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INTEGRATING INFORMATION SYSTEMS DURING MERGERS: INTEGRATION MODES TYPOLOGY, PRESCRIBED VS CONSTRUCTED IMPLEMENTATION PROCESS

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Abstract

Today Information Systems (IS) integration constitutes one of the major success factors of mergers and acquisitions. This article draws on two case studies of firms having realized more than 10 mergers and acquisitions between 1990 and 2000. This paper shows the importance of carrying out a double approach to understand IS integration process. The first approach represents the necessity of using organizational configuration to define possible IS integration modes. Thus we show the importance of organizational, strategic and technological contingencies within the elaboration of integration mode. Then, we complete our analysis with a second approach based on the organizational change theory so as to determine two IS integration process dynamics, i.e. a prescribed integration and a constructed one. These two dynamics allow to apprehend the difficulties in implementing the integration modes chosen for the IS field.

Keywords: Information system, integration, mergers, acquisitions

1 INTRODUCTION

Currently, mergers and acquisitions are increasing in numbers and values. The carrying out of mergers and acquisitions result in an economic and organizational failure for more than 50% of mergers (Cartwright & Cooper 1993 ; McKinsey 2000 ; Mercer Consulting 2001, 2003). The reasons for explaining mergers failures have been largely put forward and acknowledged. Strategic fit, although necessary, is not enough to realize expected synergy. Informational, cultural and human aspects are now more and more evoked to account for the result (Marks 1982 ; Larks & Livis 1986 ; Shrivastava 1986 ; Buono, Bowditch & Lewis 1988 ; Schweiger & Weber 1989 ; Schweiger & Walsh 1990). It is now largely established that a major part of mergers failures can be explain by difficulties with methods, management processes and information systems (IS) integration.

Then, once the merger or acquisition made official, integration process is the true key to the success of this project (Haspelagh et Jemison 1991, Shrivastava 1986). The 2001 Mercer Consulting study, about 159 transatlantic mergers between 1994 and 1999, mentions five central factors for the post-merger integration. In addition to the importance of human resources and business preservation problems, the need to integrate information systems seems to be on of the main issues to settle in order to achieve general post-merger integration.

“At the level of mergers, information systems integration is an organisational and technical issue largely underestimated. It’s not a matter of administration detail but rather that of a key success factor considering the way firms are operating today” as informed a listed big French company CEO (dec 2004). Hence, the particular integration of information systems plays a crucial role in the integration process. Nevertheless the failures regarding information systems are numerous and have serious effects on the operating and financial results of merged firms. Information system management and its staff are usually pushed aside from negotiation and assessment of the target firm (Walton 1989). Consequently, these actors and managers are in charge of settling all the merging incompatibilities only at the beginning of the integration process, which generates several malfunctioning and blocking situation: one of the argument used to counteract the merger between Société Générale and Paribas (two French banks) was the time necessary to integrate the information systems. At Axa, in 2000, then three years after the merger with UAP, we rated that information systems merger had just been finished and had overcost the expected amounts. At Total-Fina-Elf, six months after the merger, one of the source of staff demotivation lies in the difficulties in information exchanges (data, mail, ...). This prevented a well functioning of the firm. The human factor is also often alluded to as a problematic point. At Aventis, an executive tells that the delay in the achievement of the information system integration schedule was due to the fact that it took 47 work council meetings to have the integration project accepted. All these examples lead one to wonder about the IS integration modes and their implementation.

Nevertheless, literature on mergers and acquisitions focuses primarily on financial aspects of the acquisition process, the culture and communication issues (Mirvis & Marks 1992), the different general integration strategies (Haspelagh & Jemison 1991) or also on the analysis of the general organisational and strategic fit between merger firms (Jemison & Sitkin 1986). If the latter research benefits are fundamental to perceive and understand the post-merger integration process in general, they call for other specific researches regarding post-mergers integration of IS. But, when IS integration is dealt with, it remains mentioned only in professional and industrial journals, where it focuses on technical aspects of integration and deals them apart from strategic and organizational contingencies (Rubin 1992). In this literature, integration issues are usually considered as technical incompatibilities (Rosenberg 1987 ; Johnson 1989 ; Kubilus 1991).

Recent research provides us with elements on post-merger information systems integration issues. Part of this research gives priority to a technological and computer approach of the IS integration process (Giacommazzi, Panella et Pernici 1997, Pareek 2004), by proposing a classification which considers the final configuration of the applications (software) and the final configuration of the architecture of

the new IS. Another part of the research seeks to identify key factors of success relative to the process (Stylianou, Robbins, Jeffries 1996, Stylianou Robbins 1999). These authors have developed a research model explaining the variables that determine the success of the IS integration process during mergers and acquisitions as well as variables which enable to measure this success. Another approach consists in examining the role of information systems in merger and acquisition process (Stylianou et Robbins 1999, McKiernan Merali 1995, Alaranta 2004). This work shows that IS function has a reactive or a proactive role in mergers and acquisitions, and asks the question of IS strategic planning regarding merger process seen as a whole and integration process in particular. If the latter research applies to determining variables of the IS integration process and their key factors of success, nowhere can we see studies about the process in progress as such.

Hence, the aim of this article is to provide a description and a model of the IS post-merger integration process from a holistic point of view, that is to seek which are the possible IS integration modes and how are they implemented in merged companies.

2 CHARACTERIZATION OF IS INTEGRATION PROCESS

IS post-merger integration consists of two complementary and sequential aspects that we should consider together in order to propose a characterization of the process : the first one concerns possible integration modes, the second one deals with the implementation of the chosen integration mode. Then, in this research, we define IS integration process as an integration mode choice and as an implementation of the chosen integration mode in a same time.

2.1 Analyses framework of IS integration modes

We examine the IS integration process through the theory of fit, enabling us to take into account technological, organizational and strategic dimensions in a congruent perspective (Buck Lew, Wardle and Pliskin 1992). If we want to try and understand how the (emerging or deliberate) choice of the IS integration mode is made, three dimensions must be integrated by firms into their integration vision : a business strategy dimension, an organizational dimension and an information technology dimension.

Walton (1989) makes clear that “it’s essential for a firm to incorporate these three perspectives into a single vision and to consider each of these perspectives during the merger process”. This type of gestalt fit gives opportunity to supply with ideal profile so as to better comprehend choices of IS integration modes and to be able to build up a multidimensional analysis frame. Then, we select a fit configurational approach drawn from organizational theories literature. We try to apply and adapt it in order to analyse IS in mergers and acquisitions contexts. From this angle, organization tries to maintain the consistency of its gestalt and, among acquisitions, this maintaining attempt is diluted because of the number of firms involved. Although rarely used and capitalized in IS research (Iivari 1992), this fit configurational approach is considered as the most appropriate way to analyse complex organizations (Van de Ven & Drazin 1985 ; Miller 1987 ; Meyer & al 1993), which is perfectly the case of mergers and acquisitions. Thus, merged firms must choose and implement an IS integration process allowing them to make consistent their organizational, strategic and technological configuration. This compatibility of these three dimensions, as we showed previously, should be understood and examined as a single vision (Walton 1989 ; Weber et Pliskin 1996). So, the configurational approach leads us to keep as a theoretical framework the MIT works (Scott Morton 1991). The term “configuration” is usually employed in computer science in a technological perspective, considering that it constitutes a type profile of equipment and software designed for a predefined and definite use. In our analysis framework, “IS configuration” designates a configurational representation of the IS dimension. This IS configuration includes structural contingencies, management processes and roles of people and actors belonging to or users of IS function in the organization. This cares for both organization (structure and roles definition), technology, strategy and above all the importance of actors (employees, managers, consultants) in a

reactive and proactive dimension, makes it possible to present a theoretical analysis framework of IS configuration of integration process during the merger, and to understand the already or emerge integration choices according to compatibilities or incompatibilities between the firm's IS involved. We postulate indeed that the existing or no compatibility between the two firms IS involved in merger results from the similarities of their respective IS configurations.

2.2 Analysis framework of the IS integration modes implementation

Literature offers rare examples of work centred on the implementation of post-merger information systems integration process. A link between the integration phase and organizational change literature is frequently suggested without making it clear the practical details of this connection, the conditions for this link and without carrying out a real study on this relationship. That's why, we propose to take into account organizational change literature in order to examine the IS integration process. This will give us the opportunity to elaborate an analytical grid to understand the process implementation. From this perspective, we put emphasis on seeking regularities in order to explain the integration process dynamics. We are then entering the field of longitudinal studies.

Nevertheless mergers and acquisitions aren't normal and usual changes in a organization life. Merger occurs in a fast and abrupt manner, thus generating an organizational and informational instability that the IS integration process has to reduce. So this invites us to consider mergers rather as something isolated from organization in everyday life, referring to change as a distinct and independant moment from organizational life including an identifiable start and end. So the highlighting of different phases must be based on a logical reconstruction of IS integration process. For this reason, we drew on Campbell's sociocultural model (1969) applied by Weick (1977) for organization and revived by Burgelman (1991) for induced or independant strategic processes.

This model is composed of three phases : variation, selection, retention. This model supposes that exchanges with environment generates enacting variations (improvement of connections between the two IS configurations). The multiplicity of possible interpretations resulting from this exchange must be resolved either in resorting to buyer's knowledge and procedures in place, or in bringing about buyer-acquired firm interactions. These interactions aim at creating interpretations which will be individually and collectively selected to keep in the end those who appear to be the most relevant.

3 METHODOLOGY AND CASE PRESENTATION

3.1 METHODOLOGY

The chosen method to construct cases is that of retrospective stories. We chose a technique close to Yin's (1990) to reconstruct IS integration and mergers stories. The latter calls for primary data as main data source (interviews in total with many varied actors from 2002 to 2005) and secondary data to complete it (internal documents, records, press). We chose to carry out a process analysis by exploring IS integration process development phases.

3.2 DATA AND RESULTS

3.2.1 Data

Our work relies on the analysis of two big French companies specialized in real estate construction industry which both engaged in mergers and acquisitions between 1990 and 2004 (10 in total). These cases recount IS integration process stories among both studied mergers. This choice is based, on the one hand, the will to make comparable regularities emerge in different post-mergers IS integration

situations and, on the other hand, the wish to determine the similarities and divergences between the different studied cases as to elaborate a generic model putting emphasis on behaviour patterns adopted within the IS integration process.

3.2.2 *Results*

The two firms examined, MFC and GEOXIA, work in a fragmented industry. This triggered off external growth wave which allowed these two firms to buy up their business rivals. GEOXIA started to apply this policy from the early 90's, that is, in the middle of the industry crisis in order to reach the critical size and continued it up to now. MFC has launched in acquisitions after its finance listing at the Paris stock exchange in July 2000. So, the two groups have competing acquisitions policies during the same periods (2000-2005).

MFC acquisitions serve a market strategy, i.e. an increase in profitability, market shares and economies of scales. Concerning IS function, the strategic aim is clear : cost rationalization and reduction. MFC adopts a steady integration mode and applied in a uniform manner for each acquisition : MFC information system is applied to the acquired firm in order to establish a centralized control and to improve the financial situation. IS configurations of MFC and other acquired firms are very far away from each other in terms of technology, management process, structure and culture. We sum up these operations characteristics in the following table 1.

GEOXIA group begins its purchasing policy in following a market strategy as well. GEOXIA configurations and those of its first acquisitions are quite similar : same structure, same management process, close technologies. Contrary to MFC, GEOXIA experiences an integration mode based on setting up a simple link between technologies and conversion procedures. The merged firms IS are kept as they are and must cohabit. Then, GEOXIA is aiming at the cheapest IS integration in an industry crisis context.

The merger with MAISONS BOUYGUES in 1992 marks a change of integration mode. Their IS configurations are incompatible due to the structures in place, the formalization level, the technologies employed and the different cultures in the computer departments. In addition, this merger aims at other strategic goals based on synergies seeking and a market leader group identity creation leading to value creation for customers and shareholders. This results in an integration which finds expression in a radical overhaul of IS. It takes three years for the new set to take shape. Business processes are rethought, structures are modified, previous systems are given up to the benefit of a new architecture. New IS will act as an integration catalyst during the last group acquisitions in the 2000's.

New integration mode : since its new IS implementation at the end of 1999, GEOXIA holds an atypical configuration compared with other market actors, which remain less formalized, less structured and technologically less equipped. The studied IS configurations are witnessing strong incompatibilities, coupled with an integration strategy turned to integration cost cutting and rationalization. IS integration mode corresponds to absorption : GEOXIA IS is applied to acquired firms. GEOXIA relies on its IS to accelerate the general integration phase : better financial consolidation, building sites management centralization, accelerated reporting, ... Thus, in the space of 14 merging years, three integration modes have succeeded as regards IS.

Acquisition Date	Purchaser	Acquired	IS configurations	Strategic goals assigned to IS	IS integration mode
07/2000	MFC	OCR	Different	Rationalization	Absorption
06/2001	MFC	Berval	Different	Rationalization	Absorption
07/2002	MFC	GHPA	Different	Rationalization	Absorption
07/2003	MFC	Bruno Petit	Different	Rationalization	Absorption
10/2004	MFC	Horizons	Different	Rationalization	Absorption
12/1989	GEOXIA	H-France	Similar	Rationalization	Preservation
03/1991	GEOXIA	MFamiliales	Similar	Rationalization	Preservation
10/1992	GEOXIA	MBouygues	Different	Value/Synergies	Overhaul
02/2002	GEOXIA	DCA	Different	Rationalization	Absorption
04/2002	GEOXIA	Stylgit	Different	Rationalization	Absorption

Table 1. mergers and acquisitions realized by the two groups between 1990 and 2004

4 DISCUSSION

4.1 An emerging IS integration modes typology

Exploration of these firms, having each experienced more than 5 mergers during a long period, enable us to propose a typology presenting several combinations within a matrix built up on two axes : the degree of IS configurations compatibility, and the strategic goals assigned to IS function.

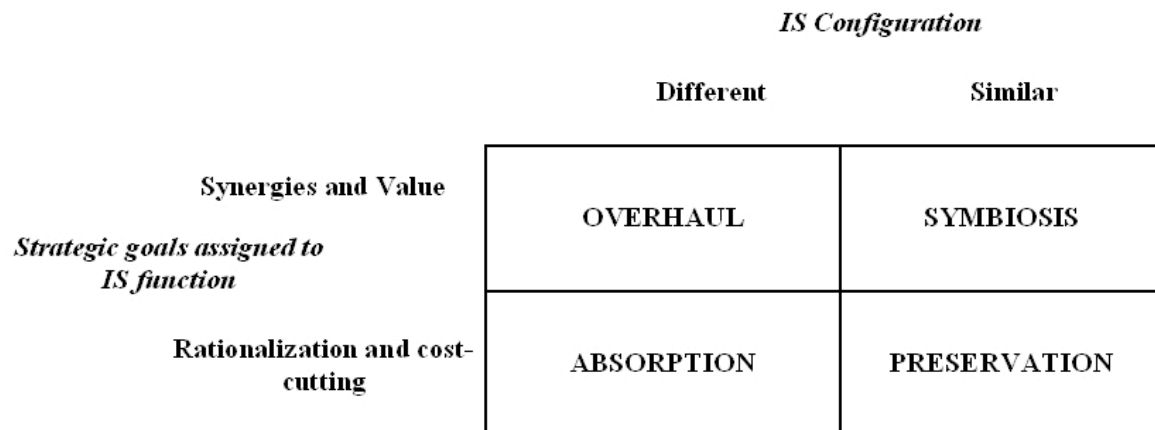


Figure 1. IS integration modes typology

Overhaul. In incompatible IS configurations cases, overhaul process constitutes the hardest process to implement. It requires management process reconstruction of each firm to integrate, architecture and IS structures conception, an overhaul of technological elements. This process led by GEOXIA illustrates the organization will to create synergies and value in spite of initial disparities presented by each firm IS configuration. However, a major risk is inherent in this approach : attempting to adopt individual components stemming from each of the present configuration, and trying to merge them into a new configuration may lead to failure because of the discrepancy inside entities interdependents components to integrate and because of the discrepancy between the two underlying organization schemes.

Absorption. Resolving different IS incompatibility occurs through an absorption process as well. So, integration issue is largely simplified to the extent that one configuration absorbs the other one.

Present risks in the overhaul process are strongly reduced making migration the preferred process in an incompatibility context (process immediately chosen by MFC from 2000 at the time of its acquisitions, then by GEOXIA in 2002 to make its new IS pay). Nevertheless other risks of different kinds are emerging : risks of destroying acquired firm initial value, change reluctance, no-acknowledgement of acquired firm IS specificities.

Symbiosis. In the case of IS configurations compatibility synergies can be achieved more easily. The symbiosis process appears to be as the process to be preferred to take advantage IS configurations proximities offered by the connection established between the firms. Here IS acts as a synergies catalyst and makes it possible to turn strategy to value. Firms examined here didn't allow us to observe such a case.

Preservation. In the case where goals declared by the acquired firm depend upon cost-rationalization or cutting, preservation process permits to answer positively to this situation. Indeed, configurations compatibility allows the possibility to minimize integration costs and to establish a minimal technological, structural and organizational coherence in the merger of the two firms concerned (GEOXIA case). Basic technical or procedural links are then set up (two front offices, two back offices) in order to fulfil these objectives.

The longitudinal study of these two groups reveals several integration paths leading from one mode to another one. We strive to identify and explain them.

Path n°1 : A strategy change turn toward integration to symbiosis. Merged firms make the most of their configurational compatibilities in order to generate value and synergies

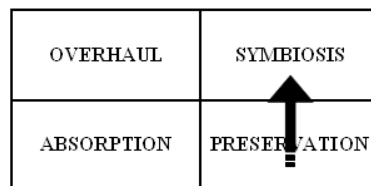


Figure 2. Path n°1

Path n°2 : Merged companies configurational compatibility moves with time to an incompatibility due to technological initiatives, process changes or structures done separately by firms. The GEOXIA case from 1993 illustrates this transition. The sliding move to these configurations and the change in strategy decided by the new management enforced in 1994 explain the IS overhaul giving a new character to integration process.

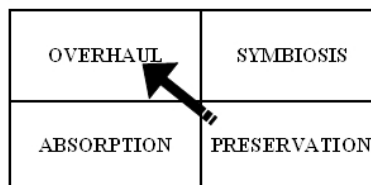


Figure 3. Path n°2

Path n°3 : Same sliding move as for path n°2, but the strategy assigned to IS remains focused on observed when purchaser and acquired firm have similar configurations. The fact that the acquired firm commits to a change in its IS (for instance an ERP implementation) leads to an automatic alignment of the acquired firm's configuration.

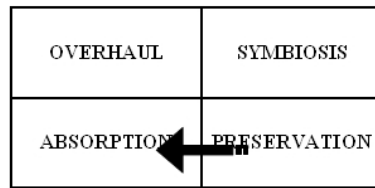


Figure 4. Path n°3

Path n°4 : Purchaser strategy is modified in order to make the investments undertaken in IS overhaul pay. The latter is then assessed as an integration catalyst. The new acquisitions whose configuration is close to that of the purchaser find themselves forced to apply purchaser IS in the perspective of “copy-pasting” style. Integration process led by GEOXIA between 1999 and 2002 follows this path.

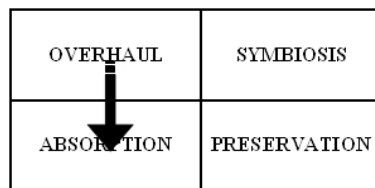


Figure 5. Path n°4

4.2 Two emerging process dynamics : prescribed vs constructed integration

The study of these integration process led by this two big groups permits to highlight IS integration modes but also their implementation according to a multi-phase change evolution illustrating Weick’s model (1977). Two dynamics are emerging from our research characterizing the way IS integration processes are led.

4.2.1 Prescribed Integration (MFC case – GEOXIA case 2000-2005 period)

Prescribed integration refers to the idea of possible definition of the IS wished related to the existing IS in each merged firms. Key actors of this prescribed integration are the leader (integration project manager) and the consultants (external counsels). The coming IS derived from integration process is the result of a “closed vision” of key actors. They draw up clear objectives and impose them to the rest of the new merged organization. Integration process entails then determining in detailed terms the IS aimed at. Integration anchoring rests on the content : so IS integration is deliberate. Analysis of this kind of process shows a “tactics of doing” such as **Retention-Selection-Variation**.

Step n°1 : The integration leader constructs his futur IS vision by means of two main activities : a strategic diagnosis enabling to determine possible malfunctioning and/or IS opportunities, and a planning based on an established diagnosis. The leader orders to install the new IS in the merged organization (Retention). Integration is then determined and constitutes a replacement act. So the integration process nature is deliberate (Mintzberg and Waters 1985). This provokes a break down and integration might not be shared. Thus training courses are organized in order to enable people to appropriate new IS. This first process step constitutes a stable phase : at this stage few unexpected things may happen because implementation is planned in advance and the integration leader doesn’t give any room for manoeuvres to other actors in the organization.

Step n°2 : Other merged firm’s actors (IS staff, employees ...) may attempt progressively by appropriating new IS to modify it and so are ready to see differently leader vision or strategy. This difference of perceptions is a source of variety namely in a decentralized structure case (MFC case). To control these emerging initiatives, selection mecanismes are set up by the leader. Selection results in the reduction of initiatives coming from the bottom. There are many tools installed which illustrate

this selection : spread quality standards, charter, rewards ... illustrating the idea of a consistency framework (Burgelman 1983).

Step n°3 : The leader concludes integration with a continuous experiments phase. Once the planning objectives fulfilled, the leader invites IS employees to take more autonomous initiatives (Variation) allowing to favour new synergies discoveries in the ressources use. A dynamic is then relaunched through new projects such as intranet implementation at GEOXIA in 2004, or middleware extension at MFC.

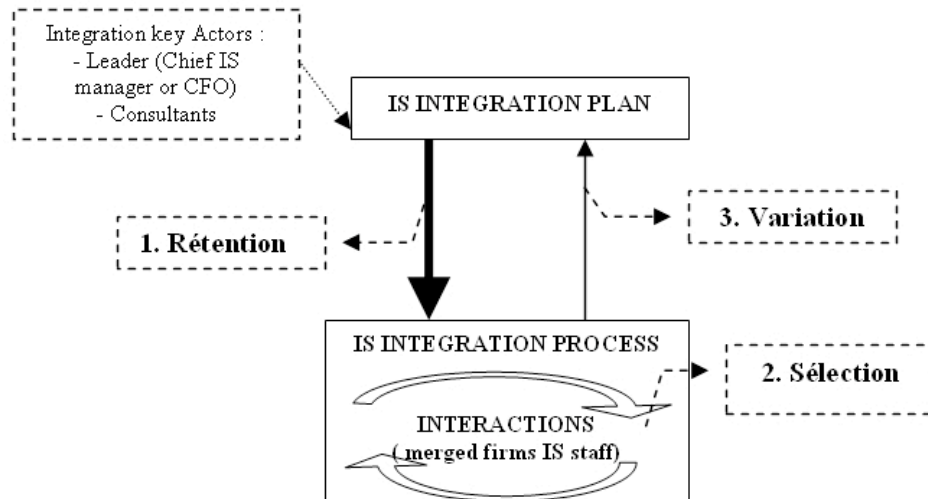


Figure 6 : Constructed Integration

Prescribed integration process follows a logics moving from a global level (whole organization) to a local one (individuals). Indeed, at the beginning of the process (stage 1) the system seen as a whole is affected. IS structures, IS management processes, technologies are modified so as to be aligned with leader vision. Then integration moves to a local level. Individuals are confronted with new IS and have to adapt to it. Two risks may then emerge : on the one hand, change reluctance may develop and compromise the global progress of general integration, on the other hand appropriation attempts in case of no control may provoke a loss of global coherence of the integration process and bring about a loss of process control.

4.2.2 Constructed integration (GEOXIA case 1997-2000 period)

Constructed integration relates back to the idea that it is difficult to anticipate in advance the precise definition of the desired IS relating to the current IS existing in each merged firm. Future IS derived from integration process is the result of an open vision of the integration leader. From this perspective, integration is not perceived as a planned action but as constructed action: it is not a matter of a solution to be found to settle given problems but to agree on the issues to solve. Integration process rests no longer on the determination of desired IS but on the method to follow in order to actually make integration concrete. IS integration is here emerging. Integration process is no longer sequential (integration is defined then fulfilled) but synchronized (integration is taking shape as it constructs itself). We recognize here Weick's self-organized systems characteristics (Weick 1977). Analysing this kind of process shows a "logics of doing" such as **Variation-Selection-Retention**.

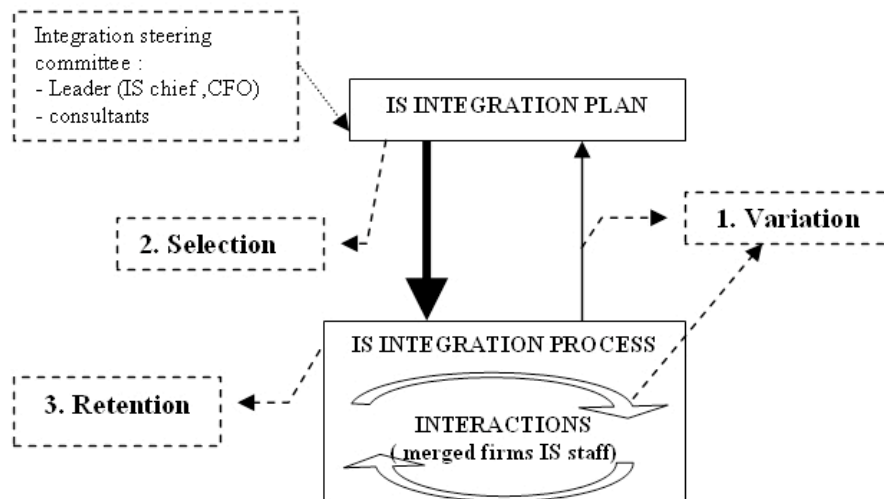


Figure 7 : Constructed Integration

Step n°1 : the leader gives a large autonomy to the actors of the organization who through meetings are in charge of proposing ideas regarding new IS construction. These discussion groups proposed by the leader are interhierarchical and interdisciplinary. These new ideas and initiatives are sources of variety (Variation). At GEOXIA for example, numerous workshops geographically spread out all over the group business unit were aiming at the business process destined to be managed by the future IS. That disorder is necessary for the dissolution of merged firms orders (Nonaka 1988) and for the future order creation.

Step n°2 : All these ideas contribute to help the leader to refine the new IS vision. He undertakes a selection phase by carrying out assessment actions enabling him to take stock regarding the advances made (business process definition, procedures conception, technological choices) and allowing him to formalize the new IS. So it is a retroactive autonomous behaviors rationalization process in the sense of Burgelman (1983). The steering committee takes the control again by bringing back coherence to the integration process.

Step n°3 : integrated IS vision is formalized. This last stage consists in a collective learning of new practices (Retention). The initial mechanism of variation allowed actors, by developing ideas and initiatives, to prepare change. So retention permits to transform initial propositions generated by these actors and by this way doesn't constitute a brutal integration process.

Here integration process evolves and derives from local level (IS actors) to global level (organization as a whole). IS actors and staff invest right from the integration start by proposing ideas and initiatives through working groups (step 1). This enables staff to commit or not in the integration process without hierarchy permission. Following these interactions a need for rationalization and coherency by the steering committee is growing so as to lead more finely IS integration. IS integration involves a change in IS actors behaviour before setting integration framework and development. Two majors risks appeared among firms we examined. First, some IS actors having participated in working group may develop the feeling that the new IS doesn't correspond to the representation they created. Another risk lies in process control due to initial autonomy left to staff. This was for instance defined at GEOXIA by organizing meetings dedicated to definite themes in order to avoid digressions with involved actors. This process management allows hierarchy to take control again smoothly.

CONCLUSION

Our research doesn't focus on the integration failures reasons. It aims to offer an understanding of the construction, implementation and issues related to IS integration process by integrating strategic,

organizational and technological contingencies. So this research aims to make clear which integration type should be set up related to the IS getting merged, and to define the pooling of the different IS during this integration process. Similarly, this research is about the degrees of this integration and the actors characterization, their role in the participation in the process as well as the interactions between the same actors.

We carried out two case-studies reflecting different IS integration process approaches. We considered temporality each of these actions and their intervention levels in the process. The research results enable us to identify the determinants of the possible IS integration modes. We suggest an approach insisting on contingencies leading to absorption, preservation, symbiosis and overhaul modes. For this purpose, we put forward the necessity to take into account a vision based on organizational, strategic and technological levels. So configurational approach allows to show the importance of fit between two merged firms within the IS integration process. This fit between these 3 levels makes it possible to understand IS integration process and to characterize it according to two perspectives : chosen or emergent integration mode and dynamics implementation of this mode. For the latter, we used sociocultural evolution model (Weick 1977, Burgelman 1991) so as to model the IS integration process. In the light of firm cases studied, we analyzed two dynamics : prescribed integration which derives from a Retention-Selection-Variation approach and constructed integration which comes from a Variation-Selection-Retention approach.

If mergers and acquisitions are two of the main focuses of media attention at the announcement time, they constitute operations hard to study due to their strategic and confidential nature, namely at the integration phase. In order to consolidate our results, we advocate to extend our study field to other firms belonging to different industry sectors. This perspective would permit to refine our analysis and more particularly one integration mode (symbiosis) that we couldn't observe in our field and which remains a theoretical conclusion in our research. Similarly, it ought to enhance the possible complementarities between the two dynamics noticed in our study in other case studies.

REFERENCES

- Alaranta, M., Parvinen, P. (2004). Contribution of Governance Theories of the Firm to the Analysis of M&A and Post-Merger Integration of the Information Systems. Conference paper: IRIS27, Falkenberg, Sweden.
- Buck-Lew, M., Wardle, C. E and Pliskin, N. (1992). Accounting for Information Technology in Corporate Acquisitions. *Information & Management*, vol. 22, No. 6, p. 363-370.
- Buono A.F., Bowditch J.L., Lewis J.W. (1988). The cultural dynamics of transformation :the case of a bank merger. *Corporate transformation:revitalising organizations for a competitive world*. San Francisco:Jossey-Bay, p.497-522
- Burgelman, R. A. (1983). A model of the interaction of strategic behavior, corporate context and the concept of strategy. *Academy of Management Review*, Vol.8, No1, p. 61-70
- Burgelman, R. A. (1991). Intraorganizational Ecology of Strategy Making and Organizational adaptation: theory and field research. *Organization Science*, Vol.2, No 3, p. 239-262
- Cartwright S., Cooper C.L.(1993). The role of culture compatibility in successful organizational marriage. *Academy of management executive* vol7 (2), p. 57-70
- Giacomazzi F., Panella C., Pernici B. (1997). Informations systems integration in mergers and acquisitions : a normative model. *Information and Management*, 32, p. 289-302
- Haspeslagh P.C., Jemison D.B (1991). *Managing Acquisitions : creating value through corporate renewal*. The Free Press
- Iivari J. (1992). The organizational fit of information systems. *Journal of Information Systems*, vol. 2, No 1, p. 3-30
- Jeminson, D., Sitkin, S. (1986). *Corporate Acquisitions: A Process Perspective*. *Academy of Management Review*, vol. 11, No. 1, p. 145-163.

- Johnson M. (1989). Compatible information systems a key to merger success. *Healthcare Financial Management*, 43, 6, p. 56-62
- Marks M.L. (1982). Merging human resources. *Mergers and Acquisitions*, 17, 2 p. 38-43
- Markus, M.L. (2000). Paradigm shifts, E-Business and Business/Systems integration. *Communication of the AIS*, vol.4 N° 10, p.1-45
- Markus, M.L. (2001). Reflections on the systems integration enterprise. *Business Process Management Journal*, vol.7, N°3, p.171-176
- McKinsey (2000). Why mergers fail. *McKinsey Quarterly* vol.4
- McKiernan, P., Y. Merali (1995). Integrating information systems after a merger. *Long Range Planning*, vol. 28, no. 4, p. 54-62.
- Mercer Consulting Group (2001). Trans-Atlantic mergers and acquisitions: review of research findings
- Meyer, A., Tsui, A., Hinings, C. (1993). Configurational approaches to organizational analysis. *Academy of Management Journal*, Vol. 36, No 6, p. 1175-1195
- Miller, D. (1987). The genesis of configuration. *Academy of Management Review*, Vol. 18, No 1, p.687-701.
- Mintzberg, H., Waters, J., (1985). Of strategies, deliberate and emergent. *Strategic Management Journal*, Vol.6, p. 257-272
- Mirvis P & Marks ML (1992). The human side of merger planning : assessing and analyzing fit. *Human Resource Planning*, Vol. 15, No 3, p. 69-92
- Napier N.K. (1989). Mergers and acquisitions, human resource issues and outcomes : a review and suggested typology. *Journal of management studies*, n°26, p.271-289
- Nonaka, I. (1988). Creating organizational order out of chaos: self-renewal in Japanese firms. *California Management Review*, spring, p.57-73
- Pareek, M. (2004). IT governance and post-merger systems integration. Conference paper: K-Net ISACA
- Robbins, S. S., Stylianou, A. C. (1999). Post-merger systems integration: the impact on IS capabilities. *Information & Management*, vol. 36, no. 4, p. 205-212.
- Rosenberg R. (1987). Network trauma: making ends meet when two firms merge. *Data Communication*, 16,8, p. 102-111
- Rubin H. (1992). The intricate process of merging two bank information systems. *The Bankers Magazine*, sept-oct, p. 72-77
- Schweiger D.M, Walsh J.P. (1990). Mergers and Acquisitions: an interdisciplinary view. In Ferris G.R. and Rowland K.M. *Research in personnel and human resources management*. JAI Press, Vol.8, p. 41-107
- Schweiger D.M., Weber Y. (1989). Strategies for managing human resources during mergers and acquisitions : an empirical investigation. *Human Resource Planning*, Vol. 12, No 2, p. 69-86
- Scott Morton, M. (1991). *The corporation of the 1990s: Information Technology and Organizational Transformation*. Oxford University Press, New York
- Shrisvatava P. (1986). Post-Merger Integration. *Journal of Business Strategy*, Vol. 7, No 1, p.65-76
- Stylianou, A. C., Jeffries, C. J., Robbins, S. S. (1996). Corporate mergers and the problem of IS integration. *Information & Management*, vol. 31, no. 4, p. 203-213.
- Van de Ven, A., Drazin, R., (1985). The concept of fit in contingency theory. *Research in Organizational Behaviour*, No 7, p. 333-365.
- Walton R.E. (1989). *Up and running : Integrating information technology and the organization*. Harvard Business School Press, Boston, MA
- Weber, Y., Pliskin, N. (1996). Effects of information systems integration and organizational culture on a firm's effectiveness. *Information & Management*, vol. 30, no. 2, p. 81-90.
- Weick, K. E. (1977). *Organization Design: Organizations as self-designing systems*. *Organizational Dynamics*. Autumn, p. 31-46
- Yin, R.K. (1984). *Case study research*. Beverly Hills. Sage