



Determination of Business Process Types Founded in Transformation and Coordination

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Abstract

Organisational action is performed by someone for someone. Thereby it has become popular to use different customer-oriented approaches focusing on business processes for studying organisational action. In order to address the aspects framed by a certain business process, different prefixes have evolved for characterising a certain business process type. There is however a lack of criteria for distinguishing such business process types. In this paper a notion for conceiving business processes founded in the transformative and coordinative dimensions is used for deriving process types in work practices. By characterising actions performed to produce and deliver results of a work practice, different business process types can be identified. These different business process types are *delivery processes*, *providing processes* and *condition-creating processes*. Criteria used for distinguishing these business process types, i.e. sub practices, are: for whom the action is performed (potential or particular client) and the type of action (operative or development-oriented). A case study performed at a mail order company is used to illustrate the different business process types.

Keywords: Business process, Mail order, Business process type, Transformation, Coordination

1 Introduction

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

The industrial view on business processes is still dominant, where input (raw material) is transformed into output (finished products) (e.g. Hammer, 1990; Davenport, 1993). This is not the only possible view on business processes as Keen & Knapp (1996) have noted. They have contrasted two different views on business processes; "process as workflow" vs "process as the coordination of work" (c.f. also Ljungberg, 1997). The coordination view on business processes is mainly based on the lan-

guage/action perspective (Winograd & Flores, 1986) where coordination, agreements and commitments are emphasized.

One important part of business development is business modelling. In the information systems field, business modelling has been a highly debated issue for a long time. In the late sixties Börje Langefors identified the need for performing an object system analysis (Langefors, 1973). This was driven by the fact that a thorough understanding of the business, i.e. the object, is needed in order to understand the business' support of information systems. Langefors (ibid.) claimed that businesses are imperceivable systems, but by regarding the business as a system with sub-systems on different levels the observer can perceive the imperceivable system.

During business modelling it is thus important to be able to describe the business on different levels (c.f. also Gale & Eldred, 1996). It has become popular to adopt a business process perspective during business modelling. Business processes are often divided into different types in order to emphasise the different kinds of work performed. Examples of such types are *core* processes, *support* processes, *primary* processes and *management* processes (c.f. Davenport, 1993; Harrington, 1991; Rummler & Brache, 1995). A business process type is an expression of which activities/actions that should be framed by the business process type. The prefix expressing the type of process is used for directing attendance to certain aspects of the work. One can, however, question whether such divisions of business processes are fruitful. Which activities should be placed in which process type? How can it be determined whether something is core or not?

In a practical business modelling situation there is a need for being efficient. Business modelling is about stating questions and documenting answers in business models. In such situations one wants to pinpoint relevant questions on a holistic level and thereby work top-down. This however requires a solid foundation for different levels of business process concepts. Putting a business process view in relation to Langefors' systems view one could say that business processes are more focused and delimited to organisational work than the systems view. The systems view is supposed to be applicable in many different settings.

The notion of business processes in existing literature relies on insufficient theoretical grounds for the purpose of identifying different business process *types*. The purpose of this paper is to challenge the traditional division of business processes into different types. An alternative notion, taking both the transformative and coordinative dimensions into consideration, will be given. This work is driven by the research question of "how to understand organisational work using the notion of business processes".

The empirical base for the paper will be a business analysis performed in a mail order setting. During this case study, in which an action research approach was used, different aspects of the practice were being investigated in order to arrive at an understanding of the mail order company's business processes. This case will be used as an example of how the work of such complex practice could be conceptualised in different business process types.

In the next section the discussion of existing notions of business processes will be deepened. Following that the notion of social action and work practices will be elaborated in order to present a comprehensive view of what to direct attendance to when the work of one or several organisations is conceptualised as business processes. Then, a synthesis, taking the strengths from both the transformative and the

coordinative view on business processes will be presented. Following that, some basic characteristics of the mail order company will be presented by using some characteristics from the notion of work practices. The presentation of the characteristics of the mail order company is followed by an argumentation for dividing the work practice into different process types based on the synthesis. The different process types will be exemplified by presenting the business processes of the mail order company.

2 Different ways of conceiving Business Processes

2.1 Business processes as transformations

Business processes consist of transformations of inputs to outputs. This view is expressed in a classical definition of business processes given by Hammer & Champy (1993, p 35): “a collection of activities that takes one or more input and creates an output that is of value to the customer”. Other similar definitions are made by Davenport (1993), Johansson et al (1993) and Rummler & Brache (1995). These definitions build on a value-adding perspective (Porter, 1985) where every activity ideally is considered to contribute more value for the customer. Typically this is an industrial perspective; in the workflow input is transformed through some kind of refinement to output (Harrington, 1991). The two schools of thought, BPR and TQM, contributed to this transformative process view. During the 90’s a business process view became the ontological backbone for many change methods; old ones as well as new methods (e.g. Born, 1994; Ould, 1995; Österle, 1995; Jacka & Keller, 2002; Aalst & van Hee, 2004). Many new approaches and methods were launched based on the business process concept.

Focusing on business processes is an expression for a horizontal view on organisations emphasising operational activities – how things are done instead of who decides according to the organisational chart. Davenport (1993, p 5) expresses it in this way: “a process view of the business ... represents a revolutionary change in perspective: it amounts to turning the organization on its head or at least on its side”. Turning the organisation on its side means precisely to change the perspective from the hierarchical (vertical) view to the horizontal process view. Focusing on business processes was thus a move away from the traditional way of viewing organisation as a hierarchical structure. A main criticism, from advocates of thinking in terms of business processes, was that the traditional hierarchical view on organisations, embodied in the organisational chart, disregarded the customers.

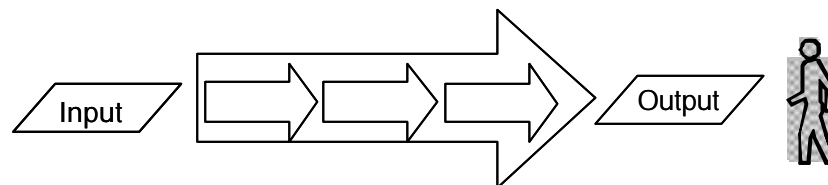


Figure 1: Business process as a sequential transformation of input to output (Lind & Goldkuhl, 2006a)

The business process view emphasizes the ordering of activities, the workflow. A business process is often seen to consist of sequential sub-processes or activities. It emphasizes also the customers as the main receivers of the output and that the cus-

tomers should appropriate a high *value* to the output. Confer figure 1 for a simple and prototypical illustration of a business process from the transformative perspective.

There are many aspects of organisations that are disregarded in a transformative business process view. As said above, issues of power and control are usually not in focus when adopting a business process focus. One exception is Harmon (2003) who tries to integrate the process view with a traditional systems view on organisations. Even if there are certain merits in the workflow view, this can be challenged as a too restricted view that focuses exclusively on transformations.

2.2 Business processes as Coordination

The transformative view on business processes is a powerful template for analysis. But what happens if this template is too restrictive? Keen (1997 p 17) gives warnings for the use of such a template: “The process-as-workflow definition excludes many processes that have no clear inputs, flows and outputs.” Keen emphasises in his criticism that processes involve coordination. This follows from a basic view on organisations according to which they essentially are created through communicative action (e.g. Winograd & Flores, 1986; Taylor & Van Every, 2000). Business processes are mainly coordination processes in this communicative view. Business processes arise through requests, offers, agreements and commitments and other communicative acts. The theoretical inspiration comes mainly from speech act theory (Austin, 1962; Searle, 1969; Habermas, 1984). The transformative view on business processes is rejected, and as an alternative a communicative and coordinative view has been formulated. This view is based on the idea that communication is not just transfer of information. When you communicate you also act.

The work by Flores and Ludlow (Flores & Ludlow, 1980) has been the initial impetus to a speech act-based conceptualisation of business. They propose to perceive businesses as networks of inter-related commitments created by directives, commissives, assertives and declaratives. Winograd & Flores (1986) built on this idea and introduced a conversation-for-action schema (CFA), which regards the essentials of the business as patterns of inter-related speech acts for arriving at successful conversations. A successful conversation covers a number of state changes; someone (A) states a request, someone else (B) makes a promise and then reports completion, which in the end A confirms.

There are several business process methods, which have been launched, based on this communicative perspective or, as it is sometimes called, the “language action perspective” (LAP). Action Workflow (Medina-Mora et al, 1992) and DEMO (Dietz, 1999) are two well-known examples. Action Workflow describes the business process as a loop consisting of four generic phases: 1. Preparation, 2. Negotiation, 3. Performance, 4. Acceptance (e.g. Medina-Mora et al, 1992). A customer and a performer are communicating in order to come to an agreement of what the performer shall do in favour of the customer (phases 1 and 2) and after the performance they communicate in order to come to an agreement on what has been done (phases 3 and 4). Confer figure 2 for the Action Workflow loop. The same is expressed in the DEMO approach by the actagenic phase (an agreement about what to do) and the factagenic phase (an agreement about what has been done); cf e.g. Dietz (1999).

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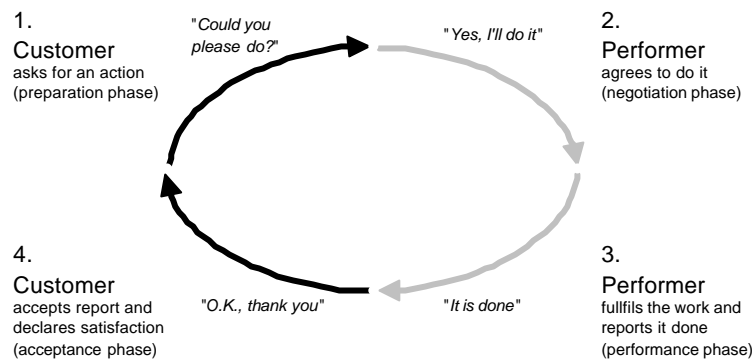


Figure 2: The Action Workflow loop (Medina-Mora et al, 1992)

The significance of these coordinative approaches is the identification of generic communicative acts in business processes. Business processes are only performed by virtue of established agreements and commitments. Such agreements are recognised as having a basic governing force in the performance of business.

The coordinative approaches have identified blind spots in transformative approaches, i.e. their lack of explicit recognition of different communicative acts governing business processes. Unfortunately, however, these LAP approaches seem to overemphasise communication and coordination at the expense of transformative and material actions.

One thing that transformative and coordinative process approaches have in common is that they both take a strict horizontal view on organisations. Vertical aspects such as power and authority are usually disregarded.

2.3 Different business process types

Authors advocating a transformational view on business processes (e.g. Davenport, 1993; Harrington, 1991; Rummler & Brache, 1995) identify different types of business processes. These different types have their roots in Porter's (1985) value chain, in which a distinction between primary and supporting activities is made. Examples of such types of business processes are identified in table 1 below.

Table 1: Different types of business processes according to the transformative view

Author	The different business process types
Davenport (1993)	Customer-facing processes Product and service development processes Delivery processes Management processes
Harrington (1991)	Production processes Business processes
Rummler & Brache (1995)	Primary processes Support processes Management processes

According to the communicative view on business processes, different types of processes are not distinguished. It is important to note, however, that those business processes according to this view focus on interaction with a *particular* customer. One can therefore state that the communicative view only takes one type of business process into consideration.

A number of uncertainties can therefore be identified:

- Which activities should be included in the different types of business processes? (Which activities constitute a certain type of business process?)
- Are not some of the examples of the different process types part of each other?
- How about work that is performed for potential customers? Which process types cover such work?

Apparently there is a lack of criteria for business process delimitation. This has also been stated by Davenport (1993) who claims that

Considerable controversy revolves around the number of processes appropriate to a given organization. The difficulty derives from the fact that processes are almost infinitely divisible; the activities involved in taking and fulfilling a customer order, for example, can be viewed as one process or hundreds. The 'appropriate' number of processes has been pegged out from two to more than one hundred (ibid, s 27-28).

One can therefore recognise that there is a need for an ontology to understand both coordinative and transformative aspects of practices in order to find criteria for delimiting different business process types.

3 Towards a Synthesis: Conceiving Business Processes as Transformation AND Coordination

The basic unit of analysis for conceiving organisational work is social action. In order to understand business processes there is a need to understand what constitutes such a basic unit. In this section the notion of social action is therefore discussed. Following that, different comprehensive models for conceiving organisations on a more holistic level are dealt with. Social action and one such comprehensive model is used as the basis for forming a synthesis, based on a transformative (as the thesis) and on a coordinative (as the antithesis) view of how to conceive business processes.

3.1 Social action as the basic unit of analysis

In order to derive a notion of business processes there is a need to go back to the foundations of business processes and organisational work. The basic unit of analysis of business processes is action. An action is a purposeful and meaningful behaviour of a human being. A human being intervenes in the world in order to create some differences. An important distinction is made between the result and the effects of the action (von Wright, 1971). The action result lies within the range of the actor and the

action effects may arise as consequences outside the control of the actor. An action is performed in the present based on a history and aims for the future (Goldkuhl & Röstlinger, 2002). A social action is an action oriented towards other persons (Weber, 1978). The action can be a communicative act, e.g. someone saying something to another person, or a material act. Material actions count as social actions if they are directed to other persons (Goldkuhl, 2001; Goldkuhl & Röstlinger, 2002). Actor relationships between the intervening actor and the recipient are established through social actions (Habermas, 1984).

An organisation consists of humans, artefacts and other resources, and actions performed. Humans (often supported by artefacts) perform action in the name of the organisation (Ahrne, 1994; Taylor, 1993). Actions are performed within the organisation – internal acts – and there are also external acts towards other organisations (e.g. customers or suppliers). Humans act in order to achieve ends (von Wright, 1971). Human action often aims at making material changes. Humans do however not only act in the material world – they also act communicatively towards other humans. Austin (1962) and Searle (1969) hold that to communicate is also to act. Human action is about making a difference, where such difference can have impact in the social world as well as in the material world.

A generic model of social action including both communicative and material acts is presented by Goldkuhl (2001) and Goldkuhl & Röstlinger (2002). E.g. an order from a customer to a supplier is a communicative act. The delivery of goods from the supplier to the customer is a material act. Both actions are performed by one business party (an "interventionist") addressed to the other party (the recipient). Since they are actions directed from one actor towards another actor they must both be considered as social actions. Language is not the only medium for interacting with other people. The delivery of a product to a customer is not only to be seen as a change of place of some material stuff. In this context it must also be considered as a fulfilment of a request and a promise made earlier. Actions are often multi-functional. One example of multi-functionality is that a customer order both represents a *request* to the supplier to deliver something and a *commitment* of paying for the delivery. There also exists a duality of actions. The performer of an act (in an organisational context) both acts on behalf of himself and on behalf of the organisation that the performer represents. Further, acts are multi-consequential. This means that a certain act can trigger several acts. Since there exists a duality of acts and since these are multi-consequential one can distinguish between inter-organisational acts, i.e. directed towards a party in another organisation, and intra-organisational acts.

3.2 Understanding Organisational Work: The Notion of Work Practices

Some researchers present different kinds of generic models for developing comprehensive knowledge about organisations. Examples of such models are CATWOE (Checkland, 1981), Activity theory (Engeström, 1991) and Theory of Practice (ToP) (Goldkuhl & Röstlinger, 2002). ToP is a theory that regards the work of one or several organisations as a work practice. This theory, whose core is a generic, contextual and relational model, for characterisation of work practices, is built from four basic categories (ibid). These are *actors in roles*, *actions*, *action objects*, and *relationships between actors/roles*. Work practices need to be co-ordinated based on different kinds of assignments. Organisations get their legitimacy from the products offered to, deliv-

ered to and utilised by its clients. Thereby a focus on inter-linked value-adding activities is highly relevant but such a one-sided comprehension of organisational work is not enough during business development.

These categories are derived from the generic model of social action (see section 3.1). A work practice is however a holistic concept for understanding the prerequisites and the actions for creating different results. Practice is a notion which permits us to shift between different levels of abstraction; between the wholeness of a practice and different parts of it and also between different contexts of the practice (Goldkuhl & Röstlinger, 2002). A practice can be seen as a company, a part of a company, several companies, some parts of several companies or some other meaningful unit of activities. A practice is defined in the following way:

A practice means that some actor(s) – based on assignments from some actor(s) – makes something in favour of some actor(s), and sometimes against some actor(s), and this acting is based on material, immaterial and financial conditions and a work practice ability which is established and can continuously be changed (Goldkuhl & Röstlinger, 2002).

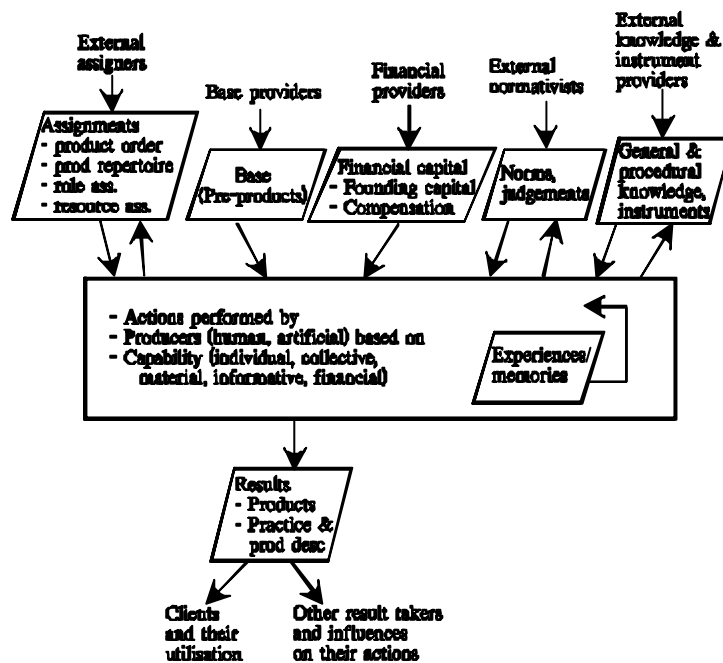


Figure 3: A generic model of work practices (ToP model) (Goldkuhl & Röstlinger, 2002)

This definition guides the construction of a generic model (see figure 1), the ToP-model (Theory of Practice) of organisations as practice systems. This generic model both emphasises the *transformation* of raw material to finished products and the different assignments for *co-ordinating* the creation of value for clients. For further discussions about the categories used, confer Goldkuhl & Röstlinger (2002). The fact that many actors are involved in the creation of value for the clients gives rise to a need for co-ordination. According to Goldkuhl & Röstlinger (ibid) organisations are

constituted and established through communication, they exist through recurrent patterns of actions and through multi-action and multi-agent constellations.

3.3 The synthesis: A further developed notion of business processes

The two views on business processes, i.e. the transformative and the coordinative, are in conflict with each other (Lind, 2002). A notion of processes used for developing IS needs to be based upon an understanding of how communication is performed within and between organizations. There is however also a need to understand the transformation performed by actors in the organization. It is therefore not possible to reduce our understanding of an organization to just communicative acts or material acts. We therefore need to take characteristics of both the thesis (transformation) and the antithesis (coordination) into consideration when a notion of business processes for IS is put forward. This is in line with the notion of social action (Goldkuhl and Röstlinger, 2002). We need to base our understanding on social action (Goldkuhl & Röstlinger, 2002), which has the consequence that transformative aspects of processes need to be regarded from an assignment point of view. Assignments are agreed upon, fulfilled and concluded through communicative and material acts. Co-ordination is many times based on communication (Lind & Goldkuhl, 2002). The transformation of basis (input) to results (output) is part of the fulfilment of the assignment. Assignment is regarded as a basic coordination mechanism. This synthesis is depicted in the figure 4 below.

During the knowledge creation, the contradictions between the transformative (the thesis) and the coordinative (the antithesis) view served as a way to direct attention towards essential aspects. These aspects then served as a basis for a thorough analysis of whether to take some parts into consideration in a so-called further developed notion of business processes or not. This further developed notion of business process is to be regarded as a synthesis of the two identified views on businesses. This drove us to search for theoretical foundations for going beyond the existing notions of business processes. The theoretical foundations used were the notion of social action (Goldkuhl & Röstlinger, 2002) and the notion of work practice (Goldkuhl & Röstlinger, 2002). Another driving force for the development of this synthesis were empirical observations obtained in several process modelling seminars.

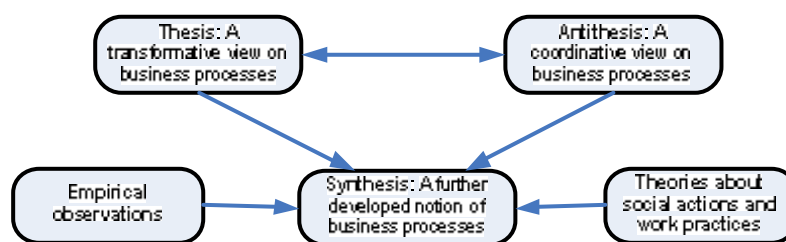


Figure 4: A further developed notion of business processes – a knowledge synthesis (Lind & Goldkuhl, 2006b)

The further developed notion of processes argued for in Lind (2002), based upon a transformative and a coordinative view on processes, empirical observations, and theoretical foundations, implies that (see also figure 5):

- There is a need to separate work performed in the organization for potential and particular clients.
- Processes cannot exclusively be regarded as transformation or coordination; transformation needs to be regarded in an assignment context.
- Processes cannot exclusively be regarded as sequentially related sub-processes; there exist variants of processes consisting of sequentially related sub-processes.
- A one-sided focus on the customer is not enough; there is also a need to focus on suppliers and other parties related to the business.
- An asymmetric view on customer satisfaction is not enough; reciprocal relationships between customer and supplier are a condition to emphasise satisfaction for both parties.

One of the fundamental characteristics of business processes is customer-orientation. It is therefore necessary to understand the ways businesses interact with their customers. In business interaction, business acts (Lind & Goldkuhl, 2001) are directed from the supplier to the customer as well as from the customer to the supplier. These business acts, which are derived from the notion of social action, are parts of the interaction logic between the organisation and its surrounding. Genuine business interaction is about exchanges between supplier and customer. A business process consists of a number of exchanges between the organisation and a specific customer (Goldkuhl, 1998; Lind & Goldkuhl, 2001). The fundamental building block of business processes should thus be social action (Lind, 2002). Social actions are communicative and/or material.

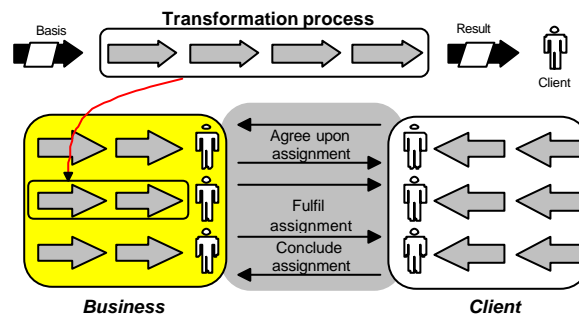


Figure 5: Synthesis: Transformation from an assignment perspective (from Lind, 2002)

Based upon this synthesis we now move on to applying this view on business processes in practice. Through this application we can investigate how business process types could be derived and delineated.

4 The Case: A mail order setting for business process analysis

The mail order tradition in Sweden has been well established for about fifty years. A project has been initiated with a joint working group consisting of members from different mail order companies, researchers and participants from the Swedish mail order association. This working group studies IT and business development in a mail order cluster (c.f. Edström et al, 2003). The focus is both on a holistic level, i.e. the cluster in itself, and on a detailed level, i.e. on each company constituting the cluster. A business analysis focused on business process analysis performed at one mail order company will be used for illustrating how to conduct a determination of different business process types. The term *mail order* is applicable not only to mail, but also to telephone, radio, television, and so on, and not only to order, but also to fulfilment of the product offered (Cohen, 1996).

In this section the mail order setting will be described. This description will be followed by describing knowledge received from a business analysis performed at one particular mail order company within the mail order cluster. The mail order company will be looked upon using some categories in the ToP-model described in section 3.2.

4.1 The mail order setting

The Swedish mail order business has developed from the rich textile tradition in Borås and the surrounding area of Sjuhärad. The abundant supply of fairly cheap textile and clothing in the area and the tradition of the traveling salesman ("knalle") that traveled by foot to see his clients in the area was a commercial tradition of the pre-industrial area. The arrival of large scale manufacturing in the textile industry also inspired other forms of trading such as mail order. The mail order firms sent out their catalogues to a large number of potential customers and bought a large part of their products in the Sjuhärad region. When Swedish textile industry could no longer compete with imports, the mail order firms switched their supply patterns to cheaper suppliers abroad.

The business of a mail order company follows a particular rhythm since the product assortment is season-based. Assortment planning and development is recurrent for each season and serves as a trigger for forecasting, procurement and production of the mail order catalogue. The catalogue remains the dominating medium and sales channel. Nowadays, companies invest heavily in the Internet as a communication medium and sales channel. The product assortment is based on an analysis of potential customer needs and since transportation lead times from suppliers in Asia are substantial, the task of sales forecasting becomes crucial. The success of a mail order company is highly dependent on a successful assortment planning and forecasting of demand. Traditionally mail order companies have products in their own stock before letting the customers placing orders. This also means that traditional mail order companies have advanced routines for logistics and stock handling. The production of mail order catalogues, the procurement and stocking of products are done in parallel.

Customers receive product information and place their orders by mail, telephone or the Internet. It is rare that the mail order customer can negotiate price or other aspects of the customer offer. When the order is placed the mail-order company issues

an order confirmation and reserves the product(s). Based on the order, products will be picked from stock, packed, and then delivered together with a request for payment.

Running a mail order company involves a number of critical success factors. They include a competitive assortment, making forecasts of future demand, making optimal procurement and establishing supply chains to ensure that products arrive at the customers according to the customers' expectations. Success of a mail order company means to manage the handling of the work for potential as well as particular customers in an efficient way. One driving force for such efficiency is the support from integrated information technology. Essential functions and relationships to the environment of a traditional mail order company are presented in figure 6.

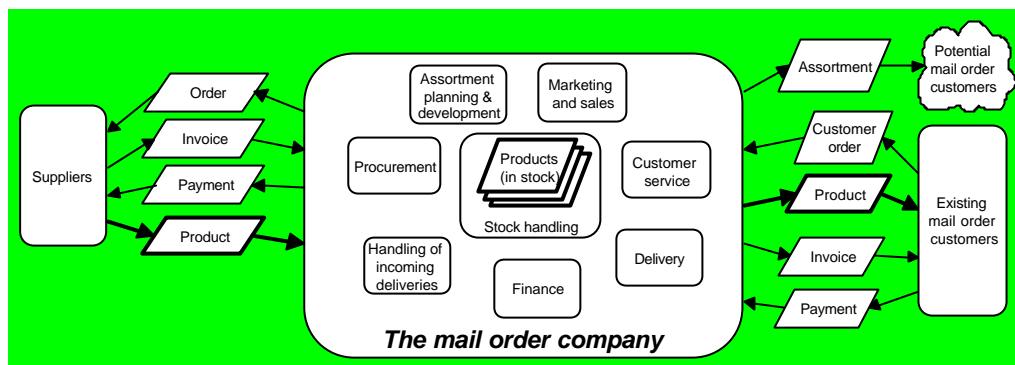


Figure 6: The mail order company and its environment (Edström et al, 2003)

From figure 6 above it can be derived that there are at least two dimensions that are crucial to a mail order business. These two dimensions are the product flow (including information) and the commercial interaction between the mail order company and their customers as well as between the mail order company and their suppliers. Figure 6 illustrates the business of one firm although most of the time business processes cross boundaries to a number of other organisations.

The ordinary mail order company has a large number of customers where each customer order is relatively small. The margins are low, which means that the success of a mail order company depends on large transaction volumes. The low margins have forced the industry to become exceptionally cost efficient. Due to the amount of transactions and the change of the assortment each season the logistics become complicated. To summarise, important characteristics of a mail order company are that it:

- Handles seasonal products
- Issues standardised offers
- Is customer intensive
- Is dependent on making good forecasts
- Has long planning cycles
- Has an irregular flow of customer orders

- Has a complicated procurement mechanism
- Performs multiple procurements per season
- Uses multi-channels for receiving customer orders
- Has advanced procedures for handling returned goods

All these mail order characteristics put demand on the mail order company to be highly efficient and to make accurate forecasts in order to become successful. To conceive a mail-order business as such it is essential that focus, through positioning different actions encapsulated in different business process types, is brought about in order to create such efficiency.

4.2 The mail order business

The mail order business, for which the business analysis has been performed, is a company selling fashion clothes. This mail order business is a company within a larger group of companies (a concern) that sells fashion clothes in shops.

In order for the mail order company to perform business, i.e. to receive and fulfil customer orders, there is a need for a developed product assortment. The product assortment is seasonal. Planning and development of an assortment starts the work for an upcoming season. This work is initiated approximately a year prior the start of the season, which means that the mail order company handles issues for multiple seasons at the same time. The planning and development of the assortment is governed by internal *assignments*. Planning and development governs the specification and layout of the mail order catalogues as well as the procurement to be made for the upcoming season. The specific mail order company produces a number of different catalogues in order to expose their assortment and thereby arrive at a stock-level close to zero at the end of the season. The task of forecasting is thus to balance between the amount and type of products that can be sold with profit and the amount and type of products to procure. The *result* of this task is thus mail order catalogues, i.e. *product descriptions*, and made procurements. The goal for a mail order company is that there should be products in stock in accordance to the customer order to ensure short lead-times. Since products are produced in other parts of the world the products need to be in stock by the time of the customer order.

The customer bases the order on the product description, mainly by using mail order catalogues but also through other channels. This particular mail order company has around two million potential buyers, i.e. active customers. The customer order is to be interpreted as an external *product order*. A call centre will receive the order and then forward it to stock-handling and other functions (internal and external) involved in fulfilling the customer order. In the end the *product* (fashion clothes) is delivered to the customer and it will be utilised by him/her. A mail order company dealing with clothing does not provide the customer with the possibility to try the clothes on before buying them. Therefore the customer can return the clothes within a two-week period so that this specific product can be sold to another customer.

The co-ordination of a mail order practice is thus two-fold. First of all it is co-ordinated based on accurate forecasting. There is a lot of work performed by the mail order company without knowing the customer who eventually will buy the product. A

lot of work is performed for *potential* customers. Secondly, there is work performed for *particular* customers. Parts of the practice are co-ordinated by the external product assignment given by the particular customer. From this relatively short description it can be concluded that the mail order company has two products:

- ? Mail order catalogues, i.e. product descriptions, directed towards *potential* customers
- ? Fashion clothes, i.e. products to be utilised by *particular* customers

Consequently a distinction can also be made between *development-oriented* and *operative* work. Since the mail order company's assortment is seasonal there is a need to continuously plan for and develop new products. This task is development oriented, which occurs from time-to-time. The characteristics of planning and development of an assortment is closely related to product development. The developed product has to be manufactured, shipped and handled in stock before it is shipped to the customer. This task both addresses the transformation performed at the mail order company and the operative work performed for the customer. Another task of operative work is the commercial interaction, i.e. communicative and material exchanges, performed between the mail order company and the particular customer. In opposition to the development-oriented work operative work occurs on a recurrent basis.

5 Business process type delimitation founded in transformation and coordination

As can be derived from the description of the mail order company in the previous section the type of action and type of client the action is performed for are important characteristics of the business logic of the mail order business. The description of the mail order company reveals that there is a need for distinguishing between:

- ? the work performed for *potential* clients and *particular* clients (type of client)
- ? *development-oriented* and *operative* work (type of action)

A potential customer can mean any customer. A potential customer becomes particular when the customer is identified in connection with a specific business transaction. Particular customers are customers that the company involves in their business interaction in different communicative and material exchanges (Lind & Goldkuh, 2001; Taylor, 1993).

The division between development-oriented and operative work corresponds basically to the principal division of primary and supporting activities in the value chain model made by Porter (1985). Business processes are about transforming something (such as raw material) to products. Such transformation (refinement) is an example of operative actions. The business interaction between the organisation and their customers has a coordinative effect on the refinement process. Business processes encapsulating operative work happen *often* and are aimed at *recurrent realisation*.

The characteristics of development-oriented work are that it happens from *time-to-time*, and that these processes aim at *developing operative-oriented business proc-*

esses and/or objects refined in the operative-oriented business processes. The aim with development-oriented processes is to meet future demands from particular clients by *creating re-usable conditions*. Development-oriented actions are about developing the basic capability of the company (or several companies) through e.g. product development, competence development, procurement/development of instruments for production and distribution etc. (c.f. e.g. Porter, 1985; Trygg, 1991). Based upon these distinctions, different process types can be identified as depicted in table 2 below.

Table 2: Determination of different process types (Lind, 2002)

Type of client Type of action	Potential clients	Particular clients
Development oriented actions	Condition creating processes	Delivery processes – 1
Operative actions	Providing processes	Delivery processes – 2

According to this way of reasoning, the business processes of a practice can be divided into three different process types in order to ensure successful agreements and fulfilments of assignments towards the clients of the practice. These process types could be characterised as follows:

- **Condition-creating processes** (development-oriented actions for potential customers). These processes include the establishment of basic conditions for the practice and are performed without having any particular customers in mind. The actions are rather aimed at potential customers on a market.
- **Delivery processes – 1** (development-oriented actions for particular customers). These processes cover product development and other development of basic conditions aimed at particular customers. These processes have also similar actions as the delivery processes – 2. This development may potentially be reused for other customers. The development result from this business process may sometimes be further developed/refined in a condition-creating process in order to fulfil potential needs for other customers.
- **Delivery processes – 2** (operative actions for particular customers). These processes include the actions of coming to an agreement between the organisation and the particular customer, as well as fulfilling the assignment by the exchange of value (products vs. money).
- **Providing processes** (operative actions for potential customers). These processes cover actions in the refinement processes (such as procurement, production, stock-keeping etc.) aimed towards potential customer (i.e. before one knows which customer(s) the delivery should be aimed towards).

To exemplify the different business processes a process chart of the mail order company's business processes is depicted in figure 7. As can be seen from the process chart, the two results are visualised (see section 4.2). The processes for producing

these results do however cover different kinds of actions. Actions for producing and delivering the mail order catalogue are covered by development-oriented work while the production and delivery of fashion clothes are covered by operative-oriented work. Some of this operative work is however performed for potential customers, i.e. covered by providing processes, and some for particular customers, covered by delivery processes.

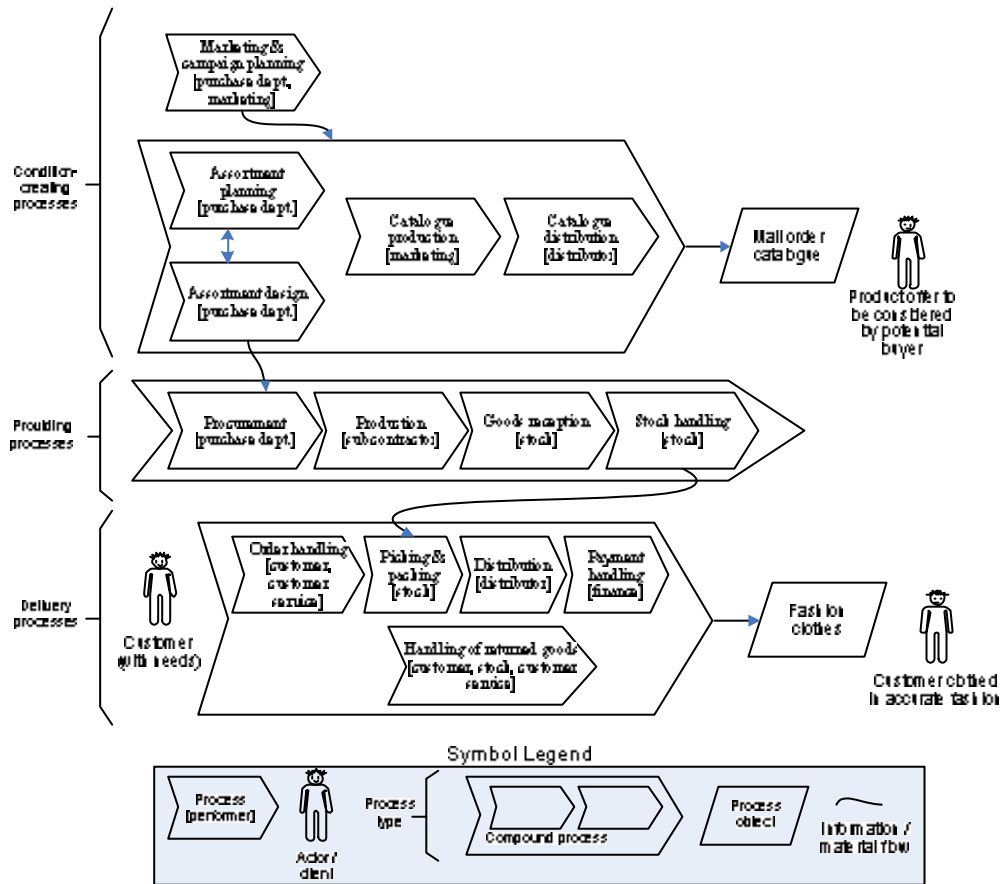


Figure 7: Different types of business processes at the mail order company

From figure 7 it can be noted that business process type determination is rooted in the types of results produced and delivered by the practice (in this case mail order catalogues and fashion clothes). It is however not enough to just use the types of result to determine different business process types. For each type of result one needs to take into consideration whether the actions performed for producing and delivering the results are performed for potential or particular clients and whether the actions are operative or development-oriented. The case study performed at the mail order company reveals that the two types of result, i.e. the product description and the product, are dependent on each other. It is problematic to sell something without letting the customer know what delivery potential that the mail order company has.

The criteria for delimiting business process types, based on a work practice view on organisational work, goes beyond the different business process types identified in the traditional views. The following can be said about the business process types identified in section 2.3:

- The division in primary¹ and support processes is a difficulty since there is a lack of solid foundations for determining what is core and not. All actions performed by organisations should contribute with value for potential or particular customers. Thereby it is inaccurate to divide something into primary or supporting.
- Management processes have not been treated in this paper, but since business processes should have a specific or potential customer one can question whether management processes are business processes. Naturally organisational work needs to be co-ordinated which is done through internal and external vertical and horizontal co-ordination.
- According to Harrington (1991) one should divide organisational work into production processes and business processes. According to the criteria used in this paper to delimit different business process types, production can be part of both providing and delivery processes. Thereby production processes are not an accurate basis for business process type delimitation. Many practices involve production, but it is superior to distinguish between the type of action and who the action is aimed at. Production processes are often parts of business processes.
- Davenport (1993) makes a distinction between delivery processes and customer-facing processes. Why such a distinction when delivery means to provide the customer with products? According to the criteria used in this paper delivery processes involve all interactions, communicatively and materially, performed with the particular customer. The delivery is thereby included.
- Furthermore, Davenport (ibid) distinguishes product and service development processes. Such a distinction is accurate, but how about other development-oriented actions, such as instrument development and knowledge management, performed for potential clients?
- Within the communicative view, only one type of business process can be identified. According to this view, business processes cover the supplier's interaction with a particular customer. What about all other actions performed by organisations? The case used for illustration in this paper show that there is a substantial amount of work performed for potential customers. Without focusing both the work performed for potential and particular customers one might miss very important aspects of how delivery potential and incitements for the customer to place an order are established.

When adopting a perspective on business processes founded in social action the action characteristic becomes important for business process determination. The need

¹ Note that other ways to express primary processes often used are *core* processes and *main* processes

for criteria for business process determination suggested by Davenport (1993), section 2.3, is partly given an answer in this paper. The criteria *type of client* and *type of action* results in superior business process types in relation to the ones identified in the transformational view on business processes.

It is however important to note both transformative and communicative aspects of business processes are taken into consideration. This is done through the comprehensive view achieved through the model of generic practice (ToP). Practices produce results to be utilised by others. Thereby it is rational to identify the types of result produced and delivered by the practice and then distinguish the different actions needed to arrive at such types of result. These actions need to be studied from the perspective of who the work is performed for and what type of action it is performed in order to identify different types of business processes.

6 Conclusions

The problem dealt with in this paper is how to distinguish different business process types. Often business modelling focusing on business processes ends up in endless discussions whether actions are core or supporting. The task of how to divide organisational work into different components has been an essential issue on the research agenda all the way back to Langefors (c.f. Langefors' (1973) theory of perceiving organisational work as a system with sub-systems). In this paper a successful way to identify different types of actions as parts of different types of business processes has been presented. This way of characterising business process types is both theoretically and empirically founded.

By adopting a perspective on business processes as transformation and coordination one can avoid such discussions and thereby adopt distinct criteria for distinguishing between different business process types. In this paper a synthesis, founded in the notion of social action, for understanding business processes in work practices has been presented.

The criteria used for characterising the actions performed for producing and delivering different *types of result* are the *type of client* (potential or specific) the action is performed for and the *type of action* (operative or development-oriented). By combining instances of these criteria different business process types can be distinguished. A business process perspective on organisational work means customer-orientation. It is however important to note that customer-orientation does not mean that all action should be performed for a particular customer. There are some actions, operative as well as development-oriented, that are performed to establish delivery potential and thereby to anticipate future interaction with particular customers.

By distinguishing such characteristics of actions performed for producing and delivering different results of the work practice, three different business process types can be distinguished. These are:

- **Delivery processes**, which includes action that takes place in the supplier's interaction with *particular clients*. Delivery processes cover both *operative and development-oriented actions*. One example of delivery processes involving both types of actions are selling, developing, producing, and delivering tailor-made products.

- **Providing processes**, which includes *operative actions* for establishing delivery potential. Actions covered by providing processes are performed for *potential clients*.
- **Condition creating processes**, which include *development-oriented actions* performed for *potential clients*.

To illustrate the division of organisational work into different process types, a case study performed at a mail order company has been used. This case has been chosen since it has a rather simple delivery process. There are no delivery variants, i.e. similar actions are performed in different commercial interactions. The actions performed do not differ dependent on different customer relationships or different products (c.f. Lind, 2002). Further the delivery process is based on standardised offers given to the customer. There is however a substantial amount of effort performed for potential customers – both in terms of operative and development-oriented work.

Within the literature arguing for a transformational view on business processes, different business process types are identified. In this paper we claim, however, that criteria for delimiting business process types are missing and thereby one might miss important aspects of work practices when conceiving them as consisting of business processes. Think of what it would mean to not understand the existence of actions performed for potential customers at the mail order company. Business process types should by its prefix direct the attendance towards relevant aspects of the business.

Based on the research reported, some issues of further research can be identified. There are a number of dependencies between different categories used to characterise a work practice. A transformative view on business processes is for example an issue of the dependency between the base for and the result of the work practice. Another dependency that would be interesting to further investigate is the one between the financial capital and the assignment.

A further issue for future research is the dependency between different sub practices, i.e. links between actions covered by the different business process types. Business processes contextually overlap which means that the result of one sub practice is a condition for another sub practice. Since work practices, and thereby also sub practices, are co-ordinated by assignments, it would be interesting to further investigate what this dependency means in terms of co-ordination. Sub practices involving actions for potential customers must be co-ordinated by internal assignments while sub practices involving particular customers are mainly co-ordinated by external assignments. Thereby one can question whether a differentiation of work practices in sub practices could be used to arrive at an understanding of how external product assignments are forwarded within the organisation. This should be done in order to understand the fulfilment of the customer order, to ensure that commitments towards the customer are made on solid foundations and that relevant delivery potential are established.

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