

Abstract Number: 008-0248

Abstract Title: Benefits derived from outsourcing decisions and its relationship with the collaborative know-how and entrepreneurship

Authors' information:

Oscar F. Bustinza: [oscarfb@ugr.es](mailto:oscarfb@ugr.es), (+34) 958249597

Daniel Arias-Aranda: [darias@ugr.es](mailto:darias@ugr.es), (+34) 95842349

Luis M. Molina-Fernandez: [lmolina@ugr.es](mailto:lmolina@ugr.es), (+34) 95842349

Vanesa Barrales: [vanesabm@ugr.es](mailto:vanesabm@ugr.es), (+34) 958249597

All of them from: University of Granada, Campus La Cartuja s/n, 18071 Granada

POMS 19th Annual Conference

La Jolla, California, U.S.A.

May 9 to May 12, 2008

Abstract: Companies have pulled back their corporate borders through outsourcing and the divestment of those activities considered “non-core”. In this context, Outsourcing pushes companies to externalise activities which were traditionally undertaken within the company. In this study the impact of outsourcing corporate performance is analysed. From the perspective of strategic alliances, this study tests whether firms need collaborative know-how in order to be successful in outsourcing relationships. In this context, know-how fosters experience and expertise in cross-firm cooperation, having a strong relationship with outsourcing practices and the entrepreneurship attitudes.

## **1 BACKGROUND**

At present the importance of the service sector is increasing and because of this we find there is a growing interest in looking closer at the Operations Management applied to this sector, for basic reasons: On one hand, the service companies are the most important activities sector of developed countries and, on the other, the degree of

effectiveness and efficiency of service operations is rather lower than that achieved in production companies (Miranda-Gonzalez, 2004).

The operations management has the job of managing those productive processes that lead to the production of goods and give services, assign and organize those services which the organizations have. Initially, the operations management established its analysis range under a perspective of a tactical analysis clearly orientated towards those companies dedicated to production (Buffa 1980; Mabert 1982). Later, the operations management was redefined as an area of directive decisions related to the processes carried there and which is applicable both to production and to services (Chopra, Lovejoy and Yano, 2004). In our case, we start from the conception of the Service Operations Management being a division of the operations management where the services system is set up, incorporating strategic types of decisions into the design as one of its main components (Roth and Menor, 2003).

## **2 INTEREST OF THE INVESTIGATION**

Within the Service Operations Management, the study of the repercussions which the strategic decisions have for the organizations constitute a field which, in some aspects, has not been sufficiently explored, because of this, different authors have argued the need for a greater number of investigations in this field (Amoako-Gyampah and Meredith, 1989; Bretthauer, 2004).

In the process of carrying out the follow up and maintenance of control of the organizations, the performance and evaluation are the tools which are most frequently used to determine whether the decisions taken by the organizations are correct. Traditionally, performance measuring concentrated on obtaining a determined amount of basic financial data, but as time passed, these kinds of details began to be questioned due the inability to show production data other than the strictly financial. In this way,

today it can be understood that the success of the organizations not only depends on achieving financial objectives, but to a great extent it depends on how they fit in with the environment where the business develops. Due to this a new concept appeared in measuring performance based on an analysis from a multi-dimensional perspective which, at the same time, is related to the study of the design and use of these systems to evaluate performance. (Bourne, Mills, Wilcox, Neely and Platts, 2000; Neely, 2002).

Within this adaptation to the environment which, will later have a direct effect on the results obtained, the need arises to study why the firms adopt their appropriate structures, the main explanatory factors being the gap existing between the cost of access to the markets and the problem of scaled diseconomies due to an excess in size of certain firms (Coase, 1937). It is at this point when the need appears to correctly identify the limits of the firm, deciding which work will be done internally and which will be for outsourcing. Thus, this becomes a useful way to adjust the limits of the firm in answer to external economic pressure and by which the firm consolidates its strategy by restructuring its activities in order to promote the growth of its main activity, which means a change in basic strategies (Prahalad and Hamel, 1990). In order that this is successful, the vertical integration and outsourcing strategies carried out in the firm should be balanced (Rothaermel, Hitt and Jobe., 2006) and the impact that these decisions have upon the results achieved by the organizations slowly studied, studying all the variables which intervene in the process in a way that they may minimise or stimulate it.

The main advantage of outsourcing consists in it permitting the organizations concentrate on their main activities and competences (Quinn and Hilmer, 1994; Quinn 1999; Sislian and Satir, 2000). It also allows them to do the outsourcing activities at a lower cost as the supplier of the service can distribute the cost between all their clients,

converting the obtaining of scaled economies into a business reason for the practice of outsourcing (Cachon and Harker, 2002). But considering the connection between outsourcing and representative evaluation of the level of results achieved by cost efficiency or the creation of a higher market value (Jiang, Belohlav and Young, 2007), in literature there has not yet been a precise relationship established between this business practice and the more representative evaluation of the firms performance (performance and productivity). This leads to the necessity to analyse the moderating variables of this relationship, starting with the adaptation of the firm and the environment and the characteristics of the internal management of the firms such as flexibility, the management of knowledge carried out and the training given in these organizations.

### **3 JUSTIFICATION OF THE SUBJECT OBJECT OF THE STUDY**

#### **▪ The role of Learning and Knowledge in the Setting up of Strategic Alliances**

In the analysis of outsourcing of activities from the perspective of strategic business alliances, the alliances may become an instrument for learning and insourcing of new abilities. When these abilities can be learnt through the development of an alliance, internalise it and exploit it over and above the limits imposed, they become of even greater value because it is possible to use them in other activities and businesses different to those of the alliance itself (Doz and Hamel, 1998).

But over and above the purpose for which making an alliance is destined, there is no doubt that it makes a profit for the organizations involved, among which we may highlight a greater return on our investments, a greater productivity of our assets, or a higher success index in the relationship if we compare it with mergers or takeovers (See, among others Contractor and Lorange, 1988, Cunningham and Calligan 1991,

Hamel 1991; Gulati 1995; Doz 1996 and O'Farrell and Wood 1999). Aspects such as trust, the adequate choice of partner, the transferring of knowledge between both parties and the how they complement one another and the synergy produced, have been recurrent in the study of the implications of carrying out an alliance (Todeva and Knoke, 2005).

Finally, highlight that between the objectives that we indicated to carry out an alliance was found the obtaining of resources which would be difficult to obtain in any other way, and especially certain types of resources such as may be those of a technological kind, know how or the organizational abilities, in which case we are looking at a type of alliance which objective it to share knowledge (See, among others, Ciborra, 1991; Inkpen & Crossan, 1995; Mowery, Oxley and Silverman, 1996; Simonin, 1997, 1999; Dyer & Nobeoka, 2000; and Kale, Singh and Perlmutter, 2000).

#### ▪ **Outsourcing and Business Performance**

In the relation between outsourcing and business performance, various authors have studied the effect that the outsourcing of activities has on the firm. Many of these studies analyse the effects on the workers productivity, on a determined division of the firm, on the general value of the firm, on the efficiency in costs and they even analyse the effects on the industry as a whole, the sectors and foreign countries, but, as indicated by Jiang and Qureshi (2006), only four studies exist on the financial impact of the practice of outsourcing on the firms performance (Jones, 2000; Hays, Hunton and Reck, 2000; Gilley and Rasheed, 2000; Barrar, Wood, Jones and Vedoyato, 2002). Others directly conclude that no relation exists, as occurs in the case of production firms (Kimura, 2002).

Thus, a large number of aspects remain for analysis in the outsourcing-performance relationship, especially regarding the impact of outsourcing decisions on

the competitive capacity of the firm (Rothaermel, Hitt and Jobe, 2006) relation which has been proved by the moderating effect which the strategy and dynamism of the environment have on the connection between outsourcing and performance (Gilly and Rasheed, 2000). On the other hand, outsourcing justifies its existence in that it allows the firm to concentrate its efforts on those activities which allow it to obtain competitive advantages (Prahalad and Hamel, 1990), outsourcing the rest. But this includes a strategic vulnerability which comes from the outsourcing of these activities (Quinn and Hilmer, 1994), a vulnerability that can be reduced by the previous experiences in relations where they worked together (Simonin, 1999).

This previous relational experience or collaborative know how, is a concept derived from the unwritten implications of knowledge, taking into account that this is intangible and difficult to formalise, as its application is evident as it originates from two sources, one is social and the other cognitive, called know-how. The reason for the existence of know-how is based on all of the abilities developed over time, understanding that this goes beyond the experience, allowing this experience to be adjusted with time. But this know-how runs the risk of being lost due to the process of exchanging knowledge which comes from the growth of a strategic alliance (Galbraith, 1990), this risk being so high that there are companies which exist that make regulations regarding transferrals of know-how (Dyer and Nobeoka, 2000)

If we analyse the learning referring to the context of the previous experiences in organizational cooperation, we find that there can be three types (Reuer, Zollo y Singh, 2002):

The first type is that related to the dynamics and operation of a cooperation agreement between various partners, where we can include working as a team, how to manage the loss of certain independence, taking joint decisions, etc. It has a generic

sense and the effects are beneficial regardless of the fact that later cooperative relationships be with different partners.

The second would be the learning about the behaviour of the partner regarding the mutual knowledge of both parties due to previous experiences (Saxton, 1997; Reuer et al., 2002). In this case previous experiences with different partners to the present would not have any influence on the growth of this cooperative relationship.

Finally, the learning which arises from carrying out activities together with the partner, result in a certain command of these, regarding a certain accumulation of knowledge and abilities. Thus, it is about the accumulation of experience in alliances about certain types of actions arising from cooperative relationships.

Therefore, it is evident that previous experience is essential in collaborative relationships when managing a portfolio of diverse alliances, on the one hand, preventing the risks mentioned before above and favouring the possibility of obtaining benefits from the present collaborations (Powell, Koput and Smith-Doerr, 1996). This logically explains that in alliances established for the purpose of learning from the partner's abilities, firms will try to acquire the greatest possible amount of specialised know-how from their alliance (Grant and Baden-Fuller, 2004).

A complete evaluation of the benefits which come from the learning acquired from the collaborative relationships require a study of the consequences which arise from these from a long range point of view, which means that the analysis of the concept of know-how is necessary from the *ex-ante*, during and *ex-post* point of view, depending on the provisional horizon we are contemplating. But over and above these considerations, the firms with experience in maintaining successful strategic alliances will be able to develop the collaborative know-how which allows them to reach their full potential, therefore we can say that:

***H1:** The collaborative know-how is positively related to the benefits obtained by the outsourcing of activities in such a way that the greater the know-how the higher the benefits obtained by carrying out the pertinent outsourcing.*

On the other hand, to get the maximum benefits from outsourcing relations established by the firm with the corresponding suppliers of this kind of service, it becomes necessary that a strategic accommodation exists between the integrants in this kind of relations. As a result of this strategic accommodation, collective learning is developed which allows the strengthening of the essential competences that all firms have (Prahalad & Hammel, 1990). This type of competences is built on the basis of a continuous improvement, meaning that the development needs long periods of time (Ehie, 2001).

Thus, the decisions regarding outsourcing activities will be correct in so much that they allow us to maximise our essential capabilities, and so it would be correct to say that the greater the benefits from outsourcing decisions, the greater the positive impact will be of these decisions on the competitive capabilities of the firm, which could be expressed as:

***H2:** The correct outsourcing decisions increase our essential competitive capabilities in such a way that the higher the benefits from outsourcing the greater the impact that these decisions have on the competitive capabilities of the firm.*

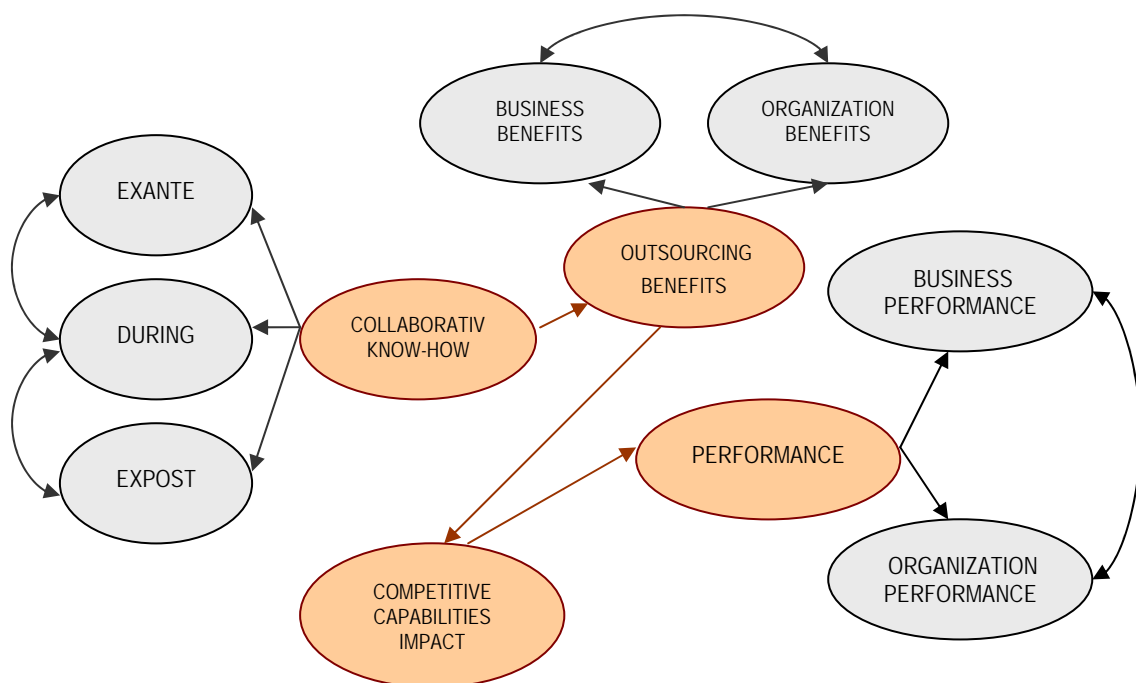
Finally, the study of the relationship between outsourcing and the firms performance, we should, as we said in the previous paragraph, evaluate the impact that outsourcing decisions have on our competitive capabilities as the origin of higher performance of the firm depend on us achieving competitive advantages (Rothaermel et

al., 2006) As outsourcing justifies its existence by giving us the capacity to concentrate on those activities that allow us to achieve competitive advantages, outsourcing the rest (Prahalad & Hamel, 1990), the impact that outsourcing decisions have on our competitive capabilities have been undervalued a relationship that has been proved by the moderating effect that the strategy and dynamism of the environment have on the connection between outsourcing and performance (Gilley & Rasheed, 2000). Because of all of this, we can say that:

**H3:** *The Impact that decisions regarding outsourcing activities have on our competitive capabilities are positively related to the benefits obtained from outsourcing activities, in such a way that the greater the impact, the greater the organization's performance.*

The structural model of the relationship between the variables can be seen in Figure 1.

**FIGURE 1. ANALYSIS OF THE RELATIONSHIP BETWEEN COLLABORATIVE KNOW-HOW AND THE PERFORMANCE OF THE ORGANIZATIONS THROUGH THE BENEFITS OF OUTSOURCING**



Source: Own design

#### **4 DATA ANALYSIS**

In this section it is necessary to define what we understand for population, element of the population, reference sample framework, sample, object of the sample and type of sampling. But before starting, it should be stated that the methodology used is empirical, we are using the experimental design as the base for verification of the causality of variables belonging to a specific theory. Thus, the empirical statistics method tries to validate models by proving their empirical validity in large populations in order to simplify the number of relations which could be considered in future investigations.

In our case, the type of investigation chosen to verify the hypothesis considered in this study is empirical, and within this category in that of statistic sampling, as the definitions come from the literature to this respect, we have a sample of firms from a defined sector (national service sectors) the relations come, in some cases, from previous studies, and we will base the level of prediction on significant statistics tests.

The population which is the object of the study selected to carry out the investigation is made up of service sector firms. The choice is made because of a growing interest in this specific sector and its growing presence in all western economies. Another aspect to underline is that only those firms were selected with more than 20 employees and that are situated on Spanish territory, in order to eliminate possible inconsistencies in the evaluation scales. With regards to the sub sectors belonging to the services sector, we refer to the national economical classification codes (CNAE), in general those corresponding to codes 50 to 52 (Sales, maintenance and repairs of motor vehicles, Wholesale and Retail), 55 (Hotel trade), 60 to 67 (Transport, Post and Financial brokerage), 70 to 75 (Real Estate, computing, investigation and development activities), 80 (Education), 85 (Health and Social services) 90 to 93

(Public cleaning and personal services), 95 and 99 (Homes with domestic staff and extraterritorial services). The population refers to the total number of firms that appear for each sector of the activity selected, while the sample is a subset of firms belonging to the population which is the object of the study and has the capacity to represent it, permitting a generalisation of the results obtained, applicable to the whole population. The choice of the sample to fulfil the objectives, for which it is selected, ought to follow a determined technique of sampling to make it representative of the population. In our case we use a simple random sampling without replacing elements, that is to say, every firm selected is excluded from the following selection and the self administered survey, which makes it necessary to draw up a questionnaire where the different measuring scales of the concepts developed in this study are found.

- **Design and Size of the Sample**

The data base used is the DICODI directory 2002-2003, which gives information for the 50,000 main Spanish companies. It includes a CD with visualisation that allows segmenting by different criteria, giving results in lists and graphics. To determine the size of the sampling, requirements must be fulfilled regarding the size required for the uses of structural equation models and it is also understood that the variability or typical deviation figure is unknown; thus a sampling error of 95% of reliability where  $p=q=0.5$  should be applied. In this case, 1,000 companies are selected, as we stated, by simple random sampling without replacement, establishing search filters by the CNAE codes previously mentioned, and some criteria regarding the number of employees, which means that the company has over 20 employees. The sample obtained corresponds to the criteria selected and the questionnaire is prepared to be sent out and a follow up of results by telephone. The data collected by the sample is handled with the statistic software SPSS14.0 and EQS 6.1.

**TABLE 1. TECHNICAL DATA OF THE SAMPLE**

Geographical Area	Spain
Methodology	Structured Questionnaire
Procedure	Simple Random sampling without replacement
Population	12587
Size of the Sample	2000 Companies with more than 20 employees
Reply Index	204 Companies
Sampling Error	6%
Reliability Level	95%; p=q=0.5; Z=1.96
Period of data collection	From November 2006 to April 2007

Source: Own design

▪ **Analysis of structural model**

Regarding the classification of the different variables that appear in the model of suggested relation, the following suggestion of names in direct relation to the indicators and scales to which they are associated will be decided. In this way, regarding the

***Structural Model:***

**BOUT** corresponds to the Benefits of outsourcing

**PNEG** are the Potential Benefits of the Outsourcing Business

**PORG** are the Potential Benefits of the Organization of Outsourcing

**EXT** is the Impact on the External Type Competitive Capabilities

**RENT** is the Business Performance

**NINT** are the Internal Business Performance

**NEXT** are the External Business Performance

**RORG** are the Organizational Performance

▪ Regarding the dimensions of ***Collaborative Know-How***

**KNOW** is the Collaborative Know-how

**EXANT** is the Exant Know-how



Thus our structural model, as can be seen in Figure 2, is related to the analysis of the relation between the latent exogenous collaborative Know-How variables, with all the endogenous variables which make up this structural model: Benefits of outsourcing (Business and Organizational), Impact of the outsourcing decisions on our competitive capabilities and, finally, Company performance (Business or Organizational). The results obtained from the analysis of the data are shown on Table 2 regarding the structural model and on Table 3 those corresponding to the causal relation with the exogenous variable

**TABLE 2. RESULTS OF THE CAUSAL ANALYSIS BETWEEN THE DIFFERENT DIMENSIONS OF THE PROPOSED STRUCTURAL MODEL**

<b>STRUCTURAL MODEL EQUATIONS RELATION BETWEEN B. OUTSOURCING IMPACT C. COMPETITIVES AND PERFORMANCE</b>							
<b>Variable</b>	<b>Dependent Variable</b>						
<b>Ind.</b>	<b>PNEG</b>	<b>PORG</b>	<b>EXT</b>	<b>REN</b>	<b>NINT</b>	<b>NEXT</b>	<b>RORG</b>
<b>BOUT</b>	0.906*** (8.323)	0.757** (8.462)	0.916*** (8.554)				
<b>EXT</b>				0.375*** (4.408)			
<b>REN</b>					0.835*** (9.435)	0.907*** (9.089)	0.395*** (9.228)
<b>R<sup>2</sup></b>	0.822	0.574	0.839	0.140	0.698	0.823	0.156
Standardised coefficients (t Values) Significance level: *** p<0.001; ** p<0.01; *p<0.05							

Source: Own design

Seeing the results obtained regarding the analysis of the equations for the model, factorial loads and indicators used to set up the different variables being studied, we can check that the model adequately adjusts giving a converging validity, and will allow the hypothesis to be contrasted. This aspect will be dealt with in the section corresponding to the conclusions of this study, which will be discussed below.

**TABLE 3. EQUATIONS ANALYSIS OF THE RELATION BETWEEN COLLABORATIVE KNOW-HOW AND THE BENEFITS OF OUTSOURCING**

<b>STRUCTURAL MODEL EQUATIONS RELATION BETWEEN VARIABLES OF MANAGING KNOWLEDGE AND OUTSOURCING</b>				
<b>Variable Ind.</b>	<b>Dependent Variable</b>			
	<b>BOUT</b>	<b>EXANT</b>	<b>DURAN</b>	<b>EXPOS</b>
<b>KNOW</b>	0.265*** (3.166)	0.844*** (8.164)	0.859*** (7.998)	0.724*** (8.039)
<b>R<sup>2</sup></b>	0.155	0.712	0.739	0.524
Standardised coefficients (t Values) Significance level: *** p<0.001; ** p<0.01; *p<0.05				

Source: Own design

▪ **Results and Discussion**

The analysis of the results consists in the evaluation and interpretation of the coefficients obtained from the evaluations carried out on the different models of causal relations presented in this study. Table 4 shows these estimates together with their interpretation according to the statistical significance of the coefficients obtained and their load.

In the first place, indicate that the parameters correspond to the regression coefficients of the exogenous variables or independents on the latent variables and that, as we said, the model is identified because a unique mathematical solution exists for these parameters. As the underlying statistical process is of Maximum Likelihood, the evaluations obtained are such that they increase the probability that the data found has been taken from a population where these parameters exist. In view of the results, we can state that all hypothesis are fulfilled, clarifying that the correspondent modification indexes of the model have been done, without finding possibility of improvement, which allows the corroboration that our model has been adequate for contrast purposes, which were the purpose of the design. The hypothesis regarding the positive influence

of collaborative know-how was created from the perspective that previous experiences in collaborative relations developed the necessary collaborative Know-How, allowing the organizations to get higher benefits from the present collaborations they are involved in. The causal relation established between this Know-How and the benefits of outsourcing show a significant structural coefficient (0.265;  $p < 0,001$ ) allowing the acceptance of the H1 hypothesis.

**TABLE 4. ANALYSIS RESULTS ACCEPTANCE-REJECTION HYPOTHESIS**

RELATION		CRITERIA DECISION	
EXOGENOUS VARIABLE	ENDOGENOUS VARIABLE	COEFFICIENT	ACCEPTANCE/ REJECTION
<b>COLLABORATIVE KNOW-HOW INFLUENCE</b>		COEFFICIENT	ACCEPT/REJECT
COLLABOR. KNOW-HOW	OUTSOURCING BENEFITS	0.265***	H1: Accepted
<b>STRUCTURAL MODEL</b>		COEFFICIENT	ACCEPT/REJECT
OUTSOURCING BENEFITS	IMPACT OF COMPETITIVE CAPABILITIES	0.916***	H2: Accepted
IMPACT OF COMPETITIVE CAPABILITIES	COMPANY PERFORMANCE	0.375-0.377***	H3: Accepted
Significance level: *** $p < 0,001$ ; ** $p < 0,01$ ; * $p < 0,05$			

Source: Own design

The Reference Theory in this analysis it of Resources-based View of the Firm. In this specific case, the Know-How construct consists of three temporary dimensions ExAnte (Coefficient 0.844;  $p < 0,001$ ), During (0.859;  $p < 0,001$ ), and ExPost (0.724;  $p < 0,001$ ) which allow us to say that all the temporary dimensions we refer to are significant. This is justified by the fact of the dynamic character of the resources at present, showing the need to potentate the feedback mechanisms within the companies.

The hypothesis approach regarding the relation between the benefits of the outsourcing and the impact of these on the competitive capabilities of the firm, established one of the fundamental bases that we are trying to prove with the present

study, that is, the existing relation between the outsourcing of activities and the organizations performance. The articulation of this relation is presented through the impact that outsourcing decisions have for the competitive capabilities of the firm (those benefits derived from the outsourcing of activities and reflected in the growth in competitive advantages), as this impact, at the same time, should be reflected in a higher business performance (an aspect which we will see in the next section). The coefficient that determines the causal relation between Outsourcing Benefits and Impact in the competitive capabilities (0.916;  $p < 0.001$ ) allow us to state that there is a positive relation established between both variables, leading to the acceptance of the H2 hypothesis.

In general terms it may be understood that this value is very high, but the theoretical justification comes from the fact that the Recourse and Capabilities Theory justify the reason for the outsourcing in the capacity which authorises the organizations to concentrate exclusively on those activities which allow the development of sustainable competitive advantages in time of the full use of the available resources. In this particular aspect of outsourcing of activities, it was not possible to validate the corresponding dimension to Impact on internal competitive capabilities, being able to understand that this outsourcing of non essential activities do not affect the competitive capabilities based on internal resources as this effect is not direct. This is the opposite of what happens in the case of impact on external capabilities, concluding that outsourcing favours resource development. This allows the development of competitive advantages at the time of facing the market demand for our services. The obtaining of competitive advantages that activity outsourcing gives in market conditions, facilitating the adaptation of the firm to them, is the real impact that outsourcing has for the organizations.

Finally, hypothesis H3, regarding the relation between the impact of outsourcing decisions and company performances is accepted on the basis of the factorial load obtained (of about 0.38, 0.375 with  $p < 0.001$  in the causal model dimensions of Knowledge management , 0.377 with  $p < 0.001$  in the model about Operative flexibility) so we can say that the impact that outsourcing decisions have on External Competitive Capabilities of organizations are positively reflected in a higher performance for the organizations.

Capacity of adaptation to market conditions, related to the general theories which serve as the basis for this study, reduce the uncertainty and develop sustainable competitive advantages, creating a higher level of business performance. In the specific case of the type of performance, we can see that the market adaptation capacity creates a higher business performance, both external (0.910:  $p < 0.001$ ) and internal (0.835;  $p < 0.001$ ), as occurs with the organizational performance (0.396;  $p < 0.001$ ). This is completely justified in that the external performance indicators selected refer to obtaining larger market quotas and sales growth, objectives that are closely related to a better adaptation to market conditions, offering outsourcing activities through the impact that these have on the external competitive capabilities, which, as we said, facilitate this adaptation. Regarding the internal indicators, we should highlight the role of organizational performance derived from a higher level of service finalisation, as well as the reduction in time between the requests for service by the client and giving it.

#### ▪ **Conclusions, Limitations and Future Lines of Investigation**

The purpose of the present investigation is to determine the relation that exists between the practice of outsourcing and business performance in the field of Service Operations Management, analysing the part that collaborative know-how plays in it. The results obtained have proved that this relation exists, although it is articulated

through the impact of outsourcing decisions on the competitive capacity of the company.

Thus, in this study the impact of the theoretical benefits that outsourcing have on our external competitive abilities from a double perspective of business (increase flexibility, give greater customer satisfaction, permit us to concentrate on our main activities and it strategically strengthens us), and organization (a technological improvement of our operations, access to new technologies, improve management processes and create an increase in innovations). This impact on competitive capabilities reflects on the increase of the level of flexibility, confronting us with market demand, in the introduction of new, faster services, in a more intensive distribution of our services, in the increase in the number of services and in the contribution to a more efficient promotion of our services. The obtaining of competitive advantages that activity outsourcing gives in market conditions, facilitating the adaptation of the firm to them, is the real impact that outsourcing has for the organizations.

In the development of the analysis of the impact of outsourcing decisions on the competitive capabilities of the company, we can see that the articulation mechanism between these decisions and the business performance is through this impact. The explanation is found in the firm's ability to adapt to the changing conditions of the market and produces a mechanism of reduction in uncertainty, establishing a catalyst in achieving competitive advantages, creating a higher performance level for organizations.

In particular, the present study proves that the impact of outsourcing decisions on performance have special relevancy in the case of business performance, be it internal (traditional business) performance measures such as the ROA, ROE investment recovery level. The justification is obvious, as the impact on the competitive

outsourcing capabilities have a repercussion on the group of external capabilities, more connected therefore, to the management performance of the business. The indicators of external performance validated in this study refer to achieving greater market quotas and the achievement of an increase in sales, objectives closely related to a better adaptation to market conditions presented to the company. Therefore, as we stated, the outsourcing of activities through the impact that these have on external competitive capabilities, facilitate this adaptation.

The development by the learning companies, regarding collaborative Know-how, which has come from past experiences in collaborative relations, is important at the time of managing strategic alliances developed at this present time. Regarding the different temporary dimensions related to this construct, that is, the ExAnte, During and Expost indicators, the first two have a lot of influence, the justification being found in the dynamic character of the resources that make the presence of a larger number of retro alimentacion mechanisms necessary in firms activities at the time of adequately managing a complex portfolio of strategic alliances.

In short, faced with the uncertainty which appears nowadays, typified by dynamic and changing environment, there is no doubt that an adequate management of the available resources lowers the levels of strategic uncertainty and thus, in a higher business performance. To increase competitive advantages of the available resources, the firm should give special attention to obtaining maximum levels of quality in the available information. The design of the firm's organizational chart must be done according to the search for the protection of the knowledge key for the organizations, using outsourcing of activities with the intention of generating new knowledge. It is at this point where the collaborative know-how that the firm has is going to permit a

reduction in the said strategic vulnerability, at the same time increasing the potential of our valuable resources.

Regarding limitation, although important relations have been obtained between the variables picked up in the present study. The results have to be interpreted with a certain caution, mainly due to the fact that it is an exploratory study and, thus, the objective is, in essence, to prove the existence or not of inter relations between variables. Also, the information obtained corresponds to one member of the enterprise, these being from the services sector only, which in itself constitutes a limitation. In the aspect of the problems associated to the perception, we must be especially cautious regarding the indicators for measuring performance, as even though the literature confirms the validity of the procedure, it may be interesting to include real performance measures in future investigations. As a consequence, it would be appropriate to include measurements of an objective nature, improving the validity of the measurement of results obtained.

Regarding future lines of investigation, in the first place, the study of the effect of the service providers the ability and the degree of complementarities with this of outsourcing of activities would be very interesting. It may also be interesting to discern if a higher or lower degree of previous outsourcing activities generate any kind of advantage similar to that found with the group of previous collaboration relations collected in the collaborative know-how. Regarding the model, the Benefits of Outsourcing only have been considered, which on the other hand could be done with the inconveniences, as in the case of the outsourcing derived from offshoring, especially those related with their impact on the environment. Thus, in their relation with the business performance, they have not included the impact which these inconveniences of outsourcing have on the competitive capabilities, which, as we have checked, show the

relation between outsourcing and performance. A more precise borderline of this effect might give a clearer vision of the relations between outsourcing and business results. Finally, we are treating outsourcing from a general point of view of service operations, while this same study could be carried out for a precise type of outsourcing (TICs, logistics, etc.).

## **BIBLIOGRAPHY**

Amoako-Gyampah, K., & Meredith, J. R. 1989. The operations management research agenda: An update. *Journal of Operations Management*, 8(3): 250-262.

Barrar, P., Wood, D., Jones, J., & Vedovato, M. 2002. The efficiency of accounting service provision. *Business Process Management Journal*, 8(3): 195-217.

Bourne, M., Mills, J., Wilcox, M., Neely, A., & Platts, K. 2000. Designing, implementing and updating performance measurement systems. *International Journal of Operations & Production Management*, 20(7): 754-771.

Bretthauer, K. M. 2004. Service management. *Decision Sciences*, 35(3): 325-332.

Buffa, E. S. 1980. Research in operations management. *Journal of Operations Management*, 1(1): 1-8.

Cachon, G. P., & Harker, P. T. 2002. Competition and outsourcing with scale economies. *Management Science*, 48(10): 1314-1333.

Chopra, S., Lovejoy, W., & Yano, C. 2004. Five decades of operations management and the prospect ahead. *Management Science*, 50(1): 8-14.

Ciborra, C. 1991. Alliances as learning experiments: Co-operation, competition and change in high-tech industries. In L. K. Mytelka (Ed.), *Strategic Partnerships and the World Economy*: 51-77. London: Printer.

Coase, R. E. 1937. The nature of the firm. *Economica*, 4: 386-405.

Contractor, F., & Lorange, P. 1988. *Cooperative Strategies in International Business*, Lexington: Lexington Books.

Cunningham, M., & Calligan, N. 1991. Competitiveness through networks of relationships in information technology product markets. In S. Paliwoda, S. (Eds.), *New Perspectives in International Marketing*. London: Routledge.

Doz, Y. 1996. The evolution of cooperation in strategic alliances: Initial conditions or learning processes? *Strategic Management Journal*, 17(Special Issue: Evolutionary Perspectives on Strategy): 55-83.

- Doz, Y. L., & Hamel, G. 1998. *Alliance advantage: The art of creating value through partnering*. Boston: Harvard Business School Press.
- Dyer, J. H., & Nobeoka, K. 2000. Creating and managing a high-performance knowledge-sharing network: The Toyota case. *Strategic Management Journal*, 21(3): 345-367.
- Ehie, I. C. 2001. Determinants of success in manufacturing outsourcing decisions: A survey study. *Production and Inventory Management Journal*, 42(1): 31-38.
- Galbraith, C. S. 1990. Transferring core manufacturing technologies in high technology firms. *California Management Review*, 32: 56-70.
- Gilley, K. M., & Rasheed, A. 2000. Making more by doing less: An analysis of outsourcing and its effects on firm performance. *Journal of Management*, 26(4): 763-790.
- Grant, R. M., & Baden-Fuller, C. 2004. A knowledge accessing theory of strategic alliances. *Journal of Management Studies*, 41(1): 61-84.
- Gulati, R. 1995. Does familiarity breed trust? The implications of repeated ties for contractual choices in alliances. *The Academy of Management Journal*, 38(1): 85-112.
- Hamel, G. 1991. Competition for competence and inter-partner learning with international strategic alliances. *Strategic Management Journal*, 5(1): 33-55.
- Hays, D.C., Hunton, J.E., & Reck, J.L. 2000. Information systems outsourcing announcements: Investigating the impact on the market value of contract-granting firms. *Journal of Information Systems*, 14(2): 109-125.
- Inkpen, A. C., & Crossan, M. M. 1995. Believing is seeing: Joint ventures and organisational learning. *Journal of Management Studies*, 32(5): 595-618.
- Jiang, B., & Qureshi, A. 2006. Research on outsourcing results: Current literature and future opportunities. *Management Decision*, 44(1): 44-55.
- Jiang, B., Belohlav, J. A., & Young, S. T. 2006. Outsourcing impact on manufacturing firms' value: Evidence from Japan. *Journal of Operations Management*, 25(4): 885-900.
- Jones, O. 2000. Innovation management as a post-modern phenomenon: The outsourcing of pharmaceutical R&D. *British Journal of Management*, 11(4): 341-356.
- Kale, P., Singh, H., & Perlmutter, H. 2000. Learning and protection of proprietary assets in strategic alliances: Building relational capital. *Strategic Management Journal*, 21(3): 217-237.
- Kimura, F. 2002. Subcontracting and the performance of small and medium firms in Japan. *Small Business Economics*, 18(1/3): 163-75.

- Mabert, V. A. 1982. Service operations management: Research and application. *Journal of Operations Management*, 2(4): 203-209.
- Miranda-González, F. J. 2004. *Manual de Dirección de Operaciones*. Madrid: Thomson Paraninfo.
- Mowery, D. C., Oxley, J. E., & Silverman, B. S. 1996. Strategic alliances and interfirm knowledge transfer. *Strategic Management Journal*, 17(Special Issue: Knowledge and the Firm): 77-92.
- Neely, A. 2002. *Business performance measurement: Theory and practice*. Cambridge: Cambridge University Press.
- O'Farrell, P., & Wood, A. 1999. Formation of strategic alliances in business services: Towards a new client-oriented conceptual framework. *The Service Industries Journal*, 19(1): 133-151.
- Powell, W. W., Koput, K. W., & Smith-Doerr, L. 1996. Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*, 41(1): 116-145.
- Prahalad, C. K., & Hamel, G. 1990. The core competence of the corporation. *Harvard Business Review*, 68(3): 79-91.
- Quinn, J. B. 1999. Strategic outsourcing: Leveraging knowledge capabilities. *Sloan Management Review*, 40(4): 9-21.
- Quinn, J. B., & Hilmer, F. G. 1994. Strategic outsourcing. *Sloan Management Review*, 35(4): 43-55.
- Reuer, J. J., Zollo, M., & Singh, H. 2002. Post-formation dynamics in strategic alliances. *Strategic Management Journal*, 23(2): 135-151.
- Roth, A. V., & Menor, L. J. 2003. Insights into service operations management: A research agenda. *Production and Operations Management*, 12(2): 145-164.
- Rothaermel, F., Hitt, M., & Jobe, L. 2006. Balancing vertical integration and strategic outsourcing: Effects on product portfolio, product success, and firm performance. *Strategic Management Journal*, 27(11):1033–1056.
- Rothaermel, F., Hitt, M., & Jobe, L. 2006. Balancing vertical integration and strategic outsourcing: Effects on product portfolio, product success, and firm performance. *Strategic Management Journal*, 27(11):1033–1056.
- Saxton, T. 1997. The effects of partner and relationship characteristics on alliance outcomes. *The Academy of Management Journal*, 40(2): 443-461.
- Simonin, B. L. 1997. The importance of collaborative know-how: An empirical test of the learning organization. *The Academy of Management Journal*, 40(5) 1150-1174.

Simonin, B. L. 1999. Ambiguity and the process of knowledge transfer in strategic alliances. *Strategic Management Journal*, 20(7): 595-623.

Sislian, E., & Satir, A. 2000. Strategic sourcing: A framework and a case study. *Journal of Supply Chain Management*, 36(3): 4-11.

Todeva, E., & Knoke, D. 2005. Strategic alliances and models of collaboration. *Management Decision*, 43(1): 123-148.