Breaking the Outsourcing Path:

An Exploratory Study of Generative Mechanisms of

Backsourcing Process

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Résumé :

This article aims at contributing to the development of theories of the firm by answering the question about how firms can switch from one mode of governance to the other, despite organizational rigidities. Given the strong adoption of outsourcing among firms, we particularly choose to explore the mechanisms that enable firms to backsource activities or in other words to reintegrate activities that have been previously outsourced.

We base our research on transaction cost economics, capabilities-based view of the firm and organization theories. Using the case study methodology, we have analysed processes related to the backsourcing of Information Technology activities in two large firms of the telecommunications and housing industries. The studies show that in presence of organizational rigidities, backsourcing processes can be broken down into four consecutive phases: the firm lock-in in outsourcing; the creation of a deadlock situation; the constrained partial backsourcing; and the deliberate deployment of backsourcing. Finally, the studies shed lights on the intertwined actions of context, structure and individuals in the definition of firm boundaries.

Mots-clés : Externalisation/internalisation, Théories de la firme, Changement organisationnel, Grande Entreprise, Etude de cas.

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INTRODUCTION

In today's context of uncertainty and interconnected environments, the definition of firm boundaries has become a difficult issue. According to research in transaction cost economics and the capabilities based view of the firm (Conner and Prahalad, 1996; Kogut and Zander, 1992; Williamson, 1985; 1991; Winter, 1988), firms should align make-or-buy decisions with transaction characteristics so as to improve transaction performance (D'Aveni and Ravenscraft, 1994; Leiblein and Miller, 2003; Poppo and Zenger, 1998). Therefore, firms should modify their modes of governance of transactions according to transaction characteristics changes. For instance, if asset specificity and uncertainty regarding an outsourced transaction increase, firms are advised to switch from outsourcing to backsourcing, in other words, to take back the transaction in house.

Though research gives clear indications about when to make or buy, we still lack information about how make-or-buy decisions are made in practice (Bidwell, 2012), all the more so as firms may encounter difficulties to adapt their boundaries due to the presence of organizational rigidities. Research has particularly highlighted the permanence of outsourcing due to reasons such as the strong adoption of outsourcing (Loh and Venkatraman, 1992), the creation of path dependent outsourcing traps (Anderson and Parker, 2002) or the fear of high switching costs (Whitten, Chakrabarty, and Wakefield, 2010). In such circumstances, backsourcing or reintegrating activities that have been previously outsourced may end up to be unfeasible in reality.

This article aims at contributing to the development of theories of the firm by answering the question about how firms can switch from one mode of governance to the other, despite the presence of organizational rigidities. Given the potential difficulties to break the outsourcing path, we particularly choose to explore the mechanisms that enable firms to backsource activities.

For that purpose, we study this question using two longitudinal and retrospective case studies that relate to the backsourcing process of Information Technologies (IT) activities in two large firms of the telecommunications and housing industries. The studies show that in presence of organizational rigidities, backsourcing process can be broken down into four consecutive phases. In the first phase, we see that firms get locked in outsourcing because the scope of choice regarding make-or-buy decisions becomes restricted to outsourcing. In the second phase, the excessive use of outsourcing and changes in the environment of the firms lead the firms to a deadlock situation. In the third phase, to overcome this situation, firms are forced to backsource some of their outsourced activities. This constrained partial backsourcing works as a destabilization of the beliefs on outsourcing. In the last phase, we observe a deliberate deployment of backsourcing to other outsourced activities of the organization. This deployment is due to the success of the first backsourcing operation and the arrival of new managers that are convinced of the relevance of backsourcing. Finally, the studies shed lights on the intertwined actions of context, structure and individuals in the definition of firm boundaries.

1 THEORETICAL BACKGROUND

Our research question about how firms can backsource activities despite organizational rigidities is based on the assumption that firms need to align their mode of governance according to transaction characteristics. If we refer to transaction cost economics (Williamson, 1985), in case of high specificity of assets most notably, firms are advised to switch from outsourcing to backsourcing, in other words, to take back the transaction in house. Capabilities-based view incorporating the resource- and knowledge-based views of the firm (Argyres, 1996; Eisenhardt and Martin, 2000; Hoetker, 2005; Leiblein, 2003; Teece, Pisano, and Shuen, 1997) enables to identify the coexistence of numerous and varied reasons

for backsourcing. Two main reasons may explain backsourcing decisions (Veltri, Saunders, and Kavan, 2008): the firm may have underestimated the strategic value of outsourced resources and capabilities; external or internal changes may have occurred and made outsourcing less relevant.

Though research gives clear ideas about the reasons to backsource, it remains to identify the way firms can backsource efficiently outsourced activities. For that purpose, we will first review the different causes of organizational rigidities that may prevent backsourcing and then the elements that enable to overcome those rigidities.

1.1   Firm boundaries and organizational rigidities

Research on firm boundaries has pointed out the difficulties for maintaining make-or-buy decisions alignment to transaction characteristics. Indeed, over time, firms may lose their flexibility, become inert and even locked in a mode of governance such as outsourcing. Three important types of concepts may explain such organizational rigidities which are institutional persistence, organizational path dependence and commitment (Schreyögg and Sydow, 2011; Sydow, Schreyörg, and Koch, 2009; Vergne and Durand, 2010).

Neo-institutional theory (DiMaggio and Powell, 1983) explains why organizations tend to adopt and keep similar forms due to pressures from institutions such as governments, families or accreditation organizations. Some studies have explained the increasing adoption of outsourcing, particularly the adoption of information technology outsourcing (Ang and Cummings, 1997; Hu, Saunders, and Gebelt, 1997; Loh *et al.*, 1992). These different studies indicate that the outsourcing practice is currently well deployed in firms because of institutional pressures that lead to mimetic and normative isomorphism processes. However, factors such as the size of organizations or the type of industry can moderate these pressures.

The concept of organizational path dependence (Schreyögg *et al.*, 2011; Sydow *et al.*, 2009; Vergne *et al.*, 2010) offers a different explanation of organizational rigidities from the one given by neo-institutional theory. While neo-institutional theory stresses the effect of exogenous factors to explain the institutionalization of practices, organizational path

dependence insists on internal mechanisms such as self-reinforcing mechanisms that are likely to lead organizations to lock-in.

Little research on outsourcing has used the concept of path dependence to explain why firms continue to use outsourcing as a preferred mode of governance despite experiencing low performances. From this perspective, Anderson and Parker (2002) research is particularly interesting. They showed that outsourcing decisions may entail the creation of a path-dependent outsourcing trap. Indeed, firms that outsourced their components production experience immediate cost benefit thanks to mass production but also higher long-term costs due to increasing difficulties to integrate outsourced components. In this context, the solution to backsource may be advisable but appears dissuasive. Indeed, it will take time and money for firms that do not have components production experience anymore to recover their past production performance. Most firms may not envisage such "pain-before-gain scenario" and maintain outsourcing.

Commitment is another concept that can explain the possible potential irreversibility of make-or-buy decisions. Commitment is key for strategic management as the success of a firm strategy depends on the level of commitment of the firm management and resources for a defined period of time (Ghemawat, 1991). However, it also implies a loss of flexibility in terms of opportunity costs (Schreyögg et al., 2011) and can drive to a lock-in situation.

Within the concept of commitment, we broadly incorporate different others such as escalation of commitment, sunk costs, switching costs, or governance inseparability, contractual commitment and bargaining power. Escalation of commitment designates psychological and individual mechanisms based on the fear or the shame to lose the achieved investments and that lead individuals to persist in using the same inefficient strategy. For Staw (1981), decisions concerning choices of resource or investment allocations that imply entry or exist costs are the most susceptible to be concerned by such an escalation process.

As such, outsourcing decisions are ideal candidates for escalating commitment. When switching modes of governance, firms may incur sunk costs that cannot be recovered once decisions are effective. These costs concern switching costs (Weiss and Anderson, 1992) that

are also named adaptation costs (Nickerson and Silverman, 2003). In their analysis of the reasons which can motivate companies to integrate their sales department by replacing independent representatives with employee sales force, Weiss and Anderson (1992) showed that switching costs prevent replacing independent representatives even though their activity performance is highly dissatisfactory. Whitten & Leidner (2006) and Whitten, Chakrabarty, & Wakefield (2010) specify that it is the high perception of the level of switching costs by managers that prevents firms from backsourcing IT activities.

The concepts of contractual commitments, bargaining power and governance inseparability (Argyres and Liebeskind, 1999; 2002; Nickerson *et al.*, 2003) also offer an explanation of lock-in situations. A contractual commitment exists as far as it links parties in such a way that it would be expensive for one or all parties to terminate the contract. The presence of such commitment can engender a governance inseparability that prevents firms from using the right mode of governance. The existence of bargaining power between parties can also have the same effects of governance inseparability as shown by Nickerson and Silverman (2003).

Research on institutional persistence, organizational path dependence, commitment and related concepts underlines the difficulty to switch from one mode of governance to the other when required (in our case, from outsourcing to backsourcing) and the potential irreversibility of make-or-buy decisions such as outsourcing.

1.2 Breaking the outsourcing path

Although prior research on firm boundaries has focussed on when make-or-buy decisions should be made, researchers now shed light on how these decisions are made in practice. As seen previously, organization theories have shown the existence of organizational rigidities that could lead firms to be locked in an inefficient mode of governance. Therefore, a new research question can be to know how firms can align make-or-buy decisions with transaction characteristics despite organizational rigidities that prevent this alignment.

Studies on strategic or organizational changes (Armenakis and Bedeian, 1999; Ginsberg, 1988; Rajagopalan and Spreitzer, 1997) point out the necessity of changes in the internal or external environment of the firm to come out of lock-in situation. For instance, in the case of the external environment, these changes can be a transformation of customer values or of competition dynamics. Regarding the internal environment, changes could concern modifications of the firm organizational rules or its organizational structure.

The main point is to determine how these changes in the firm external or internal environment can entail the change of mode of governance. In the case of institutional permanence of outsourcing, backsourcing can be viewed as a destabilization of the beliefs on outsourcing by internal or external factors. This destabilization can be triggered by the effect of a crisis or by a progressive modification of these beliefs by viral effects based on imitation (Brousseau, Garrouste, and Raynaud, 2011).

In the case where firms are in a path dependence situation, changes introducing new technological paradigms or a heterogeneity among agents can be factors of path breaking (Bassanini and Dosi, 2001). Indeed, these changes allow firms to access to new perspectives or opportunities that will enable to get out of path dependence. Concerning the heterogeneity of agent, it is the imperfect adaptation of agents to the firm or more extended social networks that can be a source of path breaking. Karim and Mitchell (2000) have identified that while making a new acquisition of activity – therefore of new resources – firms could recompose their existing capabilities and could come out of the path dependence in which they were trapped.

In the case of escalating commitment, the replacement of the decision-makers – people in charge of allocating resources to projects – is necessary to come out of this lock-in situation (Staw, 1981). The arrival of new leaders has consequences on the perception of switching costs. Indeed, provided that they have different experiences and expertises, these new leaders will consider switching costs in another way and may envisage backsourcing more easily.

This literature review highlights numerous causes of organizational rigidities that firms may have to face before backsourcing. Although literatures exist on the reasons to backsource (Benaroch, Dai, and Kauffman, 2010; Caputo and Palumbo, 2005; Freytag, Clarke, and Evald, 2012; Veltri *et al.*, 2008; Whitten *et al.*, 2010; Whitten *et al.*, 2006), we know less about how backsourcing processes are triggered and rolled-out in firms despite organizational rigidities. The next section describes the research setting and methods for our studies.

2 RESEARCH SETTING AND METHODS

In this research, we explored the process that enables firms to switch from outsourcing to backsourcing in presence of organizational rigidities. We used longitudinal and retrospective case studies of two firms that recently experienced backsourcing. Case studies can help to enhance our understanding of backsourcing as it enables to consider the temporality and the context of processes (Pettigrew, Woodman, and Cameron, 2001; Yin, 2003). Moreover, using two different firms allowed us to compare and explore various organizational processes.

2.1 Case sample

The specific setting for this study was the IT departments of a low-income housing company ("HOUSINGCO") and a telecommunication operator ("TELECO"). For confidentiality purpose, all companies have been renamed in this article. In order to collect comparable information on each case, we selected cases concerning the backsourcing of information technology (IT) activities. We have chosen IT activities because of their ambivalent contribution to the firm competitive advantage (Henderson and Venkatraman, 1999). IT activities are often viewed by non IT firms as non-core activities though their inefficiencies may jeopardize the whole firm organization and financial performance. The two cases whose characteristics are summed up in the following Table 1 were selected because of their rich and extensive information on backsourcing.

Table 1. Characteristics of the backsourcing case studies

	HOUSINGCO	TELECO
Creation date	Early 20th century	Mid 1990
Industry	Low-income housing	Telecommunications
Sales in 2011 (€M)	1 200	5 800
Number of employees in 2011	2 900	9 900
Outsourcing starting date	1995	1996
Transferred resources to outsourcing company	All the IT department staff (except 1 out of 33 people)	No systematic human resources transfer
Outsourcing mode	Simple (1 outsourcing company)	Multiple (several outsourcing companies)
Outsourcing degree	Total outsourcing	Selective outsourcing (focus on 4 embedded outsourcing-backsourcing case studies)
Backsourcing starting date	2006	2006
Backsourced resources	All the outsourcing company staff that worked for HOUSINGCO account	No systematic human resources transfer
Backsourcing degree	Total backsourcing	Selective backsourcing (focus on 4 embedded outsourcing-backsourcing case studies)

With a complementary approach of backsourcing, these two cases enable to study various situations and to extend our understanding of how backsourcing processes are generated. While the two firms extensively used outsourcing over 10 years, they outsourced and backsourced their IT activities differently. HOUSINGCO chose to completely outsource and backsource its IT activity and staff while TELECO used a selective approach and did not systematically transferred its IT staff. Similarly, HOUSINGCO was composed of a unique IT backsourcing case while TELECO case included 4 embedded backsourcing cases: 3 cases concerning the backsourcing of computer programming activities related to Alpha, Beta and Gamma systems and 1 case related to the backsourcing of IT exploitation activity (Omega). Main events, decisions and activities during the outsourcing and backsourcing periods are reported in Appendix A for HOUSINGCO and Appendix B for TELECO.

2.2 Data collection

We studied the backsourcing process followed by each firm. We gathered data from different sources such as semi-structured interviews and documents so as to reinforce the construct validity. We collected data over a period of 15 months, from 2007 to 2008. The data collection and analysis are summed up in the following Table 2.

Table 2. Data collection and analysis

	Type and amount of data	Analysis and use in theory development
Interviews	**Semi-structured recorded interviews with a standardized interview guide:** • 48 recorded interviews of 1 hour average duration: 40 indirect or direct participants of the backsourcing process which included CIO, IT and non IT managers and operational staff. **455 pages**	Transcribed interviews coded with Nvivo tool: close examination of qualitative data to name and categorize phenomena.
Documents	**Internal and external documents:** • strategic plans • contractual documents • meeting minutes • correspondence • audit reports • feasibility studies • annual reports **5 000 pages**	Triangulation work with interviews in order to improve the construct validity.
All	**5 455 pages**	• Construction of the detailed backsourcing process flowchart for each case • Temporal decomposition of backsourcing process into 4 successive periods • Writing of monographs for each backsourcing process case

To understand the context where the backsourcing process took place, we used different levels of analysis that include individuals in the observed firms, outsourcing contracts, organizational structures such as departments or governance functions and the economic,

political and social environment of firms. We chose to study backsourcing processes using a large period of analysis that started from the decision to outsource IT activities and finished around two years after the beginning of the backsourcing process.

2.3 Data analysis

We used Langley's strategies (1999) for theorizing from process data such as visual mapping, temporal bracketing and narrative strategies. For that purpose, during the data analysis, we undertook several related activities:

- Recorded interview transcripts and documents coding: we reviewed each interview transcript sentence by sentence and coded quotations into 104 categories grouped into 14 different themes using Nvivo 8 qualitative research software. We also reviewed secondary data and made summary files that were integrated to the documents to be coded.

- Identification of events, actions or activities arisen during the outsourcing and backsourcing periods: based on previous data coding, we used informants' recollection of important events and the consultation of internal documents to identify them and we characterize their influence on the studied process. This identification was a preliminary task for the following ones.

- Construction of a detailed backsourcing process flowchart (see Appendixes A and B): the flowcharts enable us to obtain a visual mapping of each backsourcing process and to compare them.

- Decomposition of the backsourcing process into 4 successive periods: the firm lock-in in outsourcing; the creation of a deadlock situation; the constrained partial backsourcing; and the deliberate deployment of backsourcing. This temporal decomposition helps us to structure the comparison of the two backsourcing processes.

- Writing of a monograph for each case: the use of the temporal decomposition and monographs aims at giving a deep understanding of processes with a focus on the time and the context dimensions of processes.

- Internal validity check: we collected data from different sources for triangulation purposes (Eisenhardt and Graebner, 2007). We presented all our case study results to the main informants (3 HOUSINGCO IT managers and 2 TELECO IT managers). This presentation helped us to be more accurate on the influence importance of some events.

The next section sums up the main findings of our empirical work.

3   MAIN FINDINGS

From our case studies of IT backsourcing processes at HOUSINGCO and TELECO, we found out that the two firms followed a similar pattern that incorporated four consecutive phases that will be described hereafter: the firm lock-in in outsourcing; the creation of a deadlock situation; the constrained partial backsourcing; the deliberate deployment of backsourcing.

Figure 1. Overview of the four-phase backsourcing process

3.1   The firm lock-in in outsourcing

The first phase deals with the progressive lock-in of firms in outsourcing. Over more than 10 years, both HOUSINGCO and TELECO used outsourcing as the prevailing mode of governance for their IT activities. However, they operated in two different ways. HOUSINGCO chose to outsource its entire IT department to a single outsourcing firm, OUTCO. The invoked reasons were "technical and financial" as mentioned in the outsourcing contract signed in 1995 between the two firms. HOUSINGCO needed to transform its tailor-made IT systems into more modernized and flexible ones. The rule followed by HOUSINGCO was to minimize outsourcing costs by reducing its internal IT costs. Therefore, from 1995 to 2001, less than four IT employees worked on a full-time basis in HOUSINGCO IT department.

This cost-cutting rule entailed a total commitment of HOUSINGCO in outsourcing. Indeed, the initial outsourcing contract was signed for a period of 7 years and included high contract

termination costs for HOUSINGCO (for instance, payment of 30% of the total outsourcing costs in case of early termination during the second year of contract). Moreover, HOUSINGCO totally relied on OUTCO IT capabilities to manage its IT systems: HOUSINGCO IT department was very limited in terms of size and IT competences with only four people ensuring the outsourcing contractual follow-up.

Though outsourcing was initially highly beneficial for HOUSINGCO (OUTCO succeeded in the first part of the transformation of HOUSINGCO IT systems without additional costs for HOUSINGCO), it became less attractive financially after 3 years of contract. To win the outsourcing contract, OUTCO had underestimated the technical transformation costs. To pursue the outsourcing contract, it negotiated with HOUSINGCO a cost increase in 1998. This situation is similar to the winner's curse one where the winner of an auction or bidding event overestimates the value of the object or services and then incur losses afterwards (Kern, Willcocks, and Van Heck, 2002). Due to contractual commitments, high switching costs and the imperative to prepare its IT systems to the Year 2000 and the Euro conversions, HOUSINGCO had no other choice but to accept OUTCO *ex post* opportunism. HOUSINGCO ended with outsourcing fees that were 20% higher than competitors'.

> "OUTCO says: "we, we will stop. We loose too much money." Because we haven't really earn much at the beginning. Losses are enormous. HOUSINGCO is the only one that earns money during the first 5 years, not OUTCO. It is HOUSINGCO that earns a lot of money. And therefore, we [OUTCO], we say to [HOUSINGCO CIO]: "we will stop now. We will withdraw from this thing. We will not take part in the bid anymore." Therefore [HOUSINGCO CIO] sets up the bases of the new contract, OK, that are much more profitable for us." (OUTCO manager)

TELECO locked in outsourcing in a way that has more to do with path dependence than contractual commitments. Indeed, when TELECO started its operation in 1990s, it indifferently used 3 various modes of governance to manage its IT activities so as to support its fast development. TELECO IT managers had the choice between hiring IT staff (hiring), contracting with independent consultants (consultants) or with fixed outsourcing contracts signed with outsourcing firms (fixed contracts). As recruiting and training new hired IT staff required a lot of time, TELECO favoured the use of consultants and fixed contracts. These two modes of governance allowed increasing employment flexibility. However, from year 2000, TELECO restricted the use of consultants because of costs cutting and labour

regulations. It also began to control staff growth by fixing maximum hiring volumes every 3 years. Finally, the scope of actions of TELECO IT managers became restricted to fixed contracts. This situation corresponds to the gradual emergence of an organizational dependent path.

> "And therefore, I had a constraint as a manager which was the number of possible hiring and consultants. Therefore, we had a directive and when we reach the maximum, it was the managerial approach, therefore, I complied with it. At that period [years 2000], it was already like that. I used fixed contracts with all that I could." (TELECO IT manager)

Though TELECO experienced severe difficulties regarding some outsourcing contracts with important delivery delays of up to 3 years, the firm continued using fixed contracts. It never questioned the relevance of using outsourcing for the governance of its IT activities all the more so as TELECO was not in a position to backsource its IT activities. Indeed, TELECO IT staff was mostly composed of IT project managers that are in charge of the follow-up of outsourced projects at the expense of computer programmers who are essential for the in-house maintenance of IT systems. Like HOUSINGCO, backsourcing IT activities would have entailed high switching costs. It would also have required time to resume an outsourced activity in-house.

As outsourcing became the unique solution for managing their IT activities, HOUSINGCO and TELECO became locked in their outsourcing contracts. In the case of HOUSINGCO, the lock-in situation was related to a total commitment in outsourcing. In the case of TELECO, it resulted from the formation of an organizational dependent path that restricted the scope of decisions to outsourcing.

3.2   The creation of a deadlock situation

The second phase marks the beginning of the backsourcing process. As previously seen, outsourcing became the prevailing mode of governance for HOUSINGCO and TELECO IT activities. However, the two firms came to a deadlock with the excessive use of outsourcing and changes in their environment, either internal or external.

In 2001, HOUSINGCO experienced the first strike of its corporate life. According to an interviewed IT manager, "we [HOUSINGCO] are not at all a company used to strikes. That has been a traumatism". Among the invoked reasons was the fact that the employees felt unease with their new computer tools. Indeed, in 2000, HOUSINGCO undertook in parallel a series of internal organizational changes that included a complete reorganization of the customer service and administrative departments and the replacement of all HOUSINGCO IT applications by standardized packaged software. Employees felt so distressed with all those cumulative changes that they went on strike in 2001. To minimize costs, the new software had not been customized to fit HOUSINGCO needs. Therefore, employees could not use it to perform all their activities in an efficient way.

> "A lot of functions were missing. It was not, there were bugs everywhere. Data was certainly insufficient. User documentations, we didn't have much. We remained working without recording charges during two years. We had some problems to manage daily activities, that is to say, there were some money that we had to refund to tenants and that we couldn't release. We had to face customers who were relatively aggressive because of all these disruptions. Our work, no, we could work, but that slowed down a lot our work." (HOUSINGCO IT user)

TELECO also experienced a deadlock situation in 2005 with the malfunctioning of Alpha, an outsourced IT system. Alpha was TELECO key IT system as it helped to interface TELECO IT systems to its partners' ones. Due to a stronger competition and the need to offer new services, TELECO had to quickly adapt Alpha and improve the quality of its IT services. However, PROV-A, the new outsourcing company that contracted with TELECO in 2004 to ensure Alpha maintenance could not follow on. The results were a strong deterioration of service and high internal and external pressures on TELECO IT management to solve those issues as soon as possible.

> "When those things got into production, they began to damage the quality of service of what was already in production. And then, highly sensitive because these are games that have a direct link with end customers. And then, it is directly, the boss of [partner company] that calls TELECO boss: your thing doesn't work, the votes of such broadcast, you know that the votes that we communicated, we didn't have TELECO votes. Your thing was out of order. That makes very bad effect. And chiefs, they don't like that. Therefore, we have some crises. And therefore, we saw the quality of service deteriorating. In fact, we didn't get there. Therefore, we began to have emergency meetings with quite a high level of management." (TELECO IT manager)

3.3 The constrained partial backsourcing

Given these deadlock situations, both TELECO and HOUSINGCO envisaged backsourcing part of their outsourced activities and allocated new resources to the backsourced activity. Backsourcing appeared in that case as a means of last resort. TELECO decided to terminate its contract with PROV-A and to backsource Alpha entirely. For that purpose, it created an internal structure composed of TELECO IT computer programmers and project managers and complemented by independent consultants.

> "To take another one [outsourcing firm] was not acceptable for the reason that we cannot switch from someone that doesn't master anything to someone that doesn't master anything. Therefore, we were obliged to go back in my mind to the stage where it is necessary that someone masters what will be given [to another outsourcing firm]." (TELECO IT manager)

As for HOUSINGCO, the firm created right after the strike a specific IT service (ITcare) initially composed of 21 people. ITcare was originally planned to be a temporary service whose objective was to help and form employees to the new IT applications. Though it was not publicized as such, the decision to create ITcare amounted to the backsourcing of the functional support that has not been provided by OUTCO, the outsourcing firm because of the cost-cutting rule. HOUSINGCO did not decide to terminate its contract with OUTCO because of the internal pressure to quickly stabilize the new implemented package software.

At both firms, the constrained partial backsourcing operation was perceived as a success. Indeed, just 2 years after the employees strike, according to satisfaction enquiries ordered by HOUSINGCO in 2003 and in 2004, 82% of HOUSINGCO IT users affirmed to be satisfied with the IT department services. As for TELECO, after backsourcing, the availability rate of TELECO Alpha system (percentage of time without disorder) was stabilized and most of the time stayed above the minimum rate that had been fixed by TELECO management.

The success of those backsourcing decisions had two consequences. The first one was a destabilization of the beliefs on outsourcing and the impact of IT activities on the firm performance. Outsourcing was no more viewed as the unique solution for organising IT activities and backsourcing could represent a real alternative. IT activities were now seen as crucial activities for the firm performance. Indeed, the deadlock situation sensitized managers

about the increasing role of IT in the firm daily operations and the relationship between IT and the firm overall performance. So the result of this second phase is a managerial cognitive change about IT strategic role and the need to adapt modes of governance.

> "It is that, first, IT has been perceived really like, like a strategic element, a core one. That is to say, if IT processes, functionalities, I'd rather say, if IT functionalities do not fit to our job, if the organization is not adapted to our job processes, insofar as the profitability or the good balance of management of the firm relies on one or two indicators, in the housing sector, you can quickly loose, for example, a half-point, a point of the recovery rate because the reminder calls are badly done, etc. We have realized that, if you prefer, the IT was indeed strategic." (HOUSINGCO IT manager)

The second consequence was that it was now possible not to strictly follow the organizational rules regarding the governance of IT activities. With the creation of ITcare at HOUSINGCO, IT internal costs were no more restricted to the outsourcing contractual follow-up. At TELECO, the course of actions was wider now and included the possibility of unplanned hiring and to a lesser extent contracting with independent consultants.

In these two phases, external and internal factors have contributed to the creation of a deadlock situation and the decision to selectively backsource some activities. Other mechanisms explain the deployment of backsourcing to other parts of the organization.

3.4 The deliberate deployment of backsourcing

While the first backsourcing operations were constrained by contextual factors, the deployment of backsourcing to other IT activities was influenced by the new IT managers at TELECO and HOUSINGCO. Indeed, following the strike and the success of ITcare, HOUSINGCO board of directors decided to replace the current CIO with the IT care director. Just 6 months after Alpha backsourcing, TELECO replaced its CIO.

Both new CIO were convinced of the interest of backsourcing activities. In fact, TELECO new CIO was the IT manager that approved and allowed Alpha backsourcing. The new HOUSINGCO CIO that was recently hired by the firm did not previously take part in any make-or-buy decisions related to the IT department. Though he had no IT background, he undertook to redevelop the IT department with a stress on quality of service.

The new two CIO focused their actions on suppressing the causes of the outsourcing lock-in. HOUSINGCO CIO worked on the decrease of the level of commitment in outsourcing. For this purpose, he reduced the contractual commitments and the reliance on OUTCO capabilities. During the contract renewal with OUTCO in 2002, the CIO renegotiated several points:

- A shorter contract duration: from 7 to 5 years.
- The possibility of early contract termination without penalty fees: HOUSINGCO could take back the computer programming activities after the second year of contract and after a 6-month notice period.
- The consideration of quality of service and user satisfaction issues in the outsourcing contract follow-up.

To decrease the dependency of HOUSINGCO towards OUTCO, the CIO developed the capabilities of its IT department that were initially restricted to the outsourcing contract follow-up. The turnover of the IT department increased from 1 person at the very beginning of the outsourcing contract to 15 in 2004, one year before the decision to backsource the entire IT activities.

> "There will be an IT department. There will be somehow a real IT department at HOUSINGCO. It doesn't have all the IT competences. It is very focused on the project owner needs…" (OUTCO manager)

Just one month after its designation, the new TELECO CIO decided to set up Gamma, an internal computer programming centre dedicated to the maintenance and development of TELECO current IT applications. In particular, this centre was planned to backsource some outsourced IT applications. In 2009, it achieved 10 backsourcing operations and employed a hundred people (however, 30% of them were independent consultants). It gave a positive signal to all TELECO IT managers and confirmed them that the course of actions could now include backsourcing.

> "And very often, during our progress statuses, he [the new CIO] talked about backsourcing, about the fact that he was happy to have backsourced Alpha, that things went really better, and that for other systems, it would be necessary to make it, and so on, and so on." (TELECO IT manager)

The actions of the two IT leaders facilitated the deployment of backsourcing to the other IT activities. The lower commitment of HOUSINGCO in outsourcing contributed to decrease the perception of switching costs. In 2005, when the firm decided to backsource, it could backsource without having to pay penalties fees and they have reduced the risk of disruptions thanks to the development of the IT department capabilities and the stabilization of the IT systems. Other factors have also played a role in the decision to backsource the entire IT activities. For instance, the staff at OUTCO that was dedicated to HOUSINGCO outsourcing contract worked at HOUSINGO premises and on a full-time basis for the firm. Switching to another outsourcing firm would have been more expensive in such circumstances than to backsource IT systems and OUTCO staff. Even though OUTCO staff did not agree to be transferred to HOUSINGCO, it would have been easy to replace it because HOUSINGCO IT systems were now based on standardized packaged software and were no more tailor-made.

As for TELECO, it proceeded to backsource part of its IT activities (selective backsourcing) because of its organizational rules regarding make-or-buy decisions. With the positive attitude of TELECO CIO towards backsourcing, backsourcing could now be envisaged. In fact, several backsourcing operations were decided by different actors of the IT department. In 2007, one year after Alpha backsourcing, TELECO decided to backsource the maintenance of Beta system and part of Omega, the IT exploitation activities. The deployment of backsourcing to other parts of TELECO IT department was partly due to the CIO strategy but also to mimetic isomorphism processes between the different TELECO IT managers.

In this last phase, the deployment of the backsourcing processes to other IT activities was a deliberate one as it was led by the actions of different actors, notably HOUSINGCO and TELECO CIO. In the case of HOUSINGCO, those actions helped to lower HOUSINGCO commitment in outsourcing from a contract and a competence point of view. As for TELECO, they helped to re-establish the initial course of actions before the lock-in in outsourcing. However, at TELECO, other organizational processes such as imitation between IT managers can also explain the deployment of backsourcing to other IT activities.

4 DISCUSSION

Based on the principle that firms should align their make-or-buy decisions to transaction characteristics, this article aim at understanding how those decisions are made in practice. In particular, it explores the difficulties that firms encounter for maintaining such alignment and the way firms overcome them. For this purpose, we studied the processes followed by two firms to backsource inefficient outsourced activities despite the presence of organizational rigidities.

The case studies reveal that the two firms backsourced their outsourced activities according to a similar four-phase process. The process started from the firm lock-in in outsourcing. This lock-in was linked to the set-up of organizational rules that entailed the immediate (in the case of HOUSINGCO) or progressive (in the case of TELECO) restriction of choices to the only outsourcing mode of governance. The inadequate use of outsourcing despite changes in the context of firms led to the second phase: the creation of a deadlock situation with the increase of outsourcing inefficiencies. Internal and external pressures to urgently solve outsourcing inefficiencies forced firms to backsource some of their outsourced activities, which is the third backsourcing phase. This partial backsourcing participated in the destabilization of beliefs regarding outsourcing as the best mode of governance and IT as merely a cost centre. It also represented a softening of organizational rules. The last and fourth phase emphasizes the direct role of managers in the deployment of backsourcing to other outsourced activities of firms.

The case studies highlight the strength of the impediments that firms have to face before switching from one mode of governance to the other. Though the mechanisms leading organizational rigidities were different at the two firms (path dependent lock-in for TELECO and total commitment in outsourcing for HOUSINGCO), they resulted in the prevalence of outsourcing and the creation of a deadlock situation. In the two firms, as pointed out by studies on strategic or organizational changes (Armenakis *et al.*, 1999), the withdrawal from outsourcing has only been made possible by the occurrence of context changes and internal and external pressures on management. It was not as such initiated by firms.

Therefore, the strength of organizational rigidities mechanisms raises the issue of how to prevent their formation. If we refer to transaction cost economics predictions (Williamson, 1985), HOUSINGCO could have easily anticipated the risk of *ex post* opportunism due to poor reversibility clauses in the initial outsourcing contract and the transfer of highly specific assets to the outsourcing firm. The case of TELECO is more complex because of the nonpredictability of path dependence mechanisms at the beginning (Sydow *et al.*, 2009). Therefore, managers need to maintain cautious attention to the formation of organizational rigidities.

The studies also give an interesting view of the mechanisms that ruled the deployment of backsourcing to other parts of the organization. The partial backsourcing acts as an outsourcing path breaker with the destabilization of beliefs regarding outsourcing and IT and the softening of organizational rules. The influence of this partial backsourcing was all the more decisive for the deployment of backsourcing that the partial backsourcing was a successful one. Thanks to this success, backsourcing represented an effective alternative to outsourcing and could restore choices for managers. The other mechanism that helped the development of backsourcing was the replacement of decision-makers. The new characters came with new ideas about how to govern activities that included backsourcing. In particular, TELECO new CIO was the one that allowed the successful partial backsourcing and was now an enthusiastic advocate of backsourcing. However, the new leaders might also have considered backsourcing as a mean to pursue their own intra-organizational interest (Bidwell, 2010).

Our research shows the relevance to adopt a process view to understand firm boundaries. The two cases underline the sequential characteristic of the backsourcing process. For instance the deployment of backsourcing was made possible by the success of the constrained partial backsourcing. The chances of backsourcing other outsourced activities may have been smaller in case of failure. The process view also enabled to identify the interplay between internal processes and individual actions. Though in the two cases, the backsourcing process was triggered by organizational factors (employees strike and internal and external pressures), its development resulted from individual actions of managers. The two cases suggest that make-or-buy decisions are not decisions made independently of the firm context, individual

interests and also past decisions. Therefore, managers should take into account these different elements that may influence their decision making concerning firm boundaries.

The studies enable to analyse two backsourcing cases in a context of lock-in in outsourcing. They highlight the difficulties for firms to backsource in such circumstances. However, the use of two IT backsourcing case studies for this research may limit the generalization of the findings. Though we deliberately chose to focus our study on IT activities to enable comparison, the findings may have been influenced by the current strong adoption of IT outsourcing that may explain part of the difficulties to decide backsourcing. Then, it will be useful to extend this research to the backsourcing of other types of activities. As our research objectives were to explore this new topic, the little size of our sample is not a limit in itself. We especially chose cases with dissimilar settings to analyse a variety of backsourcing situations. To extend our understanding, it could be interesting to study cases of firms where backsourcing is a deliberate process and not a constrained one at the beginning. Moreover, as our studies concern backsourcing processes that are internally perceived as successful ones, it would be judicious to study how managers overcome the failure of a first backsourcing operation.

The studies highlight the difficulty of reverting make-or-buy decisions in practice due to resource commitment and organizational rigidities linked to past decisions. An interesting topic for future research is to identify solutions that may increase the reversibility of those decisions. Co-sourcing that consists in making and buying the same transaction may be one of those solutions (Parmigiani and Mitchell, 2009; Rothaermel, Hitt, and Jobe, 2006). However, it requires a higher involvement in terms of resources and competences for firms as they will need to maintain part of the activity in house while outsourcing the other part. This solution may only be envisaged for some specific activities. Then, other solutions remain to be identified. Finally, though many firms choose to outsource their activities for flexibility reasons, they should consider that flexibility also includes the possibility to switch modes of governance when required.
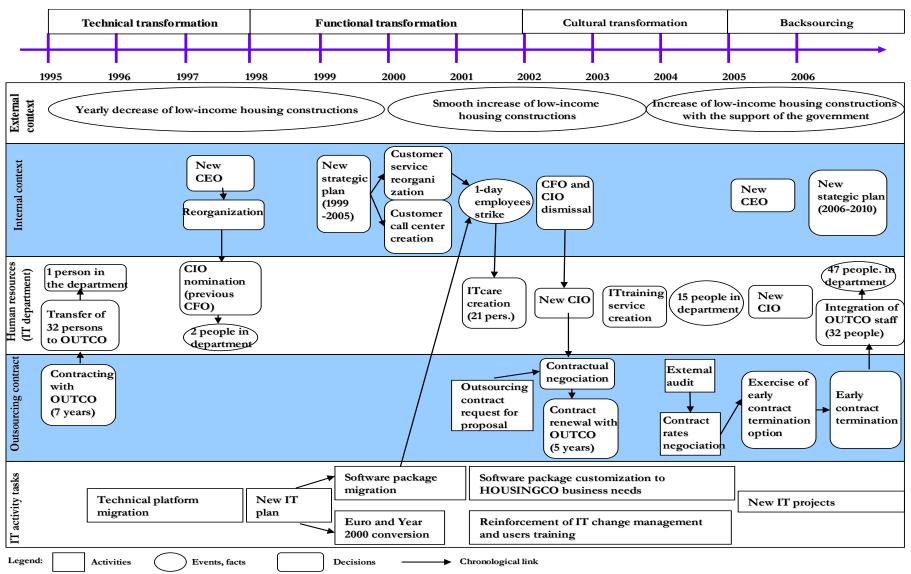
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Appendix A. HOUSINGCO Backsourcing Process Flowchart

Timeline phases: Technical transformation | Functional transformation | Cultural transformation | Backsourcing

Years: 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

External context:
- Yearly decrease of low-income housing constructions
- Smooth increase of low-income housing constructions
- Increase of low-income housing constructions with the support of the government

Internal context:
- New CEO
- Reorganization
- New strategic plan (1999-2005)
- Customer service reorganization
- Customer call center creation
- 1-day employees strike
- CFO and CIO dismissal
- New CEO
- New stategic plan (2006-2010)

Human resources (IT department):
- 1 person in the department
- Transfer of 32 persons to OUTCO
- CIO nomination (previous CFO)
- 2 people in department
- ITcare creation (21 pers.)
- New CIO
- ITtraining service creation
- 15 people in department
- New CIO
- Integration of OUTCO staff (32 people)
- 47 people. in department

Outsourcing contract:
- Contracting with OUTCO (7 years)
- Outsourcing contract request for proposal
- Contractual negociation
- Contract renewal with OUTCO (5 years)
- External audit
- Contract rates negociation
- Exercise of early contract termination option
- Early contract termination

IT activity tasks:
- Technical platform migration
- New IT plan
- Software package migration
- Euro and Year 2000 conversion
- Software package customization to HOUSINGCO business needs
- Reinforcement of IT change management and users training
- New IT projects

Legend: Activities | Events, facts | Decisions | Chronological link

Appendix B. TELECO Backsourcing Process Flowchart

Timeline phases: IT department construction | IT department rationalisation | IT department optimisation

Years: 1996 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008

External context:
- Yearly double digit growth rate of the French telecommunications market
- Growth deceleration of the French telco market (<8%/year since 2002)
- New technology provided by TELECO competitors
- Stronger competition with new entrants
- Consolidation of the telco market by mergers & acquisitions

Internal context:
- Start of operations
- New CEO
- Focus on financial profitability
- Launch of multimedia services, e-commerce and internet webiste
- New CEO and Managing Director
- New technological offer
- Focus on multimedia offers
- New technological offer
- New managing director
- Diversification into other telecommunication activities

Human resources (IT department):
- Use of 3 systems (hiring, outsourcing and consultants)
- Preferred use of outsourcing & hirintg Restricted use of consultants
- New CIO
- Creation of an internal structure for backsourcing Alpha
- New CIO
- Gamma creation
- Backsourcing of application development and maintenance
- Reinforcement of internal programming centers
- Creation of an internal structure for backsourcing Beta
- Creation of an internal structure for selectively backsourcing Omega

Outsourcing contracts

Alpha:
- Internal developments of Alpha
- Selective outsourcing of Alpha developments
- Total outsourcing of Alpha IT developments with a new vendor
- Total backsourcing of Alpha developments

Beta:
- External developments of Beta
- Selective integration of Beta developments
- Total integration of Beta developments

Omega:
- Total outsourcing of Omega
- Benchmark of outsourcing costs
- Audit of contract reversibility
- Contract renegotiation
- Selective backsourcing of Omega Extension of outsourcing contract

IT activity tasks:
- IT department creation New applications
- Reengineering of business applications
- Benchmark of the IT department costs
- End of the reengineering of business applications

Legend: Activities (rectangle) | Events, facts (ellipse) | Decisions (rounded rectangle) | Chronological link (arrow)

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