

**CONDITIONING FACTORS OF INTER-ORGANIZATIONAL COST
MANAGEMENT – A BRAZILIAN CASE STUDY**

CONCURRENT SESSION

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ABSTRACT

The basic research problem of this study is based on the lack of a conceptual model for application of Inter-Organizational Cost Management, since literature has not presented a defined conceptual model. Applying a critical and argumentative analysis, the study aimed at systemize the current knowledge on Inter-Organizational Cost Management and test adherence to its conditioning factors in two different value chains. A formal scientific exercise was developed, organizing and systemizing a theoretical structure. Using the case study as the predominant methodological element, an analysis was carried out in two organization chains from the corporate service industry. To reach the proposed objective, different sources of data were used: bibliographic research, interviews, direct observation and report analysis. As a result, five conditioning factors were identified: products, components, relationship levels, chain categories and mechanisms. The study showed that most of these factors were present in the two value chains.

Key words: Management, costs, inter-organizational, factors, conditioning.

1 INTRODUCTION

Several studies demonstrate the relevance of the relationship between companies. According to Coad and Scapens (2006), strategic alliances and other cooperation focus in business have led to profitable results. Different forms of contract lead to different governance arrangements (JOSKOW, 2003). Menard (2002) proposes that the different arrangements shape a spectrum, with hiring through the market at one end and full vertical integration (hierarchy) at the other. One way of measuring and controlling objects of contracts between companies is mutual cost management: Inter-organizational Cost Management (ICM).

This inter-organizational relationship focus as a strategic management tool is relatively new in cost management literature, and increasing research interest in this area has been observed since late last century (PORTER, 1989; 2004; HERGET; MORRIS, 1989; SHANK; GOVINDARAJAN, 1997; MOURITSEN et al, 2001; COOPER; SLAGMULDER, 1999; DECKER, 2004; KAJUTER; KULMALA, 2005).

However, the presence of reciprocal cooperation between two or more organizations depends on factors influencing their relationships. Some studies (CHAPMAN, 1997; BURNS; SCAPENS, 2000; CHENHALL, 2003) have found that there are internal or external factors favoring or not favoring the application of this strategic management mechanism.

Thus, the following research question arises: **are the conditioning factors of Inter-Organizational Cost Management (ICM) reported in literature present in the two case studies carried out in this research?**

To answer the research question, the study has three aims: (a) identify the main conditioning factors of Inter-Organizational Cost Management; (b) investigate if the identified factors are present in the two companies of the case study and (c) test the adherence to those factors in the organizations under study.

This exploratory research uses the double case study method. A study is carried out in two different organization networks in the corporate service sector, verifying the companies'

relationship with clients and suppliers and analyzing the factors that favor the application of ICM or not.

2 DISCUSSION

2.1 Definition

Several authors (MOURITSEN *et al.*, 2001; DEKKER, 2004; KAJUTER; KULMALA, 2005; COAD; SCAPENS, 2006; KULMALA *et al.*, 2007) comment on ICM, its controls, methods, techniques, practices etc., but Cooper and Slagmulder (1999, p. 145) and Hoffjan and Kruse (2006, p. 42) are the only who define in a similar way: “Inter-organizational Cost Management is a structured approach for coordinating the activities of firms in a supplier network so that total costs in the network can be reduced”. According to Fine (1999), it includes the end consumer, downstream, and the trajectory upstream, starting from the basic research and mineral extraction that sustain and provide the company with supplies.

Most authors are used to emphasizing total cost reduction as the main goal ICM, but this seems rather limited, since the greater aim would be to assure fair returns on investment for the chain companies, either by reducing or increasing the total cost, since it generates competitive advantages, materialized in revenue increase higher than cost increase. So, the main goal of ICM is to find solutions through coordinated actions among organizations in the value chain, which would not be possible if the companies tried to manage its costs independently. So, the definition proposed in this study is: **Inter-organizational Cost Management is a cooperative cost management process involving other organizations besides the company itself, aiming at competitive advantages for the value chain.**

2.2 ICM conditioning factors

According to the literature, the likelihood of successful ICM implementation depends on five main variables: product, product components, relationship levels, value chain categories and governance mechanisms. Each of these factors is discussed below.

2.2.1 Products

From the product point of view two aspects have to be analyzed: profit margin and functionality.

As to the first aspect – either gross margin or contribution margin – ICM is more favorable for products presenting lower margins, when comparing to the target margin. By expanding the cost management process beyond the limits of the organization, the range of possibilities for cost optimization also expands, thus improving the margin toward the target.

Functionality should be decomposed into the different properties or product attributes. The higher the number of functionalities, the wider the field of cost management possibilities beyond the organization’s frontiers; so, the possibilities of successfully applying ICM are greater for multiple functionality products.

For each product, a viability zone has to be defined, so as to classify it in four areas (Figure 1) and identify if applying ICM would produce favorable results.

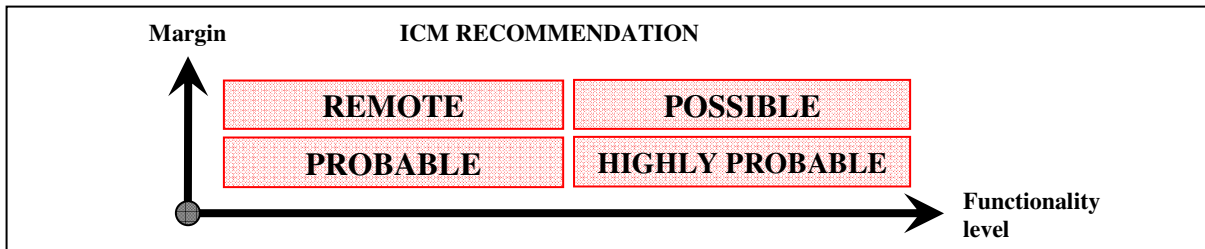


Figure 1– Viability zone of ICM in product analysis
SOURCE: based on COOPER; SLAGMULDER, 1999.

High functionality and low margin products are the most recommended for ICM.

2.2.2 Components

ICM does not necessarily apply to all suppliers of all product components; it is necessary to identify the components whose suppliers are recommendable for applying ICM. In this sense, two variables have to be analyzed: technological constraints and value ratio.

The technological restriction level determines if it is strategic, and whether the company intends to keep it in strict confidence or not. If not, research and development can be candidates for using partners and a good solution for technological advances, or even, according to Mouritsen et al (2001, p. 228), the only way out of the rapid advancement of new technologies.

Each component's value ratio measures its cost-benefit relation; that relation is measured through the equation:

$$\text{VALUE RATIO} = \frac{\text{LEVEL OF IMPORTANCE}}{\text{COST}}$$

The lower the value ratio, the greater the need for cost management, as the cost tends to be higher than the benefit offered by the functionality of the component. The applicability of ICM is verified by analyzing the two characteristics (Figure 2).

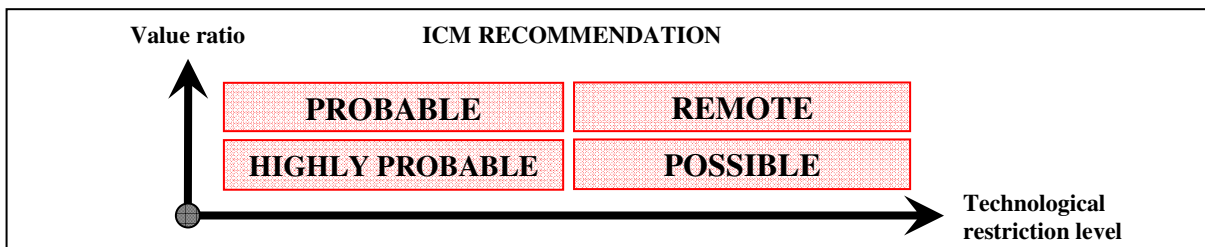


Figure 2 – Viability zone of ICM in component analysis
SOURCE: based on COOPER; SLAGMULDER, 1999.

Low value ratio and technological restriction components are the most recommended for ICM.

2.2.3 Relationship levels

The next phase of the ICM process is the analysis of the partnership relations and the classification of the suppliers (common, auxiliary, main or family). According to Cooper and Slagmulder (1999), to apply ICM successfully, a favorable relationship among companies is needed. This involves interdependence, stability, cooperation, mutual benefits and trust. The more intense the relationship level, the more favorable the ICM.

Interdependence. A company and its suppliers are said mutually dependents if the former cannot conclude its product without the latter's input and, at the same time, the

inexistence of the product makes the supplier lose a large part of its production volume. So, the higher the interdependence level, the more favorable ICM.

Trust is the certainty that a transaction is real. It is generally built over time, through knowledge about attitudes, transactions and information. The more correct information occurs in a relationship, the better it is positively conceived, thus increasing trust; the higher the level of trust, the more favorable the ICM.

Stability. A stable relationship is solid, lasting, secure, constant, so increasing the chances of a continued partnership. According to Cooper and Slagmulder (1999) a stable relationship is built on four main factors: trust relationships, security in goals achievement, cooperation in investments and activity coordination.

Cooperation is mutual help between entities to achieve common goals; this requires interaction, collaboration, complementariness and reciprocity, common goals, joint and coordinates activities and actions. According to Cooper and Slagmulder (1999), a cooperative relationship is a characteristic that allows companies to work together in order to manage costs and solve problems raised by the pressure from external adversities. Information about product projects, processes, costs etc. are shared, allowing companies to increase their innovation level. A cooperative relationship is a strong characteristic of ICM, as it enables joint work in the search for cost management.

Mutual benefit is the sharing of the gains obtained among organizations, encouraging the maintenance of the relationship. Some benefits can be generated for suppliers (increased production and access to new technologies) and others for clients (increased functionality and cost reduction).

Based on these five variables, Cooper and Slagmulder (1999) ranked suppliers in four types: common, subcontractors, major and family; this ranking identifies the partners favorable to the application of ICM. The closer to the family type, the more favorable the ICM application.

The common supplier presents the weakest interrelation with the company and it is generally the supplier that contacts the company to sell their products. According to Lockamy and Smith (2000), in this kind of relationship price is usually the most relevant factor. Little or no interaction occurs in terms of cost management between the companies. Kajuter and Kulmala (2005) state that basic inputs, standards or commodities are offered; Porter (2004) comments that, for security reasons, companies tend to have a wide range of this kind of suppliers. The lowest level of interdependence, trust, stability, cooperation and mutual benefits are found in this kind of relationship, so the ICM implementation is improbable (remote).

The supplier classified as a subcontractor presents a higher level of interdependence, trust, stability, cooperation and mutual benefits than the common type. Subcontractors are generally introduced by the company after the product has been designed. According to Cooper and Slagmulder (1999), there is relatively little need for extensive research, as the company normally gives the product design and instructions for production (supplier) or usage (client). For Lockamy and Smith (2000) the company's primary role in this type of relationship is to be certain that the partner has the ability to provide the required transactions. The main task, in case of suppliers, is to produce the components in line with the company's specifications; in case of clients, to contribute to the company by paying their invoices on time. For security reasons, in general, the company still maintains a diversified base, although a bit smaller than in comparison with a common supplier. In this case, applying ICM is becoming possible.

In the major category there is a higher level of interdependence, trust, stability, cooperation and mutual benefit level between the companies than with the subcontractor type, the supplier works with the company on a regular base and is generally involved in the product creation and development process. According to Cooper and Slagmulder (1999), major partners have specialized knowledge and can contribute to the development of the product. The company normally has already projected the specifications of the product, but involves this type of partner to plan and establish product details. The partnership is formalized through long-term contracts. Coordinated efforts are made to reduce inventories, techniques like just in time, reduced transaction costs etc. According to Lockamy and Smith (2000), relations are close enough to favor joint efforts, simplifying operations in the value chain. The application of ICM now is probable.

The familiar type presents the highest level of interdependence, trust, stability, cooperation and mutual benefits. Kajuter and Kulmala (2005) comment that, together with the company, the family partner is responsible for projecting the product or component. A high level of autonomy is delegated. The partner works almost as a part of the company, often using the company badge. According to Mouritsen et al (2001), the relationship with the company goes back a long time, with sufficient information exchange. The partnership is based on joint efforts, developing and improving products. In line with Cooper and Slagmulder (1999), this should be considered as a unique source, to be protected and cultivated. In this case, the application of ICM is highly probable and totally favorable.

2.2.4 Value chain categories

Cooper and Slagmulder (1999) identify three categories of value chains: kingdom, barony and republic. This classification is determined by the number of companies holding power in the value chain and the goal is to identify which of them is/are favorable to the application of ICM.

In the kingdom chain type, only one company dominates and commands; it has great power and the transactions occur in favorable conditions for this company, which sets the rules. Protocols and control mechanisms are imposed, as well as shared values. According to Cooper and Slagmulder (1999), improving the efficiency of this type of network depends on the kingdom company's ability to promote, or not, information sharing and on adequate infrastructure. Bacic and Souza (2007) believe that, normally, the negotiated price is close to a kind of "price set" by the kingdom company. For clients, the kingdom company can strongly restrict cost management, as it generally provides important input and has great price-setting power. This chain type is quite favorable to Inter-Organizational Cost Management.

In the barony chains, two or more companies dominate and command; the power is shared among the barony companies and none of them has sufficient negotiation power to dominate the others. Like in the kingdom type, transaction conditions are favorable for the barony companies, but clients and suppliers can minimize this power by negotiating with other barony companies. According to Cooper and Slagmulder (1999), protocols can be established formally or informally. Information sharing or not, the distribution of adequate competition and cooperation levels and adequate infrastructure are discussed among the barony companies.

In the republic type, no single or small group of organizations is in command; the firms should build alliances, since they all have at about the same power level. Negotiation conditions are rather similar for the companies, their clients and suppliers. This kind of value chain structure minimizes ICM possibilities; however, in case of strong negotiation power between two companies, ICM can become favorable. On the other hand, when negotiation

power is low in both, according to Basic and Souza (2007), negotiations occur in low asymmetry conditions, and mutual pressure can result in lower profit margins on both sides. Protocols are developed through mutual agreements, generally informally. This chain structure decreases the possibilities of ICM.

Cooper and Slagmulder (1999) state that ICM is favorable in kingdom and barony chain types, when the kingdom or barony companies can directly manage; the closer the characteristics get to the kingdom type, the more favorable its ICM implementation.

2.2.5 Mechanisms

The mechanisms are the managerial tools that provide support to the cost management process between the companies in order to orient, control, measure, inform, provide parameters, serving as a guide for the organizations, making possible the ICM. These mechanisms, according to Cooper and Slagmulder (1999), can be separated into two types: disciplining and enabling.

Disciplining mechanisms rule, train, develop, create obligations that rule organizational relationships with a view to observing and correcting aspects that do not comply with certain conditions. These mechanisms generate rules to control actions and must be used as the base to reward organizations that comply with their obligations; these rewards can be monetary (bonus for targets achieved) or non monetary (long-term relationships). According to Cooper and Slagmulder (1999), the goal of this kind of mechanism is to transmit cost pressure across the chain by establishing cost reduction targets. However, in fact, these mechanisms are rules for relationships, which serve to put pressure on the chain's total return on investments, not only on cost reductions: the goal is to set the rules. Differently from punishments, which are used in situations after rules have been broken, but that by themselves do not discipline, these mechanisms are aimed at avoiding illegal practices, deviations, transgressions and, consequently, punishments. Examples of disciplining mechanisms are: target costing, network protocols and inter-organizational budgets.

Enabling mechanisms are instruments or tools that provide skills, competences and possibilities, aiming at solving difficulties in the ICM process and helping to resolve the problems. According to Cooper and Slagmulder (1999), the goal is to help companies in the value chain to find out ways for conciliating their skills and coordinating efforts so as to collectively reach their cost management targets. Differently from gratification, which is used after the target set has been reached and serves to reward, remunerate for goals achieved, but that by itself does not enable, enabling mechanisms are aimed at advising, teaching, instructing the organizations. Examples: activity-based management, value engineering, e-business, open book accounting, inter-organizational cost investigation, concurrent cost management, *kaizen* costing, collaborative forecasts and inter-organizational training. These mechanisms' activity range goes from creation over production to logistics.

3 METHODOLOGY

The research methodology was a double case study, carried out in two companies from the corporate service industry. The two selected companies were studied in October and November 2007. Most interviews were face-to-face but, as they depended on the interviewees' availability (time and place), some were held over the phone or via messenger (MSN). The semi-structured interview technique was used, with a pre-established script. However, during the interviews, based on the interviewer's judgment and in case further doubts arose, new questions were inserted for the sake of better understanding.

Five interview scripts were created, focusing on the following interviewees: directors, persons responsible for supplier relations, persons responsible for client relations, suppliers and clients. The decision to interview all of these managers was aimed at obtaining information that would actually contribute to the case study as, depending on the interviewee, there could be fear of revealing information about strategic and often confidential aspects.

3.1 Companies

The first company (Alpha) has been operating as a corporate travel agency for over fifty years and belongs to the ten largest specialists in that sector in Brazil. It operates in three states: São Paulo, Rio de Janeiro e Bahia and its headquarters are located in São Paulo City. Its staff consists of approximately three hundred people and, in 2006, revenues amounted to at about BRL 250 million.

The second company (Beta) has been working with corporate food services, operates in almost three hundred cities in seventeen Brazilian states and its headquarters are located in São Paulo City. Staff includes approximately twenty-one thousand people, with BRL 1 billion in revenues in 2006.

3.2 Products

The product analyzed in company Alpha is a travel account management service. The company as a whole has not been obtaining the expected profit margin.

The functionality of this product is divided into four types: fundamental, strategic, physical and psychological. The fundamental type is determined by the service level agreed upon, which determines the level of demand, penalties and gratifications. The strategic type involves a revision process of the client's account to verify spending every three months. A series of analyses is performed, always in comparison with the previous year and period. Physical functionality includes infrastructure (agency size) and company systems. The infrastructure and its systems can guarantee that clients will be attended across the duration of the contract. The software used by Alpha, called Alphasoft, is a tool that offers a great differential.

Psychological functionality can be determined by the brand. According to the website of Travel Management Company Brazil (TMC Brazil), Alpha is one of the largest companies in this sector in Brazil; hence, preferential treatment of chairmen and directors is an important source of relationships. It is concluded that the service delivered by Alpha presents characteristics that are quite recommendable for the application of ICM (Figure 3).

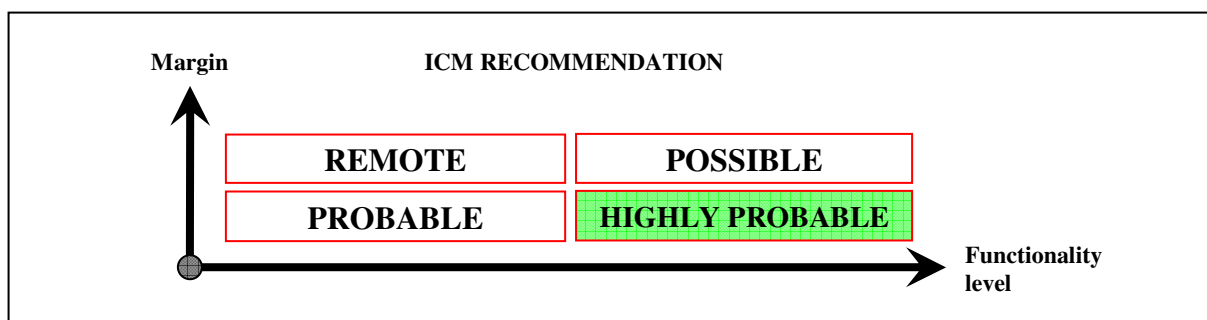


Illustration 3 – Viability zone for company Alpha's service

On the other hand, the product analyzed in company Beta is corporate food provision. The clients' choices are usually mainly based on the lowest price, considering equal supply characteristics (quantity and type of meals). Thus, companies with the same service level

compete in terms of price, which brings down the profit margin. Stockholders determine a minimum return for each contract and, when it is lower, cost management becomes crucial even before the contract is signed.

Fundamental functionality is determined by the contract with the clients, which determines type, quantity and quality of the meals, which is the basic information for planning the menus. Strategic functionality includes infrastructure, company size and the systems used for managing the meals. Size can guarantee that clients will be attended across the duration of the contract. Physical functionality includes the place where meals are taken. The appropriate environment for food is seen by end consumers, usually the clients' employees, as a relevant factor. Psychological functionality is determined by the brand. Beta is one of the largest companies in this sector in Brazil and works with renowned brands like Coca-cola, Ambev, Nestlé, Perdigão and Sadia for example. Managing the functionality level could reveal other management opportunities, turning the application of ICM favorable. It is concluded that the service delivered by company Beta presents recommendable characteristics for the application of ICM (Figure 4).

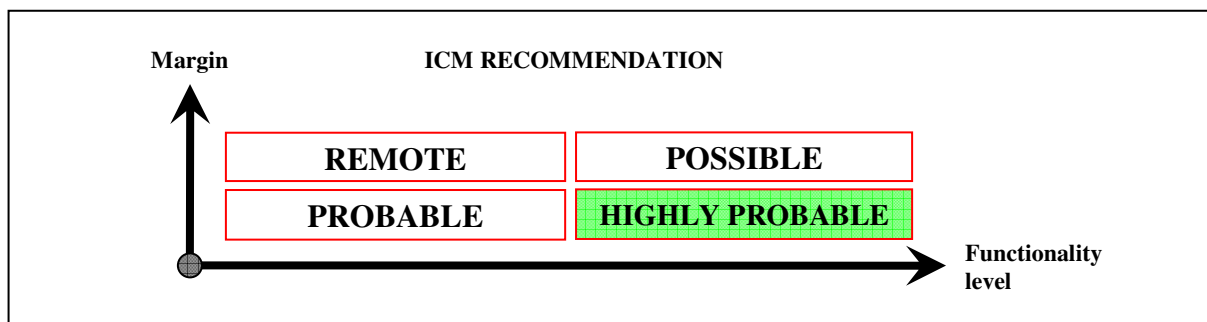


Figure 4 – Viability zone for company Beta's service

3.3 Components

In company Alpha, the attributes of the service components are generated through the use of three resources: human (60%), technological (10%) and overhead (30%). Human resources recruitment and selection are performed through the hierarchy, that is, the team is constituted by employees from the company itself, given the strategic importance.

Technological resources tend to increase, as: (a) technology is a way for reducing the use of labor and (b) facilitates client account management. In 2002, a technology project started, which culminated in the development of Alphasoft, a travel policy request and control system. Knowledge of this software is restricted to the company, which makes it impossible to apply ICM. According to an interview with a client:

“We have quit the previous agency for two reasons: because we reconsider our contracts every two years and the previous company had been working for four years and, second, we needed a good control system. We hired a consultancy specialized in the analysis of travel agencies and chose company Alpha, mainly due to Alphasoft”.

The attributes of Alpha's components have characteristics that make it difficult to apply ICM (Figure 5), due to the high level of technological restriction.

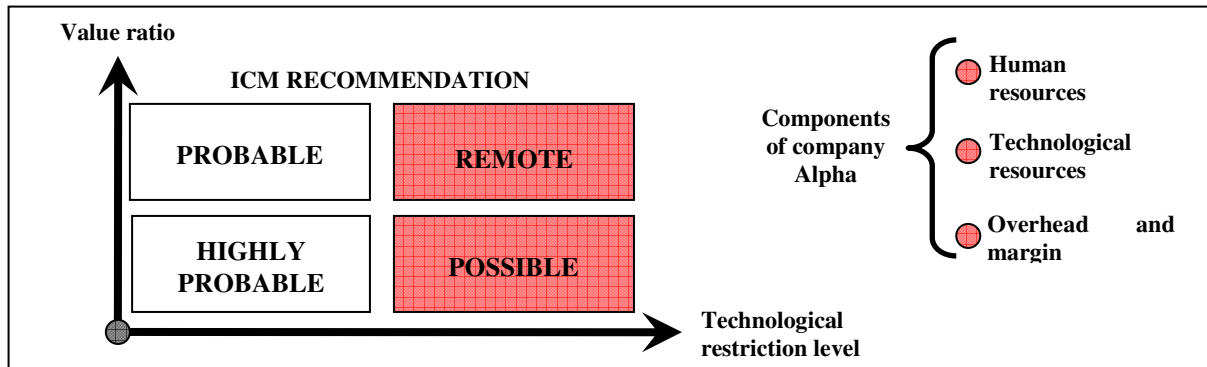


Figure 5 – Viability zone for company Alpha's service components

In company Beta, the cost of the meal service is divided into four components: raw material (47%); human resources (30%); different materials (11%); and overhead (12%). Raw material is an essential component and there is no technological restriction. The human resource team is hired through the hierarchy, because this is about the main service, which is considered strategically important.

Betasoft is the cost and menu management system; it was developed by a specialized consulting firm, but part of this development occurred in cooperation with company Beta itself. According to the financial director:

“The creation, development and implantation process of the cost system was formalized with a consulting firm. An exclusivity contract for use by our company was signed for a two-year period. Our company provided the knowledge about the business, while the consulting firm offered the informatics”.

This partnership was only feasible because the software was not considered as strategic knowledge. As the components present a low technological restriction level, outsourced companies are used for its supply; however, the human resources are exclusively managed by the company (Figure 6).

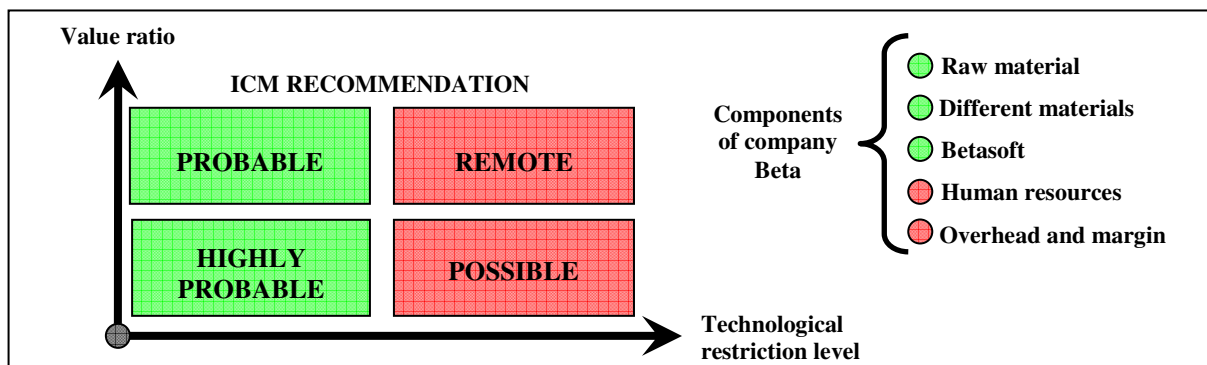


Figure 6 – Viability zone for company Beta's service components

3.4 Relationship levels

Company Alpha keeps relationships with direct and indirect suppliers. Indirect suppliers' services are used by the clients, but managed by Alpha (flight companies, hotel network, rent-a-car companies and insurance brokers); direct suppliers' services are used to attend to the internal production process (e. g.: consultants and providers of different products, such as cleaning and warehousing).

Among indirect suppliers, flight companies represent the greatest purchase volume among Alpha clients; hence, the largest part of its revenues is provided by the sales of these

suppliers' products. Although they are no direct suppliers of Alpha, due to their strategic importance this link receives special attention; however, in cost management, this relation is restricted to price negotiation. As to direct suppliers (consultants and others), attention is concentrated on price negotiations.

The view is different in terms of clients; the company rates them into four types: diamond, gold, silver and bronze. This classification determines the relationship level, the attention made available and the account manager (supervisor, manager or director). According to information by the financial manager:

“This classification guides our relationship with the clients... Nowadays, we have: 1% diamond, 7% gold, 5% silver and 87% bronze. According to revenues, 44% are diamond, 38% gold, 7% silver and 11% bronze”.

As diamond and gold clients are the most important, directors closely follow their problems and needs in order to deliver a good service; the mean relationship span ranges from one to seven years. Activities are generally developed at the client company; Alpha employees feel part of the team and often receive their own badge.

In those cases when Alphasoft is implemented, it is adapted to the client's needs, which obtains greater integration. The two companies make joint efforts to improve performance. According to the company's informatics manager and commercial director:

“The Alphasoft system was developed due to the request by a gold client who wanted better management of his travel expenses. This request led to the development of a system that saved BRL 2 million per year.”

For these types of clients (diamond and gold), the application of ICM is viable and can become an important step in cost management.

Silver clients are also important for the company, but with a lower integration level. Managers or supervisors are responsible for direct contact, instead of the directors. The goal is to deliver services in line with the standards, providing the certainty that Alpha is able to perform the demanded transactions. In this case, the application of ICM is less probable.

Bronze clients are the category with the lowest level of interrelation. Normally, profitability is the only factor analyzed for continuing service delivery. These clients are seen as replaceable and it is generally the client who first contacts the company. For this type of client, the possibility of applying ICM is remote.

Company Beta has been working with a large number of clients, which makes a close relationship rather difficult. The analysis is mainly based on the return the client will generate; cost management is not a focus. Therefore, ICM is improbable for the clients' view.

Upstream, Beta works directly with the suppliers on product creation and development; it does not establish supplier types, but classification is based on the purchase volume per product.

Type A suppliers are considered the most important and follow-up is made in a daily basis (Coca-Cola, Camil, Marfrig, Friboi, Perdigão, Sadia, Diversey, Ecolab and Ambev). They are also monitored by the headquarters' purchase area. Relationship span tends to be long, normally more than ten years, and great effort is made to maintain this type of supplier, making it viable to apply ICM.

Interdependence exists between Beta and its suppliers due to the trade volume. For Beta, few organizations are capable of supplying according to the specifications they need; for the suppliers, Beta represents a large volume in their client portfolio.

Information exchange occurs since the start of an account and communication with type A suppliers is daily. Product development is based on knowledge about the consumers, analyzed by Beta, as well as on the supplier's technical perspective. Due to exchange costs, Beta tends to maintain a stable relationship; although one-year contracts exist, the relationship has existed for more than ten.

New product development is generally driven by company Beta's request; this request continues due to the mutual benefit created. One example of product development, according to a director:

“We needed a cheaper detergent, which would avoid waste, as the one we used had to be diluted in water and, as we couldn't control the amount of water the employees added, there was plenty of waste. The supplier invested in the development of a new detergent, which was directly connected to the tap. When the water pressure is controlled, the correct quantities of detergent and water are automatically mixed, avoiding waste. One of the difficulties to implement this new detergent is that it does not produce foam, generating mistrust among the employees as to whether it actually cleans and giving the impression that it was not a good product. Training was provided to disseminate that it is not the foam that cleans. The agreement had mutual benefits: Beta saved about 30% on the cost of the detergent; to the supplier, Beta guaranteed that it would purchase 80% of its production volume; in addition, this detergent became a standard product that could be sold to other clients”

The development of Betasoft is another example that generated benefits for both sides. According to the director of the consulting company:

“Beta helped to develop our company as a supplier, investing in our relationship and helping to develop Betasoft. In 1992, they did a pilot project: they placed consultants paid by them in our company to analyze the processes. These consultants proposed a new organizational structure and helped in the communication process between the two companies (...). Our company now manages to supply technological innovations to Beta”.

For the suppliers of Beta, classified as type A, a relationship level was found that favors the application of ICM.

3.5 Value chain categories

Alpha has been working with large clients, mainly of the diamond and gold type, which act in different chains, most of which from the barony type (there is only one kingdom supply chain). Negotiations occur in conditions that favorable to clients (barony or kingdom companies), as they normally request the disclosure of cost information by Alpha and its competitors, using the competition among them. Alpha tries to minimize this power by negotiating with other companies, expanding its client portfolio.

Beta also has been working with large clients, but which do not represent a large percentage of its revenues individually, and with large suppliers, which all have significant power and influence in its business segment. Beta is one of the large companies in its sector with great bargaining power, mainly due to the number of clients, infrastructure, operations volume and national coverage. The supply chain it is part of is characterized as a barony chain, as Beta is one of the companies with the power to manage the chain; however, a part of its suppliers also have some bargaining power, due to their size, as they take part in other value chains.

Negotiations normally take place in conditions that are favorable to the barony company; when a new component is needed, the company asks the supplier and indicates the target price for negotiations to occur. The component is developed by the supplier, with recommendations and tests made by company Beta. The type of supply chain and structure created by company Beta favor the use of ICM with its suppliers.

3.6 Mechanisms

In Alpha, in the negotiation phase with clients, accounts are opened: the company projects costs and provides a detailed demonstration to its clients.

Target cost and margin are used for a number of transactions estimated by the client. Based on this volume of transactions, the agency guarantees its fees for administering the service and the client manages the travel costs. Once these variables (volume, costs and margin) have been determined, both sides talk to see if the proposed amounts are reasonable. This standardization of cost information increases the possibility of identifying potential targets in cost management, making it possible to apply ICM. Obligations are determined that rule the organizations' relationship. These rules serve as the base for gratification, commissions and the continuity of contracts.

In Beta, in the hiring phase, books are also opened when a contract is signed with the clients. This process covers investment, costs and margin, which are the base for contract negotiations. The amounts should be sufficient to generate a return that pays off the investment in half of the span of the contract. The relationship level with suppliers is more favorable to ICM. Contracts with the main suppliers guarantee the service level, creating obligations that rule the organizations' relationship. This is a disciplining mechanism.

4 DISCUSSION

The aspects mentioned in literature are now compared with the evidence collected in the two case studies, identifying similarities and differences. The goal is to return to the theoretical aspects in order to clarify the conclusions reached for each.

WERE THE ASPECTS CITED IN LITERATURE FOUND IN THE COMPANIES?			
FACTOR	CHARACTERISTICS	ALPHA COMPANY	BETA COMPANY
Products	Margin	Yes	Yes
	Functionality	Inconclusive	Inconclusive

Figure 7 – Comparison between literature and case studies – products

In the analysis of the product dimension, low margins were found for the two products, verifying that the application of ICM is recommendable, as demonstrated by theory.

Although both companies understand the functionalities of their products, no conclusions could be drawn about functionality level management, as the companies do not practice this for cost management purposes, but to trade their products. Hence, conclusions about the functionality level for ICM purposes are not possible.

WERE THE ASPECTS CITED IN LITERATURE FOUND IN THE COMPANIES?			
FACTOR	CHARACTERISTICS	ALPHA COMPANY	BETA COMPANY
Component	Technological constraints	Yes	No
	Value ratio	Inconclusive	Inconclusive

Figure 8 – Comparison between literature and case studies – components

It was found in the two companies that components with a high technological restriction level inhibit the application of ICM, as the use of partners is not a recommendable practice when considering that the component is strategic for the company. On the other hand,

in the situation of company Beta, with components offering a low technological restriction level, ICM can be applied.

The value ratio by itself does not eliminate or makes it possible to apply ICM; it helps to identify the most and least indicated components for using ICM, classifying each. However, due to both companies' difficulties and restrictions to obtain information from clients, no conclusions can be drawn about this characteristic.

WERE THE ASPECTS CITED IN LITERATURE FOUND IN THE COMPANIES?			
FACTOR	CHARACTERISTICS	ALPHA COMPANY	BETA COMPANY
Relationship levels	Common	Yes	Yes
	Subcontractors	Yes	Yes
	Major	Yes	Yes
	Family	Yes	Yes

Figure 9 – Comparison between literature and case studies – relationship levels

The high relationship level among agents in the value chain favors their interaction for cost management goals, with clients – in Alpha – as well as with suppliers (company Beta). In fact, according to literature, the higher the relationship level, the more favorable the implementation of ICM will be. The yes marked in Figure 9 does not necessarily mean that the companies practice ICM, but that the study found great propensity towards it, as mentioned in literature.

WERE THE ASPECTS CITED IN LITERATURE FOUND IN THE COMPANIES?			
FACTOR	CHARACTERISTICS	ALPHA COMPANY	BETA COMPANY
Value chain categories	Kingdom	No	No
	Barony	Yes	Yes
	Republic	No	No

Figure 10 – Comparison between literature and case studies – value chain types

The two companies under study fundamentally belong to barony supply chains; in both, cooperation between supplier and client was identified, as well as competition among suppliers, in line with theory. In company Beta's value chain, rapid dissemination of access to new technologies (input development etc.) was found, as competing companies basically have the same suppliers and all work for the same end consumers.

WERE THE ASPECTS CITED IN LITERATURE FOUND IN THE COMPANIES?			
FACTOR	CHARACTERISTICS	ALPHA COMPANY	BETA COMPANY
Mechanisms	Disciplining	Yes	Yes
	Enabling	No	No

Figure 11 – Comparison between literature and case studies – mechanisms

Only disciplining mechanisms were detected in Alpha and Beta's relationships with their clients and suppliers. Opening books and service level contracts provide characteristics of disciplining the relationship. Enabling mechanisms were not found.

Finally, all factors identified in the literature review are resumed, as well as their relation with the data found in the companies under analysis (Figure 12).

WERE THE ASPECTS CITED IN LITERATURE FOUND IN THE COMPANIES?			
FACTORS	CHARACTERISTICS	ALPHA COMPANY	BETA COMPANY
Products	Margin	Yes	Yes
	Functionality	Inconclusive	Inconclusive
Component	Technological restriction	Yes	No
	Value ratio	Inconclusive	Inconclusive
Relationship levels	Common	Yes	Yes
	Subcontractors	Yes	Yes
	Major	Yes	Yes
	Family	Yes	Yes
Chain types	Kingdom	No	No
	Barony	Yes	Yes
	Republic	No	No
Mechanisms	Disciplining	Yes	Yes
	Enabling	No	No

Figure 12 – Comparison between literature and case studies – all factors

5 CONCLUSION

The case studies performed in this research allowed answer the research question about whether the conditioning factors of inter-organizational cost management, as reported in literature, are present or not in the two companies. It was demonstrated, in Section 4, that most of those factors were present in the two companies.

However, Inter-Organizational Cost Management (ICM), as a strategic cost management tool, has not been fully applied by the companies researched.

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