

Expanding the scope: From language action to generic practice

Göran Goldkuhl & Annie Röstlinger

{e mail ggo@ida.liu.se; aro@ida.liu.se}

Centre for studies on humans, technology and organization (CMTO)
and Department of Computer and Information Science
Linköping University
S-581 83 Linköping
Sweden

Abstract

Within the language action perspective (LAP) several generic models for analysis and modelling of business activities have been presented: E.g. Action Workflow, DEMO and BAT. Outside the language action perspective there are other generic models like CATWOE of Soft Systems Methodology and Activity Theory. These different generic models have been analysed with the purpose of identifying strengths and deficiencies. The LAP models are criticized for being restricted to two-role models and not taking into account both vertical and horizontal coordination. This analysis forms a basis for the formulation of a new generic model which is called a model of generic practice or the ToP model. (ToP stands for Theory of Practice). This generic model is formulated in the spirit of LAP but has a broader scope than earlier LAP models. The ToP model integrates coordination and transformation issues into one unified model. It also incorporates important aspects such as economic compensation, utilization of institutionalised know-how and norms, and learning through gaining experience from actions. The model is illustrated in a brief example: The business activities of an Internet shop.

1 Introduction

In reconstruction, evaluation, redesigning and new-designing of business activities it is possible to use generic models as a template or a starting point for analysis. The language action tradition has contributed with several generic models of business activity for such purposes. Some important generic models of this kind are:

- Action Workflow (Action Technologies, 1993; Denning & Medina-Mora, 1995)
- DEMO (Dietz, 1994; Reijswoud, 1996)
- BAT (Goldkuhl, 1996; Goldkuhl, 1998)

There is a clear difference between a generic business model and flowchart techniques for business modelling. Examples of the latter are Role Activity Diagrams of the STRIM method (Ould, 1995), QPL Diagrams (Born, 1994), Data Flow Diagrams of the Structured Analysis method (Yourdon, 1989) and Activity Graphs of the ISAC method (Lundeberg et al, 1981). All these flowchart techniques that can be used for business modelling, are well-defined notations with semantics and syntax. This means that they have modelling constructs (e.g. process, activity, role, information) which are used to identify elements of the world to model. The notations also have clear rules for how to relate these different model constructs to each other. The semantics and syntax guide the analyst to capture important aspects of business process under scrutiny.

The generic business models (as e.g. Action Workflow and DEMO) add more to such modelling. They include notations¹, but they go beyond just notation driven analysis and modelling. Each of these generic models also includes a theory of business activity, and thus the analysis and modelling can be said to be *theory and method driven*². Compared with the flow chart techniques mentioned above, these generic models have a more constrained syntax of their notations. The Action Workflow approach describes business activities in four pre-defined phases: 1) preparation, 2) negotiation, 3) performance and 4) acceptance. The roles are also pre-defined into customer and performer (cf figure 1).

¹ In Action Workflow there are the Action Workflow loop diagrams (Denning & Medina-Mora, 1995) and in DEMO there are e.g. Communication Diagrams and Process Diagrams (Dietz, 1994; Reijswoud 1996).

² The notion of theory and method driven modelling is described in Lind & Goldkuhl (1997) and Dietz et al (1998).

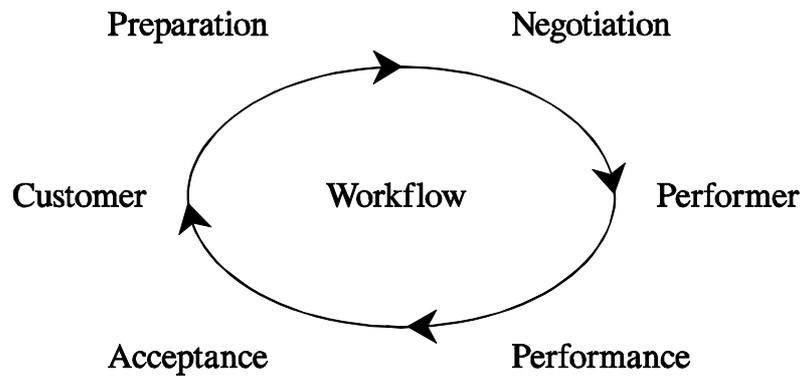


Figure 1 Action Workflow loop (from Action Technologies, 1993)

This Action Workflow loop is a generic conception of the structure of business activity. The constraining character of action workflow modelling should be seen as a directing force enabling the analyst to pay attention to essential issues of the business activity.

The purpose of this paper is to 1) analyse and discuss features of such generic models and identify possible deficiencies and 2) based on this analysis propose a new generic business model³ and discuss its features and application. The starting point for our analysis is the importance of the language action perspective (LAP) to business modelling. The analysis will however be open to the blind spots of LAP and propose expansions of the conceptual framework beyond LAP.

The paper is built on the assumption that generic models might be useful in business modelling, evaluation and design. The features of the generic models are however crucial for the accomplishment of such a theory driven analysis. It is important to have an appropriate generic business model as a basis for business analysis and design.

2 Some generic models for business activity

2.1 Language action models

As described in section 1 above there exist several generic business models based on the language action perspective. This perspective emphasises that communication and language use should be seen as action, following the theoretical works by Austin (1962), Searle (1969) and Habermas (1984). Probably the most known LAP model is Action Workflow (e.g. Action Technologies, 1993; Denning & Medina-Mora, 1995). It is based on the pioneering work of Winograd & Flores (1986). In figure 1 above the four generic phases and the two generic roles are depicted. The Action Workflow model is restricted to communicative action. The performance of material (instrumental) actions are excluded from the model⁴. The performance act means that the performer communicates to the customer that he has performed (delivered) the requested product/service.

Another generic model is DEMO (Dynamic Essential Modelling of Organisations) created by Jan Dietz and his colleagues (e.g. Dietz, 1994; Reijswoud, 1996). There are obvious similarities between DEMO and Action Workflow. There are two generic roles: Initiator and executor. One main notion is the transaction. A transaction consists of the three phases: Order phase (where the initiator requests and the executor promises), the execution phase, and the result phase (where the executor states what has been executed and the initiator accepts this). DEMO builds on a distinction between subject world (where communication takes place) and object world (the world communicated about). In the transaction, all action takes place in the subject world except the execution which takes place in the object world.

One more generic model is the BAT (Business Action Theory) model created by Göran Goldkuhl (1996, 1998). This is also a two-role model. The two roles are supplier and customer. The BAT model is intended to be used for business interaction between different organizations, and not for interaction within one organization. This is different from Action Workflow and DEMO, which can both be used for interaction between and within organizations. The BAT model describes six generic phases for business interaction:

1. Business prerequisites phase

³ This model is called the model of generic practice or the ToP model (Theory of Practice). It has earlier been described in a more exhaustive way in Goldkuhl & Röstlinger (1998).

⁴ Cf critique in Goldkuhl (1996).

2. Exposure and contact search phase
3. Contact establishment and proposal phase
4. Contractual phase
5. Fulfilment phase
6. Completion phase

There are obvious similarities to Action Workflow and its phases, but the BAT model is more detailed and also adapted to business interaction. Another important difference is that BAT explicitly includes material actions in the fulfilment phase; i.e. the production and delivery of goods or services performed by the supplier and the payment made by the customer. Another important difference to Action Workflow and DEMO is that BAT is oriented towards exchange between the two roles. The business interaction means an exchange of value; the exchange of product towards payment.

We will not perform detailed analysis or comparison between the different models here. Instead we refer to other works. Goldkuhl (1996) has made a comparison between Action Workflow and BAT. Reijswoud & Lind (1998) have made a comparison between DEMO and BAT and Verharen (1997) has made a comparison between these three models. Weigand et al (1998) have made an interesting attempt to combine all three models into one overall layered model.

All three models are restricted to two-role interaction. Is this a proper generic basis for describing business activities? Does this not mean a severe restriction when analysing business activities? Is there not a need for a richer role model? If the scope is to model and describe the business interaction between supplier and customer in a dyadic fashion, we agree that such an analysis can be based on the two generic roles of customer and supplier. But if we want to look closer at the business activities of a producer, then we question if two roles are adequate and sufficient.

The transaction cost theory (e.g. Williamson, 1981) describes two generic relationships: Market relationship (between organizations) and hierarchical relationship (within organizations). Looking at a producer (a company) there will be market relationships⁵ to its suppliers and to its customers and hierarchical relationships within the company. Hierarchical relationships such as these will exist between management and producing personnel. This is depicted in figure 2.

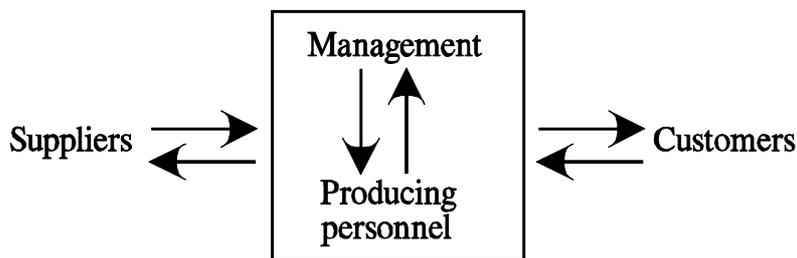


Figure 2 Different relationships between and within organizations

Looking at this simple model, there is a need, in a generic business model, to capture both hierarchical and market relationships. People working in a company (e.g. workers manufacturing cars) have assignments for their work both from outside the company (from customers) and from inside (from managers). There will be more than one assignment (and thus assigners) governing their work. This is important since it seems to be an underlying assumption of Action Workflow and DEMO that there can only be one actor who gives assignment for a piece of work to be performed. Usually, some work performance will be governed by different assignments and other "governing forces"⁶. There will be instructions from managers and there will be customer orders which act as supplementary assignments for workers.

Modern business process theory (as described in Total Quality Management and Business Process Reengineering) emphasises the horizontal level of organizations. A process oriented organization is usually a customer focused organization. The customer orders (as assignments for work) are supposed to be transparent to large (if not all) parts of the organization. If one turns to classical organization theory (e.g. Mintzberg, 1979), this horizontal dimension is not emphasised in the same way. Instead the vertical dimension is much more emphasised. However, the vertical and horizontal are two combined coordination forces for the work in

⁵ We call this a market relationship because it exists between two independent companies which have a commercial relationship between each other. Net work theory (e.g. Håkansson & Snehota, 1995) questions that long term business-to-business relationships should be seen as genuine market relationships. Other considerations govern such companies' interaction than those vindicated in classical micro-economic theory.

⁶ E.g. norms; this will be described in section 3 below.

organizations. A generic business model must be able to cope with these fundamental coordination forces as well as with other governing forces for work.

Another important restriction in Action Workflow, and to some extent also in DEMO, is the focus on communicative action. Communication is necessary and important in work, but work is not only communication. To describe business activities in a generic way, other kinds of action as well as other action prerequisites than communication, need to be acknowledged and taken into account. The BAT model includes material actions. This is important and should be carried out in an expanded generic model.

2.2 Other generic models

It is not only in language action models where we can find attempts to establish a generic foundation for business activity modelling. There are other such approaches and we will briefly look at two well-known models.

Soft Systems Methodology (SSM) by Peter Checkland (1981) involves the CATWOE model for "human activity systems". According to SSM a "root definition" of a human activity system should be made based on six generic categories expressed by the mnemonic CATWOE. A human activity system is constituted by a *Transformation* process (T) where some *Actors* (A) convert input to output directed towards *Customers* (C) who can be beneficiaries and/or victims; the transformation process is carried out in some *Environment* (E) and is controlled by some *Owners* (O) having the power to modify or demolish the system; the root definition is based on some assumptions - a *Weltanschauung* (W), which makes it meaningful in the actual analysis situation.

Compared to the LAP models, the SSM CATWOE model includes three roles; besides actors and customers also the owners. This can be seen to be in alignment with the transaction cost discussion concerning different relationships in section 2.1 above. CATWOE is not restricted to communication. It has a main focus on actions transforming input to output. The processes of arriving on agreements between actors and owners and between actors and customers are not seen as problematic.

Another interesting approach for defining activity systems is the Activity Theory formulated by Yrjö Engeström (1991, 1993). This theory consists of several generic constructs describing work situations. The basic categories are subject, object and instrument. The *subject* (i.e. an individual or a group) is working on the *object* (the "raw material") using *instruments* to create an *outcome*. Instruments can be physical or symbolic ones. The subjects together form a *community*. Their work is governed by *rules* and there exists a *division of labor*. "The division of labor refers to both the horizontal division of tasks between members of the community and to the vertical division of power and status" (Engeström, 1993 p 67).

Activity theory is an attempt to establish a unifying notion of an activity system. It is emphasizing subjects, their labor divisions, objects and their transformation by the aid of tools and rules. Both material and symbolic aspects are acknowledged. There is however only one explicit role in the model: The actors (subjects) transforming objects to outcome. Other roles are only implicit. The relationships to environment seem to be damped. "... influences from outside 'intrude' into the activity system." "The outside influences are first appropriated by the activity system, turned and modified into internal factors." (Engeström, 1991 p 128).

The language action emphasis on establishment of agreements between different actors through communication and negotiation is not stressed in the same way in these two other approaches. Roles of language and its use for action is not explicitly considered. We consider however these two generic models, as well as the LAP generic models, to have certain merits.

2.3 Conclusions and goals

Our analysis of these different generic models shows, although their merits, that there is a need for a more exhaustive model. In this section we will state some goals for a generic business activity model and in the following (sec 3) we elaborate on a new generic model.

One important goal is to construct a model that covers different types of relationships and does not reduce all relationships to producer-customer relationships. A generic model should thus be explicit about different roles related to business activities, and not only producers and customers. The model should emphasise the action character of business activities. It should not be restricted to only communicative action, but of course acknowledge the importance for such action. This means that it should have a wider scope than earlier presented LAP generic models but should maintain the spirit of LAP.

3 A model of generic practice

3.1 Basic categories

The LAP models are constituted of notions of roles, phases and actions. These can be seen as basic categories underlying the models. If we look at CATWOE and Activity Theory there is hard to find a corresponding base of categories. For our generic model we explicitly make use of the following basic categories:

- actors in roles
- actions
- action objects
- relationships between actors

One basic role is producer. The producer performs actions. These actions imply the production of action objects and also the use of objects. Action objects can be material artifacts/consequences or linguistic messages. The producer's production of action objects (products) is performed with the purpose to serve clients (customers), which is another important role. A relationship will be established between these roles and is mediated through the action objects.

3.2 The notion of practice

We use the notion of *practice* when talking about business activities. A practice means that someone is performing actions serving someone. A practice is doing. Some actors - the producers - are creating products in favour of some actors (the clients). A practice is not just a "happening". Usually it is recurrent activities with a history, a presence and a future. A practice is an institutionalised way of performing work (Berger & Luckmann, 1967). Intersubjective knowledge, including values and norms, is shared among its producers holding the practice together (Scott, 1995). To perform actions within a practice means utilizing knowledge and competence. Knowledge is expressed in practice (Schön, 1983). All knowledge is not given linguistic form in "discursive consciousness". Some knowledge remains tacit in "practical consciousness" (Giddens, 1984).

A practice is continuously developed and changed. A continuous reinstitutionalization is taking place. People within a practice learn from performing their actions (Argyris & Schön, 1996). Communication and coordination is crucial within a practice (Austin, 1962; Searle, 1969; Habermas, 1984; Winograd & Flores, 1986). A practice is always a contextualised phenomenon. It cannot exist without relationships to its environment. Its ontological basis is relational. A practice is dependent on how well it can acquire resources and transform these into products valuable for clients (Håkansson & Snehota, 1995). All this is dependant on how well relationships are created and sustained through external and internal coordination.

We define the notion of a practice 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 action is based on values, rules, knowledge and competence, which are established and continuously changed.

Practice is a notion, which permits us to change between different levels of abstraction; between the wholeness of a practice and different parts of it and also to different contexts of the practice⁷. This definition of practice is also a way of avoiding the danger of reification (Berger & Luckmann, 1967). A practice is something created by us as human beings and as such it is continuously influencing us through constraining and enabling powers. It is built on the dialectics between subjective and external world (ibid). We call these theoretical underpinning⁸ of our generic model: Theory of Practice (ToP).

3.3 Description of the model of generic practice

A practice can be seen as

- a company⁹ or
- a part of a company or
- several companies (a business network) or

⁷ This is in the spirit of hermeneutics; the switching between whole and parts and context as described in the hermeneutic circle (e.g. Bleicher, 1980).

⁸ The main theoretical sources for inspiration are mentioned in the text above in this section. Cf also section 4.1 below.

⁹ A practice can of course be a commercial firm or a governmental agency or any other kind of organization.

- some parts of several companies or
- some other meaningful unit of activities

A practice can thus be delineated in different ways. The purpose of the study determines the adequate boundaries.

The model of generic practice¹⁰ is a fundamental conceptual model of what constitutes a practice. The model consists of some generic categories and relationships between them. A graphical description of the model of generic practice is found in figure 3. The model can be used as a conceptual instrument in business development. The different categories and relationships can be used in order to establish a fundamental understanding of a particular practice. Such a basic understanding can be very important for diagnosis and design of a business. This understanding is represented in a business definition of the studied practice. An example of a business definition is given in our brief case, section 3.4. below. When using the ToP model to create a business definition this is equivalent to what is done in Soft Systems Methodology creating a "root definition" of a human activity system using the CATWOE model. We suggest as an alternative to a CATWOE root definition to make a business definition using the ToP constructs described below.

The ToP model is in itself a theoretical construct. Due to its generic character it can be used as a basis for more focused theoretical development. This means that the ToP model can be used both for practical business development and for pure scientific reasons.

3.3.1 Producers, results and clients

The core of a practice is the *producers* and *their actions*. They are working to create *products* to *clients*. We use the notion of client instead of customer. The client is the beneficiary of the practice, i.e. the role which is served by the practice. Clients are those favoured by the practice. Customer is seen as a special case of a client. A customer has a commercial relationship to the practice, ordering and paying for the products. Not all clients have this kind of relationship to a practice.

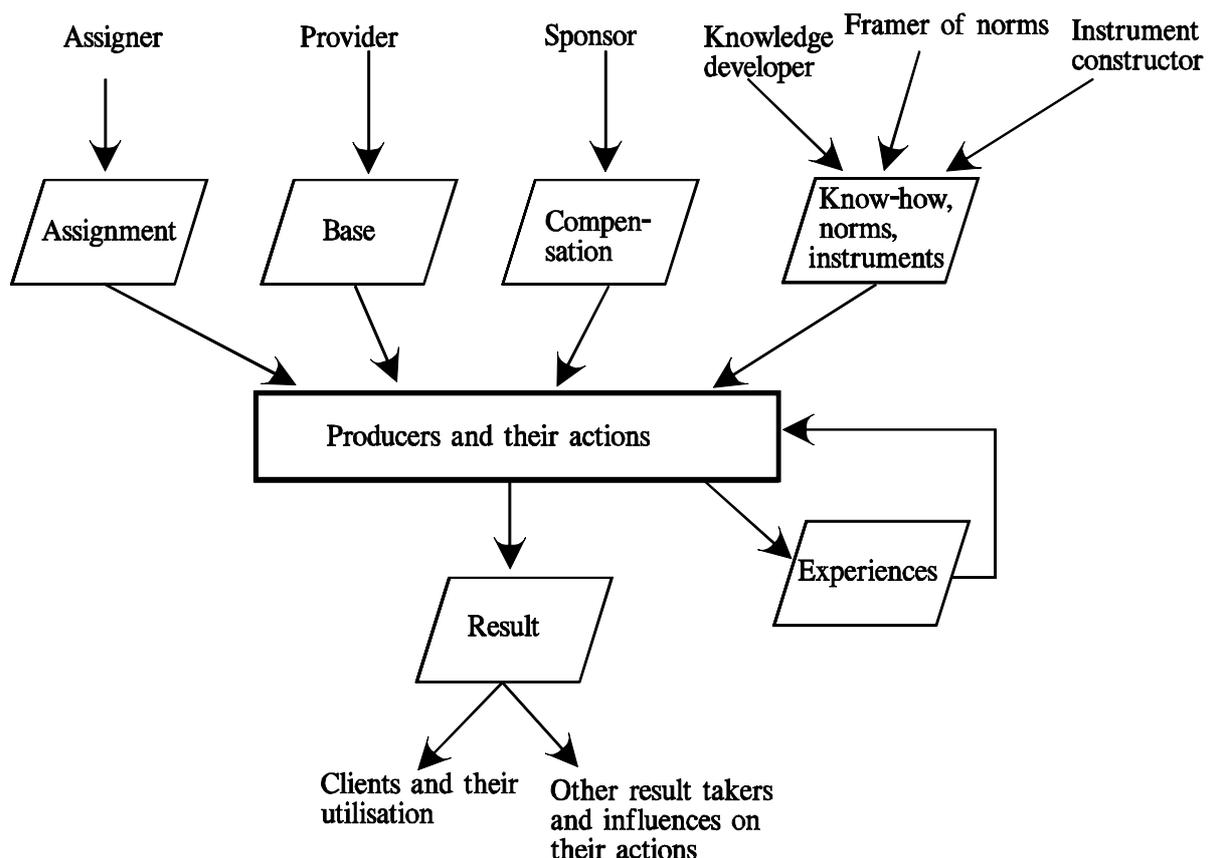


Figure 3 The model of generic practice (ToP model)

The main *results* of a practice are its *products*. Products can be goods or services. The purpose of the products is to be utilized by the clients in order to enhance their action or experience space.

¹⁰ The generic model has been earlier described in a more exhaustive way in Goldkuhl & Röstlinger (1998).

3.3.2 Assigners and assignments

According to the definition of a practice, there are always *assignments* governing the practice. The clients (customers) can order products and this will be an assignment for the producers to create particular products. Assignment is a general concept covering also other types of assignments. Related to the discussion on transaction cost theory above we made a distinction between vertical (hierarchical) relationship and market (horizontal) relationship. An assignment (order) from a client is a horizontal assignment. We call this a *product assignment*, since it is concerned with particular products. It is an assignment directed towards the producers (assignees) to create particular products for clients.

The management of the practice has a hierarchical relationship to producers. Management does not usually give orders for particular products. Managers give assignments to producers about how to perform their production. This can vary from detailed instructions to very general objectives¹¹. We call such an assignment from management to producers for a *role assignment*. It describes the work role and not any specific product assignment. This kind of role assignment is often expressed in job descriptions.

We conclude that there can be different *assigners* to practice, usually both *role assigners* (management or owners according to SSM) and *product assigners* (clients/customers or in some cases a representative for the clients). It is also important to understand that assigner is a role. In some cases the producers themselves will be assigners to the practice.

The assignment is an action object and it also represents an action relationship between assigner and assignee (producer). This is expressed (in figure 3) as a direction from assigner to producer. This direction should be interpreted as it is an assignment issued by the assigner with the producer as the recipient and expected executor. This uni-directedness should not be misinterpreted in a way to suggest that the producer is not a part in creation of the assignment. In most cases the assignment should be seen as an agreement between assigner and producer and as a result of a negotiation process between them. The producer can be very active in this creation and negotiation process. The producer can in some cases be the one that suggests and formulates the assignment. The assigner can be rather passive and the only task can be an acceptance and a formal issuing of the assignment. This negotiation and agreement view on assignments follows the views of the LAP approaches described in sec 1 and 2 above (Action Workflow, DEMO and BAT). These approaches are however restricted to product assignments according to the two-role model: The customer (as a product assigner) and the producer (performer, executor). The role assignment is not made explicit in these LAP models.

3.3.3 Transformation: From providers and base to result

The production of results is seen as a transformation process. A conversion from input to output. The output is the products of the practice. The input we call the *base*. The bases are thus transformed in the actions of the producers into products aimed for clients. Bases can be of material kind but also information, since products can be of various kind. Bases come from *providers*. We call them providers (a more general term), and not suppliers. A supplier is often interpreted as an external company. This is often the case, but it does not need to be the case. When we describe a practice as a part of a company, there will often be providers inside the company. An (external) supplier is seen as a special case of the provider role.

When we are talking about production and transformation we are not limited to manufacturing activities. Production includes all kinds of work including material, informational and service actions; (e.g. planning, advising, monitoring, manufacturing, inspection, transportation, storing, reporting).

The transformation view on business activities (practices) can be found in both SSM CATWOE and Activity Theory although all important categories are not explicit in these models. In our model we make use of the following explicit categories directly related to transformation: Provider, base, producers and their actions, results (products), clients and their utilization of products. In the LAP approaches the transformation is hidden in the performance (execution, fulfilment), which we consider as a disadvantage.

3.3.4 Sponsors and compensation

Most practices need economic *compensation* and thus *sponsors*. In commercial enterprises the shareholders contribute with share capital. The customers are paying when buying the products. In governmental authorities usually the tax-payers are the sponsors. It is important to notice that the customer role (as we understand and define it) is a combination of three roles specified in the model of generic practice: The customer is a client and a product assigner and a sponsor and this altogether.

The sponsor/compensation aspect is implicit and simply taken for granted in nearly all the generic models¹² described above. We consider that economic compensation is an important aspect that should be taken

¹¹ There can be different control and coordination strategies; cf e.g. Mintzberg (1979).

¹² In the BAT model the payment from customers is explicit.

into account when defining a practice.

3.3.5 Know-how, norms and instruments

All practices need different kind of knowledge and tools to be performed. In our model this is made explicit through the categories of know-how, norms and instruments. These are three partially over-lapping categories. *Instruments* can be both external/material tools (equipment) and internal/symbolic methods. By external instruments we mean all kinds of equipment used for production (transformation) in a practice. *Norms* can be values and rules directly governing the actions of the producers (action norms). There can also be quality norms concerning desired features of the result. The *know-how* of the producers usually contains both norms and methods besides other general skills. This means that norms and internal instruments often can be seen to be parts of the know-how. These categories are however so important that we want to have them as explicit ones in our model. Relationships between these three categories are depicted in figure 4.

The creators (and sometimes distributors/mediators) of these prerequisites are called *knowledge developer*, *framer of norms* and *instrument constructor*. It is important to understand that the creation of know-how etc often is done both externally and internally (i.e. both within and outside the practice). The producers act in a role of knowledge developer when their know-how is evolving. Norms are often brought to practice from surrounding framers of norms. But norms are usually also continuously developed within a practice. Producers are often important framers of norms. This development of know-how and norms is usually made directly in the main practice when producing results. Development of knowledge/norms is an evolutionary side-effect of the production of the main results. In this situation the know-how and norms evolve as tacit knowledge and as parts of the "practical consciousness" of the producers. The development of know-how, norms and instruments can also be done in an explicit way. It will, in this situation, be some kind of sub-practice to the main production practice. This explicit development can be performed as an articulation (reconstruction) and reformulation of the tacit knowledge evolved over time.

In the generic LAP models these aspects of know-how, norms and instruments are not emphasised¹³. But in Activity Theory both tools (which is equivalent to our concept instrument) and rules (which seem to be equivalent to our concept norm) are explicit.

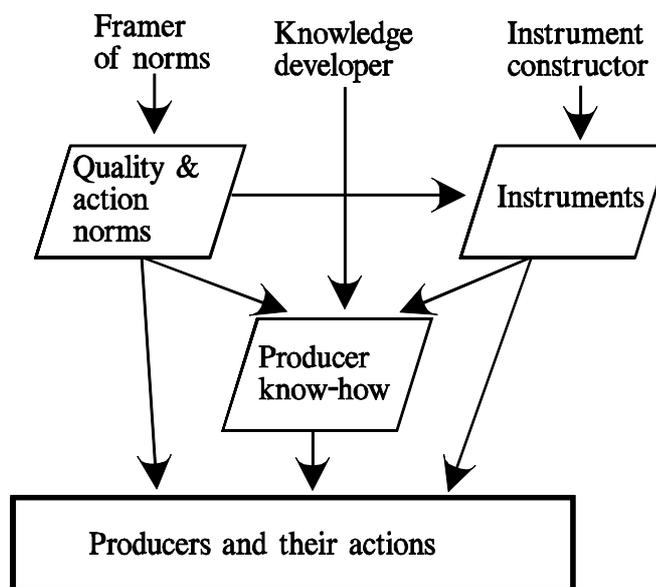


Figure 4 Relationships between know-how, norms and instruments

In our generic model we do not have goals and objectives as a special category. Is this not a serious omission? Practices should be seen as purposeful activities and thus driven by different goals. We do acknowledge the importance of goals. However we find that different prerequisites have a goal character and thus are governing the production in the practice. Of course goals are formulated by management in most cases and in our model this is expressed in the category of role assignment. But this is not the only goals governing the practice. The product assignment (issued by clients/customers or other product assigners) do have a strong governing force on how to perform the practice. This is of course also the case with norms. Norms can be framed by management, the acting producers themselves, government (in law) and special professional

¹³ In the BAT model know-how of the supplier (producer) is explicit.

associations. Goals are usually also embedded in the used tools. External and internal instruments do have strong governing forces towards the production in the practice. Goals are thus parts of several of the prerequisites for the practice. Therefore goal is not one single category in the model. It is often important in an analysis of a practice to identify different and conflicting goals. There can be goal conflicts between management objectives, customer requirements, professional norms and properties of tools. Such conflicts can be very confusing and impeding for the practice but they can also sometimes be used as a strong changing force.

3.3.6 Other result takers

One main purpose of practices is to create results in favour of clients. Clients are the main result takers of a practice, but not the only ones. In some practices there will be result takers, who are intentionally *mistreated*. They are the victims of the practice. In the definition of a practice above (sec 3.2) it was mentioned that producers can do something *against* some actors. One example to illustrate this: Police practice have the public as its clients. Such practice aims at preventing and discovering crime and in doing so catching criminals. These criminals are intentionally mistreated by the police practice.

Other result takers are hardly mentioned in the other generic models. It is only in the CATWOE model where other result takers (victims) are recognized.

3.3.7 Experiences and learning

Human action is reflexive (Giddens, 1984). It is not only those who the actions are directed towards, who experience something. The actors themselves are influenced by performing actions and perceiving the consequences of these action. In a practice, the producers gain experiences from acting. These experiences will be part of the producers' capabilities for further action. Through action and experiences the practice will gradually evolve and change. This will be the case either the actor explicitly reflects upon his own action or he just take them for granted. Of course a curious attitude towards own actions and consequences will enhance learning.

3.4 A simple example

We illustrate the model of generic practice with a simple example. It is an enterprise called NetShop. The example is based on a real case study (performed by Lindberg & Segerkvist, 1998) but given anonymity here.

NetShop is an enterprise working in the information and entertainment area. The business strategy is to sell goods via the Internet. All the NetShop products are offered via the Internet. The customers make their orders mostly via Internet. NetShop will then order the products from their suppliers and the goods will be sent to the customers. NetShop has 25 employees, more than 100 000 customers and offices in several countries.

We use the model of generic practice to create a practice definition of NetShop. In figure 5 a practice definition (or a business definition) of NetShop is given. This table is one way to document a practice definition. Another way is to model it graphically in a diagram using the template of the ToP model (figure 3 above).

When creating a definition we are interested in finding important characteristics of NetShop. We then use the generic categories from the ToP model but we also use some categories connected to the main categories. These other categories are:

- Form of communication
- Strength of action
- Payment conditions
- Utilization

The form of communication is used to describe the media used in communication between different actors. In this case we found it important to describe different forms of communication for customer orders (product assignment). But this aspect can also be relevant to describe for other communication categories, e.g. role assignment and norms.

By strength of action we mean to what degree and in what way an actor has the possibility to force a desired action. Is the assignee bound by certain rules to perform the desired action? What obligations does the assignee (producer) have to execute the requested action from the product assigner? Is the assigner forced to use a particular producer for execution of his requests?

Payment conditions give information about how and when the sponsor has to give the compensation.

The purpose of the product is to be utilized by the clients. The producer performs his actions with the purpose of giving the client a favour. By the category utilization we point out the aim of utilizing the product, the favour obtained by the client.

Generic categories	NetShop
Role assigner	Owners and management
Role assignment	Business strategy: "Quick delivery of products offered via Internet" Job descriptions
Product assigner	1) Private consumers (65%) 2) Organizations (35%)
Product assignment	Order of NetShop-products which are offered via the Internet
Form of communication	1) Written, (electronic) via Internet (95%) 2) Oral in dialogue, via telephone (5%)
Strength of action	IF the product can be delivered within agreed delivery time THEN the order is binding. IF NetShop has not the possibility to deliver a product on order THEN the order will be canceled.
Provider	Different manufacturers of NetShop-products
Base	Manufactured products to be delivered by NetShop
Sponsor	1) Owners 2) The buyer of NetShop-products
Compensation	1) Share capital 2) Payment for received NetShop-products
Payment conditions	2) Invoice; Credit: <ul style="list-style-type: none"> • Private consumers 10 days • Organizations 30 days
Knowledge developer	External consultants, internal developers, external and internal instructors
Know-how	Knowledge of NetShop-products, Internet, NetShop-IS, purchasing, selling, distributing
Framer of norms	1) The state 2) NetShop management and co-workers
Norms	1) Laws and regulations 2) principles of continuous improvement
Instrument constructor	External IS-consultants
Instruments	Internet, NetShop-IS, telephones
Producer	NetShop (NetShop co-workers)
Actions	Develop, expose products via Internet, sell, purchase, distribute, invoice
Experiences	Experiences based on feed-back from clients and analyses of the client-database
Result	NetShop-products to client
Client	Private consumers or organizations
Utilization	Information and/or entertainment

Figure 5 The case of NetShop - a definition of the practice

This kind of practice definition can be used as a basis for further business analysis. It can for example be used to guide a problem analysis of NetShop's activities. We use one example to illustrate this.

An important problem identified during the diagnosis was "Net Shop cannot handle remainder orders". This problem has negative effects on *clients* since their demanded products are not delivered. The customer satisfaction will be low. The causes of this problem can be related to the different ToP categories. The order handling is mainly performed by NetShop-IS, and in this *instrument* there is no functionality for remainder orders. The *action norms* of NetShop do not involve any treatment of remainder orders. Thus no implementation of such norms exists in IS or in any manual *action*.

This situation of no delivery of requested products can arise due to stock deficiencies. NetShop does not have any stock at all; i.e. they do not have control of their *bases*. All deliveries are shipped from its supplier to the customers. When there is a stock deficiency or other delivery problem at a supplier (*provider*), this will lead to no delivery to customer at that time. NetShop does not keep this order as a remainder. The customer is informed and encouraged to try again later on. Many customers conceive this as very unsatisfactory.

The products are offered through the Internet and most of the orders are also issued this way. The communication between customer and NetShop is performed electronically and in standardised fashion. The order (as a *product assignment*) is not mutually binding. The customer is bound to the order he has made. NetShop is however not bound to the order. If the supplier of the product cannot deliver it, the order is canceled, as stated above. This lack of mutuality is however not explicit in the offerings made by NetShop.

The business strategy of NetShop is "Quick delivery offered via Internet". In this business strategy (*role assignment*) there is an emphasis on "quick", which means that slow deliveries depending on stock deficiencies or other causes are avoided in the electronic and manual routines.

NetShop is offering many products. The product *know-how* of the order personell is low. The order clerks usually do not have any knowledge concerning delivery problems and in telephone and e-mail contacts with customers no information of such kind is given. There is no feedback of delivery cancellations to the order personell and there is no treatment of this kind of information in the NetShop-IS, i.e. there is a low utilisation of this kind of action consequences (=experiences).

The no-treatment of remainder orders leads to unsatisfied customers and a lack of sales and therefore a lack of revenues (*compensation*) for NetShop.

We have here shown briefly an example of a problem analysis using the ToP model. The different generic categories have been used for identification of different problem causes and problem effects. Each identified problem is clearly related to some part in the practice definition. This kind of generic and contextual reasoning can thus imply an increased problem understanding.

4 Concluding discussion

4.1 Main characteristics and theoretical underpinning

The LAP approaches have taught us the importance of viewing communication as action. This goes back to the fundamentals of speech act theory (Austin, 1962; Searle, 1969). To communicate is however not only to act through expression. Habermas (1984) emphasises that communicative action implies establishment of relationships between speaker and listener. This can be generalised to all kind of social action, i.e. all action directed towards other people (Weber, 1978). When acting, an action object is created. In communication this means a spoken or written message. An action object (e.g. a linguistic message) is received and interpreted by some other actor. Through this action object a relationship is established between the actors (figure 6). We claim that this is the case either the action object is a message for communication or it is a material object. Linguistic communication has the power to create relationships in far more differentiated and sophisticated ways than other action objects, but still relationships are created through actions of material kind, e.g. when you bring water to a thirsty person.

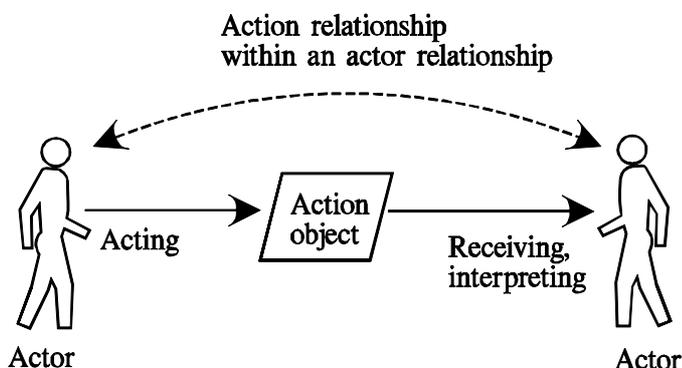


Figure 6 Relationships between actors are established through action

When talking about relationships it is important to distinguish between relationships on different levels. We talk about *action relationships* and *role relationships* (general actor relationships). We can use the BAT model (sec 2 above and Goldkuhl, 1998) to describe the difference between these levels. Between two companies there can exist a business relationship defined by the generic business roles of supplier and

customer. The particular relationship between these companies is the result of the historical business interaction over time. This role relationship can gradually change due to performed business transactions - the success and failures of these transactions. It can also change due to specific mutual agreements (e.g. long-term contracts).

Within a business transaction¹⁴ different actions are performed oriented towards each other. Within a business transaction the action relationships between the customer and the supplier will change depending on what actions have been performed. An offer from a customer creates a certain action relationship between the companies; i.e. it creates commitments and expectations of certain kind. Going to the next phase of the BAT model (the contractual phase), a contract establishes other action relationships between actors. In the following fulfilment phase, actions of delivery, invoicing and payment create yet other action relationships. All of these changing action relationships occur within the more fundamental actor relationship¹⁵ which exists between the companies. This actor relationship can, as been said earlier, change due to the specific actions performed within a business transaction. E.g. if the supplier fails deliver according to contracted time, the trustfulness of this supplier can decrease, which is a change in the overall actor relationship.

We use the conceptualisation of figure 6 about actors, actions, action objects and relationships as our paradigm model for the ToP model. As said earlier this follows the LAP view of communication as action and establishing relationships. When describing a business practice it is also important to acknowledge material objects and material actions. Business orders from customers cannot be the only prerequisite for a business company. There must exist other conditions. In our ToP model we have identified different kind of conditions for performing a practice. These conditions are considered as action objects. This means that these action objects must be created by some actors and thereby action relationships will exist between these actors and the producers of the practice. We claim that norms are governing a business practice. These are conditions for the practice, i.e. action objects used for governance of the practice. When there are norms, there must be framers of norms. When there are framers of norms there are relationships between the producers in the practice and the framers of norms. In the same way there is know-how, along with instruments and compensation as prerequisites for the practice. There are actors creating and providing these action objects and thereby establishing relationships to the practice and the producers within it.

The LAP approaches emphasise the communication and coordination aspects of doing business. In this strong emphasis a blind spot of object transformation seems to arise. Other generic approaches, like SSM CATWOE and Activity Theory, describe the core of business as object transformation. However these other approaches do not recognise the importance of communication and coordination.

The ToP model tries to integrate aspects of coordination and transformation into one unified model. In doing this it also incorporates important aspects of economic compensation, utilization of institutionalised know-how and norms, and learning through gaining experiences from actions.

One ambition behind the ToP model is that it should be more exhaustive than the other presented models; that it should have a broader scope. The model has a more elaborated role division. More conditions for actions are described. Accordingly we claim that it has a broader scope, but we admit that we have left out some aspects in the model which are covered in the LAP models. In Action Workflow, DEMO and BAT there are descriptions of generic phases. This is not explicit in the ToP model as it is described in this paper¹⁶. Therefore it is possible and even appropriate to combine "ToP modelling" with any of the other three generic models using the phase division of that model.

4.2 Applications

In this paper we have presented a new generic model for business activities - the ToP model. The model has been illustrated by a simple case, an Internet shop. It goes beyond the purpose of this paper to make deeper descriptions concerning application of the model. This will be done in future papers. It must however be stated here that the model, besides this NetShop case, has been applied in several and various domains: It has been applied in the following domains: Nautical chart production, municipal home care, saw mill, system development department, IT consultancy firm, school administration, police work, tourist agency, accountancy department.

The experiences so far are very promising. Rich descriptions have, in a short time, been arrived at. In

¹⁴ A business transaction is defined as a total sales/purchase transaction between customer and supplier involving all essential actions performed by these actors. Thus, a business transaction covers all six business phases according to the BAT model.

¹⁵ This type of actor relationship is a relationship between different roles; in this case between the roles of customer and supplier. Such an actor relationship between companies usually implies some social bonds between people within the different companies (Håkansson & Snehota, 1995)

¹⁶ A description of four generic phases for establishment of an assignment is done in Goldkuhl & Röstlinger (1998). The four phases are 1) propose, 2) formulate/design, 3) evaluate and 4) determine (i.e. establishing an agreement).

many of the cases, the ToP model has been used to create a business definition as a basis for further analysis and design of the studied business. The established business definitions have directed the further analysis in fruitful ways. The generic categories have guided attention towards aspects which later in the analysis have shown to be of great importance. The use of the ToP model has in several cases been combined with the use of methods for business diagnosis and design. The methods used have been parts of the SIMM methodology as business process analysis with Action Diagrams (Goldkuhl, 1996) and problem analysis with Problem Diagrams (Goldkuhl & Röstlinger, 1993). In such a way the combined use of the ToP model and the SIMM methods has made the analysis work theory and method driven (Lind & Goldkuhl, 1997).

A problem analysis can be more directed and focused when it is performed with a ToP model generated business definition as a basis. An example of this has been shown in section 3.4 above.

The ToP model is the result of several years of empirical work concerning business diagnosis and development. The ideas have gradually evolved during influences of several case studies and theoretical sources (cf section 3.2 above for main theoretical inspiration).

The purpose of this paper has been to describe this new generic model and to make this description also through relating it to other generic models. Strengths and deficiencies of LAP and other generic models have been recognised. These identified strengths and deficiencies act as arguments for the structure and contents of the presented model of generic practice - the ToP model.

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