A Capability-based Approach to Client-IT Supplier Relationship

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Abstract

This paper aims at contributing for the understanding of the relationship between companies and their suppliers of information technology (IT). Based on the IMP conceptual background, the research adopted a capability-based approach as a way of analyzing if that relationship worked as a mechanism to access and acquire IT resources and capabilities by both parts. The research revealed that (1) consultant projects are crucial to the strengthening of actor bonds among teams from both sides which lead to build up solid and stable relationships, (2) during consultant projects, IT capabilities are accessed and acquired from both sides, and (3) the success of an IT project depends very much on whether the consultant has a full understanding of the client's processes and industrial settings which demands a deep involvement of the consultant in every stage of the IT implementation project.

Keywords: interaction, relationships, information technologies, capabilities.

Introduction

IT is usually regarded as a source of competitive advantage. This means that companies can use IT capabilities to differentiate their offerings (Clemons 1986; Clemons and Rows 1991; Mata, Fuerst et al. 1995; Bharadwaj 2000). Hence companies must develop mechanisms to access to IT capabilities in order to benefit from that competitive advantage. Loasby (1998a; 1998b), Langlois (1998) and Foss (1999) suggest that inter-firm cooperation is an important mechanism for coordinating companies' capabilities. Furthermore, Håkansson and Snehota (1995) and Ford et al (2003) point out that relationships are ways to access and acquire resources and "if properly used supplier relationships can dramatically enhance the resources and capabilities that a company can use" (Ford, Gadde et al. 2003, p. 97). From this point of view we argue that companies establish relationships with IT suppliers, not only to buy their products and services, but also to access their capabilities.

If companies establish relationships with IT suppliers to access their capabilities, it is important to know what the features of this particular relationship are. We suggest that this access or/and acquisition of IT capabilities can be developed throughout the interactions between the involved parties. Consequently, the IMP Interaction Model (Håkansson 1982) was adopted to support the investigation, since it presents a way of assessing the richness of relationships through a four element approach: (1) the interacting parties, (2) the interaction process, (3) the interaction atmosphere, and 4) the interaction environment.

Based on a master research project, this paper aims to contribute for the understanding of the relationship between companies and their IT suppliers. Therefore, it presents the conclusions of a study developed with two major objectives: to understand the client-IT supplier relationship according to the Interaction Model, and to explore a bi-dimensional analysis of IT capabilities access as an element of the interaction process.

The paper is divided in six sections. The first section presents a literature review focused on the relationship between clients and IT supplier and the capabilities approach as the

theoretical framework of the investigation undertaken. The second section presents a model of Client-IT Supplier Relationship designed as a result of the literature review and an extended approach of IT capabilities as a type of exchange involved in the interaction process. The third section presents the research methodology followed by case analysis in section four. The fifth section comprises the major conclusions and some theoretical and managerial contributions of the study and the last section brings in the limitations and suggestions for future research.

Conceptual Background

The study was conducted on the basis of two streams of research. Firstly, we looked at literature on interaction between IT suppliers and their respective clients. This provided an initial background on which the future model was built. Secondly, we adopted a capability-based approach taking into account the supplying an IT solution is not only a matter of supplying a simple facility but, especially, a matter of competences.

Client – IT Supplier Relationship

The client - IT supplier relationship reveals some specific features as a result of its organizational form – the consultancy projects (Michel and Valla 1996). Each project is unique and complex which demands a specific resource employment, involving people from both firms in mixed teams. These teams, in the accomplishment of its activities within the project establish, simultaneously, internal networks (between elements of IT teams, operational teams and projects leaders) and external networks (between actors from internal networks and third parties such as external consultants and other suppliers necessary to the project advance). Ahola (2005) refers these networks as "project networks", that is to say, complementary networks of organizations with resources and abilities, that participate and influence a specific project, where the interpersonal trust and experiences exchange represents decisive factors for the "organizational survival" in project network context (p.10). These factors along with learning costs reduction and changing costs have been pointed as the main reasons that motivate a customer to request the services of a supplier with whom was involved in the past (Eccles 1981). In fact, in a network context, there is a trend for companies to become involved in projects with suppliers with which they had experiences in previous projects (Håkansson, Havila et al. 1999).

A second feature of this type of relationship is the existence of a considerable degree of discontinuity, as a consequence of the time breaks generally observed between projects. To fight this discontinuity trend, the parties must adopt some procedures in order to keep the relationship active (Hollow, Ghauri et al. 2002), such as: establishing social episodes between projects (participation in colloquiums, invitations for sales and marketing events, presentation of technological developments, among others); generating commercial contacts (proposals of complementary services, software update, maintenance, knowledge renew, studies of new solutions development); developing a key account approach, that is, create specific processes of customer relationship management for the most important clients.

It is important to highlight that in consultancy projects context, client firms are seeking for human capital in the form of new skills and knowledge, and structural capital in the form of

knowledge bases and best practices, due to the expertise consultancy firms can offer (Willcocks, Hindle et al. 2004). The literature of client-consultant relationships is rather scarce (Gattiker and Larwood 1991). Nevertheless the existing literature suggests that firms tend to demand consultancy services in situations regarding IT implementation, operations management, human resources management and corporative strategies implementation (FEACO 2003), generally moved by reasons attached to urgent need to manage changing processes, knowledge acquisition, internal problem solving, and even to transmit the impression of modernity and to show that "best practices" are being applied within the firm (Kipping and Amorim 1999).

Another distinctive feature of client – IT Supplier/consultant relationships is the interaction between the parties. As Gummesson (1996) pointed out, in the consulting market "the customer becomes a temporary member of the provider's organization" (p. 38) because the interaction between them turns to be frequently close, intense and long term. The literature on interactions and relationships in the management consultancy context presents several features of client-consultant relationships, namely, the information asymmetry (Karantinou and Hogg 2001), the conflicts of interests and differences in perceptions and expectations between clients and consultants (Fullerton and West 1996). In turn, the success of this kind of relationship depends largely on the problem solving capability of consultants (Covin and Fisher 1991), as well as the client ability to establish a partnership relationship with the consultant and to assume a significant level of involvement, critical judgment and project dedication.

Given the main attributes pointed to client-IT supplier relationships, the IMP Interaction Model may provide an important starting point to understand such a relationship. This model presents a way of outlining the richness of relationships in a four element analytical approach: the interaction process, the interacting parties, the interaction atmosphere and the environment within which interaction takes place (Håkansson 1982). The interaction process can be examined in two perspectives: as episodes (short time perspective) and relationships (long term perspective), which involve different types of exchanges, namely, products and services, information, social and financial exchange. Such exchange episodes may become institutionalized over time leading to expectations to further exchanges and to long-term relationships. The interaction process also depends on the idiosyncrasies of the participants, organizations or individuals and on the environment and atmosphere within which interaction takes place.

The IT Capabilities Approach

IT capability literature is rooted in the Resource Based View and generally argues that various IT-related resources combine to form an IT capability that is valuable, rare, non-imitable and non-substitutable (Mata, Fuerst et al. 1995). As Bharadwaj (2000) puts it, IT capability can be defined "as the ability to mobilize and deploy IT-based resources in combination or co-presence with other resources and capabilities" (p. 171). As IT is generally regarded as a source of competitive advantage (Clemons 1986; Feeny and Ives 1990; Clemons and Rows 1991; Grant 1991; Keen 1991; Mata, Fuerst et al. 1995; McKenney 1995; Ross, Beath et al. 1996; Bharadwaj 2000) and recognized as organizational competences (Bharadwaj 2000; Ritter and Walter 2006), companies may use their IT capabilities to differentiate their offerings from their competitors (Clemons 1986; Clemons 1991; Mata, Fuerst et al. 1995; Bharadwaj 2000).

During the last two decades, researchers have taken up several issues on what type of IT or IT features should be considered as sources of sustainable competitive advantage. To define IT global competence, Sambamurthy, Bharadwaj et al (1996) suggested that "IT competence is the organizational base of IT resources and capabilities and describes a firm's capacity for IT-based innovation by virtue of the available IT resources and the ability to convert IT assets and services into strategic applications" (p. 244). In this definition the authors included as IT competence elements, the level of IT investments, IT infrastructure quality, IT human capital (technical and business skills), and partnerships between IT units and business units.

Keen (1991) and Mckeeney (1991) describe a firm's IT infra-structure as major business resource and a key source for attaining long-term competitive advantage, since "it is the IT platform that determines the business degrees of freedom a firm enjoys in its business plans" (Keen 1991, p.184). In this sense, IT infrastructure comprises computer and communication technologies and shareable technical platforms and databases, which in turn are essential to systems integration and to develop cost-effective IT applications (Ross, Beath et al. 1996; Weill and Broadbent 1998; Bharadwaj 2000).

Mata, Fuerst et al (1996), in turn, argues that IT systems can be easily copied or purchased by competitors. From this author's point of view, only the IT managerial skills of human resources, namely, the management of IS functions, the coordination and interaction with user community, project management, leadership skills, are likely to serve as sources of competitive advantage given that they are rare, firm specific and "often heterogeneously distributed across firms" (p. 500). Other authors like Ross, Beath et al (1996) and Bhradwaj (2000) broaden the human resources IT capabilities to the technical IT skills, for instance, programming, systems analysis and design, competencies in emerging technologies.

Ross, Beath et al (1995) extend this position stating that along with a strong IT staff (human asset), a reusable technology base (technology asset) and a partnership between IT and business management (relationship asset) are able to generate sustainable competitive advantages. The relationship assets approach states that IT and business units must share the risk and responsibility for the IT application in the firm, which implies trust and mutual respect among all units, between the firm and its stakeholders, and a top management leadership in establishing IT priorities (Ross, Beath et al. 1996). Therefore, IT personnel must develop strong, on-going partnerships with managers in order to promote the necessary communication and to ensure that both business and technology capabilities are integrated into effective solutions for each level of the business (Rockart, Earl et al. 1996).

Extending the traditional notion of organizational capabilities to a firm's IT function and Grant's (1998) classification of tangible, intangible and personnel-based resources, Bhradwaj (1991) suggests a scheme to classify IT resources capable of creating organizational capabilities: the IT physical infrastructure, the human IT resources comprising managerial and technical skills and the intangible IT resources, namely knowledge assets, customer orientation and synergies. According to Bharadwaj (2000, p. 175), "a key aspect of a firm's intangible resources is its intellectual capital or knowledge assets". IT systems embedded with employees knowledge (processes, policies, experiences) enables knowledge formalization and consolidation of previous knowledge, which leverages the firm's ability to respond to environmental changes (Sabherwal and King 1997; Bharadwaj 2000). On the other hand, IT's are an indispensable ingredient to achieve high levels of customer orientation, which enables firms to track and predict shifts in customer choices, to forecast of product demand and to

improve customer service. At last, IT also promotes knowledge and information sharing across all business units, which enables firms to be more flexible and to respond faster to market needs. Therefore, competitive advantages associated with synergies are difficult to imitate because they are achieved under a unique set of circumstances based on firm-specific resources (Bharadwaj, Varadajan et al. 1993; Ives, Jarvenpaa et al. 1993; Bharadwaj 2000).
In the specific context of IT competences developed within consultancy projects, literature is rather scarce. Nevertheless, the contribution of Cova, Ghauri et al (2000) seems pertinent and coherent with client – IT supplier relationships. The authors suggest the existence of a project competence shaped by intangible resources. These intangible resources, specifically knowledge-based, can arise from intra and inter organizational relationships as a result of experiential learning and accumulation inside projects. The former refers to the set of intangible resources developed through the experience within the organization and represent a groups' knowledge that exceeds the sum of individuals' knowledge. The latter is the outcome of the link between firm and environment or the inter-organizational relationships.

In short, the literature presents several propositions to analyze IT Capabilities. Combining the different offers, and focusing specially on Bharadwaj's work (2000), we suggest a bipartite scheme of IT capabilities taxonomy as presented in Table 1.

Table 1
Taxonomy of IT Capabilities

IT Capabilities		Key References
Tangible	IT Physical Infrastructure	McKenney (1991) Keen (1991) Ross et al (1996) Weill and Broadbent (1996) Bharadwaj (2000)
Tangible	Human IT Resources	Mata et al (1995) Ross et al (1996) Bharadwaj (2000) Sambamurthy, Bharadwaj et al (2000)
	Customer Orientation	Bharadwaj (2003)
	Synergies	Bharadwaj,Varajan et al (1993) Ives, Jarvenpaa et al (1993) Bharadwaj (2000)
	Knowledge Assets or Intellectual Capital	Sabherwal and King (2000) Bharadwaj (1997)
	Inter and intra organizational knowledge	Cova, Ghauri et al (2000)

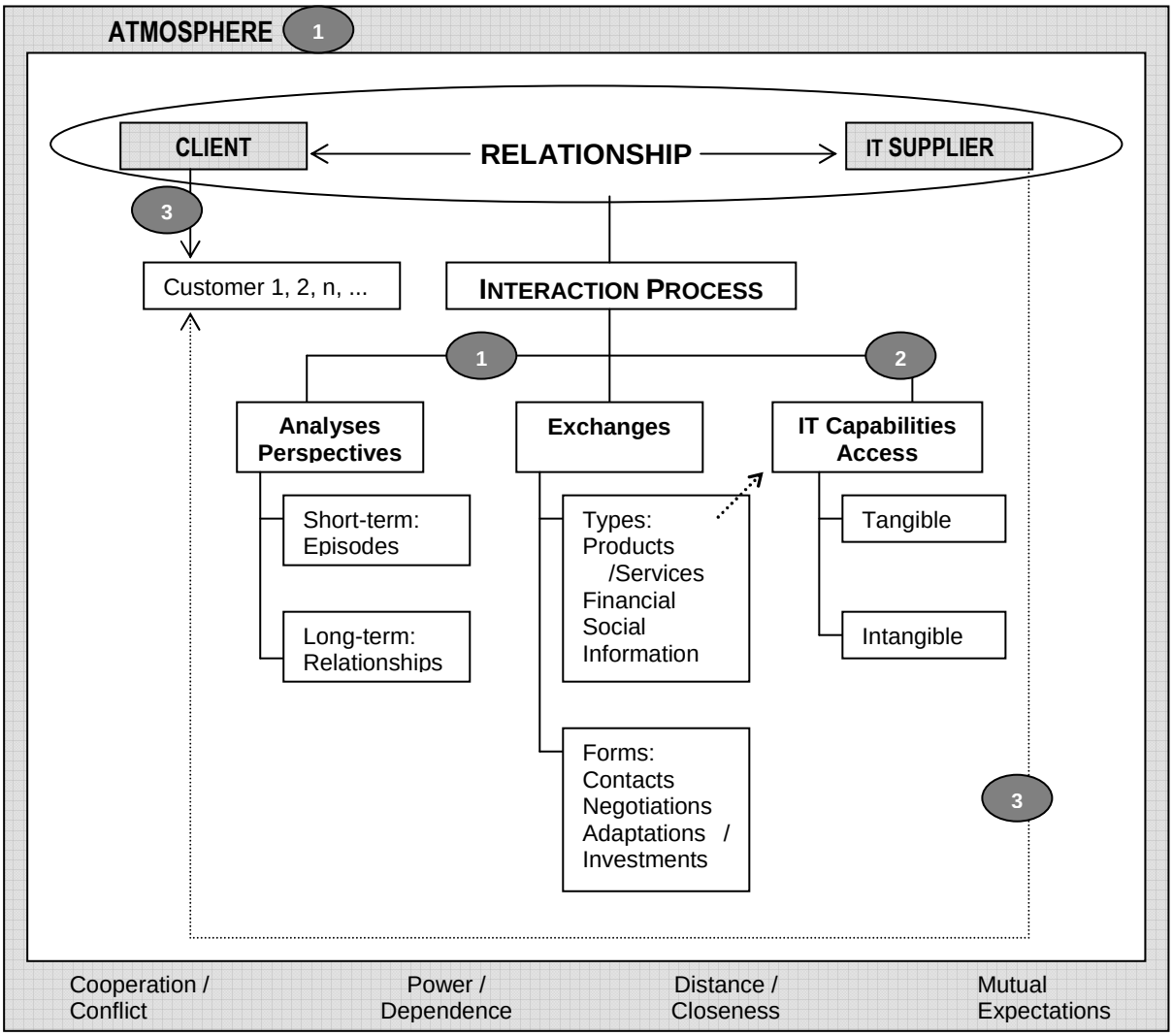
The Model

To understand the Client – IT Supplier relationship, a model was developed on the basis of the IMP Interaction Model and IT Capabilities Approach presented in last section (Figure 1). The model was designed with two major concerns: first, to represent the overall interaction process between the parties and second, to be used as a clear guideline to conduct the empirical investigation.

Inspired on IMP Interaction Model (2002) it embodies the dyadic relationship between a client and an IT suppliers. This relationship is explored in three different dimensions:

1. The interaction process.
2. The IT capabilities access.
3. The supplier's role on the implementation of its client CRM strategy supported by IT

Figure 1
The Client – IT Supplier Relationship Model



Firstly, the model reflects the interaction process itself embedded by its specific atmosphere and explored in terms of short-term and long-term analysis (1): episodes or consultancy projects and relationship evolution. Each episode involves different types of exchanges, namely, products and services, social and financial exchange and information. In addition, these exchange types are a result of the contacts and negotiations developed between the parties, as well as the investments and adaptations, which can include adaptations of the software specification, working processes, planning, delivery procedures, stockholding, administrative procedures or financial procedures. Finally, the atmosphere affecting and being affected by the interaction is described in terms of cooperation or conflict positions, power-dependence relationships, distance and closeness and mutual expectations.

Secondly, the IT capabilities access is introduced as a specific type of exchange (2) enabled by the parties in interaction. Adopting a Capabilities approach, we agree that inter-firm relationships are an important capabilities coordination mechanism. Therefore and in one hand, the IT outsourcing is taking place by the client who intends to access to IT competences possessed by the supplier, but in other hand the latter may also access to new competences that arise from the consultancy projects developed with the client. At this point, tangible and intangible IT capabilities are considered to be retrieve during succeeding episodes by both parts.

Finally, the model also addresses the supplier role in the implementation of IT strategies performed by its client. This dimension is explored throughout a particular project, which is a CRM (Customer Relationship Management) Implementation Project. For this reason, the model also seeks to reveal and to elucidate the supplier's influence or impact on the relationship between the client and its customers as a consequence of CRM IT implementation (3).

Research Questions and Methodology

Drawing on the aims, content and context of the investigation, a case study research was identified as the most appropriate methodology (2006). As pointed out, the main purpose of this study is to describe and understand the relationship between a client and an IT supplier. In particular, the study was developed to answer three key research questions:

1. What are the features of the interaction process between clients and their IT suppliers?
2. How can inter-firm relationships function as a way to access capabilities?
3. What is the role of the IT supplier on the implementation of strategies supported by IT performed by that supplier's clients?

There were mainly two reasons that drove the methodological choices. First, the exploratory and descriptive nature of the research questions required a methodological approach which supports the development of in-depth information on contextual factors and their association with the phenomena in study (Brito 1996). Additionally, Yin (Bonoma 1985) considers appropriate using case study methodology to answer "what" and "why" questions. And secondly, the adoption of case study approach seemed appropriate as, and according to Yin's words, it is "an empirical inquiry that investigates a contemporary phenomena within its real

life context, especially when the boundaries between phenomena and context are not clearly evident" (1994).

The inter-firm relationship was the unit of analysis. A relationship between a client and one of its IT suppliers was selected in order to investigate its features. The companies involved in the selected focal relationship were CIN (Corporação Industrial do Norte), a paint manufacturer, and IBS Portugal, an IT consultant company fully owned by the Swedish group International Business Systems AB. The research was based on semi-structured interviews conducted in both focal companies. To obtain a greater depth of analysis, the relationship features in a particular episode of the focal relationship that was selected for the purpose, were also examined: the implementation of a CRM strategy at CIN, supported by IT supplied by its IT supplier - IBS.

Case Analysis

As mentioned above the conceptual model of this study was designed, not only to reflect the overall interaction process between the parties, but also to be a useful tool as guideline to conduct the field work. In this sense, the empirical investigation was developed according to the elements of the model and sub-divided in three major dimensions – (i) the interaction process; (ii) the access to IT capabilities; and (iii) the supplier's role – each comprising several sub-dimensions, and which led to a case analysis framework as follows:

1. The Interaction Process

1.1 Key Actors

The companies involved in the focal relationship were CIN (Corporação Industrial do Norte), a paint manufacturer, and IBS Iberia, an IT consultant company fully owned by the Swedish group International Business Systems AB.

CIN was established in 1926. It is the largest paint company in Portugal and the only Portuguese paint company quoted on the stock exchange, with an annual turnover of about 178 million euros. With products divided into decorative, industrial, car repainting, anticorrosive and accessories segments, the CIN Group has around 800 employees and currently consists of several companies, with nearly 70 stores and factories in Portugal, Spain, Angola, Mozambique and Cape Verde. It also exports to Germany, France and China. Among paint and varnish manufacturers, CIN is ranked 16th in Europe and 46th in the worldwide. In the Iberian scenario, the company is the leader in the paint and varnish market, holding more than 30 percent of the Portuguese market share and 12 percent of the Spanish. In Portugal, it was the first paint brand to offer a computerised process for mixing 5,000 colors, the so-called Colormix System.

IBS was founded in 1978 and is a leading provider of specialised business with presence on the Stockholm Stock Exchange. The company's offers include business applications and professional services. The solutions extend to several areas, namely sales and marketing support, customer relationship management, order handling, procurement, supply chain management, manufacturing and distribution, financial control and flexible business

performance measurement. The professional services cover the entire range of business needs for IT solutions, including business process analysis; analysis of improvement potential; IT strategy, infrastructure needs analysis and design; installation of solutions and services; customer training and ongoing support; development of customized and complementary systems; project follow-up and results analysis; system operation and maintenance and Project management. Portugal is the headquarters for the Iberian competences center and a founder of the Southern Area of IBS Group, along with Spain, Italy, France, Brazil and Colombia.

1.2 Relationship Background

The relationship between CIN and IBS started in the late 80's, not as a standard client-supplier relationship but as a partnership. At the time, CIN was totally autonomous and responsible for the development and implementation of in-house information technologies, having an R&D team that supported all the company's IT needs. Through personal relationships between top managers, CIN and IBS decided to jointly develop a financial system, suitable for the requirements of the painting industry.

In the early 2000's, with the witnessed fast growing process, CIN faced the need of standardizing procedures and adopting a corporate philosophy that could be extended to all companies in the group. The main purpose was to standardize working procedures and to define a new business model universally used by the group. The new strategy brought with it a need to modernize the company's IT solutions for global planning. The supplier selection process ended with the choice of IBS ERP (Enterprise Resource Planning) software, not only because of the solution itself, but also due to the relationship of trust that already existed between the two companies for more than 10 years.

The ERP covered the financial, commercial and distribution areas. Other departments, such as R&D, human resources and distribution, had specific software adapted to their requirements, which led to a key point of the implementation project: the frequent need to create interfaces between all the different systems. Including software, hardware, assistance and training, CIN invested a total of about 3.5 million euros in the project. Currently, CIN maintains frequent contact with IBS, but mainly in terms of support.

1.3 Perspectives of Analysis

In a short-term perspective, episodes were unfolded by consultancy projects and became intense from the moment CIN decided to invest in IBS's ERP solution. The ERP project turned out to be the most conspicuous project of the overall relationship and was considered the real point of departure for all subsequent projects. The following projects consisted of an e-mail solution, several programming languages acquisition, physical infrastructure renewal, CRM solution and several others.

In a long-term perspective, the several episodes that took place since the initial partnership established in the late 80's, gave place to a strong and solid relationship, seriously dinamyzed through personal and social relationships among personnel from both companies. In fact, personal and social relationships were identified as a central characteristic of client-IT supplier relationships, frequently being mentioned by the respondents:

"It is this relationship between people from both organizations that helps maintaining a normal relationship. It sometimes involved all the other projects that go beyond the ERP and we end up giving IBS priority for supplying."

(Buying firm, respondent #1)

"The relationship between people evolved throughout time. At the beginning, there were some difficult moments with some of those people, but these were moments that led to the creation of credibility and confidence that characterized the relationship from that moment onwards. There is a mutual respect, one that was difficult to conquer but that ended up being achieved and that was in the origin of many positive outcomes."

(Supplying firm, respondent #4)

1.4 Exchanges

Exchange Types

Throughout the several episodes that were considered in the analysis, the following exchange types were identified: products and services (hardware, software, and consultancy professional services), financial exchange (disbursements), information exchange (about ways of implementing information systems, project management, activity sectors, among others), and social exchange. Social exchange had on one hand and during the projects, a daily, intense and informal nature, contributing to the development of personal bonding between the members from both organizations. On the other hand, and in the discontinuity periods between projects, social exchange played the role of a communication bridge, which explains how the relationship could carry on, healthy and stable, for twenty years even witnessing several and extensive hiatus between projects.

Exchange Forms

The exchanges that took place assumed several forms. Specific negotiations took place for each project and were formalized via contracts. There were also intense and frequent formal and informal contacts. These contacts were made via diverse channels, namely project meetings, support documentation, daily encounters, e-mail, phone and fax. Finally and what was more obvious was that both organizations conducted strong adaptations and investments. Both carried out high time and human resource investments so that the project's success would not be jeopardized. In terms of adaptations, we highlight the client adaptations to new working processes and the uncountable supplier adaptations to the standard software in order to be able to reply to the client's demands. This was evident in some statements given by the respondents, such as:

"A significant number of specific programs were developed... and despite the huge investment in services of additional programming that it involved, we were the ones that had to adapt to CIN's processes."

(Supplying firm, respondent #3)

1.5 Interaction Atmosphere

Power/Dependence

The client seems to hold a greater control over the relationship, consequence of being a strategic reference in the client portfolio of the supplier as well as a considerable source of profit. The supplier expects the client, being the Iberian leader in sales volume and innovation, to play a key role as opinion maker in the diffusion of the positive experience of the relationship. This evidence can be refuted by the amount of adaptations to the standard software that were developed by the supplier. This power position held by the client became clear by the fact that all the solicitations and requirements demanded by CIN were always approved and satisfied by IBS.

This control position played by the client is clearly visible in the following statement:

> *... We are giving up on our role and becoming someone that does everything that the client wants us to and by doing this we are reducing our value, renouncing our own experience (...). This was a lesson I learned with this project: sometimes it is necessary to be able to say no to the client."*
>
> (Supplying firm, respondent #4)

Despite that apparent control, the client seems to maintain a dependency position towards the supplier, as a consequence of frequently having the need of expanding the exploration of the applications, eliminating program errors and proceeding to modifications of the standard programmes.

Conflict/Cooperation

The relationship atmosphere was not dominated by conflict, even though there were some conflict situations, mainly resulting from the high number of software adaptations that took place and following delays in the accomplishment of pre-defined implementation deadlines. However, both parties agreed that there was a strong cooperation between them in order to resolve the conflicts. In fact, the majority of the respondents emphasized the importance of cooperation between project leaders of the two organizations as an important basis for a good relationship:

> *"The project is above all about empathy, relationships and about transmitting an attitude of partnership and cooperation. Being partners is... it is very important and it means that we are able to sometimes behave as CIN's employees and the other way around. We interact and change positions with the aim of solving problems that arise now and then."*
>
> (Supplying firm, respondent #2)

> *"At the beginning, we both went through some difficulties, but as far as we can see, it all got sorted out quite pacifically... there weren't any conflicts, just the normal problems associated to the ERP implementation and that got solved through the privileged contact that exists between CIN and IBS top managers. This privileged contact allows balancing a relationship that is considered much*

closer than any other by which some other supplier would come in to the company, implement the solution and then forget about it."

(Buying firm, respondent # 8)

This cooperation included the implementation of measures by the project direction team, mostly at the level of the reinforcement of the involvement of the CIN users in the prompt identification of non-conformities and consequent need to change standard programmes, as well as at the level of postponement of deadlines for implementation.

Closeness/Distance

Although the projects were formalized by contracts and transactions were always formalized in writing, once again the decisive role of personal and social bonds for increasing proximity between parties is highlighted. On the relationships distance in its several dimensions (cultural, social, technological, temporal and geographic), the conclusion was that only the temporal distance might have some relevant meaning given the project length.

Mutual Expectations

The companies show commonality on the perceptions and expectations on relationship continuity, as well as on the costs and benefits associated to the relationship.

2. IT Capabilities Access

2.1 IT Tangible Capabilities

The CIN - IBS relationship allowed the former to access IT tangible capabilities, which previously it did not possess, in the form of physical infrastructures. From the physic infrastructure that was developed for the ERP (information systems, interfaces between systems, hardware) and common for all the companies of the group, CIN, the buying company had access to a universal platform of information sharing and distribution. From this project onwards, it was possible to implement uniform working processes, allowing the client company to take advantage from the synergy between several units. The acquisition of software for application development, an IT physical resource, also granted CIN a greater autonomy to develop new applications and to proceed to modifications of already installed programmes.

2.2 IT Intangible Capabilities

The several episodes of the relationship, mainly the ERP implementation project, strongly contributed to the client company's access to intangible IT competencies in the form of knowledge assets. From this project onwards, the company's intellectual capital had a considerable increase, which can be explained through the pattern of personal and social bonds observed between CIN users and IBS consultants. The informal relationships that turned to be a major feature of this case, brought out the conditions to build new knowledge on several areas: about the company's processes, about activities chaining between sectors and also about the IT that supported the development of those processes and activities as a whole, and not as atomistic processes and activities supported by independent ITs.

Additionally, the daily, intense and informal nature of those relationships seems to be the key point to elucidate the process by which CIN absorbed knowledge on programming techniques and systems administration, through observation and informal sessions. By its turn, IBS acquired greater competencies in the use of its own software by being able to provide training to its placement consultants during the implementation projects.

An intra-organizational knowledge - a group knowledge that exceeds the knowledge held by individuals and companies – was also generated from the ERP episode, with the promotion of a structure of database feeding with information about clients, products, process, and others, that came from all the companies and that was uniformed in central repositories, to afterwards be spread throughout the whole group. There were also some synergies resulting from that knowledge they promoted, and consequently a greater customer orientation in the sense of providing a better service.

> *"One of the major aims of the project was the creation of a 'corporate' model that would guarantee that when a new customer registration took place in one company of the group, this registration would be diffused by all remaining companies so that all could know the customer in the same way (...) This notion is today implemented throughout the four main areas – financial, sales and logistics, manufacturing and research & development – and throughout every company of the group, either Portuguese or Spanish."*
>
> (Supplying firm, respondent #2)

> *"Now I'm able to know exactly which products are being supplied to each customer, and this allows me putting into action specific campaigns for products with inferior rotativity and I can adjust my offer for each customer in a specific way."*
>
> (Buying firm, respondent #3)

The development of new knowledge that resulted from the inter-organizational knowledge was also visible. From the several projects, the supplier was able to increment its own competencies in the best practices for the paint sector. Furthermore, both companies acquired new knowledge about the project management practice, which was considered by the supply company as one element of added value of the ERP project.

> *"Today, we both acquired capabilities that allow us going in to any another project of the same dimension (...). I didn't get those capabilities with project management courses; I got them with CIN in a remarkable experience for all that took part of the project. "*
>
> (Supplying firm, respondent #2)

In fact, the frequent (but expected) conflicting situations that emerged from the high number of software adaptations and implementation delays along with CIN's power position, can explain this evidence. Both events pressured the supplier to develop and deepen new skills in project management in order to fulfil CIN's expectations.

The client also acquired intangible capabilities in the form of relationship assets. Although there was a cultural gap during the projects between "techies" and "users", it was overcome through dialogue, which led to a cooperation situation in the pursuit of common aims.

3. Supplier's role on client's CRM strategy

3.1 Supplier Selection

The reasons that were identified for the supplier selection are focused, without any doubt, in the trust the client has on the formers' competencies as well as in the satisfactory and stable relationship background. . Therefore, the pattern of episodes and the relationship features described formerly expound the reasons for supplier selection.

3.2 CRM Episodes

Within the CRM strategy, several episodes took place over the last 7 years:

- In 1999-2000, there was the development of workflow solutions that would allow the flux between departments of the company's commercial processes. IBS involvement was quite intensive in the sense that it demanded the exhaustive identification of needs so that specific software could be developed.
- In 2003, the second CRM project took place, involving the implementation of the front-office solution – CRMSuite. IBS's involvement was limited to the following main tasks: software's installation and parameterization support the inputting back office data and training key users. CIN's IT department took responsibility for disseminating throughout the entire organization the project's aims, as well as for managing the training of the commercial team concerning the use of the new tool.
- A new project initiated in 2004, with the aim of identifying the users' real needs for information and to filter the inputting of data according to that need's identification in order to avoid having an over-dimensioned database.
- Given the lack of interest identified among the company's collaborators (and key users) in using the developed IT, in 2005 a new project takes place with the aim of stimulating the CRM strategy. This project that was carried on with IBS's intensive involvement, aimed at detecting and changing the reasons that justified the low levels of IT use, as well as proceeding to continuous sessions of clarification of end-users. These sessions were dedicated to show the advantages of using the IT in customer relationship management.
- In 2006, the planning of the 5th stage of the CRM strategy was in course, aiming at providing commercial teams with CRM IT's in PDA's, in order to overcome the natural disadvantages of having to carry around a laptop.

3.3 CRM project atmosphere

The CRM episodes were featured by the presence of three players that held different objectives (CIN's commercial team, CIN's IT team and IBS' CRM team) and which seem to have created the conditions for conflict situations to take place.

Although situations of this nature occurred, problems associated to the modification of the standard software and internal conflicts between CIN's departments were solved in pacific terms and in a perfect collaboration between client and supplier.

Similarly to what was mentioned for the analysis of power and dependence positions, it was once again possible to observe that the client seemed to benefit from a control position towards the suppliers, which, in turn, reveals why all the requests placed by the client for software modification were satisfied without any sort of manifestation by the supplier.

In what concerns the client's expectations, the evidence points out to a divergent opinion between the actors from CIN. If on one hand the IT department mentioned that "mane expectations were not fulfilled", the commercial departments was quite pleased with the tools. Both mentioned that there is still a long way to go to fully develop the CRM strategy.

3.4 Supplier's role

Depending on the project, the role played by the suppliers for the implementation of the CRM strategy of the client varied. In the project on the front office solution, the supplier played a limited role that can be explained by the client's willingness to leader the project through its IT department. Although it was aware about the possibilities that the project could not correspond to the client's expectations, the supplier adopted a passive posture by simple implementing the IT.

In the 2005 project, the opening to the supplier's involvement was quite extensive. The case analysis for this specific episode suggests that the role played by the supplier in the implementation of IT of CRM projects must be active and based on and intensive and continued relationships between consultants and end-users. This relationship aims at promoting dialogue, better understanding the client's reality, identifying what are the client's real needs on CRM activities that should be supported by IT and also define what functions must be established for that purposed.

One other conclusion is that in projects of this nature, the supplier will be interested in satisfying the client's requests for modifying the software whenever these bring real improvements to the processes of work. This way, they are able to provide the client with tangible IT capabilities as a product appropriated to its reality and at the same time to benefit from a standard product that reflects the best practices of the industry in which the client is developing its business activity, which in this case is the paint sector.

Conclusions and Contributions

The study led to three main conclusions. First, a client-IT supplier relationship develops throughout several episodes within consultant projects. These projects are crucial to the strengthening of actor bonds among teams from both sides, leading to more solid and stable relationships. Therefore social exchanges perform a crucial role (1) to fill in the discontinuity between IT projects, (2) to encourage cooperation, conflicts solving and mutual trust within projects, and (3) to promote knowledge share and reduce uncertainty during IT projects. Another feature of the relationship is about the considerable amount of adaptations and

investments undertaken from both sides to develop IT projects. Clients are pushed to adapt their tasks to new working processes, which imply an enormous investment of time, while suppliers must adapt the software to the level of specificity of their clients' activity. However we found that these software adaptations activities to the client's processes are more or less abundant and accepted by the supplier, if the client holds a steady control position.

Second, on the link between relationships and access to capabilities, our study suggests that during consultant projects, IT capabilities (both tangible and intangible) are accessed, acquired and transferred by both parties. This bilateral access can be explained through the idiosyncrasy of client-consultant relationship featured by daily contacts, informal communication processes and intense knowledge and experience share. Our findings showed that the client got access to tangible IT capabilities through physical infrastructure, which promoted a global information share and distribution between companies of the client Group. Intangible IT capabilities were also acquired by the client, namely the intellectual capital created through IT implementation (knowledge assets), the synergies obtained with centralized information and widespread share for all units, intra and inter organizational knowledge and relationship assets. The supplier, in turn, acquired new knowledge - imperative to its activity - specifically project management expertise and a new understanding and perception about the client's market which allow it to develop new IT offers accordingly to the best practices of that market.

Third, the empirical evidence showed that the role of the IT supplier in the implementation of a CRM strategy performed by its client is limited when the latter holds a control position in the relationship. Additionally, this limited role is even larger if the client's IT department is responsible for the CRM IT spreading and coaching for all users. This can lead to internal conflicts within the client's house. In this context, consultants must be involved in the global implementation process, from the first stage of software installation to the final stage of users training and "results versus expectations" monitoring. The study also suggests that an IT project success largely depends on whether the consultant has a full understanding of the client's processes and activity sector.

Regarding the pointed conclusions we might say that this paper provides a better perception of a particular type of industrial relationship: the client-IT supplier relationship. Firstly, it confirms the importance and richness of the interaction model to study industrial relationships and enhances the importance of social exchange to the success of a relationship. Secondly, suggests that throughout IT consultancy projects, IT capabilities (both tangible and intangible) are accessed and acquired and explains how this access is flourished through the closeness and informality of relationships between users and consultants. In that sense, this paper offers new insights to the understanding of relationships as mechanisms of capabilities' coordination and development. Third, this study provides a better understanding of the role of IT suppliers in the implementation of its clients' strategies supported by IT. The knowledge produced in this area may expand and deepen the scarce research developed so far on the theme. On one hand, it may be valuable for managers who come across with the manifest need of managing relationships with IT suppliers (since the overall of its activities are mostly supported by IT), and on the other hand, it may be useful for software houses and consultants that wish to reflect about the role they want to play as IT suppliers – an active role in delineating and developing their clients' strategies acting this way as a partner, or a passive role acting as mere IT installer?

Limitations and Suggestions for Future Research

The first limitation to the conducted study consists of the impossibility of extrapolating the conclusions that were found for this particular case study to the general client-IT supplier relationship. By adopting a sole-case study design for the case analysis, the research aim consisted of carrying out an in-depth and rich exploratory and explanatory analysis, and not achieving a conclusion that could be generalized to other relationships of the same nature. However, this limitation can be interpreted as a potentiality for future research, which by integrating a multiple-case study design, may lead to more universal conclusions that may then be generalized to all relationships of similar nature.

One other limitation that can be pointed out is that this research draws solely on the analysis of a dyad, not considering the vast network in which that particular dyad is embedded not even other dyads that could be used to develop a relativity analysis. Companies are believed to be embedded in a network of interconnected relationships, connected to other companies by direct or indirect relationships. Therefore, the outcomes of a company's decisions and actions will always be affected and affect other companies' networking activities, reflecting interdependence between companies' activities. These aspects were not considered in this piece of research. But given its exploratory nature and the time restrictions associated to a Master Thesis, the dyadic analysis seemed to be the most appropriate context for the research strategy. Once again, this limitation may be considered as an opportunity for future research, by looking at of the client – IT supplier relationship in a network research context.

Finally, one last limitation associated with the theoretical framework that was developed and adopted throughout the research. Not much research can be found within the IMP body of literature on the client – IT supplier relationship and consultancy based relations. Once more, this can also be regarded as a clue for future research, mostly because it is something that has not been much explored but that is getting increasing attention from managers and researchers due to its strong adherence and relevance to nowadays managerial reality. The same can be said about considering companies' ITs and organizational capabilities. There is not much research available that can guide managers and their companies to transforming their IT investments into IT capabilities. Further research will allow a better understanding as well as a possible classification of IT capabilities.

References

Aaker, D. A., V. Kumar, et al. (2004). Marketing Research, John Wiley and Sons, Inc.

Ahola, T. J. (2005). Project Networks - A Short Term and a Long Term View. 21st Annual IMP Conference, Rotterdam, Netherlands.

Bharadwaj, A. S. (2000). "Resource-Based Perspective on Information Technology Capability and Firm Performance: An Empirical Investigation." Mis Quarterly **Vol. 24**(Nº. 1): pp. 169-196.

Bharadwaj, S. G., R. Varadajan, et al. (1993). "Sustainable Competitive Advantage in Service Industries: A Conceptual Model and Research." Journal of Marketing **Vol. 57**(Nº. October): pp. 83-89.

Bonoma, T. V. (1985). "Case Research in Marketing: Opportunities, Problems and a Process." Journal of Marketing Research **Vol. 22**(Nº. May): pp. 199-208.

Brito, C. (1996). Collective Actions in Industrial Networks - The Case of the Port Wine Industry. School of Management. Lancaster, Lancaster University.

Clemons, E. K. (1986). "Information Systems for Sustainable Competitive Advantage." Information & Management **Vol. 11**(Nº. 3): pp. 131-136.

Clemons, E. K. (1991). "Corporate Strategies for Information Technology: a Resource-Based Approach." Computer **Vol. 24**(Nº. 11): pp. 23-32.

Clemons, E. K. and M. C. Rows (1991). "Sustaining IT Advantage: The Role of Structural Differences." MIS Quarterly **Vol. 15**(Nº. 3): pp. 275-292.

Cova, B., P. Ghauri, et al. (2002). Project Marketing. Chichester, John Wiley & Sons,.

Covin, T. J. and T. V. Fisher (1991). "Consultant and client must work together." Journal of Management Consulting **Vol. 6**(Nº. 4): pp. 11-20.

Eccles, R. (1981). "The Quasifirm in the Construction Industry." Journal of Economic Behaviour and Organization **Vol. 2**: pp. 335-357.

FEACO. (2003). "2003 - Survey of the European Management Consultancy Market." Retrieved (s.d.), from www.feaco.org.

Feeny, D. F. and B. Ives (1990). "In Search of Sustainability: Reaping Long-Term Advantage from Investments in Information Technology " Journal of Management Information Systems **Vol. 7**(Nº. 1): pp. 27-46.

Ford, D., L.-E. Gadde, et al. (2003). Managing Business relationships. Chichester, John Wily & Sons.

Foss, N. (1999). "Networks, Capabilities and Competitive Advantage." Scandinavian Journal of Management **Vol. 15**: pp. 1-15.

Fullerton, J. and M. A. West (1996). "Managerial Psychology Consultant and Client – Working Together?" Journal of Managerial Psychology **Vol. 11**(Nº. 6): pp. 40-49.

Gattiker, U. E. and L. Larwood (1991). "Why do clients employ management consultants?" Consultation **Summer**: pp. 119-129.

Grant, R. M. (1991). "The Resource Based Theory of Competitive Advantage." California Management Review **Vol. 33**(Nº. 3): pp. 114 - 135.

Gummesson, E. (1996). "Relationship Marketing and Imaginary Organisations: A Synthesis." European Journal of Marketing **Vol. 30**(Nº. 2): pp. 31-44.

Håkansson, H., Ed. (1982). International Marketing and Purchasing of Industrial Goods - An Interaction Approach. New York, Wiley.

Håkansson, H., V. Havila, et al. (1999). "Learning in Networks." Industrial Marketing Management **Vol. 28**(Nº. 5): pp. 443-452.

Håkansson, H. and I. Snehota (1995). Developing Relationships in Business Networks. London and New York, Routledge.

Ives, B., S. L. Jarvenpaa, et al. (1993). "Global Business Drivers: Aligning Information Technology to Global Business Strategy." IBM Systems Journal **Vol. 32**(Nº. 1): pp. 143-162.

Judenberg, J. (1994). "Applications maintenance outsourcing." Information Systems Management **Vol. 11**: pp. 34-38.

Karantinou, K. and M. Hogg (2001). "Exploring Relationship Management in Professional Services: A Study of Management Consultancy." Journal of Marketing Management **Vol. 17**(Nº. 3/4): pp. 263-286.

Keen, P. G. W. (1991). Shaping the future. Business Design Through Information Technology. Cambridge, Harvard Business Press.

Kipping, M. and C. Amorim (1999). "Selling Consultancy Services: The Portuguese Case in Historical and Comparative Perspective." Business and Economic History **Vol. 28**(Nº. 1).

Langlois, R. and P. Robertson (1995). Firms, Markets and Economic Change. London, Routledge.

Langlois, R. N. (1998). "Economic Change and the Boundaries of the Firm." Journal of Institutional and Theoretical Economics **Vol. 144**: pp. 635-657.

Loasby, B. (1991). "Equilibrium and Evolution - An exploration of connecting principles in economics." Manchester University Press.

Loasby, B. (1998a). The Concept of Capabilities. Economic Organization, Capabilities and Coordination: Essays in Honour of G. B. Richardson. N. J. Foss and B. Loasby. London, Routledge**:** pp. 163-182.

Loasby, B. (1998b). "The Organization of Capabilities." Journal of Economic Behaviour **Vol. 35**: pp. 139-160.

Mata, F. J., W. L. Fuerst, et al. (1995). "Information Technology and Sustained Competitive Advantage: a Resource-Based Analysis." MIS Quarterly **Vol. 19**(Nº. 4): pp. 487-504.

McKenney, J. L. (1995). Waves of Change: Business Evolution Through Information Technology. Cambridge, Harvard Business School Press.

McLellan, K., B. L. Marcolin, et al. (1995). "Financial and strategic motivations behind IS outsourcing." Journal of Information Technology **Vol. 19**: pp. 299-321.

.

Michel, R. S. and J. P. Valla (1996). "Marketing Industriel : Stratégies et Mise en Ouvre" Paris Economica

Ritter, T. and A. Walter (2006). "Matching High-Tech and High-Touch in Supplier-Customer Relationships." European Journal of Marketing **Vol. 40**(Nº. 3/4): pp. 292-310.

Rockart, J. F., M. J. Earl, et al. (1996). "Eight Imperatives for the New IT Organizations." Sloan Management Review **Fall 1996**: pp. 43-55.

Ross, J. W., C. M. Beath, et al. (1996). "Develop Long-Term Competitiveness Through IT Assets." Sloan Management Review **Vol. 38**(Nº. 1): pp. 31-45.

Sabherwal, R. and W. King (1997). "Towards a Theory of Strategic Use of Information Resources." Information & Management **Vol. 20**(Nº. 3): pp. 191-212.

Sambamurthy, V., A. Bharadwaj, et al. (2003). "Shaping Agility through Digital Options: Reconceptualizing the Role of Information Technology in Contemporary Firms." Mis Quarterly **Vol. 27**(Nº. 2): pp. 237-263.

Weill, P. and M. Broadbent (1998). Levering the New Infrastructure: How Market Leaders Capitalize on Information Technologies. Cambridge.

Willcocks, L., J. Hindle, et al. (2004). "IT and Business Process Outsourcing: The Knowledge Potential." Information Systems Management **Summer 2004**: pp. 7-15.

Yin, R. K. (1994). Case Study Research, Design and Methods, Sage Publications.