Translation Theory and the Integrated Approach in IT Management

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ABSTRACT

'The translation theory model' with its processes of 'alignment', 'enrollment', 'inscription' and hegemonic power processes is derived from action-network theory and offers a uniform and dynamic perspective on the management of IT in organizations. In particular, we focus on the complex social processes which are critical for the successful application of the "Integrated Approach". the 'Integrated Approach' is a promising approach to IT projects and maintenance, advocated both by researchers and consultants the last decades. In this paper, we describe a consistent analysis model based upon the translation theory. Then, the use of the model is demonstrated in regard to the implementation of the integrated approach in a large bank concern. The analysis yields how various actors continuously confront their own ideas and practices with those of others. They interpret and adjust new concepts according to their interests, and 'engrave' a jumble of new and old insights into the organization in both functional and dysfunctional ways according to the ongoing IT-project. The translation processes often takes place unintentionally, as an ongoing and power-based process of implicit meaning and identity formation. We conclude that the translation theory model offers an operational and constructive approach to understand the social construction of complex IT artifacts in organizations.

KEYWORDS

Translation theory, IT management, Participation, Power

INTRODUCTION

In the current debate on IT management, IT researchers and IT practitioners advocate the 'Integrated Approach' of IT management. It is stated that the integrated approach is better equipped to deal with problems in developing, implementing, managing and maintaining IT-systems than the prevailing technology-led approach does. The integrated approach focuses both on the integration of technological and organizational systems design and in particular on participation, i.e. the involvement of all parties, such as IT experts, management and end users in the decision making processes. These elements are considered crucial factors of success in today's projects that often span borderlines between departments, professional groups, organizations and/or cultures. Within the redesign of organizational structures and workplaces on the basis of web-based applications, mobile work, knowledge based systems and so on, the necessity of coping with approaches spanning technological, organizational and cultural aspects of IT projects is deeply and widely recognized. It is widely accepted that so-called 'technocratic', 'technology-led', 'hard' or 'discrete-entity' approaches are inappropriate for today's management of complex IT projects within and across organizations (i.e. 22, 23, 42). However, despite its promising potential to deal with these problems, the integrated approaches has still not yet settled down solidly (22, 31, 33). The implementation of the approach is clearly a troublesome, often discouraging process, which often evokes resistance to change more than participants' enthusiasm. Apparently, participation, one of the core ideas of the integrated approach of IT management, seems to be missing its targets.

If we were to make a strict and static analysis of the confrontation of the interests of all parties involved, we could then conclude that the integrated approach failed to realize the basic assumption of participation [12]. However, as we will argue in this paper, the suggested translation theory model as derived from prevailing actor-network theory works [1, 6, 11, 25, 26, 28, 29, 35, 47] offers another, uniform and operational perspective. Translation theory indicates that these problems in participation belong to the 'normal way things go', when new ideas, new models, new technology enter the organizational discourse. Translation theory analyzes the development and implementation of the integrated approach as a complex process of ongoing amalgamation, through which both elements of the existing practices and insights of the newly introduced vision get mingled into a more or less stable set of new practices of IT management.

This paper is structured as follows. First, we shortly describe the promises of the integrated approach of IT management. Then, we introduce the core concepts of translation theory and derive an operational model. Subsequently, we analyze the translation processes of alignment, enrollment and inscription and their power basis, while illustrating our analysis by exploring the integrated approach of IT management in a large bank. As conclusion we discuss the contributions of translation theory to a better understanding of the challenges of the integrated participatory approaches in IT management in organizations in general.

A PROMISING CONCEPT

Analyzing the difficulties in producing adequately functioning IT systems in time and within the limits of budget, IT researchers questions the paradigms of the prevailing - technology-led - approach of IT management [for example, 1, 6, 13, 17, 37, 38, 39, 45, 46]. The technology-led approach considers IT development solely as a matter of developing new hardware and software, and neglects the mutual impact of technological and organizational development. This one-dimensional approach of IT management is widely considered ineffective and inefficient. Hence, in the wake of emerging paradigms of technological and organizational change [18, 27, 32, 40, 41], new techniques and methods are developed.

The new perspective emphasizes a so-called integrated approach of IT management, stressing the need to integrate technological and organizational development and to stimulate participation in decision making processes [5, 17, 19, 20, 21, 40, 41]. The integrated approach focuses on four domains of activities [for an extended literature survey, see 12]. In the first place, the integrated approach of IT management emphasizes a *strategic orientation*, aiming both at mutual adjustment of the strategic options and technological and organizational change and at reaching consensus between all parties involved (management, staff, IT experts, end-users). Secondly, scrupulous *project diagnosis* is requested in order to detect all critical factors of the success of an IT project at an early stage. These critical conditions are related to both technological components (hardware, software, infra structure) and organizational constraints, such as organizational environment, organizational structures and (sub)culture, and power and interests. Thirdly, the integration of *technological and organizational systems design* emphasizes the interrelation between technical design and organizational design. The integrated approach of IT management focuses on organization oriented system development methodology, in which experienced problems in business processes steer the development of IT solutions. On the other hand, new IT developments are taken into account in an early stage of organization development. Fourth, second generation organization development focuses on *participatory organizational transformation* criticizing the linear and expert-based 'planned change'-vision of technology-led IT approaches. So-called cooperative or participatory design encourages

active end user participation (for example in prototyping) and a facilitating role of IT staff, while user organization management is supposed to have final project responsibility.

At first glance, the integrated approach of IT management is promising. However, recent research [for example 13, 31, 38, 46] has found little and scarce indications of significant improvement in the practice of IT management, due to the dissemination and application of the new approach. Although the rhetoric of integrated approach has intruded the IT-management discourse successfully, in practice it appeared to be too difficult to effectuate its core ideas of 'integration of technological and organizational redesign' and 'participation'. Hence, many IT projects suffer from a so-called *satisficing* strategy (45): Difficulties in the implementing of the integrated approach often lead to acceptation of a less optimal solution and to a pragmatic attitude to deliver *"at least a technical system that works"*.

TRANSLATION THEORY

A commonly used method to analyze success and failure of participation IT management is the 'arena'-approach, in which an analysis is made of the chances of realization of wishes and interests of all parties involved in the development and implementation of IT systems. From such a perspective, participation is considered one of the so-called critical-success-factors: "..the few key areas where 'things must go right' for the business to flourish" [34: 207]. Research suggests that, in many cases, the integrated approach of IT management will not succeed in 'getting things right' in regard to participation and the realization of the wishes and interests of all parties involved. Hence, from the point of view of the 'arena'-approach, the difficulties in the effectuation of the integrated approach will be interpreted as straight failures. However, we shall demonstrate that translation theory as depicted by McMaster, Vidgen and Wastell (28) and others (3, 12, 15, 29, 44) provides us with additional insights, which allow us to interpret the participation problems from a more dynamic perspective, as complex, though predictable processes of ordinary organizational change. Translation theory focuses on the interrelated and power-based processes of 'alignment', 'enrollment' and 'inscription'.

Alignment, enrollment and inscription

When new management concepts, such as the integrated approach of IT management, enter organizational discourses, an ongoing and complex process of meaning (trans)formation is activated. The rhetoric of the integrated approach of IT management aims at assimilation of the new concept: the (re)construction of a shared interpretation via a process of spotting and breaking down old interpretations, and of reshaping new and alternative meanings. However, successful assimilation hardly occurs in practice. Actors, involved in IT development and implementation, do not simply copy the new fashion.

The concept of amalgamation better indicates what happens

during the processes of the implementation of the integrated approach of IT management. Although the integrated approach of IT management is introduced as a complete and interrelated package of visions and actions, only some notions of the new vision will enter the organizational discourse. The new vision has to mingle and assimilate with the existing power networks, organizational culture and subcultures, in order to influence the existing set of ideas of IT management in the organization. Subsequently, during an ongoing process of confrontation of ideas, intermingling of concepts and (re)interpretations of meaning, the organization slowly changes towards the realization of some core elements of the new set of values. From this point of view, participation in IT management is part of an ongoing process of amalgamation of new and old ideas and practices.

In terms of the actor-network-theory, a 'translation' takes place. Latour describes translation as "[…] the spread in time or space of anything - claims, artifacts, goods - in the hands of people; each of these people may act in many different ways, letting the token drop, or modifying it, or deflecting it, or betraying it, or adding to it, or appropriating it" [35: 267]. The actor-network-theory – in line with the 'social construction of technology'-approach [4, 36] – states that technical development can be considered such a complex translation process, based upon 'alignment', 'enrollment' and 'inscription'.

While continuously confronting their own notions and ideas with those of others, actors in IT management form temporarily fixed, heterogeneous networks of aligned interests. Actors pick up parts of new ideas, (re)interpret these concepts according to their interests, adjust their own interpretations during decision making processes. In the course of this process. they 'inscribe' this jumble of new ideas and old practices into the organizational structure, the organizational culture and technological systems [6, 29]. From this perspective, organizational structures and cultures and technological infrastructures and software are considered frozen organizational discourses [10, 47]. To create stability in such a network, it is vital that 'enrollment' is successful. Enrollment is the process through which the differences and peculiarities of the wishes, demands and interests of all actors involved come together into a set of more or less shared values and practices. Enrollment takes place by "representing or appropriating the interests of others to one's own" (29: 330). From translation theory perspective, participation in IT management is both enrollment in the formation of dominant coalitions with aligned interests and active involvement in the 'inscription' of new concepts and ideas in the organizational structure, culture and technological systems.

Hegemonic power processes
It is important to see that translation is a non-neutral, power based process: "a stabilized network is only stable for some, and that is for those who are members of the community of practice who form/use/maintain it" [44: 43]. Sometimes,

popular organization concepts are translated as a result of rational calculation [35]. In those cases, power processes take place explicitly, when actors intentionally seek to form dominant coalition with other actors. However, in many other occasions translation is an unintended and concealed process. Translation often occurs in 'Bourdieuan' fields [9]: actors operate in non-neutral, value and power based organizational contexts, in which, in an ongoing and implicit way, ever changing meaning and identity formation processes take place as chains of related (re)formulations, ladders of (re)interpretations and slowly changing norms and values. The implicitness of power based translation requires a specific view on power, which does not only pay attention to manifest power (authority or manipulation) but also to so-called hegemonic, implicit power processes [3, 12, 15]. Hegemonic power processes express the casualness with which many people in many circumstances of daily life wield power or are subjected to power, without being always fully aware of this form of influence. In an ongoing and implicit way, ever changing meaning structures and identities in organizations are temporarily 'fixed', channeling the way subjects submit to enhance organizational or group interests. Meaning and identity formation implies that certain conceptions of reality and types of identity are 'organized in' while other possible perspectives and identities are excluded [30]. As a result, hegemonic power processes encourage consent with the dominant organizational view and the acceptance of organizational practices, despite possible disadvantages of these practices for some involved. Translation, as a process of ongoing and selective meaning and identity formation, is always part of this slowly changing constellation of manifest and latent power processes in organizations. Hence, in our analysis of participation from a translation theory perspective, we will pay attention to the explicit and implicit power processes involved.

THE INTEGRATED APPROACH - A STRAIGHT FAILURE?
In the further analysis of translation processes in IT management, we illustrate our reasoning by referring to the 'rise and fall' of the integrated approach of IT management in a large bank. In 1996/1997 we carried out a qualitative research study in regard to the management of IT projects in a large bank [16, 46]. The complexity of our research objective - the cartography of a multiple set of factors and circumstances influencing the success of the integrated approach - and its explorative and descriptive nature call for a qualitative research strategy, which does not allow general conclusions. Our research strategy, however, benefits from insights acquired from in-depth analyses, characteristic for a cases-comparative approach [48]. Information is collected through a combination of techniques, such as the analysis of internal documents, personal observations of development and implementation of IT systems and approximately forty open interviews with IT experts, managers, end-users and HRM staff. The research is based on both the analysis the process of designing PROMIS (the application of

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the integrated approach of IT management in the bank) and of the analyses of two IT projects, designed and implemented according to the newly designed integrated PROMIS methodology.

If we were to study the history of PROMIS and its applications from a 'critical-success-factors'-perspective, we would then observe straight failures:

The bank results form a recent merger. The new board of directors and the management team decided that, in order to successfully integrate both former organizations, a new integrated approach of IT management should be implemented in the organization. This new approach, PROMIS, was introduced as the new 'collective face' of IT management of the bank. According to the introduction brochure, PROMIS was an application of the integrated approach of IT management per excellence, combining all four domains of integration, which we have described earlier in this paper. The existing differences in vision, concerning successful IT development and implementation, between the two IT departments of the merger partners have had significant influence on the further development and implementation of PROMIS. On the one hand, these differences has forced the bank to develop a sophisticated IT mission and to communicate this mission in the organization thoroughly, leading to growing insights into IT methodology and the integrated approach of IT management. On the other hand, deviancies in visions and interests clearly have hindered a smooth assimilation of the core ideas of PROMIS into the existing organizational discourse. Some people associated PROMIS with a 'soft' organizational change (too much focus on the social aspects, too less on technical and economic facets). Besides, the project team failed to organize sufficient internal and external support. Furthermore, instead of redesigning the new technological structures according to the newly developed designing rules of PROMIS, old practices of technical design and implementation were sustained under the 'label' of a new approach. Organizational conservatism and the incompetence to deal with semantic confusion between IT staff and end-users have obstructed successful implementation. Despite its promising concept, PROMIS is considered a failure; in stead of participating in a joint project, the parties involved (IT staff from both former organizations, users, user management) abandon the game and withdraw from participation meetings.

TRANSLATION PROCESSES

The 'critical-success-factor'-approach would emphasize the failures of the integrated approach of IT management in the bank. However, when we look at the history of PROMIS from a translation theory perspective, we discover a more complex process, in which ostensible failures appear to be part of an ongoing process of organizational change. In order to underpin our reasoning, we analyze the development and implementation of the integrated approach of IT management in terms of the three translation processes of 'alignment', 'enrollment' and 'inscription' and we indicate the power processes involved. Each time, we illustrate our analysis by describing what happened to the introduction, adoption and implementation of PROMIS.

Alignment

Translation starts during the 'first encounters', when new management fashions enter the organizational discourse. Encountering has a supply side and a demand side. On the supply side, new concepts are invented, further processed and disseminated by management gurus or specific knowledge-based organizations. On the demand side, the success of the new concept depends on the extent to which those, who form the new concept target group (management and staff), actually accept this concept as a plausible one. A complex process of alignment takes place, through which actors investigate their own interests and search to align their interests with those of other actors. There is a common feeling that, in order to make the new approach successful, people have to 'line up' in order to aim for the same goal. In the terms of the Actor-Network Theory (ANT), two 'moments' of translation take place: 'problematization' and 'interessement' [28].

During the process of 'problematization', actors develop a common awareness of the organizational problems, and a shared insight in the kind of solution to be searched for. Successful 'problematization' takes place in the form of a general '*Aha-reaction*'. Based on past experiences and dominant interpretation structures [46], the actors in the adopting organization isolate, of all possible new management concepts and ideas that are being offered, a particular vision, as the most promising solution for the problems of the organization.

Looking at the '*Aha-reaction*' in the bank, it is obviously clear that the bank has made a good start. The plan to introduce and develop PROMIS is launched right on time. At the supply side, the bank is strongly influenced by consultants of a leading management consultant organization, who advocate the principles of the integrated approach IT management. At the demand side, both the board directors and the management team firmly supported the concepts of the integrated approach. Hence, the board of directors decides that the newly to develop integrated approach for IT projects must become the 'collective face' of the bank on the area of information development, both inwards and outwards.

Apart from 'problematization', 'interessement' is considered an important alignment process. 'Interessement' is a process through which actors carefully scan other actors' visions. Actors investigate the differences between their own and other actors' interests, trying to find out whether these differences would raise barriers to developed a commonly

shared vision. People try to find out whether the new vision supports their own opinions or not, and how the new vision relates to the existing organizational practices. In the case of the integrated approach of IT management, 'interessement' is a delicate alignment process. One of the core ideas of the approach focuses on the interrelationship between the technical, organizational and social aspects of technological change. This insight forms a main distinction between the integrated approach and the technology-led approach. However, it might also raise barriers to alignment, since it relates to deeply rooted frictions and misunderstandings in IT discourses. First, the suggestion that the technology-led approach fails to relate technological change to organizational change is a tricky subject in many organizations, since IT staff often apperceives this suggestion as an sneaky reproach of their past performance (7, 42). Secondly, although social aspects of IT are considered of great importance, this emphasis apparently evokes objections from an economic point of view (7, 36). It makes the integrated approach being considered a 'soft' concept, stemming from a non-economic, but sociological and psychological perspective.

The 'interessement' processes in the bank clearly have hindered an overall alignment between all parties involved. The integrated approach of IT management in the bank has suffered from a pejorative – social - label. PROMIS strongly focuses the social aspects of IT. In legitimizing PROMIS, too little attention is paid to the technical requisites and the presumed economical benefits. And, in particular these 'hard' organizational and economical benefits are supposed to steer the thinking, perception and action of the 'rational' managers in the bank. Hence, alignment in the bank took place along the existing groups of antagonistic interests. In a way, one could say, that many IT experts, management and end users have 'lined up' *against* the social connotation of PROMIS.

Enrollment

The process of *enrollment* [28] takes three major steps. First, the concept has to be generally *accepted* as the one and only solution for experienced problems. Research suggests that actors in organizations intentionally or unintentionally accept a new concept to improve effectiveness and efficiency, for gaining legitimization, and to seduce other actors to follow their footsteps. The general, vague and non-controversial form in which the new concept is usually disseminated provides the concept with a certain amount of interpretative flexibility or viability, which makes it useful, applicable and acceptable for all of these purposes.

Not only the board directors and the management team have embraced the innovativeness of the integrated approach. IT staff, users involved and line managers generally have accepted the new approach as an approach that constitutes 'good' management. In the bank, the

insight has been settled that it is important not just to develop better information systems but also to improve business performance with the help of better information systems, which are integrated in workflow processes. Generally, the integrated approach of IT management promises to realize these purposes.

Secondly, a complex process of *'plausibilization'* (or in the German language: 'Hineininterpretierung') takes place. Actors select partial arguments and lines of reasoning of the new managerial concept, and they make plausible interpretations of its presumed contents to remove the original equivocality and vagueness. Plausibilization can take many forms. Actors reformulate ideas by concretizing vague notions to fit the existing organizational practice, by imitating stories of success and by combining or remolding several new recipes into a new one [35]. Actors put effort in these processes of plausibilization in order to be convinced that they will support the new set of ideas. They need this confirmation in order to 'enroll' in the strict sense of the word, that is, to sign up to the new approach and to commit themselves to the new vision.

Only the board of directors has 'enrolled' entirely to the new approach, seduced by the perspective that PROMIS might bring about the required unification of the two merged partners. Other groups of the two former organizations (management, end users, IT specialists) have expressed a more reserved attitude towards to new approach. In particular, the considerable differences in the visions regarding - what each of the former partners labeled - 'an integrated approach of IT management' have caused problems in developing PROMIS as an instrument to give the bank a recognizable and collective face. One of the project members addressed this subject as follows: "*Both organizations were very different in their approach of IT projects. Our organization used to raise the why-question:... "why do we do this project", while they were more focused on the how-question:... "how do we do that project". Looking back now... we never really have tackled this problem, and both visions have persisted within the new approach, even though they did not match. It finally resulted in a sort of shared approach, but I think it still is a way of adding up the different perspectives....".* Apparently, both partners have 'enrolled' into the project, but their bases of enrollment were conflicting, depending on a different elaboration of the way, each partner considered the integrated approach to be successful. The differences in a 'why'-*plausibilization* and a 'how'-*plausibilization*, which have lingered on during the development and implementation of PROMIS, have obstructed a univocal enrollment towards PROMIS. Both partners have committed themselves to different approaches, despite the use of a same label 'PROMIS'.

A third step of enrollment concerns the construction of *networks* of allied interests. The formation of networks

often takes place as ongoing process of bilateral adjustments of opinions and insights. According to 'snowball theory', networks grow and change continuously, as long as actors seek support for their own ideas. In so doing, they adjust their attitudes, by confronting their own ideas with those of others. They interpret new concepts according to their interests, and adjust their interpretations during decision-making processes. Hence, the translation of the integrated approach of IT management stimulates the establishment of internal networks.

> The networks, which have been developed in the bank, show the same diversity, which we have recognized in the enrollment process of '*plausibilization*'. Instead of building a stable supporting external and internal network, actors group themselves heterogeneously, according to the already existing constellations of power and meaning structures. Despite all good intentions, discussions between IT specialists of the two former merger partners with regard to the development of PROMIS have always been influenced by latently conflicting interests and wishes, and a growing distrust in each others intentions. From the beginning, a broad political basis of internal support has been missing.

Inscription

Inscription processes (moments of 'mobilization' [28]) focus on the retention of the new set of managerial ideas. Inscription processes in IT management takes place both in activities concerning the creation and customization of IT systems and infrastructures and in activities with regard to the organizational culture.

Inscription in IT

The new concept has to be made operational in new procedures and activities. A complex translating machinery will be energized in order to '*customize*' the concept, to make it fit the local organizational structure and culture in the user organization [8]. Only then, the adopted loosely coupled set of ideas is developed into a meaningful prescription. Customization can take many forms. Integral customization takes place, when all persons involved share the same and one-dimensional vision with regard to the contents of the new IT system and with regard to the way the new system will be developed and implemented. However, in many occasions, customization processes are vague and contradictory, due to difference in interpretation. Actors interpret the generally accepted vision on the integrated approach of IT management in their own particular ways, thus creating a complex set of different interpretations of the integrated approach. These 'many faces' of the integrated approach deeply influence the decision-making processes of IT development and implementation. Actors often seek a justification of the way they concretize generally accepted notions into plausible ones, by referring to their own standards and visions of

what is 'good practice'. They confront their own ideas to the generally formulated axiom's of the new approach, in order to decide to what extent they will accept the reasoning of the new approach.

It might happen, that the actor's notion of 'good practice' comes close to the existing organizational practices which prevail before the organization has encountered the new fashion. In that case actors will customize the notions and ideas of the integrated approach of IT management along the lines of the existing way of developing and implementing IT systems and 'inscription' takes the form of '*relabeling*'. Relabeling means the re-interpretation, redefinition and re-articulation of new concepts based on the current dominant way of thinking, perceiving and acting. Under a new label, 'old' and engraved ways of approaching IT projects are continued; a phenomenon frequently reported concerning management fashions [2].

> We found many examples of relabeling in the bank. PROMIS-based practices of IT development and implementation are labeled with the new and attractive tags belonging to the integrated approach. Nevertheless, they still show the characteristics of the former dominant technology-led approach of IT management. Apparently, the 'customization' of the core ideas of the integrated approach into PROMIS means to copy existing proceedings and to rename them as part of the new approach. Relabeling does not only takes place with regard to the procedures concerning the development of IT systems. We have noticed the same relabeling process with regard to social and personnel aspects of IT development. PROMIS highly values the quality of working life and emphasizes social and personnel facets of technological change. Nevertheless, the detailed instructions of the manual of PROMIS hardly pay any attention to activities concerning the social aspects of IT project, aspects of cultural change and the peculiarities of the bank organization. Almost solely, attention is paid to the organization and control of IT activities in a strict sense.

Relabeling shows how the adoption process is strongly influenced by current organizational culture and dominant perceptions and initiatives from the past. Relabeling, in strict sense, is a form of inscription. However this form of translation will certainly not result in the constellation of a stable network that will be able to transform day-to-day IT management practices.

> In the case of the bank 'inscription' took place along the lines of the existing networks of power and interests. The growing distrust in each others intentions and fundamental disagreement of a 'proper' interpretation of the core ideas of the integrated approach, made it impossible for the IT specialists of the former partners to continue to work together in the project team. The version of PROMIS,

brought out by the project organization after laborious discussions, appears to be unacceptable for one of the two former bank organizations.

'Inscription' of the interpretation of the integrated approach of IT management is not just a privilege of IT staff. Other actors, such as line managers and end-users, restyle their part in the development and implementation according to their own 'customization' processes, which often differ from those of IT staff. Hence, translation theory helps us to understand the often-described *semantic confusion* between IT staff and end-users as a result of two different ways of 'inscription'. The integrated approach of IT management highly values the involvement of the user organization in developing IT systems. That is why IT staff and employees from user departments work together in order to make IT project successful. However, both groups do not speak the same language, and, thus, reinterpret the ideas of the integrated approach in a different way. For example, the term 'user friendliness' seems simple and unambiguous at face value. However, different actors have different meanings of this concept. Speaking of 'user friendliness', users usually focus on quality and speed of information, while IT professionals have in mind an information system with simple and clear structured screen layouts.

> In the bank, the differences in semantics of users and IT professionals have hindered a good mutual cooperation. Especially, the abundant use of technical jargon, models and tools raised more questions on the side of the users than answered. One of the users stated:" *We need to have more IT knowledge to judge whether or not the IT design meets our needs. In the end, it is so complicated that I often think: "probably everything is all right..." So I stop reading the entire report. I only focus on some passages I can understand. Often, however, at the end of the development process, user tests reveal problems, which we could had foreseen, when we would have understood the entire concept. But are we, users, to blame for that?"*

Inscription in the organizational culture

'Inscription' not only takes place in a technical, but most of all in a cultural sense. In order to be successful, the new concept will be accepted as *'the new cultural architect'*. Hence, the translation of the core ideas of the integrated approach of IT management is both the implementation of new procedures and the realization of a revolutionary change of mind. The implementation of new organization concepts demands changes in organizational behavior and the dominant way of thinking and perceiving. Such a process is a difficult and risky undertaking. Unless meticulously prepared, change will take the form of a cultural shock for many involved. This shock evokes resistance towards the change program, rather than the required commitment. However, to change an organizational culture is *"watching the grass grow"*. Organizations are known for their cultural

inertia. This inertia makes the realization of new ways of thinking and acting a slow and troublesome process [14]. Many implementation problems are caused by insufficient attention paid to organizational conservatism in cultural change, the difficulties in the consolidation of the new approach within the organization and to political and communication problems during its use.

Organizational members insufficiently acknowledge that implementation of a new approach demands time, both to loosen the bonds with current, dominant views, norms and routines and to develop and establish new views, norms and routines. In particular, the use of IT procedures and tools is known to induce both a technical and instrumental attitude towards IT development (characterized by an inclination to 'stick to well-known procedures'), and an aversion to think creatively about new methods and tools. Orlikowski points at this inclination, quoting an IT consultant: "*...tools have definitely stopped me thinking about other ways of doing things. We bring the same mindset to the different projects, so we already know what to do*"[32: 417].

> In the bank, we notice that concepts and tools in use and the mindset they represent form cultural barriers to the implementation of the PROMIS approach. Our research indicates that, although IT professionals pay lip service to PROMIS, in day-to-day-practice the old routines still dominate: "*Everyone has his own way of doing projects and it is pretty hard to let them see they really have to change. One of the problems is: they say "OK, tell me what I have to do differently!", but at the same time they keep doing the things the way they always did! Even if they would accept the new approach and the new ways of carrying out IT projects, the slightest thing will happen and they fall back to their old tools and habits*".

Hegemonic Power Processes

Like all other events in organizations, the development and implementation of the integrated approach of IT management become parts of the existing and ongoing constellation of explicit and implicit power processes in organizations. The micro-political interests of the stakeholders involved mold the translation processes. And, as a result, the translation processes of alignment, enrollment and inscription reproduce the existing controversies and contradictions between dominant parties within the organization. Translation, as a process of ongoing and selective meaning and identity formation, is always part of this slowly changing constellation of power processes in organizations. Different groups involved redefine and translate general notions in such a way that implementation of the new concept promises to support their particular interests and wishes. However, there is generally no such thing as a '*master plan*', nor does translation stems from cunning actors who play on the sly some dirty tricks to

steer the development and implementation towards their own interests at the costs of the interests of others.

Translation processes do not take place according to meticulously designed patterns of communication and interpretation. The differences in the ways distinct actors re-interpret generally formulated ideas into acceptable and plausible ones, do not result from preconceived goals. Nor does relabeling stem from intentional recalcitrance. These translation processes take place as concealed and slowly emerging processes, not deliberately but 'as a matter of course'. Translation is a process of ongoing and selective meaning and identity formation, through which newly introduced ideas are being reformulated, in constant confrontation with the existing organizational discourse. Actors take notice of the new vision, and they confront this new notion with their own ideas and practices. In so doing, they implicitly reflect on their own and others' power position in the organization: *"What is in here for me? Will I be able to realize my career ambition, when this new approach is established? Who is supporting this new fashion? Where does it come from?"* In order to understand the new approach properly, actors translate the original intentions of the fashion into comfortable meaning structures, in which they feel at ease, knowing that this frame of interpretation will probably suit their wishes and interests best. In so doing, they 'organize out' some interpretations of the new vision, while 'organizing in' some other interpretations [15, 30].

While reformulating and adjusting organizational meaning structures, actors reshape their own and other's organizational identity at the same time. In building networks of aligned interests, actors develop a commonly shared 'network' identity, attuning their individual norms and values in order to reach consensus. Networking is the construction of 'we' versus 'the others': *"This is our way of working, you see... We all used to do it this way, because we know that it is the best way. They prefer to work differently... They do not like it the way we work.. Maybe it is a mistake, but why should we change?"* (IT expert, referring to the way she used to work in the former bank). In other words, of all possible sets of attitudes, norms and values, actors tend to select that particular set that is commonly shared by the network they belong, in which the preference or dominance of certain identities and the marginalization of others is effected. Similar to processes of meaning formation, in identity formation processes we recognize an ongoing process of 'organizing in' relevant identities and 'organizing out' non required identities.

> In the bank, different structures of meaning and identity have emerged in the distinct networks of aligned interests: the employees of former bank A versus the employees of former bank B, the IT staff versus the end-users, the 'softies' versus the 'hard liners', the board of directors and the management team versus the managers and staff on operational levels. All these emerging networks have showed differences in the way they interpret the new

approach and in the way they enroll or identify with the new set of ideas. The differences in interpretation, customization and labeling have not come forward suddenly and explicitly, but have lingered on during the development process of PROMIS. Concealed and slowly emerging contradictions between these networks have hindered the emergence of *communis opinio* concerning the new approach, implicitly.

TRANSLATION THEORY AND PARTICIPATION

The integrated approach of IT management is a promising approach, focusing on both the integration of technological and organizational systems design and in particular on the participation of parties involved in the decision making processes. Despite its promising potential to deal with hardware and software problems, the implementation of the approach appears to be a troublesome, often discouraging process, which evokes resistance to change more than participants' enthusiasm. If we were to make a static analysis of the confrontation of the interests of all parties involved, we could then conclude that the integrated approach of IT management failed to realize the basic assumption of participation. In addition to such an analysis of success and failure, translation theory offers us another, more dynamic perspective. Translation theory allows us to interpret the participation problems as complex, though predictable processes of ordinary organizational change.

We have argued that translation resembles the process of ongoing amalgamation, rather than the process of 'cloning'. Actors, involved in IT development and implementation, do not simply copy the new fashion. While participating, they continuously reshape this process, by confronting their own ideas with those of others. During an ongoing process of confrontation of ideas, intermingling of concepts and (re)interpretations of meaning, the organization slowly changes towards the realization of some core elements of the new set of values. These translation processes often take place unintentionally, as part of an ongoing and power based process of implicit meaning and identity formation.

From our analysis, we learn that participation is involved in three power-based processes of translation: 'alignment', 'enrollment' and 'inscription':

- Participation is part of the alignment process of 'problematization'. The position of participants in decision-making processes is always ambiguous. On the hand, participants try to develop and defend their own particular interests and wishes by inscribing these into their understanding of the problem with the connected "right" solution. On the other hand, they search to line up with other parties involved in order to strive for the same goal. In participation, actors try to combine a commonly shared understanding with their own interests and wishes regarding problem definition and choice of solutions.
- Participation is part of the alignment process of 'interesse-

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ment', which impel actors to carefully scan other actors' visions. Actors investigate the differences between their own and other actors' interests, trying to find out whether these differences would raise barriers to developed a commonly shared visions. The process of 'interessement' might result in the development of commonly shared interests. However, it often occurs that participation results in the formation of barricades of antagonistic interests.

• Participation is part of the enrollment processes of 'plausibilization'. Actors select partial arguments and lines of reasoning of the new managerial concept, and they make plausible interpretations of its presumed contents to remove the original equivocality and vagueness. Sometimes, participation stimulates the formulation of shared interpretations. On the other hand, particular sets of group interests and wishes are likely to influence group specific forms of interpretations.

• Participation is part of the formation of networks as ongoing processes of bilateral adjustments of opinions and insights. Networks grow and change continuously, as long as actors seek support for their own ideas. Participation is the formation of several coalitions, each seeking to reach a dominant position in decision making processes.

• Participation is part of the process of 'customization'. Actors often seek a justification of the way they concretize generally accepted notions into plausible ones, by referring to their own standards and visions of what is 'good practice'. They confront their own ideas to the generally formulated axiom's of the new approach, in order to decide to what extent they will accept the reasoning of the new approach.

• Participation is part of 'relabeling', meaning the reinterpretation, redefinition and re-articulation of new concepts based on the current dominant way of thinking, perceiving and acting. Under a new label, 'old' and engraved ways of approaching IT projects are continued. Translation theory helps us to understand the often-described semantic confusion between IT staff and end-users as a result of two different ways of 'relabeling'. Both groups do not speak the same language, and, thus, reinterpret the ideas of the integrated approach in a different way.

• Participation is part of 'changing cultures'. Organizations are known for their cultural inertia. Organizational inertia makes the realization of new ways of thinking and acting a slow and troublesome process. Participation might contribute to the continuation of existing practices as well as it might stimulate organizational change.

• Participation takes place within temporarily fixed, but slowly changing constellations of explicit and implicit power in organizations. Translation is a process of ongoing and selective meaning and identity formation, through which newly introduced ideas are being reformulated, in constant confrontation with the existing organizational discourse.

Despite the intentions of all involved, in daily practice, the existing power relations, differences in interests and wishes and deeply rooted frictions and misunderstandings often hinder a smooth process of translation. The differences in the ways distinct actors accept generally formulated ideas and re-interpret these notions into acceptable and plausible ones, do not always result from preconceived goals. These translation processes often take place as concealed and slowly emerging processes.

Translation theory indicates that these aspects of participation belong to the normal procedure in organizational change. Participation in the development and implementation of the integrated approach of IT management brings into action complex and ongoing translation processes, which lead to (partial) acceptance, interpretation, adjustment, relabeling and partial rejection of the new approach. Some ideas of the new approach will stitch into the newly developing organizational practice, let it be with a different label. Since translation is an ongoing process, applications of the new concepts are always temporarily fixations. In use, the concept continuously will be shaped and reshaped according to the development of new networks of aligned interests....

> "an ongoing process"... In December 1997, the bank develops a new integrated approach of IT Management, called FOCUS, which is said to be 'much more based on the core principles of the integrated approach than PROMIS ever was. We expect a lot of this new method. We have learned a lot developing PROMIS.... in particular about the wrong way.. Now we know better, we hope... (team member FOCUS). New participation protocols were initiated and, enthusiastically, new participants picked up their roles in a new play of organizational change.

Translation theory in this case indicates how the complex process of social construction of information technology may lead to unexpected and unintended results, despite a consistent integrated approach in which all parties are involved in the IT management processes. We are not arguing that the integrated approach in itself is dysfunctional;, we emphasize that the contents of the involved technological, organizational and cultural processes need to be analyzed by using concepts and models which recognize the meaning inscription and organizational and cultural change processes which are always are embedded in technology change processes. It is time to keep at the track of the integrated approach, but also to accelerate identification and application of rich, well described and operational theories and models of the process of social construction of technology when forming interorganizational, cooperative, knowledge based, information and communication technology based tools that changes work, services, products, or the understanding of organization, society or culture.

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