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THE LOST DIMENSION OF STRATEGIC ALIGNMENT

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This paper starts from the IS existing literature about Strategic Alignment that is mainly built on Henderson and Venkatraman's founding article (1993). Numerous models of alignment have been developed to guide managers' daily practices. These models prescribe the alignment of dimensions through measure instruments. Other studies investigate several of the antecedents of strategic alignment such as the intellectual and social dimensions. However we argue that most existing literature on strategic alignment is technically and managerially focused. It neglects an essential dimension in organizations: the 'true' social dimension that takes all stakeholders into account, including users, and not only management. Using well-established Translation Theory, we develop three principles of method that aim at opening the models existing in the literature to this forgotten social dimension that is essential for practitioners. Our approach tends to suggest that strategic alignment needs to be constructed from a managerial, technical and stakeholders' perspective in order to be effective. We illustrate our argument through two case vignettes.

Keywords: Translation theory, Translated Strategic Alignment, Social Dimension of Alignment.

INTRODUCTION

Avison, Jones, Powell and Wilson (2004) consider that the various debates about strategic alignment do not make the concept easily understandable and appropriable by practitioners. They underline that “the literature does regularly lament the paucity of studies that assess how organizations carry out alignment in practice” (p. 224). Ciborra (1997) indicates that strategic alignment is conceptualized in the IS literature through simplistic models that links abstracts concepts together with lines (p.70). According to this author, these models cannot include the complexity of the reality. In consequence Ciborra assumes that “while strategic alignment may be close to a truism conceptually, in the everyday business it is far from being implemented” (1997; p. 68). He proposes that “tinkering, not conscious alignment, is at the origin of (ex post) successfully aligned IT applications” (1997, p. 171). Although Avison et al. (2004) propose a new tool to manage strategic alignment in a dynamic environment they appear to simplify reality and at the same time paradoxically produce complex models that are not easily appropriated by practitioners. Our purpose is to take into account the complexity of organizations by opening the strategic alignment models to neglected dimensions and processes, and propose methods that may anchor possible strategic alignment models in practical reality.

Hence the research question is: can we propose managerial principles which make sense for practitioners and may guide us toward performing strategic alignment?

The present research first presents possible limitations of existing strategic alignment models and shows the necessity to open the models to field considerations and for focusing the concept of strategic alignment on users rather than on technical and managerial perspectives. We then propose three principles of method built on the well established Translation Theory (Callon, 1981, 1987, 1991). We then illustrate these principles with two extreme case studies, a success and a failure. We finally look into the limitations of our work as well as possible opening for future research before concluding.

1. STRATEGIC ALIGNMENT, A TECHNICAL AND MANAGERIAL CONCEPT OR THE ILLUSION OF A SOCIAL DIMENSION

1.1. Strategic alignment: a technical approach

Since the 1980's, information systems (IS) are considered a strategic dimension of organizations (IBM, 1981). The IS literature then adopts the concept of strategic alignment developed by researchers in the field of strategic management (Venkatraman, 1989, Venkatraman and Camillus, 1984) and originally in the structural contingency framework (Van de Ven et Drazin, 1985).

The concept of strategic alignment applied to IS has been widely used (Chan and Reich, 2007b) under different denominations (Avison et al., 2004) or definitions since Henderson and Venkatraman's founding articles (1989, 1993). Moreover the impact of this concept is not only academic, since it has been commonly accepted by practitioners whether on the business side (Luftman, Papp and Brier, 2005) or the IS side (Papp, 2001; Tallon, Kraemer and Gurbanaxi, 2000; Trainor, 2003).

Reich and Benbasat (1996) consider that the alignment is "the degree to which the IT mission, objectives, and plans support and are supported by the business mission, objectives, and plans" (p. 56). Henderson and Venkatraman (1993) define it as a process that allows firms to realize strategic planned objectives through necessary infrastructures and applications. Sabherwal, Hirschheim and Goles (2001) note that alignment can be defined through the ability of organizational dimensions to attain theoretical norms of mutual coherence.

Two main models dominate the literature, the Strategic Alignment Model (SAM; Henderson and Venkatraman, 1993) and the MIT'90 model (Scott Morton, 1991). We limit our analysis to the SAM because it is the most used and applied model (Avison et al, 2004). The SAM proposes alignments between four elements: Business Strategy, IT Strategy, Organizational Infrastructure and Processes and IS Infrastructure and Processes.

Henderson and Venkatraman's (1993) founding article provides a general theoretical framework for strategic alignment. This framework has been applied and built upon by the IS community through diverse studies with the aim of verifying the impact of alignment on performance through a multivariable approach (Bergeron, Raymond, Rivard, 2004). Researchers developed instruments to verify, improve and confirm the SAM. Most studies attempt to find out how a given dimension should be designed to fit one or several other dimensions. The components of the various dimensions are seen as variables that one can modify in order to attain the desired design. This leads to favour a technically focused approach of the strategic alignment concept. We argue that this approach is illustrated in several studies through the mix-up between the terms Information Technology (IT) and Information Systems (IS) e.g. Avison et al., 2004, study "strategic alignment between IT/IS and the business." (p.224). The consequence of this technically focused approach is that the social aspects/elements of IS, i.e. users, are neglected by the SAM, or are endogenous variables, that is to say humans are only links in the technical chain (Callon, 1991, p. 225).

1.2. The human dimension of strategic alignment as found in the literature: a managerial illusion?

Reich and Bensabat (1994, 1996, 2000), Reich and Kaerst-Brown (2003) or Hartung, Reich and Benbasat (2000) study the social and intellectual dimensions of alignment as essential antecedent to attain a high level of strategic alignment. Then the more the intellectual and social dimension between IS and the business side of a firm are aligned, the easier it is for strategic alignment to be achieved. In the same way, Tan and Gallupe (2006) examine strategic alignment at the cognitive level, i.e. cognition shared between business and IT executives. However it appears that this human dimension of strategic alignment is mostly limited to a managerial perspective in the existing literature (see table 1). If one focuses on the methodological aspect of various works found in the literature on the social side of alignment, we have to note that these works are built upon questionnaires aimed at top managers (CIO, CEO, senior executives, and so on). Then the so called "human alignment" (i.e. social and intellectual dimension) is mostly managerial. The definition of the social dimension underlines that all organizational members should have a "mutual understanding of and commitment to the business and IT mission, objectives, and plans" (Reich and Benbasat, 1996; p.58), Reich and Benbasat insist on the fact that this is particularly relevant for managers. They do not appear to take into account in their analysis "all organizational members" as they themselves recommend: some stakeholders are excluded from the analysis.

Campbell (2005) attempts to answer the question: "What's going on in alignment?" (p.657). He aims at understanding the phenomenon of strategic alignment. He adopts a grounded theory approach to capture practitioners' concerns. The goal of this research is to give practical meaning to the concept of strategic alignment itself, to explain what this term means in a practical perspective. However all Campbell's informants are here again managers: business managers (from line managers to managing director) and senior IT managers. He thus fails to capture what the practical meaning of strategic alignment means for users. Chan and Reich underline that "more grounded research like this [Campbell's, 2005] is needed – work that questions the very possibility of alignment and allows the voices of the participants to be heard" (p.310). Campbell's article opens the way to do so.

Gagnon and Jansen (2008) consider that individual's strategic knowledge and commitment is an antecedent to strategic alignment as it engages individuals in a "strategy-supportive behaviour" (p. 426). They do not study IS alignment but general strategic alignment and start from the observation that "the failure of a strategy / strategic innovation is often due to the inability or resistance of individual employees to commit to it and adopt behaviors that are necessary for the accomplishment of the strategic objective" (ibid., p. 525). They propose a model to assess the strategic commitment construct (the degree to which behaviors support strategy) which has a positive influence on strategic alignment. This approach is relevant because it pays attention to all organizational members and not only to the top management team. It also shows that if "blue collars" do not support the strategy the

strategic alignment will be weak. Then it underlines the importance of the social dimension in a strategic alignment situation.

Table 1: The human dimension in the IS strategic alignment literature- a managerial perspective

Authors	Year	Methodology	Informants
Reich and Benbasat	1996	Qualitative : Multiple case study	57 Interviews : senior business executives, senior IS executives, members of the IT Steering Committees
Johnston and Yetton	1996	Qualitative : Positivist case study	17 managers and top managers
Reich and Benbasat	2000	Qualitative : Multiple case study	Senior executives in business unit (in each dimension as marketing, administration, etc.), Senior executives in IT unit. All interviewees were members of IT steering committees and heads other IT research functions
Hartung, Reich and Benbasat	2000	Qualitative : Case study	25 Administration and IT officers 40 Administrative staff members
Reich and Kaarst-Brown	2003	Qualitative : Case study	25 IT professionals within the business units
Johnson and Lederer	2005	Quantitative : Survey	202 pairs of CEOs and CIOs
Campbell	2005	Qualitative : Grounded theory	3 focus groups : 6 senior IT managers, 3 senior business managers and 6 senior IT managers Interviews : 16 IS managers and 4 business managers
Preston, Kaharanna and Rowe	2006	Quantitative : Survey	163 US CIOs 44 French CIOs
Tan and Gallupe	2006	Quantitative : Cognitive mapping	50 Business executives (from 6 companies) 30 IS executives (from the same 6 companies)
Chan, Sabherwal and Thatcher	2006	Quantitative : Survey	First Survey : 164 senior business and IS executives Second survey : 62 senior business and IS Executives
Lee, Kim, Paulson and Park	2008	Quantitative : Survey	51 business groups managers (from 12 companies) 162 IS group managers (from the same 12 companies)
Preston and Kaharanna	2009	Quantitative : Survey	243 matched CIO-TMT pairs
Tarafdar and Qrunfleh	2009	Qualitative : Multiple cases study	30 interviewees on 4 sites : CIO, senior level-IT, and functional managers, administrators, and middle/junior level IT and functional manager
Heart, Maoz and Pliskin	2010	Quantitative : Survey	196 CIO 190 Business (non-IT) executives

We argue that a managerial perspective cannot be aware of what emerges from the field, i.e. from users (/stakeholders), unless attention is focused on this specific dimension. Then, a strategic

alignment envisaged only in a managerial and technical perspective is not necessarily relevant from a users' perspective. In order to go beyond what we see as the managerial illusion of social alignment, we argue that, beyond technical and managerial perspectives, it is necessary to open the SAM to field considerations and users' perspective (i.e. users' preoccupations and needs).

1.2. PRINCIPLES OF A POSSIBLE METHOD TO DRIVE STRATEGIC ALIGNMENT

1.3. Translation Theory: Toward a Socially and Technically Centred approach

We differentiate Translation Theory developed by Callon (1980, 1986, and 1991) and its subsequent developments that led to Actor Network Theory (ANT; Callon and Latour, 1992; Latour, 1996a, 1996b, etc).

In his own terms (Callon's interview, 2009¹), Callon parted from the traditional sociology of science. This latter tackled the scientific fact only through the people who produce it, i.e. scientists. Callon and his colleagues (e.g. Latour, Law, Akrich, etc.) proposed a more socially comprehensive perspective of the "science in action (Latour, 1987) since they study the scientific fact, but also its emergence and construction in an enlarged social network, through the users of scientific innovations. Then the science is a technical and social phenomenon and it becomes essential to develop new analytical tools, i.e. the "socio-logic of translation" (Callon, 1980) or Translation Theory.

Callon's socio-technical understanding of a scientific controversy pleads in favour of giving up the idea that the sociologist is the one and only person able to discourse about social aspects. He gives this ability to the stakeholders of the controversies. Callon (1986) identifies three main issues in the traditional sociology of science (stylistic, theoretical and methodological) that he proposes to solve through his three "principles of method" (agnosticism, generalized symmetry and free association).

- The stylistic issue underlines that scientific and technical description of controversies made by scientists is not sufficient to reflect social reality. It is solved by agnosticism i.e. no censorship must be applied to the various actors' discourse. All actors must be allowed to express their own vision of social and natural reality.
- The theoretical issue underlines that knowledge of any sort about the social and natural world is uncertain, ambiguous and debatable. All subjective types of knowledge must therefore be equally considered in the analysis of controversies. This may be solved by generalized symmetry i.e. a single repertory common to both the natural (technical) and social world must be used. It allows the translation of all perspectives in a common language understood by all actors which can be human as well as non human.
- The methodological issue underlines that scientific innovation is a dynamic process which cannot be studied in a static social framework; power roles have to be taken into account. This may be solved by free association i.e. nature and society are part of the same world. Social and natural aspects of the world may evolve and must be taken into account in the analysis.

Translation Theory is part of the socio-technical approach as defined by Mumford (2006). However, Translation Theory offers important interpretive possibilities as shown by many authors in IS field (e.g. Walsham and Sahay, 1999; Hanseth, Jaccuci, Grisot and Aenested, 2006; etc.) who built upon it within the ANT stream of thought. If we recognize the importance of taking into account both the technical and the social dimensions of an organization as underlined by the tenants of the socio-technical approach, we moderate this perspective and do not consider them of equal importance/significance. We consider that an IS is "a set of organized resources: hardware, software, people, data, procedures....allowing the acquisition, treatment, storage of information (as data, texts,

¹ This interview was conducted by the researchers in August 2009

images, sounds etc...) in and between organizations” (Reix, 2004 quoted in de Vaujany, 2009 page 12). We argue that the human dimension of IS is of utmost importance because if technologies can be bypassed by Humans, Humans cannot be bypassed by technologies. Then we will not adopt a strict symmetric perspective between humans and technologies in our interpretation of TT. Reix’s definition feeds our critics on the technical-managerial stance of the SAM literature. Technologies and human are not only variables or “links of the chain” of the strategic alignment (Callon, 1991). Technologies and humans constituting an IS are actors/actants of the strategic alignment which can be understood as a strategic coalition between the two dimensions of IS. We should then consider them as stakeholders of strategic alignment.

1.4. Key concepts: from science to organizations...

The translation sociology adopts a specific definition of the term actor. Callon and his colleagues do prefer the term of “actant”. An actant, according to Callon and Latour (1981) is “any element which bends space around itself makes other elements dependent upon itself and translates their will into the language of its own” (p. 20). They transcend the common definition of actors which only applies to Humans. They extend the meaning of this term to designate any element that has the ability to act and positively or negatively impact an action. As we pointed out above, all dimensions of an IS are actants, but we emphasize the specificity and the core position of Humans in an IS context.

Amblard et al. (1996) give a general definition of the translation concept. A translation is the operation which implies changing an intelligible statement into another intelligible statement to allow the understanding of the initial statement by a third party (p.135). The translation is the outcome of a negotiation between different parties. The translation process acts as a link between heterogeneous activities, statements and stakes (Callon and Latour, 1991). The translation leads to the constitution of a network that constrains the members, if they agree to take part in this network. De Vaujany (2009) considers this concept of network as essential. A successful translation allows the alignment of positions (“isotropic situations”; Ibid, p. 212). Conversely, if the translation fails, actors’ positions stay incompatible, i.e. non- or misaligned (“polyphonic situation”; Ibid p. 212). A network is constituted when the different actors are aligned (p. 212). To him, a strong alignment means that at each point of the network, the translation aligns actors; conversely for a weak alignment.

1.5. ...Toward three managerial principles of method

As we have seen in a previous section, Translation Theory is grounded on three critics and three principles of method. We interpret these issues from the sociology of science from a managerial stance and more specifically to interpret the SAM and its developments, to fully understand their technical and managerial restrictive perspective.

The “stylistic” issue assumes that managers should not adopt a managerial top-to bottom vision of strategic alignment. Indeed IS strategic alignment commits a large set of stakeholders, Humans or not. If a solution proposed/ imposed by a manager may be perfectly relevant from a technical and managerial perspective, it could be also inappropriate regarding stakeholders’ field concerns. This may be solved by the first principle of “agnosticism”. Top managers have to make final decisions but stakeholders should be enrolled in the decision process. Strategic alignment goes beyond technical managerial concerns and judgments, because all stakeholders are actors/actants; they are not passive. They can disobey, resist and bypass the managerial solution and then transform a managerial strategic alignment into a totally misaligned situation. We propose that the prescriptive managerial decision has to be confronted and negotiated with stakeholders, according to their needs, through a translation process. This should influence the outcome resulting from the final decision: this decision will be easily adopted by users if it has been co-constructed and based on all parties’ needs and requirements.

The second issue is “theoretical”. The technical knowledge of top managers can be limited regarding the specificities faced by users in their daily tinkering (Ciborra, 1997). Top managers cannot have a

perfect view of practical field concerns. All types of knowledge (technical and practical) should be taken into consideration. Top managers have a general overview of the organization while stakeholders (humans or not) have a specific knowledge on their daily tasks. The “generalized symmetry” principle implies that IS strategic alignment should not only be initiated or validated by a few technicians who only think in terms of technical process or design. All knowledge should be equally taken into account. Needs of all stakeholders (Humans or not) have to be translated in a common repertory understood by all.

The last issue is “methodological”. SAM and most of its subsequent developments make managers consider organizations in a static perspective where actors have a static role, neglecting the power relations involved between them. This leads them to consider that actors/actants are variables that managers may act upon in order to design the organization. They neglect power relations and the dynamic and socially constructed functioning of an organization. They also favour a mechanistic perspective which encourages a prescriptive attitude. It is solved by the “free association” principle. Strategic decisions have structural impacts that may alter power positions and result in politically oriented behaviors. This has to be taken into account prior to the decision moment in order to evaluate the various stakeholders’ positions and the expected reactions. This should encourage the top manager to involve stakeholders through their needs in the decision process in order to defuse a priori possible hindering behaviors that can lead to the failure of a projected change.

1.6. The translated strategic alignment

We integrate the three principles of method detailed above to provide what we name a *model of method* (figure 1). It is a *conceptual model* as it is “a set of concepts) [...] used to represent or describe (but not explain) an event, object or process” (Meredith, 1993). It is also a *model* in the prescriptive meaning of the word model. This model allows us to bring forward guidelines that appear necessary (but perhaps not sufficient) in order to drive toward strategic alignment. It underlines the necessity to take into account all dimensions of strategic alignment: the technical alignment which is already studied in the literature through the SAM (Henderson and Venkatraman, 1993), the managerial alignment and its two social and intellectual dimensions (Reich and Benbasat, 1996, 2000), and the users’ side of strategic alignment. The link between the technico-managerial alignment and the users’ side of strategic alignment is made through the translation process which allows all actants to negotiate through the expression of their needs. When the translation process is finalized, they constitute a heterogeneous network which supports the co-constructed solution leading to strategic alignment that is the Translated Strategic Alignment.

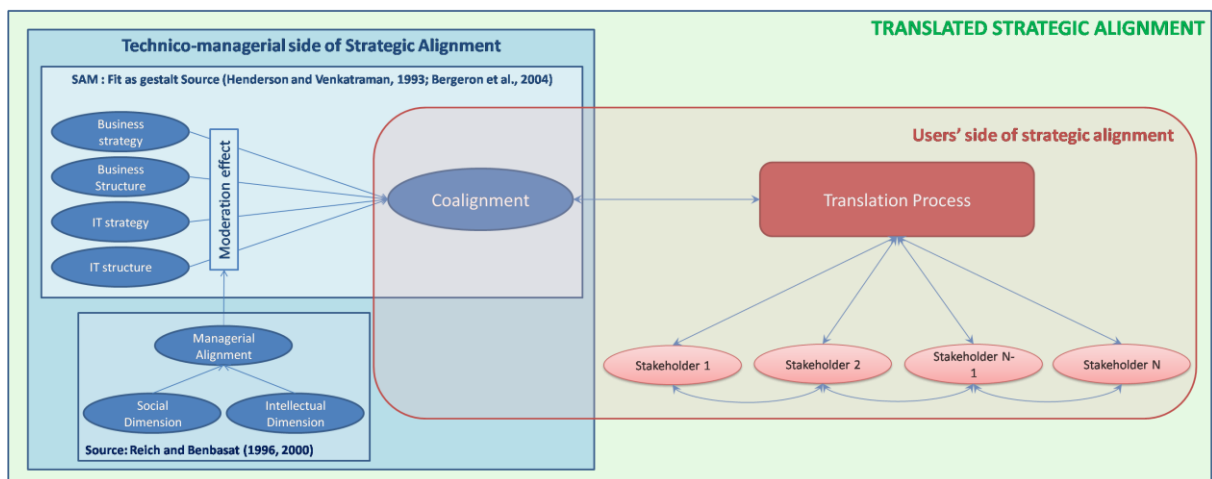


Figure 1: The missing dimension of strategic alignment

Our model reconciles two visions of strategy building, the prescriptive perspective and the socially constructed perspective. The prescriptive one is represented by the technico-managerial side, i.e. the

SAM and its developments (here represented by the Bergeron et al.'s gestalt model, 2004). The socially constructed vision is illustrated by the users' side of the model, i.e. the ability of users to bypass a technico-managerial alignment if it does not fulfill their IT-needs. The translation process allows us to take into account the prescribed strategic alignment and the specific actants' needs. As a result the socially constructed alignment is partly prescribed, and the prescribed alignment is partly socially constructed.

2. CASE VIGNETTES

Some case vignettes may serve to illustrate the theoretical elements that we have detailed above and start testing our proposition. The two case vignettes presented in this section are extracted from a wider empirical study in progress in another research. The citations are extracted from 4 semi-centred interviews with a senior IS consultant working for a very large corporation that implements ERP for its customers. The opening question was "Could you recall from your experience and describe to us an ERP implementation that you consider was a success and another one that you considered was a failure".

In those case vignettes presentations we will first describe the case in itself by presenting the organization and the studied project. We then illustrate our model by detailing all its dimensions (i.e. managerial and technical alignment, user's side of strategic alignment, the translated alignment). Finally we conclude each case vignette with the description of the consequences of the utilized method and by a graphical representation which synthesized the case.

2.1. Case 1: Once upon a time... a success

The firm F is a French subsidiary company of a large German organization (G). F used to work with different non-integrated software for each department (accountancy, logistic, purchase, etc.). G decided that F should implement the group ERP that had been specifically customized for G. The mother company G let F look after the details of the implementation i.e. G gives the direction and the objective but let's F choose the route. The local management of F decided to first start the ERP implementation in the accountancy department and then gradually extend it to the other departments.

Several meetings with the ERP provider (EP) were organized by the top management team of F, before the start of the project. The different department managers and also final users were invited to some of these meetings and regular in depth exchanges took place. These meetings aimed at defining the organizational needs to be fulfilled by EP with respect to the template imposed by G. The work was facilitated by the fact that all users had some experience with IT resulting from the previously used software: their IT-culture (Walsh, 2009) was already structured at the very start of the project. The training programme was specifically designed for each department through custom-built exercises; it was in accordance to users' specific needs as perceived by themselves.

When the EP consultants started the implementation of the new IT tool and users' training, they did not encounter any resistance or misappropriation behaviours and the only problems that occurred were paper jams in printers. .

2.1.1. Managerial and technical alignment

The prescribed managerial and technical strategic alignment is the necessity for F to adopt a specific model of ERP that was designed for the parent company G. This decision was taken by top managers of G to harmonize the IS in the various subsidiaries/countries and improve exchanges. G determines a general orientation needed to improve the IS strategic alignment with its subsidiary F.

"The project kick-off was imposed by the mother company"

2.1.2. User's side of strategic alignment

The extension to all departments, only after the initial implementation of the accountancy department had been secured, created a favourable environment. All final users in E were already familiarized with the ERP and knew the basics.

"They first implemented accounts; then they were told: 'now it's simple we do production, purchases and sales; though the processes are different it's the same software'"

They were able to understand the necessity of standardize the ERP and did not resist the proposed change, as this change was not considered a technical revolution, only a technical evolution. Change was brought about gradually and took into account the users' adaptability.

"We did not try to do a big bang! All of a sudden! We did it gradually. It was much easier this way"

The decision is not abrupt. It is constructed on the field contingencies.

The decision has been imposed to F but F has the ability to implement it in its own time. The local top managers identify the stakeholders of the projected change, i.e. the users, the departments managers, etc. and ask them to analyze and bring forward their requirement for the ERP with respect to their own needs but within the boundaries laid down by G.

"We investigated users' needs through interviews with users and also with the purchase manager who had laid down his own vision"

"Users were sensitized (...) we really reached towards the users"

We argue that the managerial and technical alignment between structure and IT has been translated to the field, that is to say, the need for the proposed change has been understood and accepted by the field. In return the field has given its own requirement in order for the new ERP to improve their working conditions

"There was real consultation and cooperation between management and users for the modeling of the work processes"

"Users were really involved in this project"

The ERP is imposed, but its implementation is co-constructed with the field requirements. All details are negotiated with the users through a translation process.

2.1.3. Translated alignment

The confrontation of managerial requirement, i.e. the implementation of E, and the field requirements, i.e. expressed It- needs, leads to a global translated alignment that takes into account all the IS dimensions (technical and social) and the organizational needs (technical, managerial, and users' needs).

"Users respected the given perimeter of the project and the processes that were in the template provided by head office"

Moreover, the translation process, i.e. the needs confrontation and negotiation, frame the project and avoids users' temptation to bypass and ignore the project.

"During the project we stayed within the fixed template. We did not try to do other things, or to do thing differently. We just did our utmost to fulfill users' needs within these parameters"

All actants (G, F, the ERP, the consultants, the users) are together in a heterogeneous network of common interest (illustrated in figure 2), i.e. the ERP implementation. Corporation G's management agrees with the negotiated version of the ERP, because it respects and does not alter its initial general prescription of ERP's harmonization. Subsidiary F's management is also implicated because the

adopted solution fulfils its main concerns, i.e. G's satisfaction, the ERP's operational capacity, and users' acceptance. The ERP is part of the heterogeneous network. Users, who are at the core of the network of allies, do not resist or bypass the project, but actively participate in it; therefore they rapidly adopt all new features.

With the help of Callon's principles of method, we argue that the strategic alignment in this case is strong, because the translation aligns actants at each point of the network, that is to say, both on the technical side, the managerial side and the users' side.

2.1.4. Consequences

This global translated alignment facilitates the implementation of the ERP in the firm. First, users were familiar with it as some in F (accountancy department) have already started to work on it: the ERP is not completely new to them. Then the customized training program also acted as a facilitating influence as it answered their practical IT- needs. So the users do not try to resist or bypass the ERP; instead they adopt it.

"They did not play around. They did not try to bypass it, nor question it. They adapted themselves to it"

"You can always try and modify a system; you can underline what is not working. Here that was not the case. Users wanted really to get into the system. They fitted themselves into the system"

Then the implementation was a success because it had been well prepared and designed through the consideration of technical and managerial requirement and of all stakeholders' perspective (true social alignment).

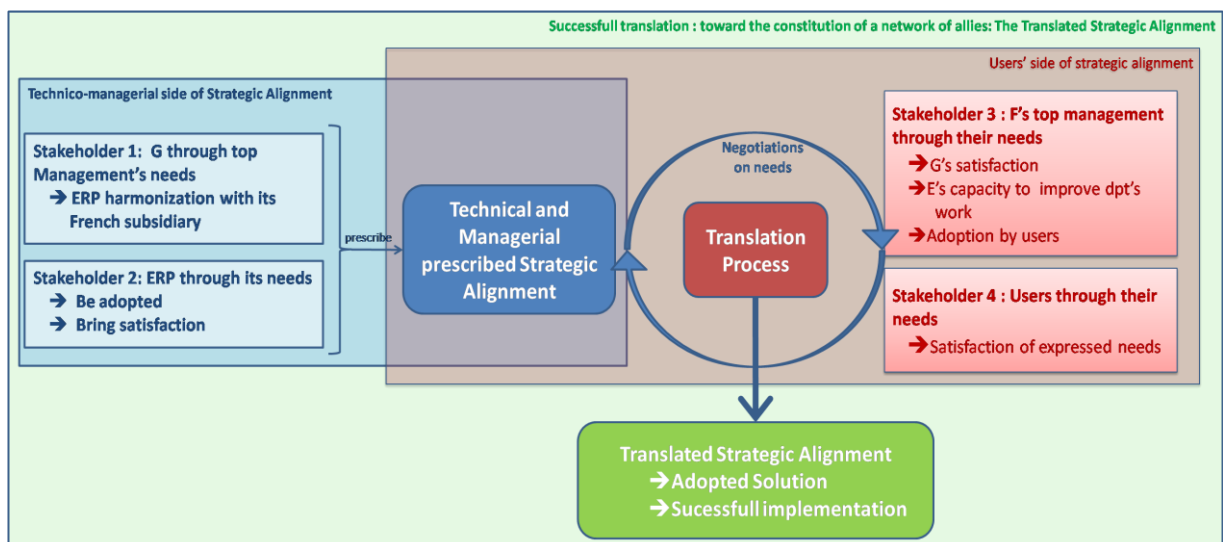


Figure 2 Once upon a time... a success

2.2. Case 2: Once upon a time... a failure

The second case is the diffusion of a standardized ERP in all subsidiaries around the world of a multinational corporation (T). In this project the ERP has been customized following T's requirements. T determined *ex ante* how the ERP should respond to the IT-needs of its organization. EP was in charge of the implementing the customized ERP all around the world.

The ERP was implemented first in eastern countries, then in south-eastern countries, in Asia, in Africa and so on. In each country the initial processes have been modified and hybridized with local processes and software, and at the end from a worldwide standardized ERP, it has been transformed into multiple local versions of the initial ERP. Then each time the ERP requires to be upgraded, rather

than to upgrade the same version for all countries, it has become necessary to work on each local version. This leads to a loss of time, money, and is the cause of major dysfunctions. Moreover, the IT-ability of people from each division are heterogeneous and were not taken into account. For instance, in Africa people have no computer skills and training. The ERP has still been implemented, without specific care or training programs. Finally, the multiple versions of the ERP results from a decision from T, but the results on the field do not respect at all initial expectations from the mother company that have been largely bypassed.

2.2.1. Technical and managerial alignment

The prescribed technical and managerial alignment in this case results from top managers' needs to standardize the day to day running of all subsidiaries around the world. Then the management imposed a standardized solution from theoretical assumptions. This ERP is supposed to meet the requirements of all divisions and all users from the field. EP is required to implement the standardized ERP all around the world and to train people according to training programs designed in a meeting room at headquarters.

"We built a core model to implement it identically in all subsidiaries of the group".

"The model was developed in a meeting room in France ».

The strategic alignment needs are determined in a managerial and technical perspective by top management.

2.2.2. Social alignment

Top managers of T consider that the ERP can be implemented everywhere in the same conditions. They did not try to evaluate specific field needs and field contingencies in order to adapt the various implementations. For example even though feedback from the first implementations in Eastern Europe showed that many changes were made in the ERP by local operators because of users' requirements, T proceeded with implementing the ERP in countries such as Africa where they should have known problems would be acute because of the lack of local knowhow concerning IT-usage.

"They did not take into account the local populations"

"When the core model arrived in Eastern European countries, it was tampered with. It was modified without authorization and subsequently each country further tampered with it".

"Some countries do not have the same culture as Western Europe. They use outdated IT by our standards. Then suddenly, you arrive and implement a full ERP. It's a cultural shock for local users!"

T did not consider the field contingencies and designed a standardized ERP model regardless of the field specificities. There is a social misalignment, because the imposed technology does not fulfil users' needs.

When the ERP was implemented in various countries, local users made changes in the software and rather than having one model, each country developed its own model. In the end, none of the local IS was standardized or corresponded to the initial prescription. Users translated their needs and adapted the ERP to these needs. They adapted the project to their own needs without consultation and went against head offices' wishes.

"Initial processes were modified. Instead of having only one model to maintain, you have hybrids, each with their own IS"

"I believe that the software functionalities did answer the original requirements. However if I were T, I would not be very proud of the result"

Final users in each different country rejected and bypassed the ERP imposed by the parent company T. They realigned their needs with the technology. They realigned the social dimension.

2.2.3. Translated alignment

In this case, the technical and managerial strategic alignment prescribed by the central management of T and the field constructed social alignment from users' needs are not congruent. Then we do not have a translated strategic alignment since the result is not a co-constructed alignment process but a prescriptive one which has been bypassed by final users.

"The original model was not respected"

"Implementation was sub contracted to local operators who cannot understand why they should not make all sorts of modifications. When you go back one year later, you don't recognize the software anymore!"

We can identify two categories of autonomous and heterogeneous networks. The first is constituted by the technical and managerial side of strategic alignment; the second is constituted by all the local actants. The coexistence of those two kinds of networks shows that the translation process failed (more precisely, it was nonexistent here). Indeed, T did not pay attention to the field's needs, i.e. T did not try to understand the field's needs and their implications for the ERP's design.

"You find yourself in a subsidiary that is used to work with Microsoft Excel and that does not have a clue about this type of software which is completely new to them"

Then the alignment is weak because the translation did not create an isotropic situation. Conversely, the situation sounds polyphonic because each dimension built its own solution, and at the end, the concrete expression of the strategic alignment is purely socially constructed and consists of bypassing the top management's will through local alignment.

"Finally you have produced a model that appears quite cheap, but at the end when you must upgrade it it's like hell because instead of doing one upgrade, you have to do 57 upgrades in 57 countries. And that is costly!"

The result is a misalignment in a technical and managerial stance that has huge financial and operational consequences.

2.2.4. Consequences

The implementation is inefficient and extremely costly for T. The end result does not respect the original purpose. We observe that if the field actants are not taken into account, there is a great risk of bypass and rejection of the managerial and technical prescribed strategic alignment solution by the users.

"T now has 57 ERPs instead of 1. The maintenance cost is huge"

"If you throw somebody who has never seen or used an ERP into this kind of setup, and without specific customized training, he will reject it, you can be sure of it."

Then the users' side clearly gets the upper hand on the technico-managerial one. This tends to confirm the necessity to open the traditional perspective on alignment to more practical considerations as it is recommended by Ciborra (1997), Chan and Reich (2007) and partly applied by Campbell (2005) or Avison et al. (2004). We illustrate this case in the figure 3.

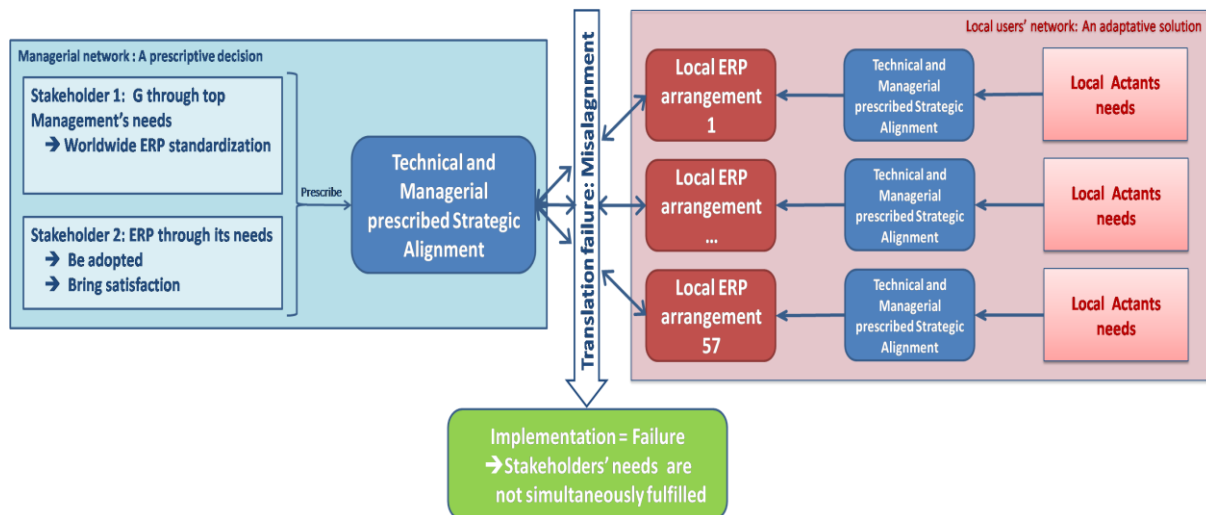


Figure 3 *Once upon a time... a failure*

CONCLUSION, LIMITS AND FUTURE DEVELOPMENTS

Chan et al (2007) call "for new theoretical perspectives on IS alignment and IS strategic analysis" and "greater use of well-established theories in alignment research is needed." (p. 311). This need is confirmed by the critics of Ciborra (1997) or Avison et al. (2004) who both, in really different perspectives, call for the clarification of the concept to make it more appropriable by practitioners. In this article we propose three principles of method, grounded on well established Translation Theory. These principles are a possible way to give more field consistency to the SAM and its developments, by integrating a whole dimension neglected otherwise, the true social dimension, not limited to a managerial perspective but extended to all stakeholders.

The main limitation of our work is the unique source of our data: a senior IS consultant. We are collecting new data in different contexts of strategic alignment in order to verify the guidelines we have proposed in the present article.

We have brought to light three principles of method which aim at influencing managerial behavior related to strategic alignment. Further research should give us more insight into the translation process and help us specify the notion of needs alignment.

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