Studying the Role of Relational Capital on Export Strength Development

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ABSTRACT

The purpose of writing the current paper is to survey the influence of relational capital on market strength development. After reviewing on related literature of relational capital, 2 separated questionnaires were deigned and distributed among 54 managers and consultants in Saipa Company (an Iranian one). The results of applying Spearman test show that there are positive and meaningful relationship between relational capital and its indices with market strength development. Meanwhile Friedman test shows market intensity has the most important influence on market strength development. Also the results of applying Binomial test illustrate all variables excepted customers' loyalty were placed in satisfied levels.
Finally by utilizing fuzzy TOPSIS test relational capital indices were prioritized in which "customer's desertion", "customer services capability" and "honesty in responding to investor from informed sources" were choen as the most important ones.

KEYWORDS: relational capital, marketing, market strength development.

1. 1 INTRODUCTION

Today's complex environment is one where the amount of changes is higher than ever in the past. Inhanced globalization, fuelled by the apply of personal and organizational technology, means that small organizations can now compete internationally with as much ease, in lots of cases, as their large firm counterparts. Small and medium-enterprises are competing and winning, and while doing so, they are providing examples for how their larger-firm counterparts require business if they want to be as flexible (Brock and Evans 1989; Fiegenbaum and Karnani 1991; Jarillo 1989; Power and Reid 2005).

IT revolution, the advent of informative communities and networks, and rapid development of superior technology, especially in the fields of communication, computer and engineering, have influenced the development of global economics from 90s. Therefore, knowledge has become the most invaluable resource substituting the physical and financial resources in global economy. In a knowledge based economy, the lives of organizations depend on knowledge, and the most successful organizations are those who use this intangible property in a faster and better-managed way (Mehrmanesh et al).

Recent studies (Almasi et al, 2010) propose that in contrary to traditional resources such as money, land, machinery equipments and etc. - which have recently led to reduced efficiency–, knowledge has become a source for business performance improvements. It can be noticed that the valuable role of knowledge and other intangible factors within this process have been recognized by the market. Also, it must be mentioned that the scale of this 'hidden value' has recently changed. Hence, while organizations compete, their present and future success will depend on knowledge management rather than physical resources. Unfortunately, knowledge cannot be measured with traditional criteria.

Moreover, it has an intangible nature and therefore the knowledge and all other intangible properties of an organization can be neglected by managers. It has been suggested that only 20 percent of knowledge-based features are applied by managers in an organization. Actually, knowledge-based business environment requires a new model to include all 'hidden', intangible factors of the organization. In this situation, the emerging field of 'intellectual capital' has become into the center of attention (Bontis, 2000). 'We are entering a new knowledge-based society, in which the main economic resource will be 'knowledge', rather than natural resources, money and work force' says Drucker, the famous management theorist.

The 21st century is the time for knowledge and information based economy, while the 20th century was the era of industrial economy. In an industrial economy, the physical properties such as land, work force and money were profitable main factors, and wealth was made from a combination of all these factors. Knowledge - as a source of making money - played a minor role in such economy. While in knowledge-based economy, knowledge or intellectual capital are superior compared to other physical, tangible properties. In contrast to industrial economy,

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intellectual and human capitals are the most important features of a knowledge-based economy, and organizations success is embedded in their intellectual capabilities. So, the management techniques of intellectual capital play a crucial role in the efficiency and goal advancement of organizations (Almasi et al, 2010).

In the meantime, the institutions and organizations in Iran cannot be excluded from the global variations in economics. They need to attune themselves with other organizations and therefore, to increase their competitive capabilities. They should employ intellectual capital in their organizational structures. Intellectual capital application in organizations must be considered more than ever, especially after 2005, when Iran became a bystander member of WTO (World Trade Organization). And also the competition increment in domestic economy and the tendency to join WTO intensifies the importance of intellectual capital application in organizations. This study investigates the relational capital and its main factors _marketing capability, market intensity and customer loyalty– and the effects of those factors on market strength development in 'Saipa' Company. The main question of this research is whether there is relational capital has meaningful influence on market strength development.

2. LITERATURE REVIEW

2.1. Intellectual Capital

The development pattern of global economy has been changed, due to advent of IT revolution, information communities and networks formation and also growth and rapid development of 'higher' technology. As the result of these changes, knowledge has become an alternative for financial and physical resources. In a knowledge-based organization, the traditional accounting methods based on tangible resources of those organizations seem to be inadequate for intellectual capital evaluation. Nowadays, these recent resources are the most worthwhile intangible properties of an organization. Intellectual capital as a new discipline for researchers and providers focuses on new measuring mechanisms for measurement of important, intangible variables in organizations such as human capital, structural capital, customer satisfaction, and innovation (Almasi et al, 2010). To simply define intellectual capital, intellectual property is the difference between the market price and clerical price of the organization's properties (Seetharaman et al, 2002). Jelcic, 2007 has defined the intellectual capital in this way: Intangible mercantile properties and measurements of an organization which impact operations and other success factors effectively, while they are not actually reflected on balance sheets. Intellectual capital, has also been recalled with other terms such as 'intangible properties', 'knowledge-based properties', 'knowledge capital', 'informative properties', 'human capital', and 'Hidden values' (Bontis, 2001; Razafindrambinina and Kariodimedjo, 2011) and it includes all innovations, ideas, fundamental knowledge, different ways of designing a product, computer programs and publications. In other words, intellectual capital consists of properties which are hidden, unseen and intangible but will result in profitability of an organization (Gharoie Ahangar, 2011). Various models have been proposed for intellectual capital modeling, in which different dimensions have been considered (Vaskeliene, 2007). Based on every defined dimension, different techniques and benchmarks would be employed (Uziene, 2010).

2.1.1. Human Capital

Human Capital _ or sometimes called human enterprise capital– is considered as the backbone for intellectual capital and is a very crucial factor for value creation in organizations (Royal and O'Donnell, 2008). Human capital, as the most important intellectual capital, includes all the current employees' knowledge (Bontis et al, 2001), and demonstrates the ability of the organization to find the best solutions and overcome the complexities through its members' knowledge (Nazari et al, 2010).

2.1.2. Organizational Capital

This category of capital consists of non-intellectual capital including factors such as information databases, customers' information, trademarks and organizational structure. Hence, when workers leave to their home, they actually stay in the organization through all the information in the system. This kind of capital belongs to the organization itself rather than individuals and it does have capabilities to respond the market needs (Almasi et al, 2010).

2.1.3. Relational Capital

The most important factor in creating added value for the organization is the relational capital (Kamath, 2008). The distribution channels, customers' satisfaction and loyalty are the factors which effect added value creation (Bannany, 2008). This capital consists of all the properties which organize and manage the relation between the organization and the environment and comprise its relations with customers, stakeholders, supplier, government, public institutions and the competitors. Although the most important dimension for relational capital is customer's relation, other dimensions should not be neglected, too (Bozbura, 2004).

Table 1: Relational capital components (Chen et al, 2004)

Fundamental marketing capability	Customer's information database creation and application, customer services capability, The ability to recognize customers' needs
Market intensity	Market contribution, market potential capability, customer's sales, brand's reputation, sales channel's creation, fair suppliers rules, timely obligations' accomplishment toward supplier, Honesty in responding to investor from informed sources
Customer loyalty	Customer's satisfaction, customer's complaint, customer's desertion, Investment on customers' relations

Relational capital

Relational capital is defined as the organizational association with internal and external stakeholders of the firm, including with customers, employees, suppliers, industry associations, stakeholders, and strategic alliance partners (Ordonez de Pablos, 2003).

Relational capital illustrates all the relations the organization has established with its stakeholder groups such as customers, suppliers, stockholders, retailers, community . . . . (Bontis, 1998). Most of audiences refer to the third part of intellectual capital -customer capital- as the most important one of relational capital (Mehrmanesh et al, 2011).

However, for the purpose of the current research, relational capital will be adopted. Lots of nations are improving economically in today's knowledge-oriented economy by promoting and supporting small and medium enterprises with necessary infrastructure. Also Stewart (2000) believed that the relationship with these external stakeholders is to turn it into money (Ngah and Ibrahim, 2011).

Baygi et al (2011) believe that relational capital is the sum of all assets which arrange and manage organizations' relations with the environment. This kind of capital includes the relations with customers, suppliers, shareholders, the rivals, community, the official institutions, and society (Baygi et al, 2011).

Conceptual framework and hypotheses

The model below is derived from Chen et al (2004) research and shows the influence of relational capital and its indices on development of Saipa market segment. In this research, relational capital has been considered in 3 main dimensions includes marketing capability, market intensity and customers' loyalty.
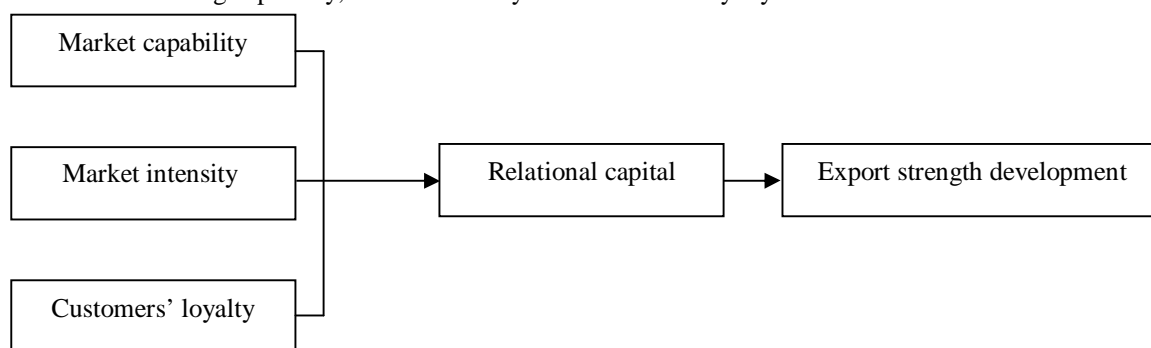
Conceptual framework of research

1. Relational capital has positive and meaningful influence on Saipa export strength development.
1.1. Marketing capability has positive and meaningful influence on Saipa export strength development.
1.2. Marketing intensity has positive and meaningful influence on Saipa export strength development.
1.3. Customers' loyalty has positive and meaningful influence on Saipa export strength development.

RESEARCH METHODOLOGY

The study was done in a society involving 54 people from chairmen of Saipa company (automobiles producer one). Whereas this number seems to be inadequate, the sampling was done through an integral counting method.
The present study can be considered as a descriptive survey if to view from data collection aspect and as an applied research if to investigate the goals of the study. For gathering data, library method (to refer to books, articles, theses, etc...) and fieldworks (questionnaire) was being applied.
2 questionnaires about relational capital (with 15 questions) and market strength development (with 24 ones) were designed.

To analyze the data SPSS 17 and Spearman, Friedman, Binomial tests and fuzzy TOPSIS technique were utilized.

The management experts were being asked to evaluate the validity of questionnaires. For this mean, the questionnaires were given to some professors and experts in management, and after their modifications were being used and they confirmed it, the questionnaires were given to the participants.

To determine the questionnaires' reliability, the 'Cronbach Alfa technique' was utilized. For this purpose, 35 people were chosen by random (from the participants) and the questionnaires were given to them. The 'Cronbach Alfa' values for all variables were calculated 0.76 and 0.84 accordingly.

These values support the reliability of questionnaires, because the calculated results for cronbach's alpha are more than (0.7) (Nunnally and Bernstein, 1994).

Data analyzing
4.1. Spearman test
To survey the relationship between variables, we used Spearman test. The results of using this test are presented in table 3:

Table 2: The correlation between relational capital and market strength development

Correlation	Spearman r	P-Value	Test result
Relational capital and market strength development	0.596	0.000	H_0 hypothesis is rejected
Market capability and market strength development	0.422	0.024	H_0 hypothesis is rejected
Market intensity and market strength development	0.785	0.000	H_0 hypothesis is rejected
Customer loyalty and market strength development	0.651	0.000	H_0 hypothesis is rejected

As table 2 shows, there are positive and meaningful correlations between relational capital and its indices with market strength development.

4.2. Friedman test
To survey the influence of relational capital on market strength intensity, Friedman test was applied. The results are shown in table 3:

Table 3: The results of applying Friedman test

Variables	Mean rank	Final rank
Marketing capability	2.89	3
Market intensity	4.12	1
Customer loyalty	3.29	2

Table 3 shows that "market intensity", "customer loyalty" and "marketing capability" were chosen as the most important main criteria.

4.3. Binomial test
Binomial test was applied to survey variables' levels. The results are shown in table 4:

Table 4: The results of applying Binomial test

Variables	Observed Prop.	Test Prop.	Sig	Result
Relational capital	0.8	0.6	0.000	Favorable level
Market capability	0.6			Favorable level
Market intensity	0.6			Favorable level
Customers loyalty	0.3			Unfavorable level
Market strength development	0.6			Favorable level

Table 4 shows that all variable apart from "customers' loyalty" were placed in favorable places.

4.4. Fuzzy TOPSIS technique
In real-word situation, because of incomplete or non-obtainable information, the data (attributes) are often not so deterministic, there for they usually are fuzzy /imprecise. So, we try to extend TOPSIS for fuzzy data to categorize the driving factors affecting on Iran carpet industry compatibility. Linguistic variables for the important weight of each criteria are shown in table 5:

Table 5: Linguistic variables for the importance weight (Chen, 2000)

Very Low	VL	(0, 0, 1, 2)
Low	L	(1, 2, 2, 3)
Medium Low	ML	(2, 3, 4, 5)
Medium	M	(4, 5, 5, 6)
Medium High	MH	(5, 6, 7, 8)
High	H	(7, 8, 8, 9)
Very High	VH	(8, 9, 10, 10)

To rank relational capital indices, fuzzy TOPSIS technique was applied instead Friedman test.
Decision making matrix and fuzzy weights are shown in table 6:

Variables	5	6	7	8	7	8	8	9	8	9	10	10
	Marketing capability				**Market intensity**				**Customers' loyalty**			
P1	7	8	8	9	4	5	5	6	4	5	5	6
P2	8	9	9	10	4	5	5	6	8	9	10	10
P3	7	8	8	9	4	5	5	6	5	6	7	8
P4	4	5	5	6	7	8	8	9	5	6	7	8
P5	5	6	7	8	7	8	8	9	5	6	7	8
P6	4	5	5	6	8	9	10	10	7	8	8	9
P7	5	6	7	8	7	8	8	9	5	6	7	8
P8	4	5	5	6	7	8	8	9	7	8	8	9
P9	4	5	5	6	8	9	10	10	5	6	7	8
P10	2	3	4	5	5	6	7	8	4	5	5	6
P11	5	6	7	8	7	8	8	9	7	8	8	9
P12	4	5	5	6	4	5	5	6	8	9	10	10
P13	4	5	5	6	7	8	8	9	8	9	10	10
P14	7	8	8	9	7	8	8	9	8	9	10	10
P15	5	6	7	8	4	5	5	6	7	8	8	9

By applying formulas 8, 9 and 10, positive and negative ideal solutions, closeness index and final ranks of variables were calculated. The results are shown in table 7:

Table7: positive and negative ideal solutions, closeness index and final ranks of variables

Indices	D_i^+	D_i^-	Cc_i	Final rank
Customer's information database creation and application	2.065129843	1.437848779	0.410464617	15
customer services capability	1.238190526	1.900808708	0.605546089	2
The ability to recognize customers' needs	1.512034178	1.58840515	0.512316153	13
Market share	1.46650772	1.631129829	0.526572203	10
market potential capability	1.374914583	1.742423092	0.558945893	8
customer's sales	1.242524508	1.858084041	0.599264309	5
brand's reputation	1.374914583	1.742423092	0.558945893	7
Sales channel's creation	1.331425107	1.757635936	0.568987117	6
fair suppliers rules	1.377607121	1.731577934	0.556923407	9
timely obligations' accomplishment toward supplier	1.801355391	1.287470412	0.416815481	14
Honesty in responding to investor from informed sources	1.239831971	1.8689292	0.601181338	3
Customer's satisfaction	1.480685123	1.63824325	0.525258375	12
Customer's complaint	1.251231212	1.877778455	0.600119097	4
customer's desertion	1.06730376	2.074588982	0.66029911	1
Investment on customers' relations	1.469285882	1.629393994	0.525834891	11

As table 7 shows "customer's desertion" was selected as the most important index and "customer services capability" and "honesty in responding to investor from informed sources" were placed as the second and the third ones.

5. Conclusion and suggestions

The current paper discusses about the influence of relational capital on market strength development in Saipa Company. 54 people were chosen from the managers in strategic management and long-term decision making field and the questionnaires were distributer among them.

First of all by applying Spearman test, the relationship between relational capital and its indices with market strength was proved. Then by using Binomial test the level of each variable was surveyed in which just customer loyalty was placed in unsatisfied level.

And finally by utilizing fuzzy TOPSIS technique, relational capital sub criteria were ranked in which "customer's desertion", "customer services capability" and "honesty in responding to investor from informed sources" were chosen as the top ones.

Attending to positive and meaningful influence of relational capital and its dimensions on market strength development some suggestions are presented as:

1. Market Capability: "identifying goal customers' needs and requires", "creating customers' data bases" and "produce in terms of their desires" lead to marketing capability development and finally increase Saipa Company market share.

2. Market intensity: other affecting driver on export strength development is market intensity. So strategic and long-term planning to increase more market share, applying various distribution channals for more sales and goods on time delivery make the mentioned firm to achieve more market segmentation. As this criterion is most important one, so the managers are advised to focus on it seriously.

3. Customers' loyalty: last driving affecting factor on export strength development is customer loyalty. So service adoption capability with customers' different needs, producing various goods and products, presenting services after sale, delivering goods at possible shortest time, promoting productions' quality and enjoyment of customers' points of view may enhance their loyalty and also lead to improving export strength.

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