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# Re-conceptualizing IS Strategic Alignment: the Translated Strategic Alignment Model (TSAM)

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## ABSTRACT

In this article, we propose a new conceptualization of strategic alignment leading to the proposal of a new model: the Translated Strategic Alignment Model (TSAM). We adopt a grounded theory approach, while studying three corporations. We then extend our research to other corporations through a Delphi method with five experts (IS consultants). The model of strategic alignment that we propose includes a three-level network involving the essential alignment of various stakeholders' needs. We bring forward a new perspective on the fits traditionally studied in the literature and we propose seven fits whose "shores"<sup>1</sup> make sense to practitioners. In corporations TSAM may open a new path leading to the achievement of organizational performance and competitive advantage in an organizational climate which may be socially enhanced.

## Keywords

IT-needs, SAM, Translated Strategic Alignment, Translation Theory, TSAM.

## INTRODUCTION

Avison, Jones, Powell and Wilson (2004) underline the little agreement there is in the literature on the conceptualization of IS strategic alignment. These authors also insist that "the literature does regularly lament the paucity of studies that assess how organizations carry out alignment in practice". We propose to re-conceptualize strategic alignment as resulting from multiple alignments in a three-level network. The perspective on alignment that we bring to light includes its full social dimension and underlines the users' position as essential in processes leading to improved performance.

Ciborra (1997) proposes "tinkering, not conscious alignment, was at the origin of (ex post) successfully aligned IT applications" (page 171). He rejects the idea of "an objective and reified world" (Ibid.) and underlines that managers constantly muddle through what he names the "tinkering" and "improvisations" of the real world. We, however, argue that managers do need IS research to reassert basic fundamental elements in understandable, practical models in order to reassure and guide them. Therefore if we know that an objective and reified world indeed does not exist, this should not forbid us to search for models closer to day-to-day organizational reality. Though Ciborra states that strategic alignment cannot be summarized by "boxes and arrows" in a diagram, we argue that it may be so, if the so called "boxes" make practical sense to

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<sup>1</sup> Ciborra, 1997

managers and emerge from their daily “tinkering”. Hence, the research question addressed in the present article is: can we propose a model of strategic alignment that emerges from praxis<sup>2</sup>?

We first present our theoretical framework which calls upon well-established Translation (Callon, 1981, 1986) and Needs Theories (Alderfer, 1969; Herzberg, Mausner and Snyderman, 1959; Maslow, 1943, etc.). We then detail our methodology and our findings. We study three corporations with a grounded theory approach and we then extend our research to multiple settings through a Delphi method approach. We study more specifically the various alignments at the second level of the organizational network that appear to have been somewhat neglected in the literature. They involve various needs that may be aligned through multiple translation processes. We propose a new model of strategic alignment that we name the Translated Strategic Alignment Model. As a result of our work we bring forward a set of propositions. Finally, we look into the limitations of our work as well as its practical applications and future possible research before concluding.

## THEORETICAL FRAMEWORK

### Strategic alignment

Since the beginning of the 80s, it has been accepted that, far from being simple technical artifacts, Information Systems (IS) have become major organizational strategic stakes (Chan and Reich, 2007). Like strategy, IS have been thought out and planned (Chan and Reich, 2007; IBM, 1981). IS research mostly enrolled in the structural contingency theory framework and met with strategy research that developed the concept of strategic alignment in the 80s. The concept of IS strategic alignment started developing from the end of the 80s, notably with Henderson and Venkatraman’s founding articles (1989, 1993) who brought forward the most used and applied model of strategic alignment in the literature. This model proposes alignments between four elements: Business Strategy, IT Strategy, Organizational Infrastructure and Processes, and IS Infrastructure and Processes. Though extremely detailed and having been widely studied in the literature these terms remain abstract and have little relation to practitioners’ daily tinkering.

The literature on strategic alignment, supported by the practices of big firms and consultants, mostly views alignment in a managerial perspective, as a top-down process and through a technical lens. Even though Reich and Benbasat (2000) study what they name social or intellectual dimensions of alignment, the social aspects appear as limited to the managerial vision that is necessary for the alignment of IS and business. Thus, the so-called social dimension has a very strong managerial component; it is mostly studied through questionnaires administered to top managers. Alignment thus appears to have been conceptualized in an essentially managerial perspective. However we argue that strategy (business and/or IS) also emerge from the bottom up, even perhaps more so in a highly unstable economic context when managers are at a loss to design strategies for want of long term visibility. We propose to bring to light in the present article a model which allows emerging strategy to express itself and be taken into account. We aim at proposing a model grounded in managerial reality whose alignment “shores” (Ciborra, 1997) have concrete meanings for managers.

### Translation theory

As Walsham (1997) underlines: “Actor Network Theory (ANT) is not a stable and unified body of knowledge” (page 468). This is why we ground our reflection in its most stable and well-established part: we propose to go back to one of its foundations, that is Translation Theory (TT: Callon 1980, 1986).

The process of translation is seen as the outcome of a negotiation between different stakeholders. It acts as a link between heterogeneous activities, statements and stakes (Callon and Latour, 1991). It leads to the constitution of a network that constrains the members, if they agree to take part in this network. The translator is the actor who helps and nurtures this link between the members of the network.

The key concepts of Translation Theory that are applied in the present work are as follows: an actor (or actant) may be a human being or a non human; spokesmen, or delegates, are “actors who stand in and speak for particular viewpoints which have been inscribed in them” (Walsham, 1997; page 468); intermediaries are what circulates between the different entities of the network (Amblard, Bernoux, Herreros, and Livian., 1996). The translator is the entity that effects the translation.

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<sup>2</sup> We understand praxis here as “an organizing project which transcends material conditions towards an end and inscribes itself, through labour, in inorganic matter as a rearrangement of the practical field and a reunification of means in the light of the end” (Sartre, 1960 page 734)

In the context of the sociology of science in the 1970s, Michel Callon tries to overcome the limits of the so-called traditional sociology of science that assumes that scientific controversies can be isolated from the social context. In several of his works, Callon rejects this perspective in order to adopt a socio-technical understanding of a scientific controversy. In his famous 1986 article about Saint Briec scallops, he identifies three main issues in the traditional sociological stance (stylistic, theoretical and methodological) that he proposes to solve through his “principles of method”, i.e. agnosticism (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), generalized symmetry (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), and free association (Social aspects of the world may evolve and must be taken into account in the analysis)

Grounding our reflection in Callon’s work, and his principles of method, we propose to consider strategic alignment as the result of adequately translated strategic change management, that is, as a set of translation processes which, through a change opportunity expressed by a change initiator (primum movens: Callon, 1986), allows all key actors to aggregate around a project and as a collective, positively impact the projected change.

### Needs Theory

The necessity to conceptualize strategic alignment as an alignment of various *IT-needs* emerged from our empirical data at a very early stage of our research.

Even though the concept of needs has been implicitly or explicitly called upon in most IS research, needs theory has been rarely explicitly mobilized in recent works in IS research (Walsh, 2009). This theory is grounded on the fact that when a need is not satisfied, the individual will act in such a way as to satisfy it; needs therefore represent an internal force which guides behaviors (Maslow, 1954).

Walsh (2009) shows that beyond individuals’ fundamental needs (self accomplishment, affiliation, power, etc) which may be satisfied through IT-usage, specific IT- related needs emerge and are perceived by individuals through their exchanges with their environment and through socialization. The individual may perceive these needs at three levels: situational level; contextual level and global level. This author shows that users’ perceived IT-needs may be understood as expressing the *users’ IT-culture*.

Urwiller and Frolick (2008) studied organizational IT-needs. These authors metaphorically extend Maslow’s hierarchy of human needs (1947) to organizational IT-needs. In corporations, these organizational IT-needs result mostly from planned, designed strategy and are mostly expressed through top managers’ vision. This is why in our work we introduce the concept of *managerial IT-needs* that represent the managerial vision of organizational IT-needs, i.e. organizational IT-needs as perceived by managers.

We also propose to consider what we name *Tasks’ IT Needs* defined as the computerization needs of given tasks in order to maximize organizational efficiency (e.g. what are the algorithms that best detail the tasks). Finally *Hardware* and *Software needs* are the technological requirements of these two components of an IS, that are necessary in order for them to perform adequately.

## METHODOLOGY

In answer to Ciborra’s “De profundis?” (1997) we aimed at the reconstruction of the concept of strategic alignment in a different perspective, that is as emerging from the praxis of organizations. A grounded theory approach (Glaser and Strauss, 1967; Glaser, 1978; Strauss and Corbin, 1990, 1994) thus imposed itself on us.

### Research settings and sampling<sup>3</sup>

The research was carried out over a period of approximately two years. Through comparative case studies, it was first conducted in three different corporations (a multinational corporation: A, a medium sized enterprise part of a multinational corporation: B, a small European-based enterprise: C). The research was then extended to other corporations through interviews with IS consultants who have access to information about a great number of diverse corporations. This second part of the research could be assimilated to a Delphi method approach (Dalkey and Helmer, 1967).

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<sup>3</sup> Further details concerning investigated corporations and interviewees are available on request. Due to allocated space we are not able to include these details.

In corporation A, the IS project is aimed at the extension of national CRM-related “dashboards” to several other European countries. These dashboards use data analysis, data mining and business intelligence. In the highly competitive industry of telecommunications, they were custom-designed to help the centralized head office verify the work done commercially by the local teams in each country (particularly concerning customers’ turnover), with little consideration for each country’s specificities. This has led to the implemented instrument being used little or not at all in some countries, despite very high implementation costs.

In corporation B, after a merger resulting from the acquisitions of several SMEs, the implementation of a specific, standardized ERP was imposed by the mother company and all data bases, resulting from the IS of the different and recently acquired companies, were merged into one common data base. After two years, a big number of non integrated spreadsheet programs are being used by the operators alongside the mainframe application; the newly implemented ERP also results in a 30.000 article data base, with the same article referenced up to 5 times, and stocks have reached an unprecedented level. Articles’ denomination and classification have thus to be standardized in order for stocks to be managed in a centralized way and for head offices to have a global inventory visibility.

In corporation C, the previously custom- developed mainframe application had to be replaced (as it was no longer maintained), due to the closing of the company that had developed it. The CEO had been very satisfied with the mainframe application custom- developed 10 years before; therefore, not taking into consideration the progress made in the IS field in those 10 years, and instead of aiming at a standardized ERP software sold to many other companies of his industry, the CEO decided to reproduce the same set up and commissioned a small software provider to develop a customized ERP with limited financial backup. The end result was the rejection of the newly implemented ERP at all levels of the corporation. Corporation C went back to the original mainframe application and is still using it to this day, despite its lack of maintenance.

When we started conducting the interviews in the three investigated corporations, selective sampling was first used, then theoretical sampling. The first interviews in each company were thus conducted with the IS project managers in enterprise A and B, and with the CEO in enterprise C. Once the IS projects and current issues were clearly defined, interviews were then conducted with key users of the implemented solutions i.e. business intelligence (BI) managers in enterprise A, buyers and commercial staff in enterprise B, operators in enterprise C.

In the second phase of our research semi-centered interviews were conducted with consultants from various consultancy firms with different specificities (sizes, national versus multinational, specialization,...) to maximize the possibilities of generalization of any emerging theory. Most consultants were interviewed twice: first through semi-centered interviews and then, when the model and the theory had started emerging, they were presented with the model and asked to comment, confirm, infirm... These second interviews with consultants allowed us to secure triangulation.

### **Data collection, coding and analysis**

Data was collected through 34 interviews. 25 of these interviews were recorded and transcribed in writing. Notes were quickly jotted down during those interviews that could not be recorded. Data was collected and analyzed simultaneously through the constant comparative method (Glaser and Strauss, 1967; Glaser 1998). The model that emerged from the data, and is presented in the next section, has been constantly verified/modified/completed when new data were collected and analyzed. Throughout the ongoing process of data collection and analysis, data was coded first through open coding, which helped us describe what was “happening” in the data (Goulding, 1999) and explore similarities and differences. The investigation of possible dynamic inter-relationships between concepts led us to axial coding (Glaser and Strauss, 1967; Goulding, 1999); In order to effect axial coding, we followed Strauss and Corbin’s (1998) precepts and answered the questions “what, who, when, how, and with what consequences” for each main category/code (See table 1). Finally selective coding was applied in order to verify our findings. Through all effected coding, we did not attempt to quantify but rather immersed ourselves in the diverse data and concentrated on their interpretation and meaning.

## **RESULTS**

In this section, we present the model that has emerged from our data (see figure 1). We define the alignment or “fit” between two elements as the degree to which one element supports the other and/or is supported by it. The full lines in the diagram represent the alignments/fits that are already investigated in traditional IS strategic alignment research. The dotted lines indicate the users-centered alignments/fits that appear as having been mostly ignored, or at least not explicitly taken into consideration, in previous models. In a polyphonic change management perspective (Belova, King and Sliwa, 2008), users’ IT-needs are understood as the often-silenced voices that one should pay attention to.

An interconnected three-level network emerged from our data. Level I includes the four main actants (designed business strategy and structure, IT strategy and structure, users' tasks, users' IT-culture). Level II includes 5 groups of delegates (managerial IT-needs, hardware needs, software needs, tasks IT-needs, users' IT-needs). Level III includes 5 groups of intermediaries (Top managers, IT-technicians, software analysts, job experts, IT-utilization).

We investigated more specifically the second level of this network; it expresses a *needs alignment* through seven fits described hereafter that emerged from our data. In corporations A, B and C all delegates, intermediaries as well as translators were precisely identified; they cannot be reported here for confidentiality reasons.

**Fit 1: the Fit between managerial IT-needs and implemented IT** results from business- IS alignment as studied in the IS strategic alignment literature.

Consultant: [His consultancy firm had proposed to subsidize an NGO (Non Governmental organization) and to implement a very heavy and costly ERP in its existing IS structure, without any immediate expense for the NGO. The CEO of the NGO argued, that if subsidies subsequently stopped, they would not be able to maintain the proposed ERP]<sup>4</sup> *"This project could have started on a bad design. A proper study of the business [managerial] needs beforehand allowed us to avoid this. We finally implemented a 100% outsourced product, with very simple screens..."* [Fit]

Buyer (Corp. B): *"From one day to the next, the corporations X and Y were merged. We were not independent any more. We were one corporation... But we had orders from X to Y. These orders have been delivered and even invoiced but they are still in the system four years later. The system does not allow us to process them..."* [Unfit]

**Fit 2: the hardware-software fit** appears as a self-evidence. However, we found that it was often neglected *ex ante* and had to be solved *ex post* when new software had already been bought and implemented. This fit is particularly acute when new software is integrated in an existing IT-structure.

Consultant: *"We used to have technical problems [when we implemented new software in an existing and stabilized IT-structure] but we don't any more. Our consultancy firm has developed a specific tool, the 'quick sizer', and created a specific measure unit 'X'. When we arrive at a client, we use this instrument and it tells us, for example 'the system will need 2000X'; then the client calls upon hardware suppliers who know about our measure unit 'X' and offer suitable hardware".* [Fit]

BI Manager (Corp. A): [Although the model was already implemented in another country and all requirements should already have been specified and written down, they had to find out after the implementation was over] *"the relevant information...look for and obtain/gather all documents that appear relevant to technical requirements, analyze and synthesize them...(so that) what appears useful, essential is written down ex post".* [Unfit]

Consultant: *"We had to re-boot the server all the time in order to be able to work with Microsoft Windows"* [Unfit]

**Fit 3: the Task-technology fit** has been studied in the literature (e.g. Goodhue and Thomson, 1995; Zigurs and Buckland, 1998) as the extent to which the technology supports the task. We define it here as the extent to which some software objectively supports some given task's IT-needs i.e., in consultancy terms, the "functional requirements".

Consultant: *"When we implemented the first ERP, the time we spent analyzing the primary needs of functional tasks...I would say that is what guaranteed 100% of the success of this first computerization".* [Fit]

Buyer (Corp. B): *"Normally when you register an order, you can link the items ordered to the order itself. But in the implemented ERP, you cannot; it does not work...Up to the merger of the databases, we were able to identify the stocks of a given article with different codes for the different business units. When the databases were merged we had multiple stocks of the same article with different codes, as each business unit kept ordering under its own code whereas there was plenty of the same article identified through a different code in other business units".* [Unfit]

CEO (Corp. C): [When they implemented the second ERP, they discovered that] *"They [the analysts] had not even understood that we needed to print delivery dockets!"* [Unfit]

**Fit 4: the IT-contextual needs fit** is the fit between managerial IT-needs and a user's specific contextual perceived IT- needs (Walsh 2009). The users' specific contextual perceived IT-needs represent the IT-needs globally perceived by a user in a specific organizational context, in order to fulfill his/her appointed obligations. For example, if through adequate organizational communication about a new CRM, users are brought to see the congruence of the proposed change with their contextual needs, then the measure of this fit may be high.

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<sup>4</sup> Coder's comments are reported between brackets [...]

Consultant: “They did things gradually. It’s not useful to start on projects that are ‘huge mountains’. There was a first project that involved the financial department. Then there was the logistics project. They did not try to do ‘a big bang’. ...Users were gradually sensitized to the new system...we showed them the product, we were at their disposal, we listened to them” [i.e. we listened to their needs]...Management consulted with users [before implementation]”. [Fit]

Consultant: “Before the roll off, before the implementation, they did several simulations; the users were psychologically prepared” [Fit]

Buyer (Corp.C): “That’s our boss’ great idea! He tells us we don’t need to do this or that. We must do things his way...But it’s not feasible; it would take hours, weeks, months...” [Unfit]

Consultant: “We were in subsidiaries that were still working with Microsoft Excel. They were not used at all to this new type of software... They had a shock, a culture shock”. [Unfit]

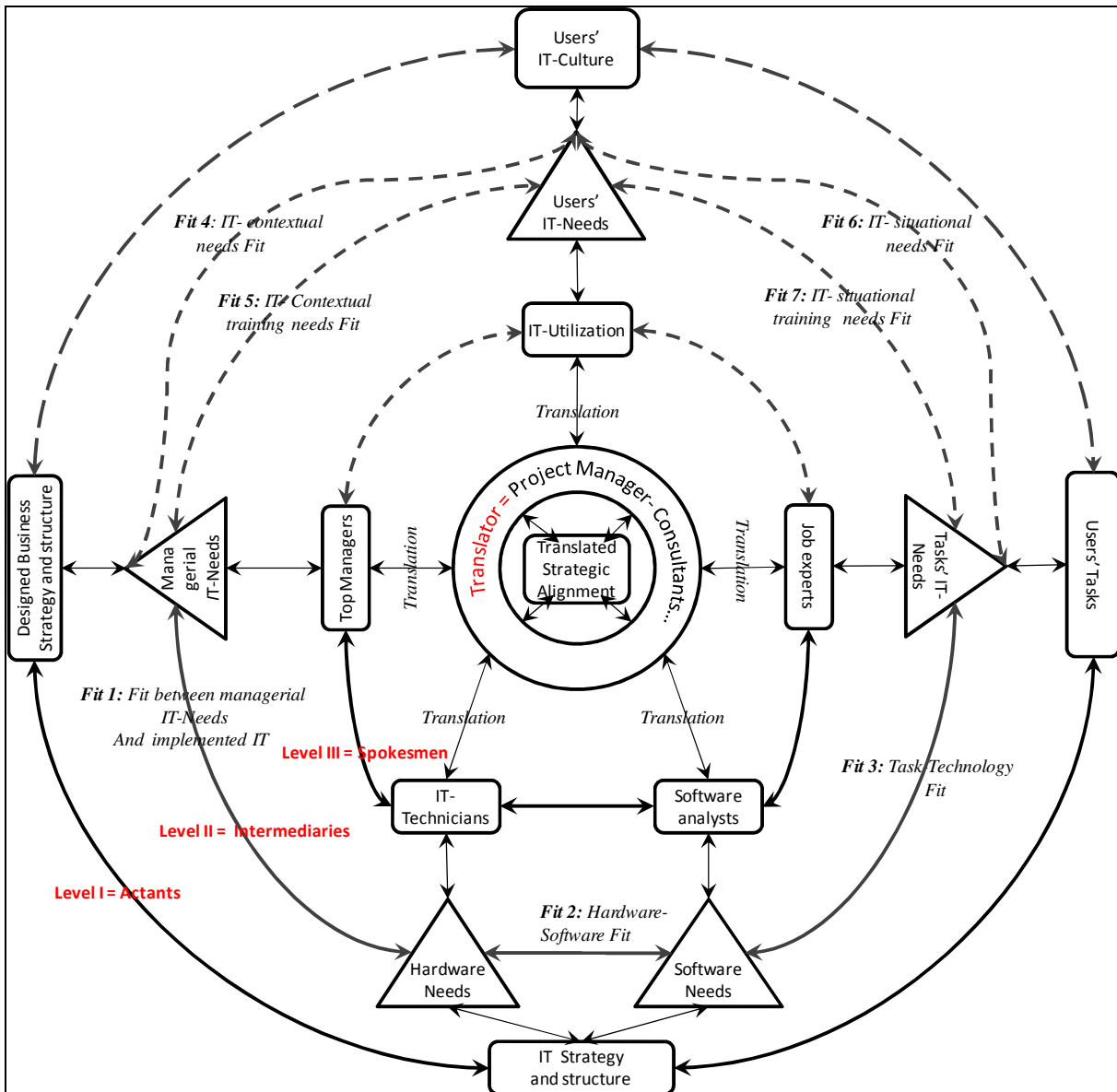


Figure 1: The Translated strategic Alignment Model: Strategic alignment grounded on a strategic network of IT-needs

**Fit 5: the IT-contextual training needs fit** is the fit between managerial IT-needs as resulting from planned/designed business strategy and structure and the general IT-training needed by users as resulting from their IT-culture.

Consultant: *“You have to respect people. Here, when we did the training, we customized it to the users. Some didn’t even know how to use a mouse and a keyboard...the culture shock is of course lessened if they have already used an integrated system...”* [Fit]

Operator (Corp.C): *“People involved with computers share a language that is their own, that is part of their own world and their own evolution. They forget that there are other people who do not master this language”.* [Unfit]

**Fit 6: the IT-Situational needs fit** is the fit between a user’s situational need to fulfill some given mandatory tasks and a specific IT i.e. the degree to which a proposed IT improves the user’s self- perceived efficacy on given tasks.

CEO (Corp.C): *“We did not even try to go forward before we had functional feedback from job experts and before the software had been tested with key users”* [Fit]

Buyer (Corp.B): *“It’s mainly that 80% to 90% of the functional specificities of the system are redundant”* [Unfit]

**Fit 7: the IT- situational training needs fit** is the fit between a user’s situational IT-training need to fulfill given mandatory tasks with a specific IT and the specific IT- training provided.

Consultant: *“You always have differences between users. Always. Then when you plan the training sessions, you have to customize these sessions, to level them out to the people you have to train. We didn’t only use slideware. We also did a lot of exercises adapted to the users’ [IT-culture] level...People should be thoroughly tested beforehand for training on a given tool to be effective”.* [Fit]

CEO (Corp.C): *“After two months of useless trials, with huge costs, we realized that...we were still being trained two days a week ...but we still did not know how to print a delivery docket! ...So I fired everybody and lost a lot of money!”* [Unfit]

## DISCUSSION

Using Callon’s vision of controversies, strategic change management can be interpreted as management of controversies, controversies resulting from confrontation with change. Three issues related to strategic change management can be brought to light from our field and we can start finding possible solutions in the managerial application of Callon’s work.

Callon’s stylistic issue is understood here as the managerial top-to bottom vision of strategic alignment. We argue that this issue may be solved by Callon’s principle of agnosticism which is understood here as the fact that the managerial vision is not sufficient to strategic alignment; all organizational stakeholders’ needs and discourses must be taken into consideration. Change goes beyond managerial concerns and judgments; it has social roots and impacts. Top managers are only the intermediaries who bring forward organizational IT-needs resulting from designed and planned strategy. Strategy must also be allowed to emerge from praxis.

Callon’s theoretical issue is understood here as the technical vision of strategic alignment. Technical needs often appear to take precedence over other needs. This issue may be solved through Callon’s principle of generalized symmetry which is understood as the fact that change is not only technically prescribed; it also has to be socially constructed through interactions of all organizational *actants*. An IS change decision does have technical impacts on the work content (Tasks’ IT-needs) and on the workers social exchanges (users’ IT-needs). Therefore, all actors’ needs have to be translated into a common repertory understood by all.

BI Manager (Corp.A): *“They [the technicians and the analysts] try and ‘boss’ everybody around”* [i.e. technically prescribed change].

Callon’s methodological issue is understood here as the static vision of strategic alignment. This may be solved by Callon’s principle of free association understood as the fact that change is a dynamic process; therefore one must also study it within a dynamic socio-technical framework and all stakeholders and their IT-needs have to be taken into account, even if they do not appear to be directly affected by the IS change.

CEO (Corp.C): *“If we summarize this experience which was very refined in the analysis of business needs, we regretted not to have been able to produce something in a programming language that could be used by other developers and therefore which could evolve adequately. That’s the mistake we made... We could not upgrade our software... But corporations evolve. What today appears to be exactly what you need [in a managerial stance] might not be so tomorrow”.*

The translation process, if it is adequately driven/managed, allows the alignment of the stakeholders’ network including humans and non-humans. Callon’s three principles of method, applied to organizational issues, may serve as guides towards dynamic change management leading to IS strategic alignment.



Table 1: Results and propositions

Proposition 1		Proposition 2				Propos. 3	Proposition 4	Propositions 5a and 5b	
Strategy		What (Alignments)	Who (actants)	Who (delegates)	Who (intermediaries)		When (should critical alignment be aimed at?)	How (should critical alignment be optimized?)	
SAM	TSAM								
Planned and designed (Technico-managerial perspective)	Planned, designed and Emergent (socio-technical perspective)	<b>Fit 1:</b> organizational IT-needs and implemented IT	- Business Strategy and structure - IS strategy and structure	- Organizational IT-needs - Hardware needs and software needs	- Top managers - IT-technicians and Software analysts	Affects organizational performance and climate	Before implementation	Through the thoughtful consideration of an appointed translator	Business requirements have to be fully specified and validated in writing
		<b>Fit 2:</b> Hardware-software needs	- IS strategy and structure	- Hardware needs - Software needs	- IT-technicians - Software Analysts		Before implementation		Technical requirements have to be specified and validated in writing
		<b>Fit 3:</b> Task-Technology	- IS strategy and structure - Users' tasks	- Tasks' IT needs - Software needs	- Software analysts - Job experts		Before implementation		Functional requirements Have to be specified and validated in writing
<b>Fit/Unfit 4:</b> IT-contextual needs		Business strategy and ructure - Users' IT culture	- Organizational IT-needs - User's contextual perceived IT- needs	- Top managers - IT-utilization	Before implementation		Users' contextual IT-needs have to be taken into consideration, nurtured and brought at least to the level of IT-needs strategically aimed at by the organization		
<b>Fit/Unfit 5:</b> IT-contextual training needs		- Business Strategy and structure - Users' IT culture	- Organizational IT-needs - Users' perceived IT-needs (situational, contextual and global)	- Top managers - IT-utilization	Before and during implementation		Global IT-training has to be provided and customized depending on the level of users' IT-acculturation		
<b>Fit/Unfit 6:</b> IT-situational needs		- Users' IT-culture - Users' tasks	- Tasks IT-needs - Users' situational IT-needs	- IT-utilization - Job experts	Before implementation		The user's vision of the adequacy of the proposed IT has to be taken into consideration		
<b>Fit/Unfit 7:</b> IT-situational training needs		- Users' IT-culture - Users' tasks	- Users' perceived IT-needs (situational, contextual and global) -Tasks IT-needs	- IT-utilization - Job experts	Before and during implementation		Training on specific It has to be customized depending on users' IT-acculturation		
Mostly Ignored (Users' centered perspective)									

These principles allow us to overcome what we consider as a limitation of traditional models. According to the four strategic lens proposed by Johnson, Scholes and Whittington (2008), current frameworks proposed in the literature mostly appear to adopt the design lens and/or the discourse lens and exclusively in a managerial and/or technical perspective, while mostly leaving aside the experience lens and the ideas lens which may emerge from other stakeholders, and more particularly through users' IT-needs. In the traditional models, the users' perspective mostly appears ignored or taken into consideration in an implicit manner. We however would argue that users' needs are core stakeholders in the strategic alignment process. We propose to re-conceptualize the concept of strategic alignment as an alignment of various IT-needs and to include users' IT culture, users' IT needs and IT utilization as core stakeholders in the network.

Ciborra (1997) considers the concept of strategic alignment itself as too abstract and too remote from day to day true managerial concerns. The concepts of *IT-needs* and resulting *requirements* (*business requirements, functional requirements, technical requirements*), are at the basis of what Ciborra describes as the "intricacies of real business processes and behaviors" (page 168).

As De Vaujany (2008) underlines, strategic alignment between IS and business is often assumed in the literature to lead to competitive advantage. If this might have been true some decades ago, we argue that nowadays IS strategic alignment, as traditionally defined in the IS literature, may only lead to improved operational performance (as defined by Venkatraman and Ramanujam's, 1987) through time gained on given tasks. However, if alignment is conceptualized in a broader fashion as multiple needs alignment and if what we apprehend as a critical needs alignment level (i.e. the fulfillment of all of the network needs at a given time) is attained and exceeded, it may open the way to innovative behaviors leading to competitive advantage (Papp, 2004). This may occur for example if the technology has greater potential than current users' needs or business needs. Unutilized resources then provide opportunities for further growth (Penrose, 1959). Thus, and in order to provide the basis for adequate (i.e. leading to competitive advantage) "cultivation" (Ciborra, 1997 page 174) the IS has to meet this critical needs alignment. But if it does not, then "cultivation" cannot occur and, first and foremost, improved performance cannot be achieved.

Contrary to Ciborra (1997), we argue that technology is not an autonomous organism. When it evolves, it is the result of human minds, and needs, brought together in a systemic and cumulative production of further knowledge. When global needs alignment goes beyond what we have described as the critical needs alignment level, it leads to the achievement of improved performance; it also frees the human mind to evolve towards innovative behavior that may lead to competitive advantage.

Our work allows us to underline the following propositions summarized with our results in table 1.

**Proposition 1:** In traditional models only fits 1 to 3 appear to be investigated and result from strategic planning and design. In our model of TSAM, all fits result from planned, designed and emerging strategies; fits 4 to 7 should be purposely nurtured if strategy is to be allowed to emerge from the bottom-up and to favor innovative behavior.

**Proposition 2:** Strategic management may be conducted as the management of a network of IT-needs that involves multiple translation processes involving intermediaries and translators.

**Proposition 3:** Organizational performance and organizational climate are impacted by the level of translated strategic alignment fit.

**Proposition 4:** Critical alignment of all fits should be aimed at before implementation of new IT. Critical alignment of fits 5 and 7 should continue to be aimed at during implementation of new IT to allow IS strategy to emerge from praxis.

**Proposition 5a:** Users' vision and needs, resulting from users' IT-culture, have to be taken into account through the thoughtful consideration of an appointed translator.

**Proposition 5b:** Business, functional and technical requirements should be clearly specified and validated in writing before implementation.

If Translation between all actants/stakeholders is adequately achieved "blind giants" (Ciborra, 1997) recover their sight through translated knowledge and "angry orphans" (Ibid.), i.e. users, are again part of their home organization and are not cut out of strategic development: users' IT-needs are important intermediaries in the translation processes which lead to IS strategic alignment and should not be left out of these processes.

## CONTRIBUTIONS, LIMITATIONS AND FUTURE RESEARCH

Chan and Reich (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). In the present article, we have brought forward new perspectives on alignment in a new theoretical framework, grounded in well established Translation and Needs Theories.

The limitation of our work results from our methods that are grounded in our own interpretation of data. Double coding should be effected in order to verify this interpretation of our data.

We have brought to light seven fits which, when combined, may guide managers towards improved performance and, possibly, competitive advantage. Future research might aim at operationalizing the defined fits through the development of an instrument in order to guide IS strategic management. We may then aim at investigating what emerged through our data as a critical needs alignment in order for managers to exceed this critical level and drive towards innovative behaviors and competitive advantage.

## CONCLUSION

In the present work we have proposed a new conceptualization of strategic alignment leading to the proposal of a new model: the Translated Strategic Alignment Model (TSAM). This model proposes strategic alignment to be the result of a three-level network involving the essential alignment of various stakeholders' needs. In our work, we mobilized Needs Theory in order to interpret the network brought to light, and Translation Theory to provide us with possible guidelines towards strategic IS management.

We argue that the existing literature in IS strategic alignment combined with some of Ciborra's reflection may provide a fertile ground for a robust cumulative research tradition if one does not limit oneself to what appears to us as a sterile debate of practice versus research or qualitative methods versus quantitative methods. We would argue that, using both practical and theoretical knowledge, both qualitative and quantitative methods, researchers may propose, in IS strategic alignment research, models that may be enduring as well as practical. In order to do so we, researchers and managers alike, would perhaps benefit from, first and foremost, hearing and listening to users' needs in order to adequately translate these needs and to align them with managerial and technological strategic needs. Our work tends to show that, contrary to Ciborra's assertion, we may bring forward useful models with "boxes and arrows" but that our "boxes" should aim at having practical meaning and at including expressions of "people's existence, carefully left out of models" (Ciborra, 1997 page 168) in most current strategic alignment models.

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