

# MEASURING AND REPORTING ON RELATIONAL AND SOCIAL CAPITAL: EMPIRICAL EVIDENCES

Dr. Patricia Ordóñez de Pablos  
Dept. of Business Administration and Accountability  
University of Oviedo  
Faculty of Economics  
Avd. del Cristo, s/n  
33.071 Oviedo – Asturias- Spain  
[patriop@correo.uniovi.es](mailto:patriop@correo.uniovi.es)  
Phone: +34-985-10-62-06  
Fax: +34-985-10-37-08

## ACADEMIC TRACK

**Abstract:** We draw from literature (resource-based theory of the firm, knowledge-based view of the firm, intellectual capital and social capital theory) to state that customer, relational and social capital is positively related to firm's competitive advantage. The characteristics of these knowledge-based resources emerge from complex social interaction patterns. This paper is structured into two main sections. First, the paper builds a conceptual framework for the analysis of knowledge-based resources as well as its impact on organizational competitiveness. In particular, we focus on customer, relational and social capital. Second, it presents the results of our study of intellectual capital reports from leading firms located in Asia and Europe during the period 1994-2001. We focused specifically on main customer, relational and social capital indicators used by a pioneering group of firms to measure and report their valuable social connections.

**Keywords:** case study; intellectual capital report; measurement; relational capital; social capital.

## **Introduction**

We draw from literature on resource-based theory of the firm, knowledge-based view of the firm, intellectual capital and social capital theory to conclude that customer, relational and social capital is positively related to firm's competitive advantage. The characteristics of these knowledge-based resources emerge from complex social interaction patterns. This paper is structured into two main sections. First, the paper builds a conceptual framework for the analysis of knowledge-based resources as well as its impact on organizational competitiveness. In particular, we focus on customer, relational and social capital. Second, it presents the results of our study of intellectual capital reports from leading firms located in Asia and Europe during the period 1994-2001. We focused specifically on main customer, relational and social capital indicators used by a pioneering group of firms to measure and report their valuable social connections.

## **From customer capital to social capital**

In this section, we attempt to build a conceptual framework for the analysis of customer, relational and social capital. The two first terms constitute a special subset of social capital.

Let's start with the concept of customer capital. The term customer capital represents the knowledge embedded in the marketing channels and customer relationships that an organization develops through the course of conducting business (Bontis, 1999). To visualize customer capital, it can be broken down in the following major components: customer capital, customer base, customer relationships and customer potential (Skandia, 1996). Customer capital represents the present value of firm's set of customer relationships. Customer base refers the size and structure of the customers of the firm. In this sense, this firm states that:

*“Today customer relationships can be visualized using various indicators which together form a pattern. These indicators measure the number of relationships, the nature of them and their duration, their role in the value-creating process, customer support systems and value appreciation” (1996: 5).*

The last component of customer capital is customer potential. Regarding this element, Skandia (1996) declares that “to build a network of partners, firms need to develop relationships. To do this, extensive information and training efforts are being undertaken, including services via Internet” (p. 17). The successful interaction between the firm and its customers is influenced by the developments in information technology tools. In the New Economy, this situation leads to new types of relationships, often in networks and with customers from all over the world. So customer potential is “capital in waiting”.

Many firms perform customer satisfaction surveys. They analyze different items. Among them, we can highlight the following items: quality of products and services, understanding of customer’s environment, professionalism, employee’s skills and knowledge, and cooperation in general. Additionally, it is important to benchmark the customer satisfaction survey with a national customer index for the current year and compare with similar measurements of other companies. Literature and practitioners alike recognize the positive link between customer satisfaction and financial performance through the customer loyalty variable.

### **“TAKE IN FIGURE 1”**

Today, customer relationships can be visualized using various indicators that together form a pattern. These indicators measure, for example, the number of relationships, their role in the value-creating process, customer support systems and so. Capturing

this knowledge requires the development of the indicators that capture the value of organizational customer capital.

### *Relational capital*

However, afterwards firms replace the term customer capital with the term relational capital. Relational capital extends the definition of customer capital by including both sides of the value chain. It is a broader term that encompasses not only the value of customer relationships but also the value of relationships with shareholders, governments, partners of strategic alliances and so (Bontis, 1998, 1999; Bontis and Choo, 2002; Ordóñez de Pablos, 2001, 2002). Relational capital comprises external partner relationships: customer, supplier and competitor relationships, alliance partners, research institutes, knowledge of market channels, an understanding of the impact of governmental or industry associations and other external networks linked into the organizational value chain.

Some firms even perform supplier satisfaction surveys. This type of survey covers all suppliers from whom the firm buys products/services worth more than a particular amount of money.

## **Social capital and the strategic importance of networks**

### *Concept*

Other firms are now using the concept of social capital instead of customer or relational capital. Since its introduction by Coleman (1988), this concept has become increasingly popular in a wide range of social science disciplines. Recently, many papers in the strategic management literature have analyzed the topic of social capital (Adler and Kwon, 2002; Bouty, 2000; DeFilippi and Arthur, 1998; Koka and Prescott, 2002; Ordóñez de Pablos, 2000, 2001, 2002; Tsai, 2000; Tsai and Ghoshal, 1998).

These studies point out the fact that social capital is positively related to firm's competitive advantage. Thus understanding this concept is important because it enables us to explain competitiveness differences among firms.

Let's examine closely the concept of social capital. In the course of their business activities, firms develop and establish a variety of interfirm ties. Examples of these ties are buyer-supplier relationships, strategic alliances and joint ventures. Nahapiet and Ghoshal (1998) define social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network" (p. 243). Bourdieu and Wacquant (1992) describe social capital as "the sum of the resources, actual or virtual, that accrue to an individual or group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (p.119). Finally Putnam (1995) states that it represent "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (p. 67).

All these definitions incorporate the term "network". A network is understood as "two or more firms involved in a long-term relationship" (Thorelli, 1986: 37). It may be described as "a model, or a metaphor, which describes a number, usually a large number of entities that are connected. In the case of industrial networks [...] the entities are actors involved in the economic processes that convert resources to finished good and services for consumption by end users whether they are individuals or organizations. It is said that a network combines relatively loose coupling with complex, reciprocal, cooperative and stable relations between legally independent units. Network relations, which are closer and longer term than market relations, are

seen to facilitate greater information density and a more reliable information exchange than markets do" (Easton, 1992).

#### *Social capital versus other components of intellectual capital*

Unlike economic capital that resides in people's bank accounts and human capital that is inside their heads, social capital is found in the nature of personal relationships. To possess social capital, a person must be related to others, and it is these others, not he or she, who is the actual source of his or her advantage (Portes, 1998: 7).

Social capital has an emergent nature and thus can have positive and negative effects on organizational performance. As social capital is the result of day-to-day interactions among people, this result can not be anticipated at the initial point of a R+D+i activity. Other characteristic of social capital is that it arises from relationships and does not live inside the individual or organizational context.

#### *Benefits and risks of social capital*

Although some researchers state that social capital is an organizational resource with only positive outcomes, others increasingly consider both positive and negative outcomes. Sometimes social capital has risks that can outweigh its positive outcomes (Hansen et al., 1999; Leana and Van Buren, 1999). In this section we frame a discussion of benefits and risks of social capital.

Different benefits arise from social capital. Adler and Kwon (2002) and Sandefur and Laumann's (1998) identify three major benefits of social capital: 1) it smoothes the access to broader sources of information, 2) it provides control and influence, and 3) it provides solidarity benefits of closure and trust. According to Koka and Prescott (2002), social capital yields three different information benefits in the form of information volume, information diversity and information richness.

However, associated to these sources of social capital benefits, firms may also get risks. First, the development and nurture of social capital demands considerable investments. In particular situations, these investments may not be cost efficient. Second, control and power benefits may trade-off against information benefits. Finally, solidarity benefits may result in overembeddedness, and subsequently leading to inertia.

## **EMPIRICAL RESEARCH**

### *Data collection*

The aim of our empirical study is to analyze main indicators used by firms to measure customer capital, relational capital and social capital as well as *guanxi* or social connections. Thus we gathered intellectual capital reports (ICRs) from leading firms in measuring and reporting on intangible resources. In particular, we analyzed ICRs of Danish, Indian, Spanish and Swedish firms. These firms constitute what could be called “the world pioneer group of firms in building intellectual capital reports” (See *Table I*)

### **“TAKE IN TABLE I”**

What is an Intellectual Capital Statement or Report? The object of an intellectual capital statement is to give a picture of the corporate effort to build up, develop and streamline its resources and competencies in relation to its employees, customers, technology, and processes. The intellectual capital statement underpins the development of the future value of the company, and consequently its competitiveness in the knowledge economy (Danish Agency for Trade and Industry, 2000, p. 4). It “forms an integral part of working with knowledge management within a company. It reports on the company’s efforts to obtain, develop, share and anchor the knowledge resources required to ensure future results. The intellectual capital can contribute to

creating value for the company by improving the basis for growth, flexibility and innovation" (Danish Agency for Trade and Industry, 2001, p. 13)

In 1994, Skandia, the Swedish insurance company, became the first firm to publish an intellectual capital report. Since then, other companies decided to measure and report on their intangible resources. However, today the number of firms that publish intellectual capital reports is small (Mouritsen, 1998; Ordóñez de Pablos, 2001, 2002).

Due to the increasing importance of social relationships in today's competitive environment, all intellectual capital reports devote a full section to the study of the customer, relational or social capital –the term and thus the breadthness of the concept depends on the particular firm.

### *Results*

First, let's describe the relational and social capital indicators we found in the sample of intellectual capital reports during the period 1994-2001. Three major types of indicators are identified: percentages, monetary units and numbers.

Second, we classify indicators into nine categories:

1. *Customer profile*: it describes the type of clients of the firm: private, public and so.
2. *Customer base renewal*: it represents new customers
3. *Commercial network penetration*: it measures the presence of the firm in foreign countries.
4. *Client satisfaction and loyalty*: it indicates the satisfaction that clients obtain from bought products and services as well as the loyalty derived from satisfaction.
5. *Strategic customer base*: it represents key customers.

6. *Reputational capital*: it measures the exposition to the media, notoriety and value perception, among other items.
7. *Stakeholders*: it indicates contacts with investors, analysts and other stakeholders.
8. *Networking*: it measures the opportunities to networking with colleagues in academic and social events.
9. *Intensity, collaboration and connectivity*: this category shows the level of collaboration with individuals and institutions.

After describing each category of indicators, *Table II* shows main indicators included in each category.

**“TAKE IN TABLE II”**

### **Conclusions and managerial implications**

In this paper, we have attempted to build a conceptual framework for the analysis of customer, relational and social capital. The first of our goals –framing a discussion on reputational and social capital and their role in business- proved to be feasible. The second goal –analyzing customer, relational and social capital indicators used in intellectual capital reports by world pioneering firms- proved tougher.

Our proposed conceptual framework does, however, allow us to map the different streams of current research on reputational and social capital as well as identify some of the key contemporary issues under debate. This study has helped to develop a vocabulary to analyze social networks and describe the benefits arising from them. It has also identified key indicators to measure and report these knowledge-based resources. In sum, it has taken a step forward a better understating of the ways in which the management and measurement of social networks can contribute to the enhancement of sustained competitive advantage.

Let's summarize our major conclusions. The review of literature and empirical evidence confirm the strategic importance of reputational capital and social connections to build long-term competitive advantage. We performed a case study analysis with Asian and European pioneering firms in measuring and reporting on intangible resources. In particular, we analyzed intellectual capital reports published by these firms during the period 1994-2001. Our empirical study has identified 9 major categories of indicators to measure these intangible resources: 1) customer profile, 2) customer base renewal, 3) commercial network penetration, 4) client satisfaction and loyalty, 5) strategic customer base, 6) reputational capital, 7) stakeholders, 8) networking and 9) intensity, collaboration and connectivity:

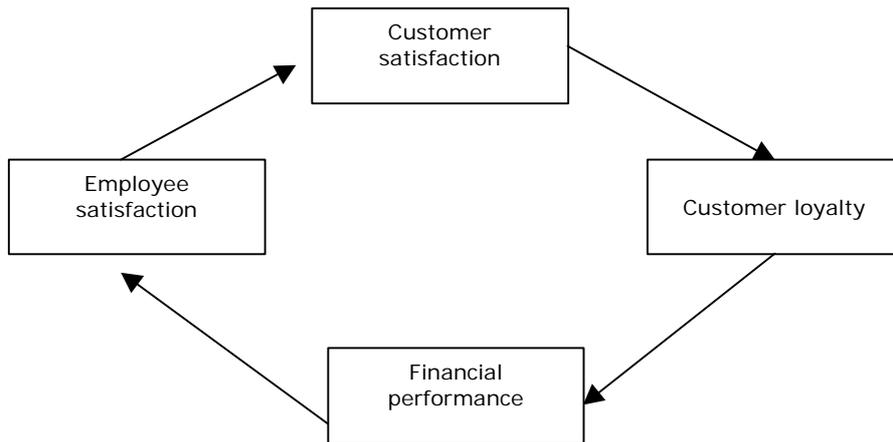
### **Bibliography**

- Bontis, N. (1998), "Intellectual capital: an exploratory study that develops measures and models", *Management Decision*, Vol. 3, N. 2, pp.63-76.
- Bontis, N. (1999), "Managing organizational knowledge by diagnosing intellectual capital: framing and advancing the state of the field", *International Journal of Technology Management*, 18, 5/6/7/8, 433-462.
- Bontis, N., Chong Keow, W.C. and Richardson, S. (2000), "Intellectual capital and business performance in Malaysian industries", *Journal of Intellectual Capital*, Number 1, Vol. 1.
- Bontis, N. and Choo C.W. (2002), *Strategic Management of Intellectual Capital and Organizational Knowledge*, Oxford University Press.
- Bontis, N., Crossan, M. and Hlland, J. (2002), "Managing an organizational learning system by aligning stocks and flows", *Journal of Management Studies*, forthcoming.
- Coleman, J. (1988), "Social capital in the creation of human capital", *American Journal of Sociology*, 94: S95-S120.
- DeFillippi, R. and Arthur, M. (1998), "Paradox in project-based enterprises: The case of filmmaking", *California Management Review*, 40, 2: 125-140.

- Easton, G (1992), "Industrial networks: A review", in Axelsson, B. and Easton, G. (editors), *Industrial Networks - A New View of Reality*, London: Routledge.
- Ganesan, S. (1994), "Determinants of long-term orientation in buyer-seller relationships", *Journal of Marketing*, Vol. 58, October, pp. 1-19.
- Hansen, M.T., Podolny, J. and Pfeffer, J. (1999), *Social Networks in Organizations - Capital or Liability?* Working paper, Harvard Business School, Boston.
- Koka, B. R., and Prescott, J.E. (2002), "Strategic alliances as social capital: A multidimensional view", *Strategic Management Journal*, Vol. 23, pp. 795-816.
- Leana, C.R. and Van Buren, H.J. (1999), "Organizational social capital and employment practices", *Academy of Management Review*, 24: 538-555.
- McInnes, P. (1992), "Guanxi or contract: A way to understand and predict conflict between Chinese and Western senior managers in China-based ventures", Paper given at the Symposium on Multinational Business Management, sponsored by Nanjing University and Florida Atlantic University, Nanjing, December 10-12, 1992.
- Nahapiet, J., and Ghoshal, S. (1998), "Social capital, intellectual capital and the organizational advantage", *Academy of Management Review*, 23:242-266.
- Ordóñez de Pablos, P. (2001a), *Intellectual Capital, Knowledge Management and Human Resource Management Systems: Influence on Organizational Performance*, Doctoral Thesis. University of Oviedo, Spain.
- Ordóñez de Pablos, P. (2001b), "Relevant experiences on measuring and reporting intellectual capital in European pioneering firms", in N. Bontis and C. Chong (Eds.), *World Congress on Intellectual Capital Readings*. Butterworth-Heinemann.
- Ordóñez de Pablos, P. (2002a), "Evidence of intellectual capital measurement from Asia, Europe and Middle East", *Journal of Intellectual Capital*, Special Issue, Vol. 3, No.3, pp. 287-302.
- Ordóñez de Pablos, P. (2002b), "Knowledge management and organizational learning: Typologies of generic knowledge strategies in the Spanish manufacturing industry from 1995 to 1999", *Journal of Knowledge Management*, Vol. 6. No.1, pp.52-62. MCB University Press.

- Ordóñez de Pablos, P. and Rodriguez Pérez, J.M. (2002c), "Strategic resources management: An organizational learning perspective", *International Journal of Human Resources Development and Management*, forthcoming.
- Portes, A. (1998), "Social capital: its origins and applications in modern sociology", *Annual Review of Sociology*, 24: 1-24.
- Putnam, R.D. (1995), "Bowling alone: America's declining social capital", *Journal of Democracy*, 6(1): 65-78.
- Sandefur, R.L. and Laumann, E.O. (1998), "A paradigm for social capital", *Rationality and Society*, 10: 481-501.
- Skandia (1996), *Supplement to the Annual Report. Customer Value*.
- Tsai, W. (2000), "Social capital, strategic relatedness and the formation of intraorganizational linkages", *Strategic Management Journal*, 21, 9: 925-340.
- Tsai, W. and Ghoshal, S. (1998), "Social capital and value creation: The role of intrafirm networks", *Academy of Management Journal*, 41: 464-478.
- Williamson, O. (1985), *The Economic Institutions of Capitalism*. New York: Free Press.

## APPENDIX



**Figure 1.** Customer satisfaction cycle

**Table I.** Intellectual capital reports in pioneering firms

FIRM	SECTOR/ACTIVITY	INTELLECTUAL CAPITAL REPORT YEAR/S	COUNTRY
Carl Bro	Consulting	1998-1999-2000-2001	Denmark
Cowi	Engineering and related services	1999-2000-2001	Denmark
Dieu	Course provider	2000-2001	Denmark
Systematic	Software development	1999-2000	Denmark
Balrampur Chini Mills	Sugar producer	1996/97-1998/99/-1999/2000	India
Reliance	Diverse (insurance, finance, telecom, oil & gas, etc)	1997	India
Shree Cement Limited	Cement manufacturer	2000-2001	India
Bankinter	Banking	2000-2001	Spain
BBVA	Banking	1999	Spain
BSCH	Banking	2000	Spain
Mekalki	Mechanized integral services	1998	Spain
Union Fenosa	Electricity	1999-2000-2001	Spain
Skandia	Insurance	1994-1995-1996-1997-1998	Sweden

**Table II.** List of customer, relational and social capital and “guanxi” indicators

<b>CATEGORIES AND INDICATORS</b>	<b>TYPE OF INDICATOR</b>
<b>CUSTOMER PROFILE</b>	
Public clients	Number
Semi-public clients	Number
Private clients	Number
Others	Number
<b>COMMERCIAL NETWORK PENETRATION</b>	
No. of countries where the firm has implemented projects	Number
No. of permanent offices in the own country	Number
No. of permanent offices abroad	Number
Number of contracts	Number
<b>CUSTOMER BASE RENOVATION</b>	
First-time customers	Number
New strategic customers during the year	Number
<b>CLIENT SATISFACTION AND LOYALTY</b>	
Clients' impression of the firm	Number (Scale)
Customer satisfaction index	Number (Index)
Customer loyalty index	Number (Index)
Customer complains	Number
Market share	%
<b>STRATEGIC CUSTOMER BASE</b>	
5 largest customers during the year	Number
Duration of existing customer relationships	Number
% of customers who would recommend our firm	%
Relational marketing	Monetary units
<b>REPUTATIONAL CAPITAL</b>	
Exposure to the media	Number (Scale)
No. of news about the firm published in the media in the own country	Number
% of positive evaluations in the news about the firm in the local media	Number
Spontaneous notoriety index	%
No. of unsolicited applications, hourly-paid employees	Number
Value perception	
<b>STAKEHOLDERS</b>	
No. of contacts with investors and analysts	Number
No. of favorable recommendations from analysts	Number
No. of solved consultations from shareholder's information office	Number
New stakeholders	Number
<b>NETWORKING</b>	
Number of conferences attended	Number
Lectures at scientific conferences	Number
<b>INTENSITY, COLLABORATION AND CONNECTIVITY</b>	
No. of operations done via phone	Number
No. of countries where the firm operates	Number

No. of commercial alliances	Number
No. of alliances with Business Schools	Number
No. of participants in support events	Number

Note: Scale: 1 to 5 (highest)  
Index (1-100)