

Talking about projects – a project generic model

by

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1 Introduction

The background to this paper is a co-operation project between the research group VITS¹ and a consultant firm². The consultant firm works within the field of system development. The purpose of the project was to accomplish a business diagnosis of the improvement business in the consultant firm, to create conditions to make the business more efficient. The consultant firm has long experience of projects concerning development of their customers' organisations and ways of forcing improvement work, but has identified a need for a more structured way to conduct their improvement projects.

The aim of this paper is to present a model, a project generic model, which can be used as a support for more efficient diagnosis of project based organisations. The model is in part build on experiences from the business diagnosis at the consultant firm. The model is also built upon theories concerning business processes.

2 Change work

2.1 Business diagnosis

Changes are necessary in all organisations and change work is done both reflected and unreflected. An unreflected behaviour often leads to a situation where changes in the business are made in a non well-founded way, due to insufficient knowledge of the business. A way to achieve well-founded change is to start with building a good knowledge and understanding of the existing business, reflecting over it and then suggesting changes. Existing business practice needs to be reconstructed (Röstlinger et al, 1997). The way the business performs its work needs to be visualised both for the actors in the business, and for the investigating people to be able to ensure *good* changes.

To reconstruct existing business practice as a part of the change work implies an effort to reach a mutual understanding of the way that the business is performed. Much of what is done by people is based on personal (tacit) knowledge (Rolf, 1995). When this knowledge is articulated it becomes possible to spread, criticise and thereby also develop. Through reconstruction of existing practice you also want to avoid the pitfalls:

- Mapping which end in itself, i.e. mapping for the mapping in itself

¹ VITS is a network-based research group within the field of information system development

² The name of the consultant firm has been made anonymous

- Correcting the investigation which treat the apprehensions and ideas of solutions made in advance with special favour

A well-conducted reconstruction should result in a number of important results (Lind & Goldkuhl, 1998):

- Parts of the business language (vocabulary), different conceptions, and action rules and patterns are made explicit
- Unclear meanings are elicited and clarified among participants
- Participants agree upon different meanings
- Shared understanding of current business processes among participants is established
- A basis for evaluation and critique of current praxis is created
- Quality assurance concerning future changes

Experiences have showed that it is also fruitful to reconstruct historical courses of events, i.e. to reconstruct what actually has happened. Historical reconstruction is an important complement to reconstruction of existing practice.

In connection with reconstruction work there is a need for support to direct the attention to different aspects of the business. Lind & Goldkuhl (1997) have earlier identified needs of both theory and method when reconstructing business processes. A theory support in reconstruction work means a complement to methods, where methods are used to structure answers of questions that are stated. The theory is used to state generative questions in the investigation work. Examples of theories which have been used when reconstructing business processes are Business Action Theory (Goldkuhl, 1998) and Theory of Practice (Goldkuhl & Röstlinger, 1999).

Beside theory and method driven reconstruction work there is also a need to consider the current investigation situation. A too large weight on theory and method driven reconstruction means that not enough consideration is taken to the current situation. A too large weight on situation driven reconstruction means that it can be hard to get structure both in the work and in the directing of attention.

2.2 Talking about businesses

In connection with diagnosis of businesses there is a need for a language to be able to talk about the business. This is valid both when someone is studying the business from outside and when diagnosis is made with a high degree of participation from different parties within the business. This language needs to be built upon how the business is understood by the people involved in the change work.

Businesses consist of actors who individually and jointly perform activities to satisfy different parties. According to Goldkuhl & Röstlinger (1999) the managing of business can be seen as *some actor(s) – based on assignments from some actor(s) – makes something in favour of some actor(s)*. This doing needs to be structured so that people can manage businesses and create value in an efficient way together. One way to structure businesses is to think in processes. The process thinking includes a horizontal thinking, customer focus and optimisation of cost.

Processes can be categorised as agreements (assignments) which are decided and completed. An example of a structure like that can be found in the generic business framework

(Goldkuhl, 1998), which is built upon the idea that the assignment is governing the doing of business. The model describes the joint venture between a supplier and an external customer. The generic business framework is divided into six different phases, which respectively can be grouped into the two overarching phases *come to agreement about assignment* and *fulfil assignment* (see figure below).

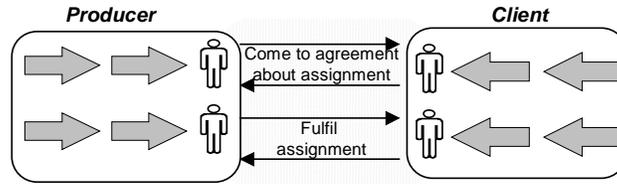


Figure 1: The assignment process (inspired from Röstlinger et al 1997)

To structure businesses from an assignment point of view is generic, which implies that this thinking can be applied in many different types of businesses. In connection with the conduction of projects it is natural to see project as consisting of agreements which are made (mutual commitments), fulfilled and concluded.

3 Application of business diagnosis in consultant firms

3.1 Line of action

In the change project at the consultant firm the framework for business diagnosis according to the method change analysis (CA)/SIMM (Goldkuhl & Röstlinger, 1988) has been used (see figure below). CA/SIMM is a method (in a wide meaning) which includes both method of work and perspective as a support for making good decisions about changes. This method is divided into two phases; business diagnosis and measurement study (business design).

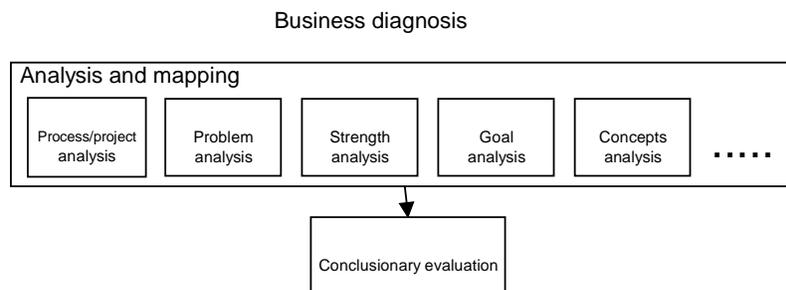


Figure 2: Framework for business diagnosis

The line of action in the business diagnose at the consultant firm implied the following:

1. Reconstruction of five completed change projects concerning procedure, conceptions, problems and strengths together with the project participants individual and in groups (the projects were chosen to get a wide distribution of participating people and type of projects).
2. Formulation of a goal picture for the consultant firm's improvement business together with the managing director of the company.

3. Analysis of project overarching problems and strengths experienced by the improvement consultants at the consultant firm together with seven consultants.
4. Analysis of generated material and documentation, verification and consolidation together with a project group and a reference group.
5. Formulation of change requirements, based on the analysis material, in a conclusionary evaluation.

3.2 Generalised change requirements as result of the business diagnosis

Generated change requirements in the change project give indications on what is important to direct the attention to in connection with project based development work. These indications can be concluded as follows:

1. To increase the consultants *competence* about improvement work at the consultant firm, which can be done by a controlled conduction of projects and thereby see the conduction of each project as a way of increasing the competence for a certain individual. Furthermore there is a need to be able to identify competence requirements in an early stage of the project.
2. To create an *independence of individuals* in the improvement business of the consultant firm. Prerequisites for transfer of competence and exchange of experience need to be built.
3. A *joint framework of concepts* as an important prerequisite to be able to talk about improvement business and to achieve a good exchange of experience between different consultants.
4. *Methods and techniques* as important support when planning, fulfilling and concluding projects. Methods and techniques represent knowledge support for the consultant (or other people involved) in connection with project work.
5. *Analysing the customers related processes*, i.e. the environment of what is in focus for improvement by the customer, when different parties come to agreement about the assignment. This is needed to ensure a good penetration of the improvement project in the customer's organisation.
6. An *assignment description*, which is accepted by both the consultant firm and the customer. This is essential in order to formulate mutually oriented expectations about the result and it is also the base for evaluating whether the project has met the parties' expectations (after fulfilment).
7. Support for enabling a good *management and planning* of projects.
8. Support in the *fulfilment* of projects.
9. Support when *introducing changes* to the customer.
10. To be able to estimate and achieve a relevant *customer satisfaction*.
11. To be able to see the client as a co-producer, i.e. *client participation*, in the conduction of the improvement project. The client needs to participate and conduct a part of the project, but also to stimulate and commit colleagues in the business.
12. Support for *control of resources and occupation*.
13. To create prerequisites to be able to *give priority to different assignments*.

3.3 Experiences from talking about projects

The experiences from the business diagnosis of the consultant firm's improvement business show a number of problem areas when it comes to talking about projects. Examples of this is the structuring of projects, analysis of problems, confusion of concepts when it comes to the project concept itself and also that different project related conceptions are applied individually by the consultants.

Based on experiences we see that a model, for project based organisations, would have been a good theoretical support in connection with the conduction of the different analysis elements in the change project. The framework of concepts and the valuations, which a model like that contains, can be used to state generative questions about projects in connection with reconstruction, discussion, structuring and documentation of development projects.

4 A project generic model

4.1 Project oriented processes

There is a great risk for conceptual anarchy when a lot of people together are involved in producing results for another party. Project-based work is a co-operation procedure that means that a number of people work together for a specific task and over a limited time. It is common that people participating have their own understanding of different concepts. In the change project that was performed at the consultant firm concepts such as project and process were used with a lot of different meanings. What can be put within the notion of projects and how does such notion stand in relation to the notion of processes?

Project is an idea or plan that can be used to arrive at a certain result. It often includes the work to conduct the plan. During the last decade the word has more and more been used to mean a task that should be performed within certain limits (such as time, quality and resources) in order to reach certain goals. (Marcusson & Ahlin, 1995).

"A process is thus a specific ordering of work activities across time and place, with a beginning, an end, and clearly identified inputs and outputs: a structure for action" (Davenport, 1993). A common view of processes is to focus upon objects that are being transformed to a refined product, i.e. the transformational view (see e.g. Hammer & Champy, 1993; Keen, 1997). Production processes is an example of such processes, which are being repeated over and over since it is the same type of objects that are being refined and the process produces the same kind of result. This view is depicted in the figure below.



Figure 3: A transformational view on processes

Each project deals with a unique phenomenon, i.e. characteristics of each project differs. Examples of such variations can be different time, level of client participation and that different types of result are being produced. Since a process, however, deals with types of things we believe that there is a potential to use an overarching structure for projects that can be used to talk about projects on a type-level. We would like to use the concept project process to express this, which can be interpreted similarly as a project model. A project model means a model over how a project should be conducted. A project process (or a project model) includes norms and rules of how to structure projects, how to talk about projects etc.

Lind & Goldkuhl (1997) have identified the notion of variant processes as a useful concept in order to express variation in organisation's behaviour. We also believe that the notion of variant processes can be used to express different types of type projects, where each variant of project processes express one such variant.

A complimentary view on processes is to view them as agreeing upon assignments and fulfilling assignments, where the transformation of "raw material" to finished products is a part of this process. By using the complimentary view the notion of processes is widened, where communication is used to co-ordinate human activity (Reijswoud, 1996), i.e. communication is used to co-ordinate the transformation that needs to be performed in order to fulfilling the assignment. Inspiration for such co-ordination can be found in for example speech-act theory (see for example Searle, 1969).

4.2 *Dividing project process into phases*

The generic raster about assignments (see section 2.2) can be used when projects are being discussed, analysed and conducted. One important experience from the case study was that projects rarely become concluded in appointed time. The reason for this is a lack in the agreements between different actors that either act within the project or have special interest in the project. It is therefore important to stress the importance of agreements (and commitments) more than it is done today. In the change project that was performed at the consultant firm we realised that a lot of emphasis was put upon the accomplishment phase of the project, but a lot of the problems that occurred in the projects had their roots in bad formulated assignment. The consultant firm and the client was never really fully agreed upon the assignment.

We characterise a project as having a clear start and end, where the starting point is some needs from the client that needs to be fulfilled. The end point of the project is when satisfaction has been reached at the producer and at the client. In order for a project to have a well defined start and end there is a need for the project to have a clear defined goal as well as clear defined expected result. When talking about projects one can characterise the types of goals in the following:

- Change goals, which concerns with the issue of expected changes in the organisation that the project is about.
- Project goals, which concerns with time and resources that can be consumed within the project.
- Quality goals, which concerns with quality goals at both process and product level within the project.

When formulating goals for a project it is important that one reaches a balance between the quality of the result, the amount of resources that needs to be put in to reach the expected result and the calendar time. The figure below shows these relationships.

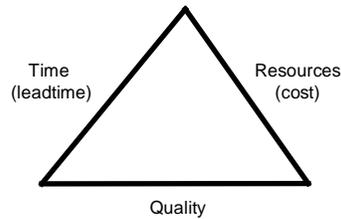


Figure 4: Dependent parameters to be used when optimising projects

As mentioned earlier, a project can be divided in at least two generic phases (see figure 1). Experiences from the change project at the consultant firm show difficulties in concluding projects, which have its base in the generation of supplementing orders while the project is running. The reason for these supplementing orders might be that the consultant firm establishes a deep relationship with the client through the accomplishment of the project which leads to that the client wants more things conducted than originally agreed upon.

In order to arrive at efficient co-ordination of a project-based organisation it is important to bring projects to an end. When a project then comes to its end it might result in generation of new needs for the client, which can be the basis for a new project. We regard the closing of a project as a separate phase. The purpose of such a phase is to check the result of the project against the client's expectations that was established in the beginning of the project. Such expectations are documented in the assignment. A project can therefore be divided in the following phases:

- Agreement phase
- Fulfilment phase
- Closing phase

4.3 Roles in projects

By using the view on projects described in the previous section one can question which roles that are involved in each phase. We believe that there might be the same persons involved in both formulating agreements and closing the project, but the person is then acting in different roles. In the figure below we have included the roles that should be active within the different phases. This thinking is based upon Theory of Practice (Goldkuhl & Röstlinger, 1999).

In the agreement phase there is one actor from the supplier side and one actor from the customer side that interact in order to reach an agreement of future actions. We call these roles for *assigner* (from the customer side) and *contractor* (from the supplier side). When the two parties have reached an agreement the two roles *producer* (from the supplier side) and *co-producer* (from the customer side) jointly fulfil the agreement. Typical for projects is that the fulfilment often is a joint venture between the supplier and the customer. When the agreement is fulfilled the project comes to its closing phase. The two roles interacting here are the *result deliverer* (from the supplier side) and the *client* (from the customer side). The roles related to the different phases in the project are depicted in the figure below.

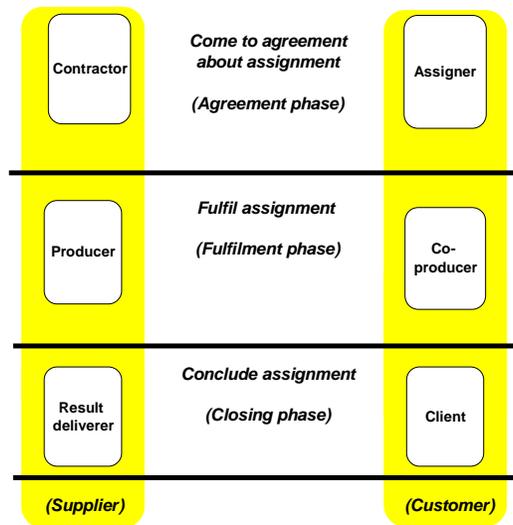


Figure 5: Roles involved in the different phases of a project

4.4 A model to use when talking about projects – a project generic model

A project generic model has been formulated based upon demands and experiences from the case study (see appendix 1). A generic model means that the model is general in some aspects, but that it needs to be adjusted to the specific situation. Furthermore it is important to realise that the model is normative and ideal typical. Also note that a model is always a simplification of the phenomena that it is supposed to describe.

The model is built upon the three identified phases (see section 2.2); *agreement phase*, *fulfilment phase* and *closing phase*. The model can be seen in appendix 1, which describes relationships between the phases as well as the contents of each phase. We have chosen to emphasise the states that each phase should result in and the interactions between different roles. A symmetric view of the involved parties has been applied in the model. It is not just a supplier delivering, i.e. fulfilling a commitment. It is also important to take the customers commitments and involvement into consideration.

The project generic model starts out with the agreement phase in which should result in an assignment formulated and accepted by the contractor and the assigner. Activities that are performed within this phase are exposing ability and needs, negotiation of obligations and formulation of mutual commitments. By mutual commitments we mean double-directed commitments. In the figure below we have shown that there is a lot of interaction between the two roles (contractor and assigner) in the agreement phase. We believe that one should be very serious about formulating good agreements in order to arrive at a successful result. It is therefore also important to take different experiences from different phases (former conducted projects) in to consideration. Such experiences together with former experiences from the agreement phase become know-how for the parties, which will be used when acting in future projects. We believe that such dynamic is important to enhance in order to arrive at continuous improvement of involved parties. We also mean that the parties can be aided by using methods. Since a project means involvement of a lot of people one need to clear out responsibilities among different parties. Such responsibilities should be included in the assignment.

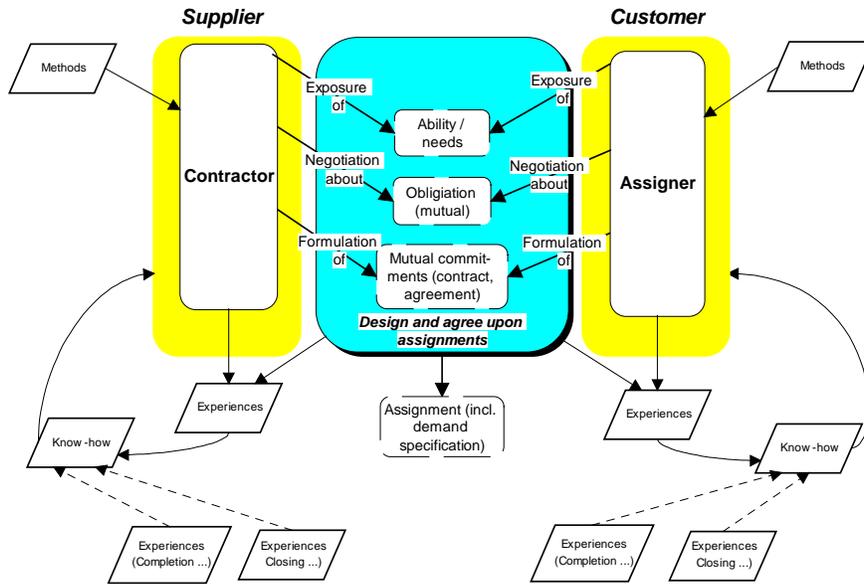


Figure 6: The agreement phase in the project generic model

The agreement phase is followed by the fulfilment phase. The assignment, consisting of mutual commitments, is an important condition for this phase. The content of the fulfilment phase is shown in the figure below. The project leader, who is responsible for the structure of the projects (activities), utilisation of resources as well as ensuring that the project arrives at agreed results, uses the assignment as a base for his/her work. The assignment from the agreement phase is both a product and role assignment, which is the base for the project leader to act. The role of being a project leader doesn't have to be on the supplier side. It can also be someone at the customer that has the obligation of being a project leader. Within this phase of the project it is important to emphasise that the producer and the co-producer jointly works to produce expected result. During the fulfilment this phase of the project it might happen that the condition becomes altered. In this situation there is a need to evaluate and see if there is a need to reformulate the assignment and thereby move back to the preceding phase (agreement phase) or if the altered conditions can be handled within the fulfilment of the assignment.

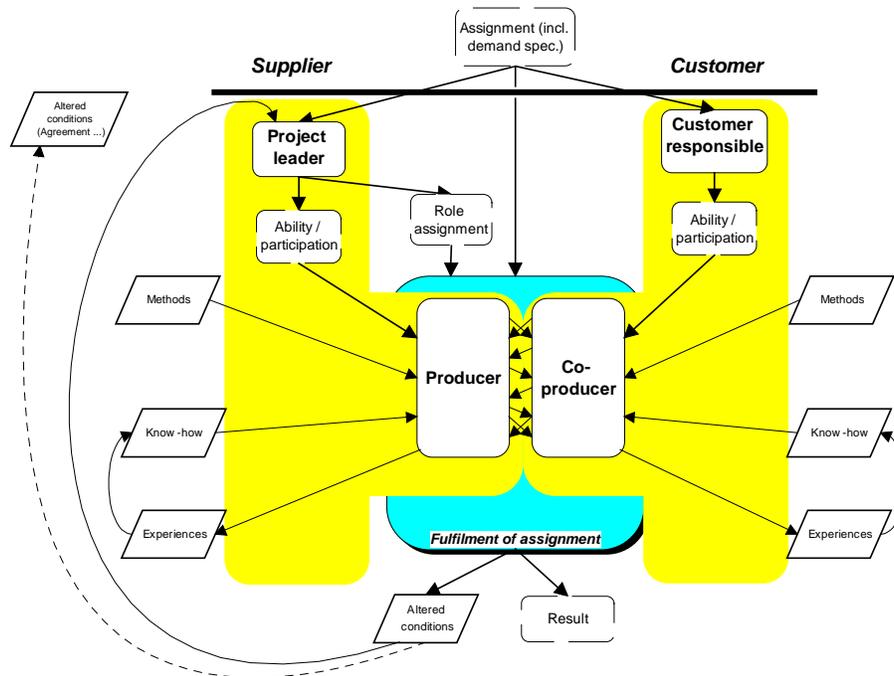


Figure 7: The fulfilment phase in the project generic model

The fulfilment phase is followed by the closing phase. The purpose of this phase is to evaluate whether the result of the project matches the expected result that was formulated in the agreement phase. The goal of this phase is to arrive at supplier and client satisfaction. The client expresses his/her satisfaction by conducting the rest of his/her obligation. In commercial situations this is about transferring money to the supplier. Note that the financial arrangements can differ a lot from project to project. It is however important to ensure that both parties fulfil their obligations, which sometimes also happens during the fulfilment phase. The closing phase then function as an evaluation phase in order to ensure that both parties has fulfilled their commitments (stated in the agreement). The goal for this phase, as well as for the whole project, is to arrive at relevant satisfaction for both parties. Examples of satisfaction for the supplier are gained experiences within a certain domain, goodwill at the customer etc. One examples of satisfaction for the customer is that the customer arrives at the changes in the organisation that was expected. If the project turns out well it is common that one arrive at a new needs for the customer. It is common that the supplier and the customer have established such a relationship that they want to continue to co-operate. In the figure below we have also chosen to emphasise the need for bring back experiences from the evaluation to the actors that have acted in the former phases in the project. If the parties do not arrive at satisfaction it is very important that they evaluate the reason for this and then find ways to arrive at satisfaction, which can mean that they need to move back to the preceding phases of the project.

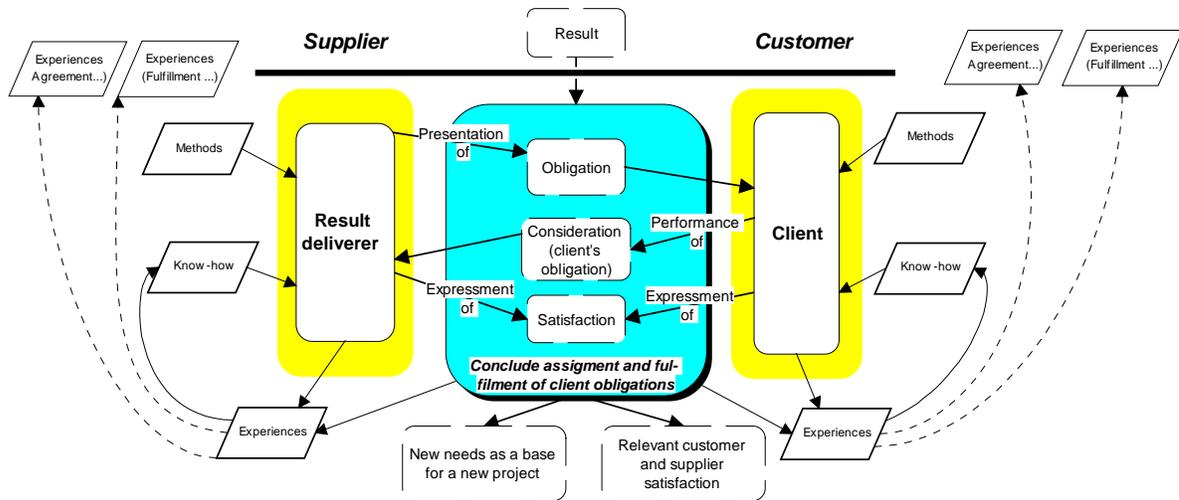


Figure 8: The closing phase in the project generic model

The project generic model can be interpreted as very sequential, but as we have tried to show, there exist a lot of feedback couplings between the different phases. It is however, important to be aware of the purpose of actions that are performed in different phases. If the parties need to come into renegotiations one moves back to the agreement phase where the assignment is altered and then goes back to the fulfilment phase.

Dividing a project into different phases highlights decision points (often called base lines). The producers (producer and co-producer) are then forced to generate different results within certain frames (time, quality and resources).

Note that the agreement phase might need to be conducted as the whole project generic model, i.e. the agreement phase might need such thorough investigation that coming to an agreement needs to be regarded as a whole project.

4.5 The applicability of the project generic model

The model can be used in many different situations. The model can be used as a theoretical lens in order to ensure that attention is paid at relevant aspects when investigating and changing project-based organisations. Such attention is needed when reconstructing, discussing, evaluating, structuring, documenting, and designing projects. In order to manage to aid the attention creation process one can state questions to guide the analyser. Since such questions then will be based on a generic model the questions also shall be seen as generic. Examples of such questions, in the context of the project generic model, are:

- What is/was the purpose of the assignment / project?
- What different type of goals exists for the assignment?
- What are the different roles and how are these interacting in the project?
- Who is responsible for the whole project and who are responsible for different parts of the result?
- How are feedback and refinement of experiences handled?

- How are projects being initiated?
- How are projects concluded and evaluated?
- Which methods are being used to ensure commonality and good quality in the different phases?
- How is, and by who is, relevant satisfaction measured?
- How is planning and governing of projects being performed?
- How is responsibilities shared by different parties in the fulfilment phase?

It is common that people involved in projects have their own conceptual framework, which means that the model might be possible to help people to unify their conceptual framework. Since the model is based upon a longer case study performed together with the industry we believe that the concepts used in the model is rather relevant.

Furthermore, we believe that the project generic model will be a help to ensure successful project work. To structure projects around agreements seems to be relevant since a lot of problems that occur within project-based work is based on bad formulated agreements. A project should be evaluated by using an accurate frame of reference, which is established in the formulation of the specific (for a certain project) assignment.

5 Concluding remarks

When performing change work, where several individuals are taking part, there is a need for a common language. Experiences from the conducted change project at the consultant firm show that the participants in the change project had problems in communicating with each other. These communication problems had its roots in a lack of a common structure and a common frame of reference. The purpose of this paper has been to formulate a model that can be used to talk about projects. The model is labelled a project generic model. The model has been generated from empirical experiences, but also from theories about business processes.

The model is generic, which means that it is ideal typical, or general. This means that thorough considerations need to be taken in order to adapt the model to a specific situation. The model is then rather a base to be used when reconstructing, talking, designing, structuring, evaluating, and documenting projects.

The notion of projects is reflected in the model where a project is regarded as consisting of three phases; *agreement phase*, *fulfilment phase* and *closing phase*. Language, essential roles, relationships between the roles, expected states and result after accomplishment of each phase have been emphasised in the model in order to help the attention creating process when diagnosing project-based organisations.

The issue addressed in this paper is about communication, where the presented project generic model aims at helping people to communicate in a better way. It concerns both when developing organisations, which is about reflecting upon the present situation, and when running projects, which is about operatively doing things project-based. We have stressed the issue about coming to agreements, which we think is important in all business situations when we are aiming at some kind of satisfaction. Within an inter-cultural context people participating in the project will represent different cultures. We believe that it is even more important to stress the issue of becoming agreed upon the things we are doing since different cultures also means that the participants have different ways of understanding the world. The participants will have different understandings of what is important and therefore create

expectations directed towards the other party that really needs to be made explicit. When the participants come from the same cultures some basic values might be taken for granted, which must not be the case if one wants to arrive at satisfaction when the participants represent different cultures.

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Appendix 1: A project generic model

