of more or less abstract nature that normally, but not necessarily, take place in* <u>interaction</u> *between the customer and the service provider's employees and/or physical assets (goods and/or systems that belong to the service provider). Services are provided as* solutions to *a customer's* <u>problems</u>*.'* (Grönroos, 1990; emphasis added).

Basically, a service consists of activities that are fulfilled in some kind of interaction between buyer and seller. This interaction is needed to create a necessary function that the service producers has promised (is assigned) to fulfil. The following table provides an overview of the characteristic elements of services compared to goods, although the list should not be seen as an overview of simple, clear-cut distinctions; many goods may have some service characteristics and vice versa.

Table 1: Differences between goods and services

Goods	Services
Tangible	Intangible
Can be demonstrated before the purchase	More difficult to demonstrate (not available)
Can be stored	Cannot be stored
Production occurs before consumption	Production and consumption simultaneously
Seller produces	Buyer/customer takes part in production
Production, sales, consumption on different locations	Production, consumption and (often) sales on the same location
Can be transported	Cannot be transported (but the producer and the customer can move)

Based on Normann (1992).

It will be clear that these characteristics have implications for the process of buying services. Some service characteristics that have an impact on the buying process, as compared with buying goods include:

- The need to be able to explain the *service content* as expected by the customer, because it does not yet exist when the customer buys it. It is by then a promise to provide the agreed- on functionality.
- The need to *handle the interplay* between the involved parties as the service is produced and delivered in interactive processes.
- *Quality assurance*. The production of services consists of recurrent activities, often in close interaction between the customer and the supplier. Failed productions can often not be put aside, but will lead to a bad service delivery to the customer or a bad purchase process from the perspective of the customer.
- *Capacity and demand management*. Services can normally not be 'made-to-stock'. For the buying company, it becomes important (especially for those services that especially

sensitive to this problem, like call-centres) to ensure that there is enough capacity when needed.

These are just a few of the aspects that can be expected to be different and / or put more into focus in exchange processes dominated by services, as compared to those dominated by goods. From this, it is evident that interaction processes, the topic of this paper, are a key aspect.

1.1 Why do companies and organisations buy services and which services do they buy?

Purchasing, ultimately, is a matter of acquiring external resources. Suppliers provide customers with those services that customers do not own, do not control and do not create themselves. In that respect, the reason for organisations to buy services is exactly the same as for the purchase of goods. The next question is then, especially in the long run, why customers do not develop capabilities for creating and delivering services in-house ('in-sourcing'). The reason may be that customer could perhaps internally produce the services it is buying, but it cannot do so in a competitive way. Or, the people responsible do not want to spend energy and resources on producing certain services, and therefore they choose to buy these from an external supplier. In short, service (but also goods) procurement comes down to one or several of the following three reasons; the company:

- does not have (sufficient) internal capabilities to do it effectively with the right quality (competence issue);
- does not have the ability to do it efficiently (capacity issue);
- does not want to build or maintain the necessary competence nor capacity because it is not part of its core activities (strategy issue).

Obviously, given these reasons, there is a wide range of services that firms buy. Still, most people seem to have a very biased perception of the types of services that are being bought by companies. Let us review two examples of typical reactions from people with experience in industry.

Box 1: Stereotypes of service procurement

Stereotype 1: Service procurement is about buying travel, cleaning and going to restaurants
"Yes, we buy lots of services. Cleaning, travel, transportation and lots of other stuff. Altogether, it may be much but it is still not worth to invest substantial resources in. Services are services, and services are not very complicated or advanced."
Stereotype 2: Service procurement is about buying consultancy services
"You don't have a clue how many strange and expensive service purchases I have seen during my time on management teams or boards of directors. It seems like there is an incomprehensible magic around certain consultants. Company management is prepared to pay whatever the price, despite the fact that consultants often come up with things you already know."

These comments are very common among people with this kind of background and experience, even while some of the remarks are more individually based. Because, in contrast to these quotations, there is such diversity in 'services' that organisations buy, we need to develop a more comprehensive overview of the different types of services. For some more realistic illustrations of service procurement at different companies, consider the following examples.

Service procurement in a manufacturing company

Some years ago, an IBM printer factory was buying the following services: surveillance/security, catering services, travel, facility management, telecommunication services, property management, translation and advertisements. Internal suppliers delivered transports, warehousing and administration services.

Service procurement in local government organisations

The work of local governments consists largely of the production of services. In Sweden, some 50 % of the total purchasing volume by local government consists of service procurement, like construction work, maintenance, transport, garbage collection, social care and consultancy (Bryntse, 2000).

Service procurement in a knowledge-oriented company

The core activities of Ericsson Infocom Consultants are development and engineering work, leading to the development of new services in telecommunication. Considering it is not a normal manufacturing company that buys raw materials and components for processing, a purchasing ratio as high as 50 % may be surprising. However, a business like this needs to buy information technology, training, travels etc. The most important category, though, are various types of consultants. The company was contracting a great amount of external resources in order to have sufficient manpower to carry out its assignments (Axelsson, 1996).

These examples show that services form a broad (in terms of variety and number of different services) and important purchasing area in many businesses. In a national survey on purchasing practices in Sweden, more than one-third of the 261 respondents indicated that they had been outsourcing (part of their) IT and facility/maintenance services in the period 1995-1998 (Brandes et al., 1999: 15). Also, nearly 25 % of the respondents had been outsourcing design & engineering services, while more than 15 % had been outsourcing logistical services. A North-American investigation among 116 companies and organisations showed that services accounted for a weighted average of 54 % of total purchases (39 % on average for the 59 manufacturing companies, 81 % for the 23 service companies and 62 % for the 34 public authorities) (Fearon and Bales, 1995).

There is a strong contrast between this (economic) importance, and the attention service buying has received so far in research and practice. Only recently, the area has come more into focus, partly due to the efforts of companies like AT&T and Philips Electronics, which have undertaken huge efforts to rationalise and professionalise their non-product related (NPR) buying – a spend category that traditionally includes a large part of service procurement. However, it is important to note that not all service buying is NPR, and not all NPR is service buying. Our further discussions will also demonstrate this.

1.2   The process of buying services
In the typical textbook, the *purchasing process* is described as a sequence of steps initiated or triggered by a conscious need that has arisen at the customer. After that, a number of steps is taken that finally result in a purchasing decision and the acquisition of a product (Van Weele, 2000). In defining this process, there has been considerable attention for the factors that affect its specific shape and course. Examples of such factors are the difficulties in quantitatively and qualitatively measuring and defining the needs, the complexity of the problem solution, the experience customer and supplier have with the specific problem solution etc. In this context, it seems reasonable to assume that the *type of service* affects the purchasing process.

The type of service also affects the *exchange process*, f.e. in terms of the information and solutions that are being exchanged. This is reflected by the subsequent interaction and dialogue between the parties concerned, but also by the organisation and membership of the purchasing decision making unit and in the internal co-ordination that is more or less needed within the customer and the supplier. It can also be seen, from the buyer's perspective, in how the supplier relation is or can be managed. These aspects – the impact of the type of purchase on the ensuing interaction and relationship - have been dealt with not so much by traditional (Anglo-Saxon) purchasing literature but more so by IMP(-related) literature.

The question is not whether but *which* different aspects of the type of service play a role. Elsewhere, we have characterised services by using distinctions such as: basic vs. knowledge-based services, long-term versus short-term services, standardised versus non-standardised services, simple vs. complex services, creative versus non-creative services, fluctuating versus non-fluctuating services, and services directed at individuals within the company versus services directed at the whole company (Axelsson and Wynstra, 2000b). It is likely that such classifications could help us understand systematic differences in the interaction processes that are designed (or that evolve) when companies are to deal with those services. A complex service is probably handled in a different way than a simple, a fluctuating service would probably imply a different dialogue between the parties than a stable one, etc.

Here, we have, however, chosen to focus on *the type of service due to product-technology*, i. e. if the service is used as a component, a raw material, an operation method or consumed by the buyer. This is a parallel to previous studies of goods based on the same product technology classification (Håkansson, 1982; Hallén *et al.*, 1991). As this classification has been a fruitful way of understanding patterns of interaction related to goods, we think it is worthwhile to try and 'translate' it into services. We also think that such a classification is better fitted to analyse impact on interaction patterns in business-to-business than the other classifications just mentioned. The ways in which a product is to be used, dealt with, by the customer firm should be a strong point of departure for analysing systematic, functional interaction patterns. We think that this argument will be strengthened in the text that follows. Before we discuss the different types of service application in more detail, let us briefly take a look at what we mean by interaction processes and the ways to portray them. We will also add some specific ideas regarding the procurement of services in general.

2 Interaction patterns

We address three aspects of interaction patterns: What is interaction basically about? What do we mean by interaction processes / interactive behaviour, what are the elements? And how could we describe interaction as well as describing the context of an interaction process?

2.1 Why interaction?

Basically, we think that interaction is functional. The reason for the interaction between people from the buyer and seller is that there is a need to make certain competencies available in order to handle problems of various kinds. If that is true it should to some extent be possible to predict which interfaces between two firms that are likely to emerge in order to fulfil the functions requested. If we apply this reasoning and first of all look at the buying party, the customer and the competence that actor is likely to bring into the relationship the following frame of reference (cf. Fisher, 1970) should be relevant.
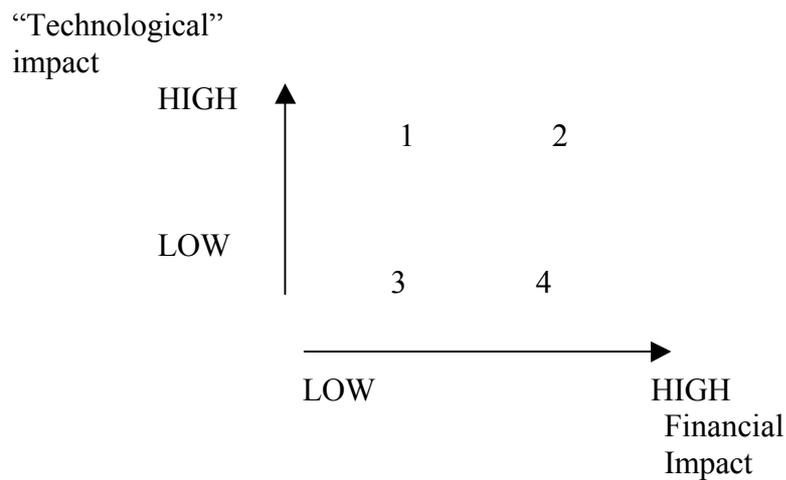
Figure 1. Two basic dimensions of competence to make involved in specific buying processes.

Two important dimensions are the technological impact of the business (or function bought) in question and the financial impact. With 'technological', we mean not just biotechnology, mechanical engineering and the like, but also other issues related to the technology of a business in a broader sense. It could be about understanding children's play habits and pedagogical aspects of that, something that could be a vital 'technology' in child care business (Fisher (1970) calls it 'product complexity'). The buyer or buying team that is to supply such an operation with f.e. toys should need to understand this technology. The technological impact, whatever it is in the specific case, could be high or low related to the specific purchase situation. The other dimension is the financial impact, f.e. in terms of order volume and/or required investments, that also could be high or low.

If we accept this frame of reference we would find it natural if a situation of low-low (number 3) were dominated by the purchasing specialists and the interaction with the supplier primarily focuses around the buyer of those products. If we have a situation of high technological and low financial impact we would most likely find a dominance of the technology specialists. A situation of high and high (number 2) is likely to be very much characterised by teamwork with a multitude of specialists involved. Finally, situation 4 would imply a dominance of financial and people in top- management. Switching to the supplier side, we could apply the corresponding arguments. In f.e. a low – low situation the interacting people from the supplier would be a salesperson, etc.

If we apply this basic argument, we could argue that regularities in interaction patterns exist and should be possible to trace. Business relationships are in our views, not "just" a matter of "relationships" and "interaction": It is a matter of *what kind of* relationships and *what patterns of* interaction and – for the practitioner – how to *understand and handle* them!

But this, however reasonable frame of reference, does not tell the whole story. It tells us that there are different collections of skills (of people) involved in different exchange processes and it gives a hint on the possible compositions of such skills. We want to come closer to specific patterns than that.

2.2 Elements of exchange processes
We define buying behaviour in specific exchange processes as consisting of the following main elements:

- The products exchanged;
- The information exchanged reflected by the number of people involved (interaction pattern), which functions they add and to what extent they have been involved, but also the content of the dialogue (what do they discuss); and
- The financial exchange.

Such behaviour is not just conditioned of by and financial aspects of the product as was included in Figure 1. If we study the interaction process between two firms and thereby describe the products, the contact patterns including the dialogues and financial exchange, and then ask ourselves "Why like this in this specific business relationship?", we would have to look for additional explanatory factors. The patterns could partly be a result of previous business between the parties. They know one-another, have developed trust, and do not have to specify in detail, neither do they in the dialogue need to clarify 'all' possible aspects. They know already; it is institutionalised. Also other factors could apply. The buying party could put a lot of efforts into comparing the offering from the specific supplier with that of other suppliers, because it has a purchasing strategy to always find alternatives and / or because there are in the environment to the specific relation, a number of possible alternatives available. If so, the market context of the relation is an explanatory factor. The patterns could also be a result of the supplier's marketing strategy. If it has one standard offering and one specially adapted to specific individual customers and wants to promote the latter, this would most likely influence the contact pattern as well as the dialogues with the buyer. There are evidently a great number of factors that could influence the interaction patterns between the buyer and seller. Is it at all possible to find some ways to arrange such factors into broader categories? A too detailed and complex model does not really help.

2.3   Zooming in the context of interaction processes

A conceptualisation of the factors that affect the content and extent of interaction processes has been formulated in the so-called interaction model (Håkansson et al., 1982). The aim of that model is to describe and analyse in a systematical way the interaction processes and relations between firms. The model consists of four main groups of variables: the interaction process (in the short and long term), the characteristics of the organisations involved (including the individuals), the atmosphere in the relation and in the individual transactions, and the environmental factors. To put it simple we use the following illustration:
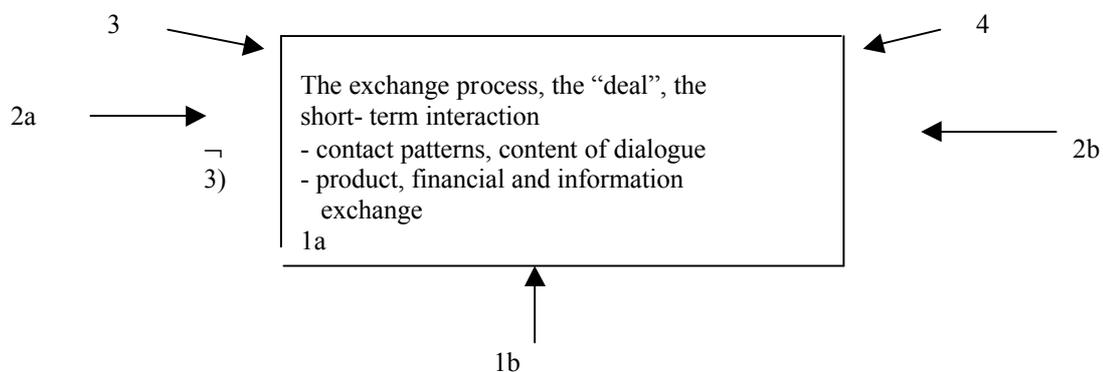

Figure 2. Interactive behaviour could be explained by four groups of explanatory factor (adopted from Håkansson (ed.), 1982).

The pattern that is described should be possible to explain by the variables related to four groups of variables:

1a) The product itself,
1b) Previous activities in the relationship like adaptations of routines that have created expectations and led to institutionalisation

2a) Characteristics of the selling firm, f.e. its marketing strategy, organisation, technology and its individuals
2b) Characteristics of the buying firm, f.e. its purchasing strategy, organisation, technology and its individuals

The atmosphere in terms of expectations created over time, power dependence, conflict – co-operation, etc

The market structure such as number of possible alternatives to present supplier, but also other characteristics such as dynamism – stability, globalisation, etc

This is a brief overview of the established interaction model developed by the IMP- group and presented by Håkansson (1982). This is the same model that has been used for studies of systematic influences on interaction patterns before. We think this is a valuable tool for anyone who wants to address the question "Why like this in this interaction process? We can now turn to the second, more specific question "What in this interaction process is explained by the product technology (where the different products essentially are services)?". Before we do, we briefly discuss each of these four groups of variables somewhat in more detail.

Interaction processes and relations in the short and long run
Regarding the interplay between buyers and sellers, a distinction is made between the individual transaction ('episode') and the more or less long-term and developed relation within which the business is taking place. According to previous discussions, the business exchange can be described as a number of exchange processes. The relation can be described in terms of the adaptations that the parties have carried out in relation to each other, and the institutionalisation and the expectations that have been created. In a systematical analysis, different patterns, for example, regarding the form of interaction can be investigated and understood; which type of information is being exchanged, which type of employees are involved, how many and with which qualifications.

Exchange and adaptation processes can, for example, be seen as an effect of the relation; by parties having experience with each other and thereby being able to collaborate in an easier way, or that same experience makes that the customer 'knows' it can put strong demands on this supplier. This works also the other way around; relations develop based on individual transactions. One example may illustrate this notion.

Box 3: A failed assignment as the start of a successful relation

A major service provider used a law firm that was new to the company, but which had especially good references within the area of antitrust laws. The law firm perceived the odds of a positive result of a lawsuit the service provider was involved in as very high. The law firm and the company representative prepared their case well, and worked out a well-defined line of defence. Then, the lawsuit took place.

Despite the successful collaboration and the sound line of defence, the client lost the case. The customer had to pay the legal expenses both for itself and for its counterpart, and also had to pay financial compensation to the counterpart for losses incurred. The customer was not satisfied with the result, and neither with the evaluation the law firm (the supplier) made at the beginning. Despite all this, it became the start of a long-term collaboration. The customer thought that the supplier was very professional and that the collaboration had worked well. The customer argued that the things both parties had learned about each other during this process would be of value in any future business. The result of this 'episode' was therefore negative in the short run, but very positive in the long term!

Often we think that relationship creation should start with a minor event which, if it is a positive experience for the two parties, will develop. The nice thing with this illustration is that it starts with an event that could be interpreted as a negative event, still it helped in the process of relationship building.

The customer's purchasing strategy, production technology and purchasing organisation
Purchasing strategy can affect purchasing behaviour and, in doing so, the long-term development of the supplier relation (in terms of institutionalisation, adaptations and investments). If the strategy implies that the buying firm actively wants to exploit competition and wants to avoid tying itself into a specific counterpart, this will obviously have a corresponding effect on the relationship. However, it also will affect the way the individual transaction is handled; what is being discussed, which communication patterns will arise, etc.

We also know that the production technology of the buying firm and its organisation have an influence both on the need of purchased items as well as the collaboration with the supplier, f.e. in terms of the type of contacts between the customer and the supplier that are especially important to the customer, the dialogues that need to be pursued and the conditions for the desired functionalities to be realised. Here is an illustration:

Box 4: Procurement of training for management development

In company A, there is a co-ordinated human resource management department, with broad responsibilities. When the company is contracting management development in the form of training and education, this department forms a strong central actor. Communication is facilitated. The supplier knows 'who decides' and can adjust its behaviour accordingly.

In company B, there is no such department. The procurement of management development training is spread across all business areas and is carried out locally. This implies that the contacts between the supplier and the customer have to be adjusted to this situation. The contacts become larger in number, and more difficult to co-ordinate. Patterns in the behaviour of both sides and the pattern in the mutual contacts are in this way affected by the organisation of the customer.

It is obvious that the internal organisation of the companies involved also actively affects the collaboration between them. Conditions like these can either facilitate or hinder, and

sometimes even prohibit, the business relations between customer and supplier. Conversely, a change in the contents of a relation (i.e. the purchasing or marketing tasks) often requires adaptations in the organisations of both parties.

Relationship atmosphere
In a similar way, it can be argued that the atmosphere and the broader context (environment) of the relation help us to understand and/or to predict how the collaboration between customer and supplier will or can take shape.

Box 5: Delivery impossible

Over the past five years, publisher XYZ has concentrated its purchases of typesetting and printing services. Currently, it has only two suppliers in this area. In return, the publisher has achieved better prices (through volume discounts) and a more stable production flow. At one of the suppliers, printing company A, the publisher accounts now for 40 % of the total production.

An important activity for publisher XYZ is the publication of education material. During the month of August in a recent year, something happened which is not uncommon. An over-ambitious author and an over-loaded editor at the publisher go past their deadline for a new course book. Camera-ready originals are not available at the first week of August, as previously agreed. The third week of August seems more realistic, but in the meantime the publisher has made a strong promise to educators that the book will be ready for the new school year, starting in September. When the publisher informs the printing company that the situation is problematic, but that it assumes the printing company will do its best to "arrange that the book can be printed within 2-4 days", the immediate reaction is very negative. The production manager of the printing company argues 2-4 days is impossible, and declares: "I refuse to do it!". What now?

Within the publishing company, internal discussions take place which (among others) include the managing director. Educators and the author are being informed, and receive a comforting message despite the dramatical situation: "We will fix it". New contacts are made with the printing company. This time, contacts are made at a higher level than previously. Within a couple of hours after the second contact, news comes from the printing company: "We will do it, we will help you this time but please do not put us in a similar situation next time!"

An obvious question regarding this example is which of the variables from the interaction model discussed so far have the greatest explanatory value for those that want to understand this behaviour. Probably, the atmosphere as regards the power- balance has an important influence. The buyer seems to have exercised his power to make the exchange process run this way.

Environment
The environment of a business relation is usually described by factors such as the characteristics of the market system in terms of market structure, number of available alternatives (the structure of the supplier market) but also by nature of the social system in which the business takes place. The latter aspect affects conditions such as business culture, norms etc, and as such, indirectly, the purchasing behaviour of the firm. The first group of aspects directly affects the conditions for purchasing activities. An illustration:

Box 6. Wrong interpretation of the environment led to a badly adapted purchasing behaviour

Within one of the larger building companies there were 12 identified and well-known suppliers of certain contracts. The buying strategy was aimed at actively using this competition. To be able to do this they worked transaction oriented and they actively "played the market".

By pure coincidence , when writing an examination paper, an analysis was done of the supplier market. The students started out from a network-based line of thinking and tried to map different types of co-operation agreements, joint ownership etc. between the 12 suppliers. When the mapping was finished it showed that the tough market of competition actually only contained no more than three competitors maximum. All of them were in different ways interlaced with each other. This led to a review of the current buying strategy.

This illustrates that the market structure is likely to have an impact on how the specific buyer-seller relationship is handled. When the environment of a specific supplier relation acts like a competitive market, this has a positive impact on the possibilities a customer has to exploit the competition between suppliers ('play the market'). When there is only one alternative supplier, the ways of working have to be adjusted to that.

Individuals

The interaction model even considers the characteristics of the individuals concerned. Persons from a buying company that participate in a particular business relation can - often in a strong way - affect both the exchange processes and the long-term relationship. Therefore, in order to understand and to exploit the opportunities that exist in a specific exchange process or business relation, it is important to know what experiences these individuals have with transactions of a certain type and/or with specific suppliers. It also important to know their individual goals, which may be derived from how they are rewarded for their professional role (as well as from other factors).

Box 7. A new individual on a new position changed the interplay between the two parties in substantial ways

The Service Company had since many years had a reliable and stable relationship with IT-Company. The strong bindings existed between IT-Company's customer support department including the service technicians and Service Company's computer department. One year ago there was an occurrence that triggered the "warning system" at the IT-Company. A reorganisation of the IT-function of the Service Company meaning that all its IT- issues should be centralised and that a new position as IT- managers was to be introduced. The IT-Company and their contacts, the purchasing managers on operational level within Service Company who at any cost wanted to save the established relation, now judged that they were in a situation where they could choose between the following alternatives:

(a) Wait and see how the new manager was going to act.

(b) Attempt to offensively prepare arguments in order to maintain and "cement" the relations, now including the new IT- manager.

This illustrates in many ways the role of specific individuals in relationships. It could be further emphasised if we consider that many services are basically produced by human resources. The knowledge needed in f.e. an architect firm's service is highly dependent on the individuals carrying out that service. This goes for many professional and 'soft' services. Such services are a result more of the interaction between specific individuals from both the

buyer and supplier than of the interaction between 'the organisations' as such. A wide variety of influences of the individual are thus possible.

We are, however, not specifically going to focus on that. In the remainder of this article, we will focus our analyses on the interaction pattern for different types of services. We will first set out to develop a typology of these different types, based on the way the service is used.

3   The type of services (product technologies)

Researchers in the area of industrial marketing and purchasing have identified systematical differences between different types of products in terms of the interaction pattern (Håkansson et al., 1982). They have based the classification on the product technology, or type of application, interpreted as *how the customer uses the good*. This classification seems relevant also for services (Axelsson, 1987; Jismalm and Linder, 1995), and comprises the following types of services:

component services;

transformation services;

❑   working-method services, and

❑   consumption services

3.1   Component services

Components become - *unaltered - part of the offerings to the (final) customer*, and therefore the customer may have specific demands regarding the selection of supplier or component. In its turn, the supplier has to have a good understanding of the customer's product and the ways in which the customer's customer uses the product, together with an understanding of the component itself.

Component services are characterised by becoming part of the offering ('package' of core and peripheral services) to the customer's customer. There are essentially two types of components, standard and "special". A standard component is well known and need not that much of interaction by specialists. A special component that also might be quite advanced technologically is likely to go along with a deeper involvement and technical expertise. By using component services, the customer's offering can be differentiated and an added- value could be created. Therefore, it becomes important to clarify to the supplier that the service is part of a package and how the final customer will use it. This is likely to have an impact on the interaction patterns including the dialogue.

Box 8: Examples of component services identified at a telecom operator

In the case of installing an exchange systems and cables at a new office building, examples of such services may be goods transportation and groundwork services. It turns out that the communication pattern between the customer and the suppliers of these component services is quite broad, generally speaking. Many people are in touch with suppliers for the services mentioned. The contacts are even 'deep' in nature, as evident in their high frequency and intensity. Important demands on the suppliers are delivery reliability, and being able and willing to take responsibility for complete 'system solutions' (a number of components that together constitute a complete system). With regard to the long-term development of the relation investigated, emphasis is being placed on 'playing with open cards'; customer and supplier should have a trusting and open dialogue.

The component in this example is a standard component. This might explain the broad patterns of interaction people. But still we see that it is vital that the interaction process is under restrictions of the entire product and how that is going to be used in the next step.

3.2   Transformation services

These are characterised by *being modified by the buying firm* and then - in an altered form - going further to the customer's customer. Examples (of 'semi-manufactured' goods) are paper pulp that is processes into paper and steel that is heat-treated and acquires new characteristics. In these situations, it is important that the customer knows how the supplier has treated the material and what is suitable (possible) to do with it.

Transformation services are used in a similar way. Examples are information or knowledge. Information can be seen as data that is collected and presented in a certain structured way. Data can consist of numbers, words, sounds and images. Knowledge and capabilities are the result of processing/modifying information, or of the productive use and collection of information. Like similar goods and unlike most services, transformation services can be put in stock. Consumption does not occur at the same moment as production.

Box 9: Examples of transformation services identified at a telecom operator

Concrete examples are market research, media surveillance and personnel evaluation services. These constitute raw materials that needs further processing (analysis) by the customer. It turns out that the communication patterns between the customer and the supplier, in the investigated cases, are relatively limited in terms of width. Relatively few people were involved in the purchases of these services. However, the existing contacts are rather 'deep'. Important customer demands are delivery reliability so that the processing of the 'raw material' can take place according to the time plan. Moreover, price is an important element in the dialogue with the supplier. For the development of a long-term relation, the importance of continuous improvement of the product is emphasised, and that this should occur in an open and trusting dialogue.

It seems very natural that the firm buying a service that is going to be processed further in its own operation should be as 'ready for treatment' as possible. That's why there is a need for interaction directly between the people supplying the 'raw material' and those who are designated to fulfil the process. Needless to say, it is likely to be a difference in depth and number of involved specialists between an advanced raw material and one that is a standard.

3.3   Working-method services

A piece of machinery or an installation is used as tool or instrument for the production of one's own products, f.e. a paper machine. It will strongly effect the ways to operate the production of a manufacturing firm. Equipment is also characterised by the fact that after the purchase, it should be used during a long period. Consequently, the purchases occur only with very long intervals or perhaps only once. The purchase usually also represents a major investment. Often, it takes place in the form of a project with a variety of internal functions involved. A fundamental aspect is that the equipment will affect the customer's way of working, and therefore it is important to understand *how the equipment fits within the production environment it will operate in*. Working-method services are mainly based on knowledge. The buying firm tries to acquire methods of working from the supplier, and subsequently apply these as tools.

Box 10: Examples of working-method services identified at a telecom operator

Concrete examples of services in this firm that are used in this way are education, organisation and management consultancy services. These services are bought repeatedly, and on a case-by-case basis. This implies that the kind of employees involved may vary, but that the relation with the supplier becomes more intensive in connection with a specific purchase or ongoing deliveries, which is determined by that part of the company whose methods of working will be affected by the purchase. Important functional demands on this type of services are usability – being useful within the firm's business system – and delivery reliability. Regarding the conditions for long-term collaboration, it is emphasised that the supplier should have the capability to continuously develop and improve its products. They must stay 'in sync' with new developments.

An engine needs to fit with other or is likely to alter the role of other equipment in a production process. It has an impact on the entire production structure. Working method services are likely to have an impact on the ways to operate a business. This could be issues like how to design certain organisational processes. Therefore it should be vital that it is fitted with other operation logic, be it existing ones or changed (due to the new working method initiated initially). Again, there is a difference in significance between a minor and not integrated new method and a major change that might have an impact on the entire organisation. Such differences should be reflected in the interaction patterns.

3.4 Consumption services (support services)

What characterises this category is that the services are used within the buying firm without becoming part of the buying firm's final product. The only constitute, more or less, a support for the customer's business. This consumption aspect is typical for so-called 'MRO' (maintenance, repair and operating) items in manufacturing industries, such as lubricants, working shoes, glues, small tools etc. The category mainly consists of a large variety of items that involve significant administrative efforts: the so-called 'small order' problem. Buying this type of items therefore requires the development of efficient routines to deal with them. Consider some examples of these services – as they were identified at a European telecom operator - and how they are managed.

Box 11: Examples of consumption services

Consumption services

Hotel services, cleaning, security, medical care and insurance were all identified as examples of consumption services. In those cases, there are a highly limited number of people involved in the contacts with the supplier. The services are contracted for on an annual basis, from suppliers that are first evaluated, and on the basis of competitive bidding. Important requirements for the suppliers are the ability to offer total solutions, geographical coverage and low total costs.

In these cases, the service is targeted at the firm but the category includes also most of the services targeted at specific individuals within the firm (see Box 4).

Box 12: Services for individuals

Medical services Often, companies negotiate medical services for their employees. This can involve, for example, pre-contracted physiotherapeutic treatments at special rates or annual health-checks for all employees. The agreement specifies what is to be checked and what treatments may follow from the checks. There may also be agreements that provide priority specialist treatment (such as surgery) for key personnel etc.

Domestic services More and more companies offer domestic (housekeeping) services to their employees. This is a secondary benefit that relieves employees from (some of) their domestic chores and, in that way, facilitates them in meeting their professional obligations and getting more valuable spare time. The Scandinavian insurance company Trygg-Hansa is one of the companies offering this to employees that have small children. The service is contracted by the employer, and is an employee benefit just like a lease car, and therefore subject to taxation (Aftonbladet, 1997).

This is a very broad category and it is difficult to identify any specific regularity. But it serves its task as a contrast to the other product technology based services dealt with.

Table 2 summarises how these different types of services may affect the interplay between customer and supplier. For each service type, it indicates the expected contact pattern between the two companies, the most important issues, the way the relation works and what is creating trustworthiness in the relation. It barely needs emphasising that this overview involves relatively strong simplifications. We also indicate likely differences if the service is a qualified or a standard one. It could thus f.e. be a standard component service or an advanced component service. That aspect is reflected in the matrix. Note also that the same service, depending on the way the customer 'leverages' it, can act as a consumption, component, transformation or working-method service. A series of seminars by a trainer can be a working-method service when it is directly bought by the customer that lets its employees participate, while it is a component service for a training institute outsourcing the content of the seminar but adding marketing, documentation and registration services to it.

Table 2: Type of service in terms of application and its effects on business relations

Type of service	Contact pattern / representatives involved	High priority issues in the dialogues	Relation/trust based on
Consumption services	C: purchasers and internal customers S: marketing representatives	How the service supports various core processes	S's ability to supply the desired service and (if needed) adapt it to the specific situation of C
Component services	C: product and market specialists S: specialists regarding final product and supplier product	How the service fits in C's final product Demands of final customer	S's production capacity and quality S's development capabilities (when S is used as external expert)
Transformation services	C: production and quality representatives S: production planning and marketing	How the service will be used (transformed) at C and how well it fits in different transformations	S's production capacity and capability to maintain a stable quality S's innovation in production equipment and business development (when S is used as an external expert)
Working-method services	C: business development representatives and affected customers S: product representatives	How the service is used for changing C's working-methods and how it fits with the important aspects of these methods	S's business development and innovation References Collaboration partners

C: customer; S: supplier

It could always be argued whether it is meaningful to try and stereotype interaction patterns like this. We all know and we have already pointed to the limitations in trying to explain exchange processes and interaction patterns by just one variable. In practice, from case to case, we should expect specific interaction processes – why like this in these processes? – to be explained by a combination of influencing variables. The important thing to reflect meaningfulness is whether the selected factor, in this case the kind of service, is of much enough significance to really matter. We think it is!

4   Life after the purchase

We think it is important to consider this kind of patterns. There are a lot of actions and contacts involved in business relationships, but if there are basic activity structures (Håkansson & Snehota, 1995) of the business, that should also be reflected in the contact patterns. A lot of actions that are reflected in our view of interaction processes are not really connected to the basic activity structures. Such actions, like f.e. for a marketer to remembering to celebrate a purchasing manager's birthday, could be important for the relation between the buying and selling firm. But that's not the kind of activity structures we are referring to. We tend to believe that the substance, the functional aspects that are to be solved by the products are more basic.

We also want to emphasise that purchasing behaviour is not only a matter of handling individual purchasing processes ('buying'). It is – definitely -also a matter of continuously dealing with supplier relations. Some services are contracted at a certain point in time, but then require a continuous interaction over time to manage the interactions between the parties

involved. A review of literature on buying services (Bryntse, 2000), show that the focus of most studies are on the specification and the deal as such. But what happens after the deal is settled haven't received much focus. In our view this should be equally as important, it is after the settlement of the deal that the service is to be produced and distributed! And in that part of the process it should be highly valid to have an idea of what problems are likely to have to be handled.

To give a more concrete illustration of this point, which in our opinion is a very critical one, we give an illustration of communication and contact patterns in business relation involving the buying and selling of services.

Box 13: Communication and contact patterns: the manufacturing customer and the insurance supplier

A manufacturing company discusses its relation to a major insurance company as following: "They have a customer account team. This team includes everyone from their company that has contacts with us. This involves experts on different types of insurance: personal insurance, fire and other property insurance etc. Similarly, we have a team to deal with the supplier in a co-ordinated fashion. Depending on the specialist inputs needed and the responsibilities of various people, the communication patterns will vary. Our human resource department has the most important contacts with their specialist on personal insurance, including the insurance on our key personnel. Our production people have contacts with their fire insurance specialists etc. The contacts vary in intensity, partly according to an annual cycle of planned visits and other meetings, partly depending on important events such as damages and accidents or new investments that may change the situation."

This example illustrates the contact patterns that can occur in business relations as a consequence of the characteristics of the service and other basic conditions (nature of the business, the formal organisation etc.) both at the buying and the selling company.

Bryntse (2000) discusses how interaction and 'joint action' between the parties can be seen to function. The need for competencies for and understanding of management or collaboration between companies is a key issue. Capabilities to handle the interaction, the co-operation with suppliers is in reality probably more important than the ability to make decisions in itself, and to carry out negotiations and conclude agreements such as Service Level Agreements (Hiles, 1993). Ongoing relations between the customer and the supplier are important, both as an aspect that precedes decision processes and as a crucial condition for the practical collaboration that follows after the selection of a supplier. Exchange processes, adaptation processes and institutionalisation are important concepts in the interaction-perspective.

The exchange (i.e. selling and buying) of service between two companies puts certain requirements on their resources, their competencies and the design of their organisations. In order to handle exchange processes, the companies need to adapt themselves to each other, to a large or small extent. Adaptations may involve both technical aspects and organisational aspects, and the economical system in both companies. Such adaptations sometimes involve changes in terms of power and dependencies between the parties involved.

Demands that the exchange processes should involve deliveries in short intervals in order for the customer to be able to reduce its inventories often imply requirements for significant

adaptations between the parties. It will involve the adaptation of ordering routines, new routines for incoming goods inspection, transports, set-ups of machines and other production resources, etc. A complete description of the adaptation processes between two companies should there involve (among others) developmental, production-oriented, distribution-oriented, product-oriented, financial and organisational adaptations.

Another important aspect of collaboration is a gradual institutionalisation. This means that some things become 'taken for granted' by means of learning. This can be both a good and a bad thing. On the positive side, the collaboration between the customer and the supplier becomes more natural when not everything has to be spelled out, because the parties have learned how they work together and what is appropriate. On the negative side, institutionalisation may hinder the willingness and possibilities to 'think new things'.

The responsibilities of both purchasing and marketing are largely about getting - in the best way possible - an interplay between internal systems and processes and those of the supplier, such as labour, equipment, input resources (e.g. raw materials) and development, production, delivery and administrative processes. It is all about making part of the supplier's *resources* and *capabilities* accessible for the customer, and getting the customer's processes to integrate with those of the supplier. It requires a capability to deal with the interplay with the supplier: partly in relation to the delivery of the service in itself, partly in dealing with the relationship as such.

5   Conclusions

In this paper, we have considered some specific aspects of the process of buying and exchanging services. First, services are not something homogeneous, and in the various illustrations we have illuminated a broad spectrum of products that can be called services.

Secondly, there are certain requirements for and effects on the interaction between customer and supplier as a result of some important aspects of the kind of service being bought. The way the customer uses the service seems to have a strong bearing on the interaction pattern between buyer and seller. We have proposed that services can be classified as: component, transformation, working-method or consumption services. Still, it will be clear that, besides the type of service application, there are other factors that are important in understanding both why parties involved behave as they do and what is important to be able to manage in a certain relation. For any given service, it does not follow automatically that it is f.e. a consumption or transformation service: this depends on the customer uses the service.

The implication is that in buying these different services, the customer should consider, for each specific service, how it is applied. Based on that, it is relevant to consider who are likely to become, or who *should be* involved and to what extent, in the purchasing decision process. Other aspects is to consider what the important supplier selection criteria are etc. For suppliers, the implication is that they should analyse how their service is applied by each individual customer, in order to address the right issues and people (interface) in its marketing, sales and exchange processes with the customer.

Thirdly, understanding and being able to manage the interaction with a supplier can be just as important as being able to purchase the desired service. We have argued that this classification is relevant and, if so, it should help academia and students to better understand some basic regularities in the exchange processes centred around services in business-to-

business. For practitioners it could be helpful to either get support for designing the buyer-supplier interfaces and adapt it due to the impact of the service in question. Alternatively, they could be better prepared for the kind of pattern that is likely to occur in exchange processes of this sort and thereby easier identify the emergent organisation pattern (the *ad-hocracy*).

Further research could use this classification of services and analyse the impact of the respective types of services on the purchasing and interaction process in more detail.

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