

Business Process thinking in practice

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Abstract

The business process oriented perspective is a popular approach when describing corporations. The description can be used when doing business, developing or evaluating business processes in a corporation. There is an uncertainty how the perspective should be used in practice. Focus is either put on the "customer to customer" process or the production process. This report covers a complement to the current perspectives that authors put on business processes. In my perspective a business process is a combination of the two mentioned approaches. A business process consist of one primary subprocess and one or several supporting subprocesses. The primary subprocess consists of activities that are performed during a business deal for a specific customer. The supporting subprocesses are performed in order to support the primary subprocess. Within a corporation the business processes are coexisting and co-using the infrastructure of the corporation, i.e. the business processes within a corporation are overlaid. This report focuses on how business process thinking has been used in a case study on action research basis. Special focus is put on the components of the business process, their construction, delimitation and co-operation.

1 Introduction

Between October 1994 and March 1995 I was involved in an action research project, which purpose was to investigate the consequences of applying a business process perspective on a method for change analysis (Goldkuhl & Röstlinger, 1988). The project, process redesign with focus on activities, quality and time, was performed within the research group VITS¹. A method for business process oriented change analysis was developed as a result of the project. The selected corporation for developing and implementing the method was Structo in Storfors, Sweden. Structo is a producing corporation which mainly manufactures pipes for hydraulic cylinders.

The business process perspective is popular when business development is performed. The perspective is used in different development strategies such as *BPR*², *TQM*³, *ABC/ABM*⁴, *TBM*⁵, process management etc. With a business process perspective the horizontal process in the corporation is in focus. This process consists of activities, which are performed in order to produce value for the customer. Different organisational functions can perform these activities

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²Business Process Redesign

³Total Quality Management

⁴Activity Based Cost Analysis / Activity Based Management

⁵Time Based Management

and with the business process perspective the links between these activities will be visualised (Rummler & Brache, 1995). The corporations must have the ability to adjust themselves to the customers demands, which is done by focusing on the customer. When a business deal takes place the value-adding activities and the links between these need to be in the centre to ensure that the result is of high value for the customer. This is possible when corporations are observed from a business process perspective.

Process thinking is used in a lot of perspectives. In the mentioned development strategy the corporation is viewed from a business process point of view. Still there is a difference between how authors interpret and use the concept.

Another problem arises while talking about the process concept. It is used on different levels. When developing information systems you can look upon the development process as a business process or develop information systems which are supposed to support the business processes of a corporation.

Goldkuhl (1996) defines a business process as a process consisting of activities which are performed when a corporation is doing business. Other processes, such as management processes, also exist within a corporation. In this report I am using business process in the same meaning as Goldkuhl (1996).

The purpose of this report is to give a description of how business process thinking can be used in practice. It mainly concerns description of the business processes, which can be used in situations when performing business deals, developing or evaluating business processes in a corporation. The report mainly focuses on the following aspects:

- To give an account of how corporations can be viewed from the perspective "several overlaid business processes"
- To give an account of the components of the business process, their construction, delimitation and co-operation.

The report is meant for both researchers and practitioners, who are interested in business development where process thinking is an important factor.

2 The process concept

2.1 The meaning of the process concept

Process thinking is in focus in several of the popular development strategies and methods that are used today. BPR is such a development concept which stands for radical process improvement (e.g. Davenport, 1993; Hammer&Champy, 1993; Johansson m fl 1993; Willoch 1993). In Lind (1995a) the definition of the process / business process concept of several writers are valued and compared. The following conclusions are drawn:

- A business process consists of activities, that refine input to output. During the refinement process objects flow from one activity to another. The activities are contextually related to each other.
- The result of the business process is of value for the customer.
- Only a few of the authors argue about the range of a business process. Where does a business process start and end?

- To regard a corporation from a business process perspective means that it is looked upon from a horizontal perspective. A business process normally crosses several organisational functions.
- Adopting a business process view of a corporation implies a strong emphasis on what is done and how it is done within a corporation, in contrast to who is doing the work. Some authors mean that a business process needs a process owner.
- A corporation consists of several business processes.
- A business process consists of one primary process and one or many support processes. The support processes are supposed to give support to the primary process.

The process part of the business process concept is better defined than the business part. Goldkuhl (1995a) means that within the range of a business deal there is, during a certain period of time, an interchange relation between a customer and a supplier.

2.2 Viewing corporations from a business process perspective

Some authors do not have a clear opinion about their perspective on the business process as an object. They are vague about how the perspective should be used when corporations are looked upon from a business process point of view. I have identified two different ways of how the business process perspective can be used.

- A corporation consists of several processes which start with raw material and end with a finished product to the customer (production process)
- A corporation consists of several processes which consist of the activities needed for the interchange relation between the customer and the supplier when business is done ("from customer to customer" process)

2.2.1 The business process as a production process

Davenport (1993) regards a corporation as consisting of a number of subprocesses, where the performance of each subprocess is a part of creating a result which is of high value for the external customer. According to Davenport examples of subprocesses are:

- the manufacturing process
- the logistical process
- the marketing process
- the order management process
- the delivery process

Porter (1985) regards business processes in a similar way. He uses his generic value chain (fig 1) to explain how activities are performed in order to create a value for the customer.

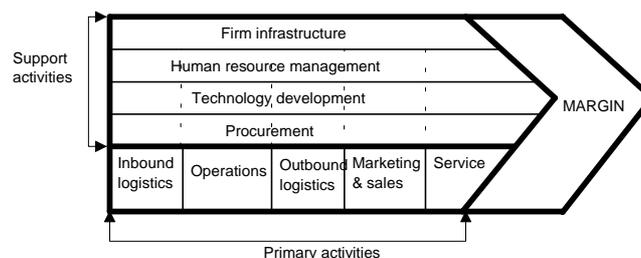


Figure A: The generic value chain (Porter, 1985)

The value chain is divided into two parts: primary and support activities. The primary activities that are performed within a corporation are supposed to be value-adders for the result that the external customer is receiving. From my point of view the fundamental idea of the value chain is excellent, because when a business deal is being made there is a sequence of value-adding activities performed to ensure that high value is produced for the external customer.

Both Davenport's and Porter's definition of a business process start from an unrefined product instead of starting from the customer needs. The end of their business process is a refined product, which is of high value for the external customer. This means that the business process is regarded as a production process. The process part of the business process concept is defined with distinction, but authors are not explicit concerning the business part. Furthermore they are not bringing any discussion of variant processes forward. The delivery process will for example be performed in different ways in different contexts. Therefore it could be difficult to survey the external customer.

On the other hand Porter is very explicit about the fact that all the activities that are performed within a corporation are not value-adders for the external customer. Within a corporation there are some activities performed that are of primary interest for the external customer and some that are of secondary interest. The primary activities can be questioned to ensure that these are value-adders. The supporting activities can be difficult to relate to a certain business process. From Porter's point of view the delivery process consists of supporting activities which could be a prerequisite for different primary activities. Porter means that the supporting activities indirectly contribute to a higher value for the customer, but are necessary for the performance of primary activities.

2.2.2 The business process as a "from customer to customer" process

Another point of view is to look at the customer needs as a starting point for the business process and its end when the commitments from both sides, supplier and customer, are fulfilled (e.g. Frontec, 1995; Goldkuhl, 1995b; Willoch 1994). The order/delivery process (see figure 2) is a business process which starts at the point when a corporation makes an offer and reaches an agreement. The business process ends after product delivery to the customer and the customer has fulfilled his commitment by paying for the product or service. The business process is done when both sides have been satisfied.

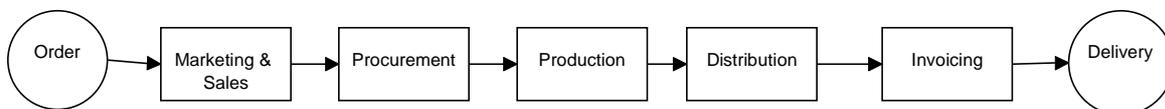


Figure B: Primary activities performed in a business process context (Willoch, 1994)

The set of problems concerning primary and support activities are not dealt with. All the primary activities are performed in a sequence. There is no distinction between activities that directly or indirectly contribute to a higher value for the customer.

2.2.3 Conclusionary analysis

In both of the viewpoints the primary process consists of several subprocesses that are performed in sequence. From my point of view there are two ways of looking upon the primary process. It either consists of activities that are performed to refine a product or it consists of activities to fulfil a commitment. Therefore the following questions emerge:

- What does business process thinking mean? How should it be used in practice?

Further the business characteristic is made more explicit when the business process is regarded as a "from customer to customer" process. This can be found when looking at Frontec's (1995) and Willoch's (1994) definitions of the concept. In the definitions where the business process is regarded as a production process the business characteristic is not made explicit enough. Hence the following question emerges:

- How does an explicit business characteristic influence the use of business process thinking?

In the approaches presented above a sequence thinking is applied. This is not the only way. In my research I have chosen to look upon a corporation from several overlaid business processes (variant processes). Each business process consists of activities that are performed during a business procedure, meaning that each business process implies one aspect of doing business. This differs from the conventional way of looking at a corporation from a business process perspective. It is a complement. Another question emerges:

- What does it mean to look upon a corporation from the perspective "several overlaid business processes" as a complement to the sequence thinking that the current perspective recommends?

3 Business process thinking - a definition

Typical for a business process is that it consists of activities that are contextually related to each other. The business process ends with a result which is of special value for its customer by solving a task. The customer is in focus, a horizontal thinking is applied, value-adding activities are focused and process responsibility is made clear. A business process consists of activities that are performed during business, implying the operative business.

The concept is based on the business transactions between a supplier and a customer. The relation between these two sides is an interchange relation, which involves a number of communicative and material actions. Offer, request, commitment and fulfilment of commitments are such examples. To the purpose of supporting the value-adding activities that transform input to output, they are arranged in a business pattern. Goldkuhl (1996) names this Business Action Game Theory. The value-adding activities are performed in order to create high value for the customer (figure 3).

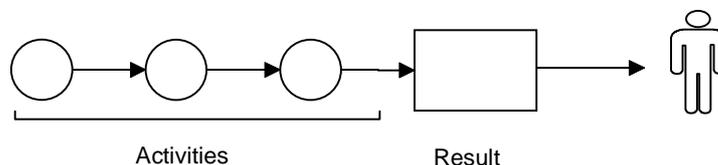


Figure C: Value-adding activities that are performed in order to create high value for the customer

3.1 Important aspects in business process thinking

A *corporation* can be described as a number of coexisting and co-using overlaid *business processes* (see figure 4). The extent of the co-use of the infrastructure of a corporation is

varying in all probability to the type of corporation that is described. The business processes of a service corporation probably utilises the infrastructures to a lower extent than in a manufacturing corporation. The co-use can be regarded at different levels (see section 4.2).

Each business process could be *delimited* in relation to other business processes by *customer relation* and *internal handling*. The delimitation is dependent on the *type of corporation*. It is common that business processes are expressed as instruments to achieve the main goal of a corporation. The corporation is a *supplier* to the *customer*.

Each business process consists of a *primary subprocess* and possible *supporting subprocesses*. The range of the primary subprocess is determined by the *generic business framework* (Goldkuhl, 1996); see section 3.2 below. The primary subprocess consists of activities concerning the interchange relation between a supplier and a customer that are performed when doing business. The characteristics of the subprocesses that are supporting the primary subprocess, could be either a **condition** to be able to perform the primary subprocess or a **consequence** of that a primary subprocess is performed. Each subprocess (primary or supporting) is built by several *activity bricks*, which consist of *activities* that are contextually related to each other. Each activity consumes *resources* that could be a part of the *infrastructure* of the corporation. One activity brick could be a component in more than one business process. Figure 4 is a conceptual model which describes important aspects in business process thinking.

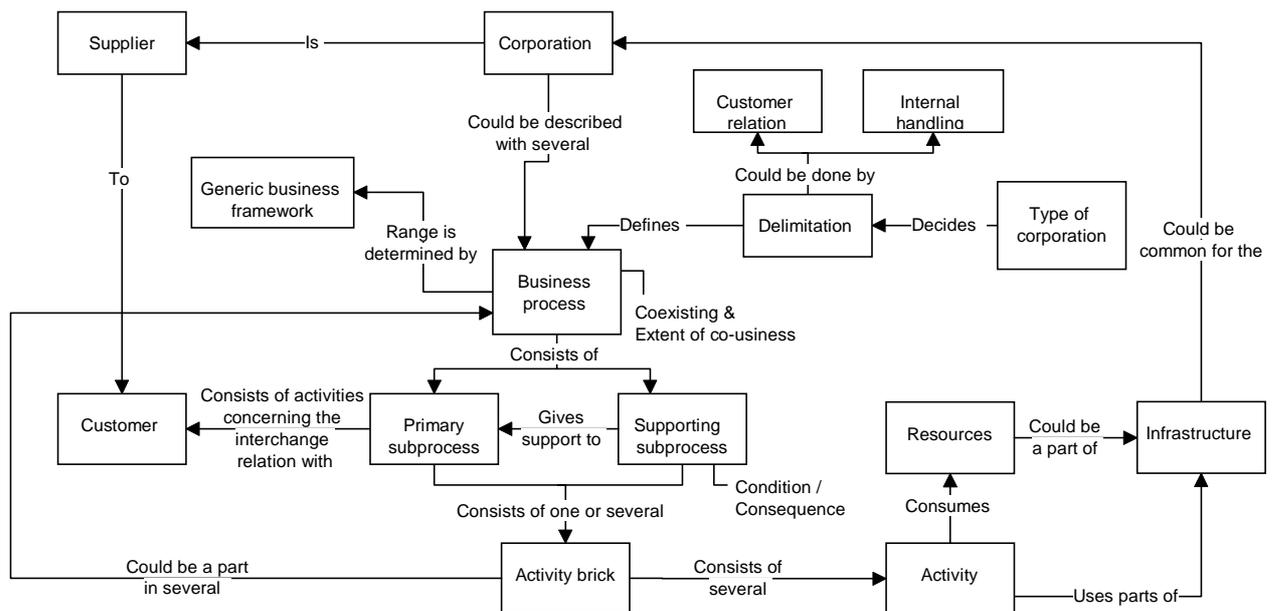


Figure D: Conceptual model describing important aspects in business process thinking

3.2 The business process and its four phases

When business is being done a business transaction is performed. "The business transaction is an interchange process between supplier and customer and it involves creation and sustainment of business relations" (Goldkuhl, 1996). Further Goldkuhl defines different phases in this interchange process:

- Proposal phase

- Commitment (contractual) phase
- Fulfilment phase
- Completion (acceptance/claim) phase

The business logic in the interchange process can be described as follows: The customer has some kind of need and therefore he makes an inquiry to the supplier. The supplier hopefully has the capacity and the know-how to make an offer to the customer, which can result in a customer order. Together, the offer and the order form a contract, which is a mutual commitment. The supplier usually confirms the agreement. A mutual commitment involves delivery from the supplier and payment from the customer. The supplier fulfils his commitment by delivering the product or service to the customer. Finally, when the delivery has reached the customer he fulfils his commitment by paying as agreed. When the supplier has received the payment and the customer is using the delivered product/service satisfaction, from both sides can be reached. The way a corporation makes business is decided by the range and delimitation of the business process. Figure 5 describes the interchange process between a supplier and a customer while doing business.

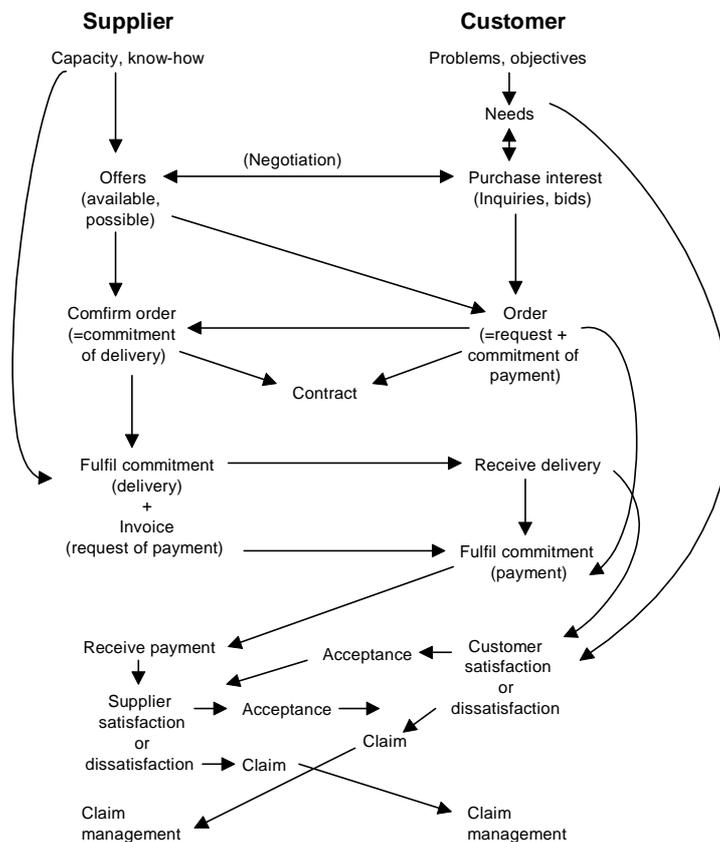


Figure E: Business as Action game - an illustration of the generic business framework (Goldkuhl, 1996)

3.3 The components of the business process

I view a business process as consisting of different activities. To make it possible to regard the business process from a perspicuous level activities are grouped to perspicuous components. I call these components:

- primary subprocess
- supporting subprocesses
- activity bricks

Each business process consists of a primary subprocess and possible supporting subprocesses. The primary subprocess consists of the business logic between a supplier and a specific customer. The supporting subprocess supports the primary subprocess and its characteristics is either a condition or a consequence to the performance of the primary subprocess. The activities, that a support subprocess consists of, are performed for a potential customer.

Each subprocess consists of several activities, a flow of and connections between activities, which are put together in activity bricks. This is done to leave no room for doubt concerning different activities in the flow of the business process on a perspicuous level. The activities in an activity brick are contextually related to each other and are identified by using action diagrams (Goldkuhl, 1993). An activity brick is performed by several actors, who can be members of different organisational functions. Each activity brick could be a component in several business processes.

I have created a process diagram (see figure 6) to make it possible to view business processes from a perspicuous level. Figure 6 is an outline to the construction of the process diagram.

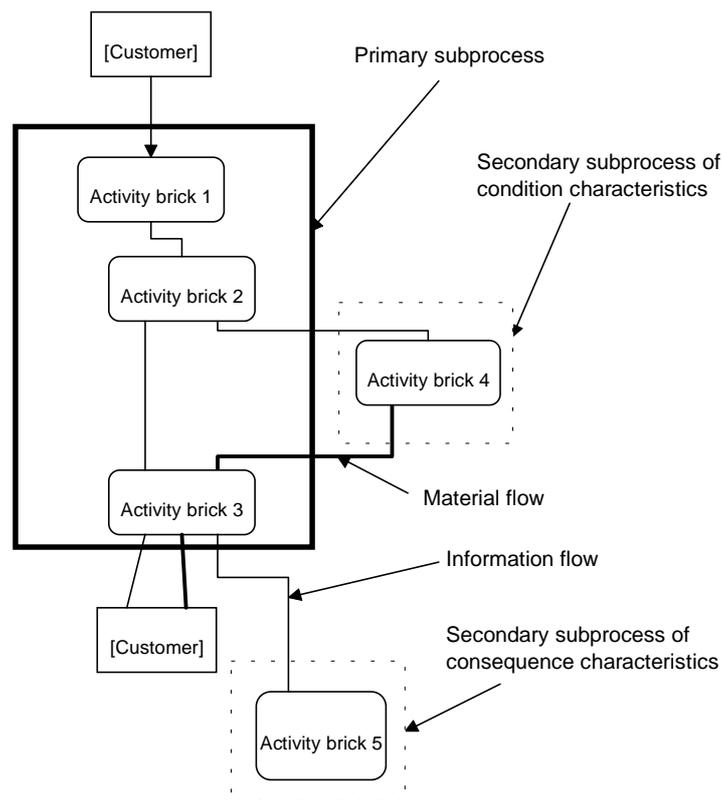


Figure F: Outline to the construction of the process diagram (Lind, 1995bc; in Swedish)

3.4 The overlaid business processes of a corporation

As mentioned earlier a corporation consists of one or many business processes. Each business process describes the interchange process that is performed when business is being done. The customer relationship in combination with internal handling could delimit business processes

from each other within a corporation. A corporation usually has different kinds of relations to different customers. A corporation can for example draw up the general framework for specific customers, where the customer gives a prognosis for the needs. Other customers might merely buy products/services from an assortment which is built for potential customers. These customers have another relation to the corporation. Therefore several business processes could exist within a corporation, i.e. the business processes of a corporation are coexisting.

During a business deal a business flow is executed. Within the frame of the business flow there are activities performed within the supplier's business as well as within the customer's. When business deals are performed different business flows may be run through. Hence there can be a divergence in the business flow within a certain business process. These business flows interconnect. A business flow within a specific business process that seldom co-operate with other business flows could itself form the basis for another business process within the corporation.

In a corporation several business processes exist and co-uses the infrastructure of the corporation. Infrastructures could be:

- divisions and units
- actors
- information systems
- routines
- machinery and equipment

From my standpoint some of the activity bricks and supporting subprocesses could be equal for a variety of several business processes, which results in the business processes being overlaid. Within different business processes the same actors could perform the same activities, but for different purposes. The infrastructure of a corporation is charged when an activity/activity brick/subprocess is performed. Figure 7 describes two overlaid business processes within one corporation. These two are co-using the infrastructure of the corporation (production personnel/machinery, information system supporting the orderprocess and warehouse/storeman). The activity bricks procurement (5), production (3), and delivery (4) are the same for the two processes. In business process A, production (3) is a component in the primary subprocess, and in business process B, it is a component in one of the supporting subprocesses. In both A and B delivery (4) is a component in their primary subprocess and procurement (5) is a component in their supporting subprocesses.

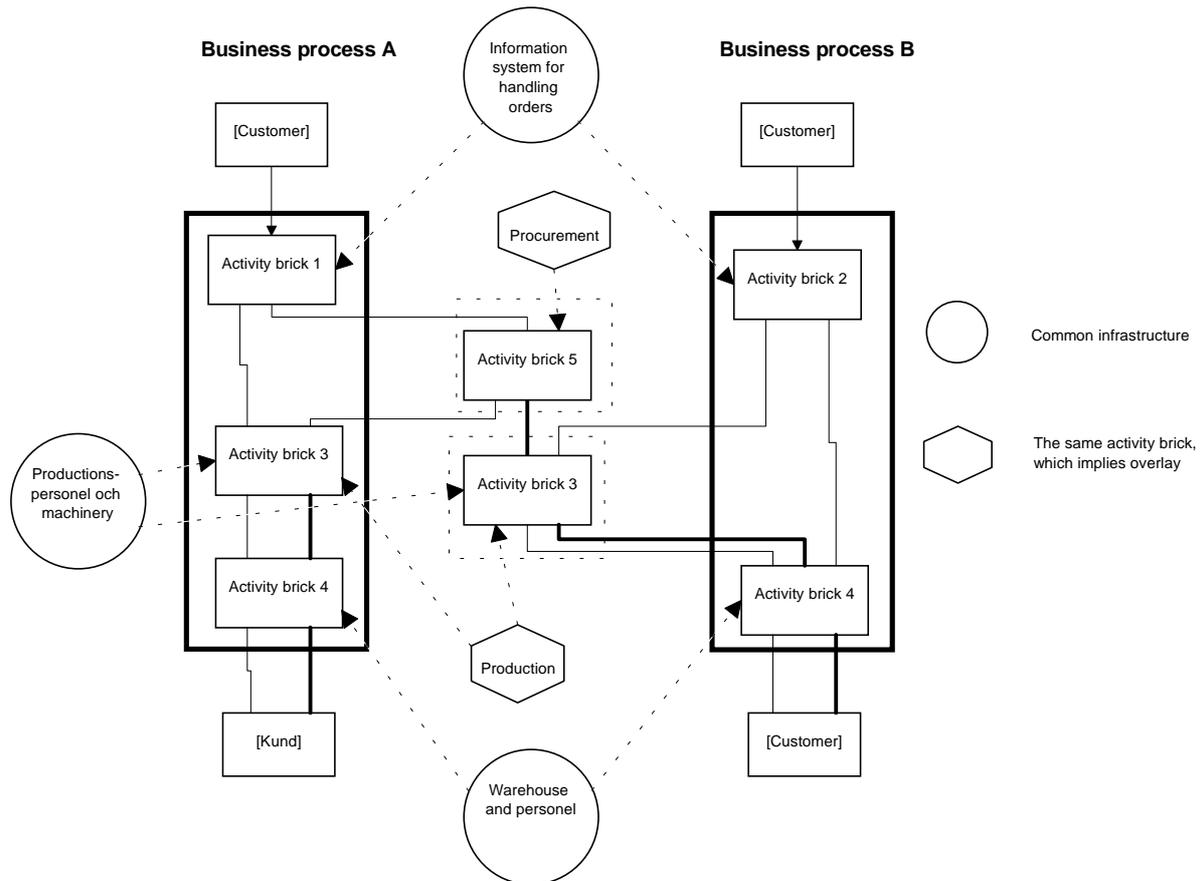


Figure G: Two overlaid business processes that are co-using the infrastructure of a corporation

In other words the business processes are overlaid in the sense that they are both coexisting and co-using the infrastructure of a corporation.

4 Business process thinking in practice

In the case study a change analysis was performed. The framework for a change analysis consists of activities for establishing prerequisites and diagnosing a corporation. To ensure that a corporation is developed towards its main goal it also consists of activities for generating and evaluating measurements.

At Structo the business process thinking was implicit. Structo, as a corporation, focuses on the customer and make a lot of effort on quality development. Attempts have been made to measure customer satisfaction and describe the production with flow charts, but there is a need to get a more comprehensive view concerning the business processes of the corporation. This involves production flow as well as administrative flow. Structo needed to form a clear concept of which activities that were value-adders to the result, aimed for the external customer.

One of the activities when a corporation is diagnosed is reconstruction. In the case study reconstruction of the business logic was performed. During the diagnosis the goals and instruments for achieving those goals got clarified. This showed that the business processes

were instruments for reaching the main goal of the corporation. The existing praxis got reconstructed at two levels:

- At the activity level by using action diagrams.
- At the perspicuous level by using process diagrams based on activities and their connections from the action diagrams.

I am convinced there is often uncertainty concerning corporation’s main goal and the instruments for reaching the goal. The instruments are seldom governed. Therefore one possible way to identify the business processes of a corporation is to reconstruct already existing business logic.

4.1 Coexisting business processes

In the case study several of the business processes of the corporation were reconstructed. These covered 90 % of Structo’s operations. The reconstructed business processes were:

- *special production customer*, which consists of activities to produce tailor-made products.
- *standard stock customer*, which consists of activities that are performed when the corporation is selling products from the standard stock.
- *framework customer*, which consists of activities that are performed when the customer makes a prognosis of his orders.
- *whole trading customer*, which consists of activities that are performed when Structo’s supplier delivers products directly to it’s customer.
- *framework - whole trading*, which consists of activities that are performed when the customer makes a prognosis of his whole trading orders.
- *framework - half trading*, which consists of activities that are performed when refined products are delivered to Structo before they are delivered to the customer. The goal of this business process is to store bulk products that are cut when the products are delivered to the customer. The customer makes a prognosis of his orders.

Table 1 shows the delimitation of the business processes in the case study.

Customer relation / internal handling	Procurement (raw material)	Whole trading	Half trading
Special production (project based development)	Special production customer	---	---
Standard stock sales	Standard stock customer	Whole trading	Missing, but is being developed
Framework	Framework customer	Framework - whole trading	Framework - half trading

Table A: The delimitation of the business processes in the case study.

4.1.1 The business process "standard stock customer"

The process diagram in appendix one shows the business process "standard stock customer". The diagram exclude which activities the activity bricks consist of, i.e. the detail level only runs down to activity bricks. The purpose with a process diagram is to point out the activity bricks during a business process realisation.

The business process is initialised when the customer asks for an offer from the corporation. This offer can result in an order. Alternatively, the customer is already one of Structo's customer and therefore an order could be made directly without asking for an offer. The acknowledgement of the order obligates Structo to fulfil its commitment to the customer.

After an agreement the customer's order is picked from the standard stock and cut according to the agreement. The order ends up in the delivery stock and an invoice is written. The order will be transported from the delivery stock with a suitable means of transportation to the customer.

The primary subprocess, as appendix one implies, consists of activities that are performed for a specific customer. The activities cover the process from offer to delivery. One prerequisite for picking from the standard stock is to produce products for the standard stock. The standard stock is supplied by controlling the need for provision and deliveries. This takes place in a supporting subprocess, which is a prerequisite for the primary subprocess. When the stock level is too low it needs to be supplied with products from the production unit. The planning takes place in another supporting subprocess. The production unit has a need of raw material, which is purchased from external suppliers.

When a business is closed the invoice aimed for the customer is looked after in order to make sure that payment is made. It is an assignment for a supporting subprocess with consequence characteristics. Other subprocesses with the similar characteristics are dealing with suppliers, invoices and claims.

4.1.2 The business process "special production customer"

The process diagram in appendix two shows the business process "special production customer". The business process can be initialised by the customer asking for an offer from Structo, where Structo together with the customer uses an inquiry procedure to look through the customer's demands. The inquiry is a detailed specification of demands, which later on will be used in the production process. Another way in which the business process can be initialised is when the customer order products earlier produced in this business process. In this case the inquiry procedure is excluded. The customer directly makes an order, that results in an acknowledgement of order.

In order for Structo to fulfil its commitment the production has to be planned to be able to refine the products that are supposed to be delivered. As in the business process "standard stock customer" the order ends up in the delivery stock. It will be transported with a suitable means of transportation to the customer and an invoice is written and mailed to the customer.

Different raw materials have to be purchased in order to perform the primary subprocess. The production unit does the materials refinement. Dealing with customer's and external supplier's invoices as well as claims are consequences of the performance from the primary subprocess in the business process.

4.2 Co-using business processes

Both of the process diagrams show that some of the activity bricks in the business processes are the same, but they are performed in different contexts. One example of such an activity brick is delivery, which consists of activities to produce invoices and deliver products to the customer. There is no reason to regard all activity bricks in the business process as unique, but the composition of activity bricks in subprocesses of each business process is unique. A

business process is built up by a number of activity bricks, where one or a couple of these are unique for that business process. The inquiry process in the business process "direct production customer" and picking/cutting process in the business process "standard stock customer" are examples of unique activity bricks.

In other words: some activity bricks are performed in several business processes but for different purposes. Each activity brick consists of different activities that need resources from the infrastructure of the corporation. Delivery consumes personnel resources. When the delivery is performed an information system is used to produce invoices. The information system and personnel are common infrastructures of the corporation.

Even supporting subprocesses are performed with different purposes in different business processes. "Purchase and stocking of materials", a supporting subprocess, indirectly belongs to a certain business process, but supports the primary subprocesses in both "direct production customer" and "standard stock customer".

Table two shows common and unique activity bricks in both business processes. X(P) shows that the activity brick is a part of the primary subprocess. X(Sp) shows that the activity brick is a part of a supporting subprocess, which is a prerequisite for the primary subprocess. X(Sc) means that the activity brick is a part of a supporting subprocess, which is performed as a consequence of the primary subprocess. An activity brick can be part of a primary subprocess as well as part of a supporting subprocess. Production is an example of an activity brick's participation in both subprocesses.

<i>Activity brick</i>	<i>Special production customer</i>	<i>Standard stock customer</i>
Proposal handling	X(P)	X(P)
Inquiry handling	X(P)	
Order handling	X(P)	X(P)
Stock control		X(Sp)
Stock-keeping		X(Sp)
Planning of production	X(P)	X(Sp)
Production	X(P)	X(Sp)
Purchase (raw materials)	X(Sp)	X(Sp)
Stock-keeping (raw materials)	X(Sp)	X(Sp)
Picking / cutting from standard stock		X(P)
Delivery	X(P)	X(P)
Handling of invoices to customers	X(Sc)	X(Sc)
Handling of invoices from external suppliers	X(Sc)	X(Sc)
Claim management	X(Sc)	X(Sc)

Table B: Common and unique activity bricks in the two business processes

The business processes of a corporation are co-using the infrastructure at different levels (see appendices):

- Supporting subprocess level, implying that different supporting subprocesses can be found in different business processes. An example is "Purchase and stock-keeping of raw materials".
- Activity brick level, implying that different activity bricks can be found in different business processes. Examples are delivery and production.
- Activity level, implying that activities consume resources and charge the infrastructure of a corporation.

4.3 The components of the business process

4.3.1 *Primary and supporting subprocesses*

During a business process execution activities are found in both kinds of subprocesses. To be able to get a perspicuous view of which activities a business process consists of, they are grouped into activity bricks. You have to decide whether the activity bricks are a part of a primary or a supporting subprocess. The primary subprocess describes the interchange relation between customer and supplier according to the generic business framework. Furthermore it consists of activities supporting a "customer to customer" process, i.e. from offer to delivery. The criteria for placing an activity brick in a primary subprocess is that performing the activity brick will directly lead to increased value for a specific customer.

A primary subprocess should make it possible to follow one specific order from offer to delivery. An activity brick that supports the primary subprocess is placed in a supporting subprocess. The supporting subprocesses contribute value for potential customers, i.e. indirect value for customers. It is impossible to follow a specific customer when these are performed. Production for "standard stock customer" is one example of such subprocess. It is a necessity to keep products in stock for potential customers.

Production is a component of the two business processes (see appendices). In "standard stock customer" the activity brick is a part of a supporting subprocess and in "direct production customer" it is a part of the primary subprocess. The reason for this is that in the latter business process, production is performed for a specific customer.

Another example, of placing the same activity brick in two business process, is handling customer invoices. This activity brick is placed as a supporting subprocess with consequence characteristics. This is accomplished because handling customer invoices is a consequence of business performance. Claim management is unwanted, but it is a feasible outcome of doing business. Therefore it is important to take this in to consideration when studying business processes. When placing activity bricks as components in different subprocesses I recommend that the purpose of the business process is estimated, i.e. how the business process contributes to the main goal of the business. The purpose of the "standard stock customer" is to deliver products from standard stock with short delivery times. You start with placing the activity bricks in the primary subprocess and then consider the prerequisites needed to perform the primary part of the business process. The next step is to take in to consideration what consequences different subprocesses might have.

4.3.2 *Activity bricks*

The activities in a business process are contextually related to eachother during an activity analysis (see Lind 1995bc). This context could be divided into different parts, where each part is a group of activities as well as an activity brick.

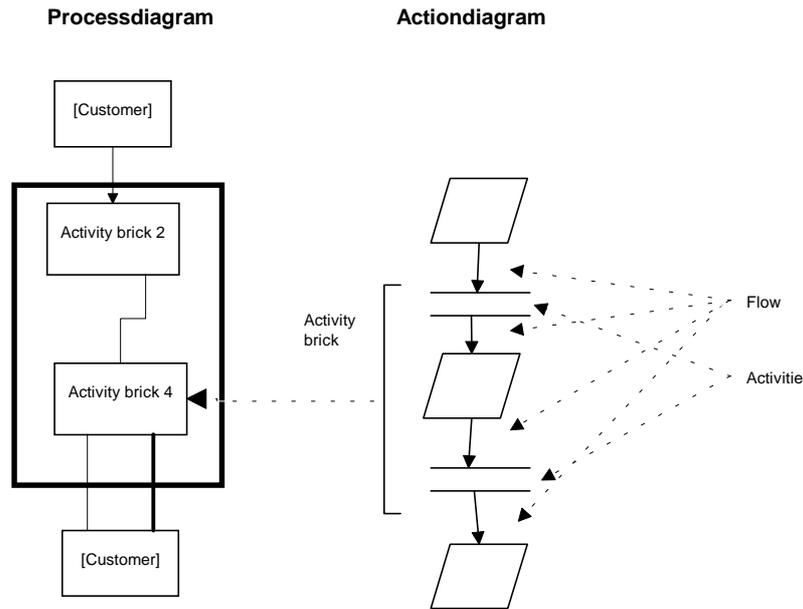


Figure H: Relation between contextually related activities and activity bricks

The ambition in the case study was to let the delimitation of an activity brick, in the primary subprocess, form a collection of activities within the frame of each phase according to the business generic framework. In some situations there is a need of specifying activity bricks on a lower level of detail in order to verify differences between business processes. Depending on the purpose with the description the number of activity bricks will differ in a primary subprocess.

Activity bricks in supporting subprocesses are delimited according to business logical criterias, in order to create an overview of the activities in the subprocesses. A business logical criteria can not be generalised and it all depends on the actual situation. In the case study "Purchase - Raw material" is an activity brick that is a part of a supporting subprocess in several business processes. Performance of this activity brick is obvious to make the production in some business processes work.

4.3.3 Different flows in one business process

As the process diagrams indicate (see appendices), different flows exist within one business process. An example of different flows in the business process "standard stock customer" is that the customer sometimes asks for an offer; otherwise a contract can be signed directly.

The business process "special production customer" also consists of different flows. When the customer asks for an offer an inquiry procedure is necessary, which implies a variant of the total business flow in the business process. Another kind of business flow is when a customer places an order without going through offer and inquiry procedures.

When the difference between business flows is too big, it is possible to regard one of these flows as a separate business process. The case study shows that small variations from the main flow is not enough to make a separation in order to create a new business process. The question is if internal handling or customer relation should have the highest priority to delimit the business process. This must be considered from cases to cases. In the case study customer relation had the highest priority.

5 Conclusions

From my point of view the process thinking implementation in a corporation means that the corporation is regarded as a wholeness. From a business process perspective activities and relations between them are identified. The range of the business process is determined by all the activities that take place during a business deal. The business process can be regarded either as a "customer to customer" process or a "production" process. In both cases a primary process is in focus. The primary process consists of a number of subprocesses which are performed in a sequence (see figure 9).

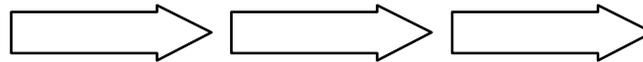


Figure I: Subprocesses in sequence

Further, I regard a business process as a "customer to customer" process. As a complement of considering subprocesses in a sequence I divide the subprocesses into two parts, i.e. primary and supporting subprocesses. It is done in order to identify the activities that increase direct value for the customer and the activities that are supporting these. The business process consists of the activities from offer to satisfaction according to the business generic framework. The primary subprocess consists of the interchange relation between customer and supplier. On the other hand the supporting subprocesses give support to the primary subprocess. The subprocesses in the two approaches ("customer to customer" process and "production" process) are a mixture of primary and supporting subprocesses. The two approaches are equivalent as long as the performance of the subprocesses directly or indirectly contributes to the value for the customer.

Corporations of today are going towards a customer oriented society, where focus on the customer has to be applied. From my perspective a corporation consists of several overlaid business processes (variant processes), consisting of different aspects of doing business (see figure 10). In order to ensure that high value for the customer is created, activities within business processes are identified. A customer-focused thinking implies that the customer is in focus, but concurrently high profitability is normally a preference.

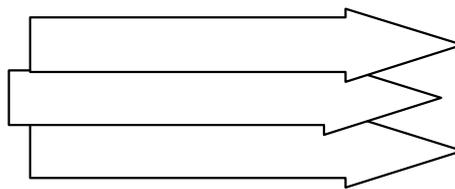


Figure J: Overlaid business processes, i.e. different variant processes

A corporation consists of several overlaid business processes and these coexist in a corporation and co-use the infrastructure of the corporation. The realisation of the business processes is an instrument to strive towards the main goal of a corporation. In the case study customer relations were primarily focused. Secondly internal handling was treated. The divergent customer relations were important instruments to achieve the main goal of Structo. Different customer relations at Structo were for example, standard stock sales and special production of customer adapted products. These two business processes were coexisting at Structo.

The consequence of regarding a corporation as consisting of several business processes is that the same components (activity bricks) are performed in different contexts. Therefore it is necessary to be sure in what purpose each activity brick is performed. Is the activity brick a part of the primary subprocess or a part of a supporting subprocess?

In this report a complementary perspective on business processes is presented, which implies the following:

- A corporation can be regarded as consisting of several business processes
- The business process co-uses the infrastructure of a corporation
- The business processes are overlaid, i.e. consist of different aspects of how business is performed.

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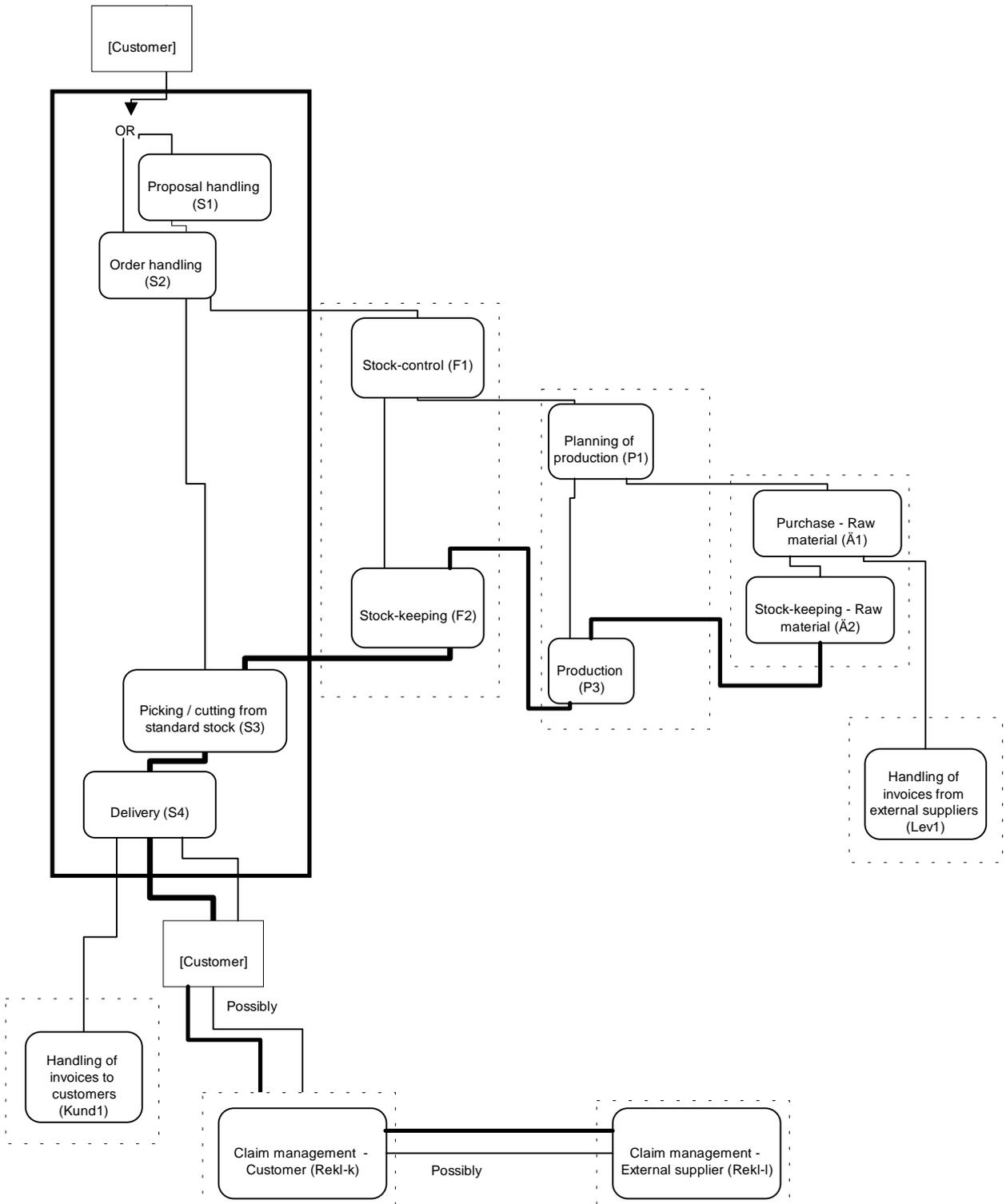
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Appendices

Appendix one: Process diagram describing standard stock customer

Appendix two: Process diagram describing special production customer

PROCESS DIAGRAM				
Prepared by:	Date	Version	Referens	Page
ML, JW	1995-02-19	1	Pgstand	1
Concerning: Business process: Standard Stock Customer				<i>Appendix one</i>



PROCESS DIAGRAM				
Prepared by:	Date	Version	Referens	Page
ML, JW	1995-02-19	1	Pgdirpr	1
Concerning: Business process: Special production Customer				<i>Appendix two</i>

