

Teaching Note to the Case #6 on Knowledge Communication, 6/2004

**“Why don’t they know what we want?”
The Knowledge Communication Chasm between IT-Cracks and Insurance
Professionals**

1 Case Study Synopsis

The case study deals with the communication problems between IT-specialists and the business department of a large insurance company. Within the scope of a project, the IT-specialists are asked to do specific changes on an IT-application that supports the business in completing their daily tasks. Even if the communication process along the project is already quite elaborated, various misunderstandings between the two parties take place and the project falls more and more behind schedule. The case illustrates the challenges of the knowledge intensive communication between IT-specialists and the business line of the insurance company and encourages the reflection upon possible solutions that can be employed.

2 Teaching Objectives and Target Audience

The main objective of this short case study is to sensitize the reader to the knowledge-intensive communication problems that can arise between specialists with different expertise who have to work together in order to successfully make decisions or accomplish a project. In a second step, the student should think of possible solutions for the encountered communication problems and evaluate the ones presented in the case. The didactic objective is both to reflect upon the general communication process along the project enrolment and upon the single communicative situations. The case is written on the one hand for university students (undergraduate and graduate students) in the fields of communication, management (i.e. project management, knowledge management), or information technology. On the other, the case can also be used in the executive education, for example for workshops that aim to improve the communication skills of experts (i.e. consultants, IT-specialists, analysts, engineers) and decision makers (i.e. managers).

3 Teaching Approach and Strategy

The case study is very short so that it can be distributed either a few days before the actual discussion or just ahead of the elaboration of the case. There are at least two possible ways how to work with the case. The one is that the students discuss the questions of the case first in small groups and then present their findings to the class (for example one group always presents its answer to just one question). It is also possible that the case is directly discussed in a plenary session.

4 Case Discussion

Question 1

The following is a list of the **major reasons that have led to the various misunderstandings** and the project delay. The upper problems of the list are more communicative whereas the lower ones are more due to the general process of the project.

- *Different jargons*: Both groups, the IT-specialists and the people working in the insurance department, work in very specialized areas and talk very different languages.
- *Different perspectives*: The two parties do not share the same educational background, they have different interests or needs and therefore apply very different perspectives and rate things differently.
- *Being strongly attached to detail and losing the big picture*: the IT-specialists sometimes stick too much to technical details rather than communicating the general lines and implications of a specific IT-solution. The fact of being too much oriented on technical detail and not conveying the more global context is not only a problem when IT-specialists are communicating with the business, but also when the IT-team leaders are explaining the subtasks to their programmers.
- *Implicit misunderstandings*: such understandings can be due to an implicit different understanding of certain terminologies (term ambiguity).
- *Rigid formalisms*: The communication of the IT-team leaders with the programmers is rather constrained when they have to apply them to tasks (detail specification forms of subtasks)
- *ASK (anomalous state of knowledge) problem*: For the business people there was the general problem that they could not conduct an accurate briefing at the beginning of the project because they do not have the IT-knowledge that they would need to do so. How can they define what they need if they do not know what is possible. Therefore, it was difficult for the IT-specialists to fully understand the intention of the business team.
- *Three-step-communication process*: The business people do not have a direct contact with the programmers. They communicate with the project/team leaders of the IT-department which only in a second step communicate with the programmers.
- *Scope creep*: the signed scope, that is the common agreement on the detail specifications of the new application, is broken several times. The constant changes in the programming phase leads to quite a tense relationship.
- *Time pressure*: the quite narrow time schedule from one release of a new application to the next one often leads to cut downs in communication.

Question 2

There are several **actions Ferguson could undertake in the short term in order to finish the project successfully** and not to fall behind schedule even more.

- Convoke a *meeting with all the people involved* in the project to clarify present misunderstandings, communicate certain frustrations by explaining to one another one's own perspective and to define next action steps
- Radically *prioritize* which changes and requirements to take into consideration and which ones to leave aside

Question 3/4

The following changes could be implemented in **future projects** so that the collaboration between the business and the IT specialists will be less problematic and the projects can meet its deadline.

a) Suggestions for the general **project process** that have an impact on the effectiveness of the communication:

- *Job rotation*: send programmers and IT-specialists for “internships” to the business line for several weeks so that they get to know the bigger context of their work, develop a deeper understanding of the necessities of the business and start sharing common experiences.
- *Close collaboration*: extend the briefing to several workshops, involve someone from the business line quite actively in the application development process
- *Early on involvement of programmers*: involve programmers earlier in the project (already when defining the goals of the project) and not only when team leaders divide tasks into subtasks.
- *Early on testing*: do testing of small functionalities of the application early on rather than testing the whole prototype at the end.
- *Intermediary unit/person between IT & business*: a special unit/person that has a translator function and that has a background both in business and informatics. In fact, the insurance company's IT project managers that have this double background and function as translators.
- *Discourage scope creep*: install a “payment” for every time the business line commits scope creep i.e. adds additional wishes after they signed the scope. Such a payment could be for example additional time for the project or also more symbolic payments.

b) Suggestions for the **communication process along the project**:

- *Clarify Project goals at the beginning of the project*: Engage more time in the initial project phase by defining clearly the project goals. Project leaders should take away the urge to immediately start programming because of the high time pressure. Focus at the beginning on
- face-to-face interaction and use interactive visualization to support these meetings in order to create reciprocal trust and a shared language.
- *Debriefing*: at the end of the project involve all the members of the project to give a feedback on what went well, on what went wrong and reflect together upon the reasons why certain requirements could not be met
- *Combine formalized communication with interactive personalized communication*: Team leaders should always accompany the communication through the forms with the detail specifications with a short face-to-face briefing.
- *Training in communication skills*: train both parties in their communication skills
- *Visualization*: Engage in more consistent visualizations by defining standard meanings for certain symbols. Use visualization for providing an overview and do intelligent integrations of text into these visuals. Use text to give more detailed information. The collaborative development of visuals during a conversation or meeting also helps to create a common vision and language.

Question 5

The **advantages of meetings or personal talk** to communicate domain specific knowledge in an interdisciplinary context:

- A major advantage is that meetings and personal talks are interactive and iterative forms of communication so that continuous feedback is possible and the understanding of the vis-à-vis can be checked.
- Face-to-face interactions are a collaborative way of communicating. This is particularly important when the business has difficulties to clearly define the objectives and requirements (ASK-problem).
- Face-to-face interactions permit to reciprocally adapt the different languages/jargons.
- Face-to-face interactions are trust-building and allow the project members to get to know each other and share common experiences.

The main **challenges** of face-to-face interactions are:

- Face-to-face interactions are non persistent and the decisions taken are therefore less traceable and less obliging.

- Face-to-face interactions are characterized by a formally less structured process. Conversers therefore risk getting lost in detailed discussions on side issues and losing the big picture of the argument.
- In face-to-face conversations, inferences and argumentation threads often remain implicit and rather vague. This can lead to misunderstandings, which are discovered only later in the collaboration and to untested and not very rigorous reasoning.
- Face-to-face conversations can become very emotional. This is not by all means negative. In fact, emotional talk fosters trust, which is a prerequisite for effective task oriented talk. On the other hand, emotional talk (especially if conversers insult and hurt each other) can impede constructive, task oriented conversations.
- Face-to-face meetings usually take place in rather short time frames. Conversers often lack time to espouse an idea more in-depth. This problem is intensified by the fact that a conversation is a very interactive form of communication and topics are switched quite rapidly.

Question 6

Requirements for a **good written knowledge communication** / Trade-off between the need to standardise knowledge intensive communication (to enable synthesis, easier orientation, etc.) and the necessary liberty in how to represent complex issues

- Always provide an *overview*. Allow various levels of detail so that the receiver of the communication can decide where he/she needs more in-depth information and where a more superficial knowledge is sufficient.
- Use *visualizations* (graphs, figures, metaphors) for the overview or the general idea.
- Combine *standardized communication* (e.g. through forms) *with face-to-face interactions* to check understanding. In the standardized communication, clarify conventions and terminologies to minimize the implicit misunderstandings.

Question 7

General **key success factors for the knowledge intensive communication** between two parties that belong to two different departments and that do not share the same domain specific knowledge

- Engage in a common understanding of the general goals
- Communicate the big picture and the more general context (explain the why) of the issue in order to enable a common understanding and to turn the communication meaningful
- Stress face-to-face interaction and use interactive visual documentation of these interactions
- Foster a close collaboration between the two parties and create shared experiences and trust
- Facilitate perspective changes through job rotation