

ORGANIZATIONAL LEARNING AS A DETERMINING FACTOR IN BUSINESS COMPETITIVENESS

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ABSTRACT

Unstable market conditions caused by innovation and increasing intensity and diversity of competition have resulted in organizational capabilities rather than served markets becoming the primary basis upon which firms establish their long-term strategies. If the most important resource from a strategic point of view is knowledge, then the essential organizational capacity of the company will be the generation, integration and institutionalization of knowledge through continuous learning processes. Therefore, the aim of this paper is to analyze the contribution of learning to the achievement of competitive advantages. First of all, the literature on organizational learning is reviewed the aim being to clarify its distinctive characteristics. Secondly, the relationship, within an empirical scope, between organization learning and business performance is analyzed. In order to do that, a causal model contrasted from a sample of Spanish companies by means of structural equations is proposed. This model establishes that organizational learning contributes positively both to customer and employee satisfaction and to economic/financial results.

Key words: organizational learning, competitive advantage, customer and employee satisfaction, economic/financial results, structural equations.

1. INTRODUCTION

We now find ourselves in a competitive environment characterized by market globalization, a greater complexity and increasing changes, which reinforces the need for flexibility and differentiation. Consequently, traditional sources of competitive advantage such as subsidized markets, both physical and financial assets and even technology have been pushed into the background in favor of knowledge since they tend to be increasingly easily available to everyone on equal terms, in open markets. Traditional processes are not only inadequate to fulfil future demands but are also unable to satisfy current demands. A smooth, comfortable process of change will no be allowed in an international market that is changing very quickly.

In order to survive and obtain advantages in this environment, it is necessary for the companies to be able to innovate and assimilate new knowledge, which allows them to do things in a different way. Numerous authors consider organizational learning as a long-term process and link it to knowledge acquisition and performance improvement (e.g. Garvin, 1993; Probst and Büchel, 1997). Nevertheless, the scarcity of empirical support of the theoretical argumentation must be overcome if we wish to continue developing that field on solid grounds.

Therefore, the aim of this paper is to analyze the contribution of learning to the achievement of competitive advantages. First of all, we study the concept of organizational learning trying to clarify conceptual confusion. After an exhaustive revision of the literature on the topic, we develop and validate a measurement scale, which permits us to examine and evaluate the dynamics of organizational learning. Finally, we analyze the relationship between organizational learning and business performance on a sample of 195 companies employing over two hundred people and carrying out their activity in Spain.

2. ORGANIZATION LEARNING

For over thirty years, research on organizational learning has contributed significantly to the development organizational theory and the change in strategic management. Moreover, this research has increased very rapidly in the last years. The contributions of the resource-based view of the firm and the approach based on knowledge management suggest that competitive advantage come as a result of the abilities and capabilities of the company. Thus, learning becomes a fundamental strategic aspect. But in spite of the increasing interest in this subject, consensus on basic matters and concepts has not yet been reached. This is due to the fact that this subject has been studied by several disciplines and from different approaches.

Economist tend to view learning either as simple quantifiable improvements in activities, or as some form of abstract and vaguely-defined positive outcomes. The management and business literature often equates learning with sustainable comparative efficiency, and the innovation literature usually sees learning as promoting comparative innovative efficiency. These various literatures tend to examine the outcomes of learning, rather than delve into what learning actually is and how these outcomes are achieved. In contrast, it is a major concern to organizational theory and psychology to examine the processes of learning. Learning, in the sense used here, relates to firms and encompasses both processes and outcomes.

Organizational learning can be defined as a dynamic process of creation, acquisition and integration of knowledge aimed at the development of resources and capabilities that allow the organizations a better performance. This definition includes three basic assumptions.

1. Organizational learning is not only linked to knowledge creation and acquisition but it is also necessary its integration into the routines and activities of the firm in order to develop new resources and capacities.
2. Organizational learning implies not only a new way of thinking, but also a behavioral change. That is, learning takes place through all the activities performed by the company, which means all the levels of the organization are involved.
3. It is a process focusing on improvements in performance that will take effect as long as the process of developing organizational learning interacts synergistically with deliberate organizational policies directed towards an improvement in the performance.

In keeping with the above, some authors have tried to identify the key characteristics of an organization that is constantly learning (Senge, 1990; Garvin, 1993; Watkins and Marsick, 1993). This is how the concept of learning organization comes into being, which according to Senge (1990) can be defined as an organization that expands its capacity in order to achieve the expected results. It uses learning as an intentional strategic tool for organizational and individual improvement and facilitates learning by eliminating barriers. To be precise, Senge (1990) describes five disciplines that every organization must carry out in order to become a learning organization: a) personal dominion, b) mental models, c) shared vision, d) collective learning, e) systematic thought. The aim, all in all, is to move towards flatter organizations which experiment with new approaches, develop training schemes for the employees and motivate staff at all levels of the organization, encouraging a shared vision (Pedler *et al.*, 1991; Senge, 1990).

Nevertheless, these prescriptions must be supported empirically in order to contribute to enforce strategic management and to be of interest to entrepreneurial management. On one hand, it is necessary to develop systems capable of measuring what has been learnt by the organization, and on the other, to analyze the importance of organizational learning in the creation of value and the securing of a sustainable advantage for the company.

3. THE OBJECTIVE OF THE INVESTIGATION, CONCEPTUAL MODEL AND HYPOTHESES TO BE TESTED

Organizational learning constitutes a complex capacity difficult to imitate and develop which is useful in all the dimensions of the company's performance and which can be considered a source of competitive advantage (Day, 1994; Slater, 1997). Among the benefits of organizational learning it is worth mentioning, first, that it establishes a link between the organization and the environment which allows a proactive behavior rather than a reactive one. Learning implies an improvement in response capacity through a wider understanding of the environment (Sinkula, 1994). This behavior helps to diminish its sense of complexity and avoids stagnation of strategic decisions. Nevertheless, it is not only a question of changing according to modifications in the environment, but also a question of giving the organization the possibility of regenerating itself continuously. On the other hand, the flexibility inherent

to the organizations that are oriented towards learning allows them to adapt themselves quickly to new market opportunities (Slater and Narver, 1995). The wish to learn and to know more leads to the establishment of relationships with customers, suppliers and other market agents so that there is a generation of favorable attitudes towards collaboration and solution of conflicts (Webster, 1992).

In agreement with these considerations, numerous authors have underlined the positive effects organizational learning has on business performance, as stated by Fiol and Lyles (1985); Levitt and March (1988); Dogson (1993); Dixon (1994); Nevis *et al.* (1995); Lei *et al.* (1999) and Bontis *et al.* (2002).

Nevertheless, it is worth highlighting that opinion differs on what is understood by business performance. Thus, it is possible to interpret them from three different perspectives: (1) financial results, (2) stakeholder satisfaction, (3) results concerning organizational efficiency. From the financial results point of view we must refer to the prescriptive literature, which takes the definition of organizational learning as the only source of sustainable competitive advantage as a starting point (Lei *et al.*, 1999). On the other hand, many authors (Ulrich *et al.*, 1993; Watkins and Marsick, 1993; Dixon, 1994) consider business performance in a wider sense. For them it means the impact of business activity on the satisfaction of the owners, directors, employees, customers and society in general. In other words, the effect on stakeholder satisfaction, or that of other interest groups. Finally, business performance can be understood in terms of the changes in organizational behavior as a result of learning and that can mediate in the relationship between the latter and the business results in a strict sense.

From the above, in order to analyze the relationship between organizational learning and business performance, we opted to consider first of all the existing relationship between organizational learning and financial results, which have been the main focus of investigations into business strategy. However, there is a general belief that learning does not always immediately affect the company's competitiveness. Moreover, certain external factors, such as the failure of a competitor to look after the needs of their customer, changes in government regulations or in production or distribution costs can also affect the economic/financial results. Therefore, we also consider appropriate to use employee and customer satisfaction as a measure of firm performance. Their satisfaction could mediate in the relationship between learning and economic/financial results.

In conclusion, in agreement with the above, the following working hypotheses can be drawn up:

H1: organizational learning positively affects customer and employee satisfaction.

H2: organizational learning positively affects the economic/financial results, directly as well as indirectly through customer and employee satisfaction.

4. METHODOLOGY

4.1. Scope of the investigation

With the aim of testing these hypotheses, an empirical study was carried out on large Spanish companies since the learning process is more structured in this type of company. The target population of the study was made up of the 2,740 industrial and service companies, which in 2001, when the study was carried out, had more than 200 employees, according to the data available in Duns & Bradstreet.

The information was collected through a postal survey. In order to test the viability of the questionnaire, it was subjected to the scrutiny of various management experts, most of whom are specialized in knowledge management. And from a professional point of view, personal interviews were carried out with the top management of a sample of leading companies in the banking, computing, transport, engineering and steel industries. The final questionnaire was sent to the General Manager or the highest management executive in the company. One hundred and ninety-five of the returned surveys were considered valid, which represents a 7% response rate and a 6,9% sampling error for a confidence interval of 95%.

4.2. Measures used for the research

Organizational Learning. Several authors have studied the process of organizational learning in order to define its dimensions, stages or flows (Huber, 1991; Day, 1994; Nevis *et al.*, 1995; Crossan *et al.* 1999; Winter, 2000). Although the terminology differs from one author to another, the defined processes are similar. The revision of the different works on the subject allows us to identify four different dimensions or phases: 1) knowledge acquisition through external sources or internal development; 2) distribution by means of which knowledge is spread among the members of the organization; 3) interpretation, in which individuals share and incorporate aspects of their knowledge, which are not common to all of them, achieving a shared understanding as well as co-ordination in decision making, and finally 4) organizational memory which tries to store knowledge for future use, either in organizational systems designed for this purpose or in the form of rules, procedures and other systems.

Therefore, we opted to develop a scale that both recognizes the multidimensional character of learning and collects explicit information on the four dimensions of learning. The choice of the variables representative of the dimension and each critical dimension was carried out after a thorough revision of both the organizational learning literature and of the measurement tools developed up to present of its assessment. Among the measures reviewed are important those developed by Nonaka *et al.* (1994); Hult (1995); Bontis *et al.* (2002) and McGraw *et al.* (2002). The resulting 5-point Likert scale is presented in Appendix 1.

Business performance. As has been previously stated, in order to assess the effect of organizational learning on the company's competitiveness and results, two indicators have been suggested: a) customer and employee satisfaction and b) economic/financial results. Both of them were obtained as a result of the information collected in the questionnaires.

Thus, for the assessment of the former, those polled were asked to grade on a Likert scale of 1 to 5 their level of satisfaction with respect to the following: reputation, customer reliability,

employee satisfaction, adaptation to the environment, innovation, success in the new products development and quality of the product. For the assessment of the latter, they were asked to grade their level of satisfaction with respect to financial profitability, sales growth, profit growth and profit/sales margin.

5. ANALYSIS OF THE RESULTS

First of all the psychometric properties (reliability and validity) of each of the three scales used are assessed, that is: organizational learning, customer and employee satisfaction, and economic/financial results. Secondly the suggested theoretical model is contrasted.

5.1. Reliability and validity of the organizational learning measurement scale

The psychometric properties of the scale were analyzed by means of the statistical technique of confirmatory factorial analysis through structural equations, using the computing program EQS, 5.7.a. The assessment method used was Robust-ML. Its application was done following a strategy of the model development¹.

The analysis was carried out in consecutive stages. First, a first order model was considered with the aim to prove the existence of the dimensions inherent to organizational learning that have been previously mentioned: acquisition of external knowledge, acquisition of internal knowledge, distribution, interpretation and organization memory. Subsequently, a second order model was considered so as to contrast that the acquisition of external and internal knowledge can integrate within a single basic dimension related to the process of knowledge acquisition. Finally, through a third order model it is checked that the four suggested dimensions are underlying a single major factor, organizational learning.

The results of the different analysis are shown in Table 1. It may be observed that the standardized regression coefficients between the explanatory variables of the scales and their corresponding saturation variable are significant, which comes to prove the existence of four dimensions inherent to organizational learning. The indicators of goodness of fit for each of the models show their adaptation to the critical values recommended for each of them. On the other hand, the composite reliability coefficients exceed in all cases the minimum level of 0,6 recommended by Bagozzi and Yi (1988), which allows us to confirm the reliability of the constructs. In the same way, the discriminatory validity between each pair of dimensions is confirmed, since the confidence interval of its correlation does not include in any case the value 1.

¹ The researcher suggests an initial model so that if it does not adjust correctly with the data, it can be modified successively until it does. The change from one model to another is carried out by eliminating those items that do not substantially converge on their respective latent variable (Gerbing and Anderson, 1988; Steenkamp and Van Trijp, 1991). This strategy is justified because in many cases the theory only provides a starting point for the development of the model which will be later supported empirically.

Table 1. Scale for measuring Organizational Learning. Evaluation of psychometric properties

DIMENSION	ITEM	STANDARDIZED FACTOR LOADINGS	RELIABILITY	DISCRIMINATING VALIDITY			
				DIMENSION	COEF. CORRELATION (CONFIDENCE INTERVAL)		
ACQUISITION INTERNAL (AI)	A. INTERNAL 1	0,74	0,850	AI-AE	0,55 (0,4; 0,692)		
	A. INTERNAL 2	0,87		AE-DB	0,41 (0,234; 0,578)		
	A. INTERNAL 3	0,78		AE-IT	0,54 (0,396; 0,692)		
ACQUISITION EXTERNAL (AE)	A.EXTERNAL 3	0,65	0,698	AE-MO	0,32 (0,144; 0,488)		
	A.EXTERNAL 4	0,60		AI-DB	0,60 (0,472; 0,714)		
	A.EXTERNAL 6	0,63		AI-IT	0,63 (0,519; 0,655)		
	A.EXTERNAL 7	0,53		AI-MO	0,52 (0,395; 0,655)		
DISTRIBUT (DB)	DISTRIBUT 2	0,59	0,772	DB-IT	0,89 (0,82; 0,968)		
	DISTRIBUT 4	0,61		DB-MO	0,62 (0,501; 0,745)		
	DISTRIBUT 5	0,74		IT-MO	0,50 (0,36; 0,632)		
	DISTRIBUT 6	0,61					
	DISTRIBUT 7	0,62					
INTERPRET (IT)	INTERPRET 1	0,63	0,821				
	INTERPRET 4	0,67					
	INTERPRET 5	0,68					
	INTERPRET 6	0,72					
	INTERPRET 7	0,76					
MEMORY (MO)	MEMORY 2	0,59	0,844				
	MEMORY 3	0,53					
	MEMORY 4	0,56					
	MEMORY 5	0,69					
	MEMORY 6	0,75					
	MEMORY 7	0,53					
	MEMORY 8	0,70					
	MEMORY 9	0,71					
GOODNESS OF FIT STATISTICS FOR FIRST ORDER MODEL							
S-B χ^2 89,1838 (P=0,000)	RMSR 0,038	GFI 0,917	NFI 0,879	NNFI 0,904	AGFI 0,872	CFI 0,925	IFI 0,92
DIMENSION	SUB- DIMENSIONS	STANDARDIZED FACTOR LOADINGS	RELIABILITY	DISCRIMINATING VALIDITY			
				DIMENSION	COEF. CORRELATION (CONFIDENCE INTERVAL)		
ACQUISITION (AD)	ACQ. EXTERNAL ACQ. INTERNAL	0,67 0,80	0,703	AD-DB	0,70 (0,533; 0,853)		
				AD-IT	0,79 (0,661; 0,925)		
DISTRIBUT (DB)				AD-MO	0,60 (0,501; 0,745)		
INTERPRET (IT)				DB-IT	0,89 (0,821; 0,969)		
MEMORY (MO)				DB-MO	0,62 (0,501; 0,745)		
				IT-MO	0,50 (0,361; 0,633)		
GOODNESS OF FIT STATISTICS FOR SECOND ORDER MODEL							
S-B χ^2 89,1838 (P=0,000)	RMSR 0,038	GFI 0,917	NFI 0,879	NNFI 0,904	AGFI 0,872	CFI 0,925	IFI 0,92

DIMENSIÓN	SUB-DIMENSIONS	STANDARDIZED FACTOR LOADINGS	RELIABILITY				
ORGANIZATIONAL LEARNING	ACQUISITION DISTRIBUTION INTERPRETATION ORG. MEMORY	0,81 0,95 0,93 0,61	0,9				
GOODNESS OF FIT STATISTICS FOR THIRD ORDER MODEL							
S-B χ^2 89,1838 (P=0,000)	RMSR 0,038	GFI 0,917	NFI 0,879	NNFI 0,904	AGFI 0,872	CFI 0,925	IFI 0,92

5.2. Reliability and validity of the scales of business performance

The results of the evaluation process are described in Table 2. We can observe that most of the adjustment values are within the most conservative boundaries recommended for each of them.

Moreover, we can observe that the reliability of the constructs is high since the composite reliability coefficients obtained for the constructs are higher than 0,8. Also, according to the standardized parameters of the relationship between observable and latent variables, the existence of convergent validity is proved since all of the parameters are higher than 0,5 and significant at a confidence level of 99%. Finally, the discriminatory validity between employee and customer satisfaction and the economic/financial results is confirmed since the confidence interval of its correlation does not include the value 1.

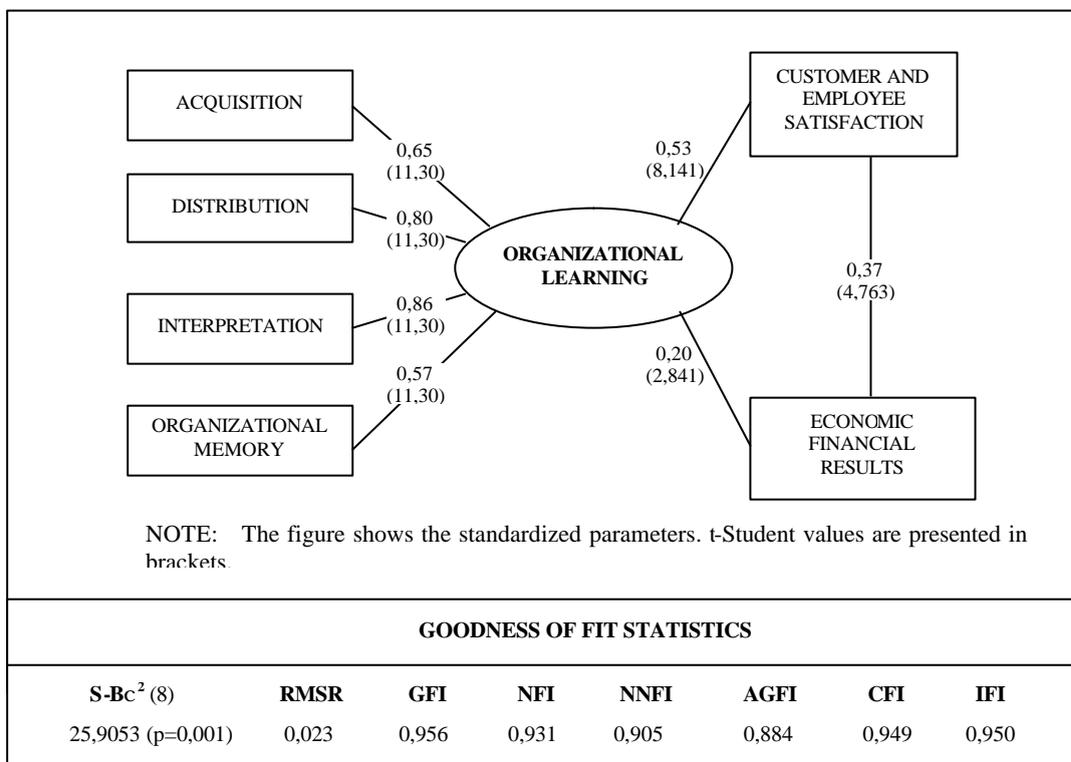
Table 2. Measure scales for organizational performance. Evaluation of psychometric properties

DIMENSION	ITEM	STANDARDIZED FACTOR LOADINGS	RELIABILITY	DISCRIMINATING VALIDITY			
				DIMENSION	COEF. CORRELATION (CONFIDENCE INTERVAL)		
CUSTOMER AND EMPLOYEE SATISFACTION (ST)	SATISF.1	0,65	0,815	ST-RES	0,528 (0,398-0,658)		
	SATISF.2	0,58					
	SATISF.3	0,67					
	SATISF.4	0,62					
	SATISF.5	0,68					
	SATISF.6	0,60					
	SATISF.7	0,56					
ECONOMIC FINANCIAL RESULTS (RES)	RESULTS.1	0,73	0,854				
	RESULTS.2	0,64					
	RESULTS.3	0,90					
	RESULTS.4	0,82					
GOODNESS OF FIT STATISTICS							
S-B χ^2 89,1838 (P=0,000)	RMSR 0,038	GFI 0,917	NFI 0,879	NNFI 0,904	AGFI 0,872	CFI 0,925	IFI 0,926

5.3. Contrasting the theoretical model

In order to test the proposed hypotheses, we have estimated a model of structural equations. This analysis allowed us to assess the causal relationships between organizational learning, customer and employee satisfaction and economic/financial results. The diagram of relationships of the model as well as its indicators of goodness of fit are shown in Figure 1. As it may be observed, the estimated model can be considered appropriate. It can also be observed that all the goodness of fit indicators greatly exceed the recommended value for each of them. Moreover, the study of the standardized regression coefficients which relate organizational learning to the indicators of performance are positive and significant at a confidence level of 99% which allows us to draw conclusions in keeping with the proposed hypotheses.

Figure 1. Representative model of the causal relationships between organizational learning and performance.



First of all, we contrast the direct significant contribution of organizational learning to customer and employee satisfaction and to the improvement of economic/financial results, although in this case, the effect is smaller, which is congruent with the general belief that it is necessary to wait some time before the positive effects of learning contribute to improving competitiveness. Secondly, we observed a positive and significant relationship between customer and employee satisfaction and the economic/financial results. Therefore, organizational learning also influences the latter indirectly. In this manner, taking into account the overall assessment of the model and the identified relationship, we can validate H1 and

H2. Thus, we may state that organizational learning contributes directly to the improvement of customer and employee satisfaction, and directly as well as indirectly to achieve better economic/financial results. These results are coherent with the empirical evidence obtained by Bontis *et al.* (2002), and give support to the importance of organizational learning as a source of competitive advantages, which has been stated in earlier works in this field.

6. CONCLUSIONS

The aim of this study has been to assess the contribution of organization learning towards the achievement of competitive advantages. We have obtained empirical evidence on the contribution of organization learning to both employee and customer satisfaction and economic/financial results, which has important implications for strategic management.

The consideration of knowledge both as an essential strategic resource and the company's ability to create it and apply it like a fundamental capacity constitute the foundations of knowledge based view of the firm. The practical application of this theory implies an attempt to manage knowledge in an explicit way rather than considering it as an intangible resource, difficult to measure and manage.

Several methods and practices have been developed in order to share and codify knowledge. Nevertheless, the multidimensional structure of learning implies that it is not enough to ensure acceptable levels in some dimensions, all the dimensions previously mentioned must be satisfied since they are parts of the learning process. Therefore, there are several fronts related mainly to social aspects of learning that the companies currently trying to develop their learning capacity must pay special attention to.

1. The establishment of systems to gather information in order to obtain an exact knowledge of the organization and its environment as well as its possible development.
2. The promotion of the development of transfer mechanism and integration of knowledge among employees, exploiting the overlapping among working groups and favoring information transference by means of formal and informal mechanisms such as seminars, visits to working sites, usage of specialized knowledge nets and information channels across department, and the development of operational and managerial manuals.
3. The training of the employees and their commitment to participate actively in the process of organizational learning.

Finally, we would like to point out that there are still various aspects which will deserve more attention in future research, such as identification of the different organizational elements (strategic culture, human resources policy, leadership) which may be determining factors in the learning process, and therefore of major importance of the development of a knowledge based strategy.

APPENDIX I. ORGANIZATIONAL LEARNING SCALE

EXTERNAL ACQUISITION OF KNOWLEDGE	
A. EXTERNAL 1	The company has frequent access to new knowledge through patents and licenses.
A. EXTERNAL 2	The company hires skilled personnel in order to acquire specific knowledge.
A. EXTERNAL 3	Co-operation agreements with other companies, universities, technical colleges, etc. Is fomented.
A. EXTERNAL 4	The company is in touch with professionals and expert technicians.
A. EXTERNAL 5	The company mixes with its competitors in order to exchange information.
A. EXTERNAL 6	The organization encourages its employees to join formal or informal nets made up by people from outside the organization.
A. EXTERNAL 7	The employees attend fairs and exhibitions regularly.
A. EXTERNAL 8	The company acquires knowledge through its relationship with its suppliers.
A. EXTERNAL 9	The are systems to collect in a formal manner the new
A.EXTERNAL10	The new knowledge obtained when collaborating with other agents is assessed openly.
INTERNAL ACQUISITION OF KNOWLEDGE	
A. INTERNAL 1	There is a consolidated and resourceful R&D policy.
A. INTERNAL 2	New ideas and approaches on work performance are experimented continuously.
A. INTERNAL 3	Organizational systems and procedures support innovation.
A. INTERNAL 4	There is a specific strategy for the development of new products.
A. INTERNAL 5	The company's rate of new product launching and new services has been higher than the average one in the sector up to present.
A. INTERNAL 6	The company has been more innovative than the average of the companies in the sector up to present.
A. INTERNAL 7	The company has been awarded for its innovative activity.
KNOWLEDGE DISTRIBUTION	
DISTRIBUT 1	Informative technology is used to improve the flow of information and encourage communication among individuals from the company (internet, intranet, Lotus Notes, etc.)
DISTRIBUT 2	All members are informed about the aims of the company.
DISTRIBUT 3	Meetings are periodically held to inform all the employees about the latest innovations in the company.
DISTRIBUT 4	The company distribut es written reports on its progress to all members of the organization.
DISTRIBUT 5	The company has formal mechanisms to guarantee the sharing of the best practices among the different fields of the activity.
DISTRIBUT 6	There are within the organization individuals who take part in several teams or divisions and who also act as links between them.
DISTRIBUT 7	There are individuals responsible for collecting, assembling and distributing internally employee's suggestions.
KNOWLEDGE INTERPRETATION	
INTERPRET 1	All the members of the organization share the same aim to which they feel committed.
INTERPRET 2	Improvement on the side of the employees' performance entails improvement of the company's performance and therefore its competitiveness, too.
INTERPRET 3	The members of the organization try to understand the way of acting and see what the rest of their colleagues are doing.
INTERPRET 4	Employees share knowledge and experience by talking to each order.
INTERPRET 5	Teamwork is a very common practice in the company.
INTERPRET 6	The company develops internal rotation programs so as to facilitate the shift of the employees from one department or function to another.
INTERPRET 7	The company offers other opportunities to learn (visits to other parts of the organization, internal training programs, etc.) so as to make individuals aware of other people or departments' duties.
INTERPRET 8	The company has systems or procedures to allow employees themselves to select the knowledge they require at each particular moment.
INTERPRET 9	The company is capable of rejecting obsolete knowledge and finds other alternatives.

ORGANIZATIONAL MEMORY	
MEMORY 1	Organizational processes are documented with manuals, standards or quality norms among others.
MEMORY 2	The company has databases to stock its experiences and knowledge so as to be able to use them later on.
MEMORY 3	The company has directories or e-mails filed according to the field they belong to, so as to find an expert on a concrete issue at any time.
MEMORY 4	The company has up-to-date databases of its clients.
MEMORY 5	There is access to the organization's data basis and documents through some kind of network (Lotus Notes, Intranet, etc.)
MEMORY 6	Databases are always kept up-to-date.
MEMORY 7	All the employees in the organization have access to the organization's databases.
MEMORY 8	Employees often consult the databases.
MEMORY 9	The codification and knowledge administration system makes work easier for the employees.
MEMORY 10	Suggestions about products or services given by clients or employees are very often put into practice.
MEMORY 11	When an employee leaves, it does not imply the loss of important knowledge or abilities for the company.

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