



Relationship between Intellectual Capital and Organizational Profitability in Insurance Alborz of Tehran province

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Abstract. Aim of this research was investigating relationship between intellectual capital and profitability of insurance agency of Alborz in 2014. Therefore, this research is applicable and based on method is descriptive and correlative. We used simple random method in order to predict statistical sample. Furthermore, method of collecting data is questionnaire. Reliability of tests is 0.89 and it shows good reliability of test. We used SPSS software in order to collect and analyze data. We used some indexes like frequency, mean, standard deviation in descriptive level and t-student and analyzing variance in order to test inferential statistics. Results of research indicated that significant and positive relationship between intellectual capital and profitability as well as intellectual capital and organizational profitability also customer capital and organizational customer profitability with confidence of 99 percent.

Keywords: Intellectual capital, organizational profitability, Alborz Insurance

1. INTRODUCTION

In according to scientific resources organizations have three types of financial, physical and intellectual and in order to measure competitive capability of organizations non-financial index has been more important gradually. Financial capital is difference between net assets or equity owners. In other words, physical capital means production capacity or servicing of organizations and intellectual capital emerge from science and knowledge and when grand company of Skandya commence set of scientific methods in order to pay attention to intangible assets (Skandya, 2011).

In the knowledge-based economy, the success of an organization depends on the management of intellectual capital; but in the industrial economy of the production factors and the physical and tangible assets such as land, machinery and financial capital are the most important factors and their management is very important. Using the these assets, their value decreases, but Using the intellectual capital of the organization's data and intellectual property value increases. Today, intellectual capital, and in particular the human species is one of the most important organizational assets. Because, the success of a company is depended largely rooted in intellectual ability. With the growth of the knowledge economy, it is observed that the intangible assets compared to tangible way, a more important factor in maintaining and achieving sustainable competitive advantages are considered. Components of measuring intellectual capital or human species, structural, relational and innovation are able to measure the quality of knowledge management in organizations. Since, the factors are affecting on the profitability of the organization's intellectual capital. Thus, current research is investigating relationship between intellectual capital and profitability in Alborz insurance

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1.1. Aspects of Intellectual Capital: Conceptualization and Definitions

Several studies designating an organization's knowledge resources as its intellectual capital have underscored the notion that knowledge is utilized through different approaches in an organization.

The authors of these studies consider intellectual capital to be the sum of all knowledge firms utilize for competitive advantage (Nahapiet & Ghoshal, 1998; Youndt, Subramaniam, & Snell, 2004). More importantly, it is the conceptualization of different aspects of intellectual capital that offers scholars a means to parsimoniously synthesize the approaches by which knowledge is accumulated and used in organizations. Previous research has identified three prominent aspects of intellectual capital: human, organizational, and social capital. Human capital is defined as the knowledge, skills, and abilities residing with and utilized by individuals (Schultz, 1961), whereas organizational capital is the institutionalized knowledge and codified experience residing within and utilized through databases, patents, manuals, structures, systems, and processes (Youndt et al., 2004). The third aspect, social capital, is defined as the knowledge embedded within, available through and utilized by interactions among individuals and their networks of interrelationships (Nahapiet & Ghoshal, 1998).

At a basic level, the conceptual separation of these three aspects of intellectual capital is evident from how each aspect accumulates and distributes knowledge differently: either through (1) individuals, (2) organizational structures, processes, and systems, or (3) relationships and networks. Other key attributes, however, further highlight their inherent differences. Individual expertise and its associated human capital may or may not stay within organizations and can change depending on the hiring, mobility, and turnover of employees. Conversely, institutionalized knowledge and its associated organizational capital stay within organizations and do not change very easily (Walsh & Ungson, 1991). As for social capital's preservation, it tends to function more like organizational capital than human capital. Yes, social capital comprises a network of individuals who each have the option to leave their organization, however it is rare that this individual mobility destroys the viability of the overall network. Since social capital stems from norms for collaboration, interaction, and the sharing of ideas

1.2. Human capital

First, the organization's members possess individual tacit knowledge skills necessary to perform their functions) (Nelson and Winter, 1982). In order to illustrate the degree to which tacit knowledge characterizes the human capital of an organization, it is useful to conceive of the organization as a productive process that receives tangible and informational inputs from the environment, produces tangible and informational outputs that enter the environment, and is characterized internally by a series of flows among a network of nodes and ties or links.

Human capital has also been defined on an individual level as the combination of these four factors:

your genetic inheritance;

your education;

your experience; and

your attitudes about life and business (Hudson, 1993).

Human capital is important because it is a source of innovation and strategic renewal, whether it is from brainstorming in a research lab, daydreaming at the office, throwing out old files, re-engineering new processes, improving personal skills or developing new leads in a sales rep's

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little black book. The essence of human capital is the sheer intelligence of the organizational member.

The scope of human capital is limited to the knowledge node (i.e. internal to the mind of the employee). It can be measured (although it is difficult) as a function of volume (i.e. a third degree measure encompassing size, location and time). It is also the hardest of the three sub-domains of intellectual capital to codify. The Nobel Prize-winning economist Theodore W. Schultz (1981) has also used the term human capital:

The decisive factors of production in improving the welfare of poor people are not space, energy, and cropland; the decisive factors are the improvement in population quality and advances in knowledge. These advancements can be augmented by appropriate investment in human capital.

1.3. Structural Capital:

An organization with strong structural capital will have a supportive culture that allows individuals to try things, to fail, to learn, and to try again. If the culture unduly penalizes failure, its success will be minimal.

Structuring intellectual assets with information systems can turn individual know-how into group property (Nicolini, 1993). It is the concept of structural capital that allows intellectual capital to be measured and developed in an organization. In effect, without structural capital, intellectual capital would just be human capital.

This construct therefore contains elements of efficiency, transaction times, procedural innovativeness, and access to information for codification into knowledge. It also supports elements of cost minimization and profit maximization per employee. Structural capital is the critical link that allows intellectual capital to be measured at an organizational level.

1.4. Customer capital:

Customer capital represents the potential an organization has due to ex-firm intangibles. These intangibles capitals include the knowledge embedded in customers, suppliers, the government or related industry associations. The arrows represent the knowledge that must flow from external to the organization (i.e. its environment) into the organization's core by way of linked nodes. The essence of customer capital is knowledge embedded in relationships external to the firm. Its scope lies external to the firm and external to the human capital nodes. It can be measured (although it is difficult) as a function of longevity (i.e. customer capital becomes more valuable as time goes on). Owing to its external nature, knowledge embedded in customer capital is the most difficult to codify.

One manifestation of customer capital that can be leveraged from customers is often referred to as "market orientation." There is no consensus on a definition of market orientation, but two recent definitions have become widely accepted. The first is from Kohli and Jaworski (1990), who define market orientation as the organization-wide generation of market intelligence pertaining to current and future needs of customers, dissemination of intelligence horizontally and vertically within the organization, and organization wide action or responsiveness to market intelligence. Similar definitions are found in Deng and Dart (1994) and Lichtenthal and Wilson (1992). The second is from Narver and Slater (1990), who define market orientation as one dimension construct consisting of three behavioural components and two decision criteria – customer orientation, competitor orientation, inter-functional co-ordination, a long-term focus, and a profit objective. With close parallels to Kohli and Jaworski (1990), Narver and Slater

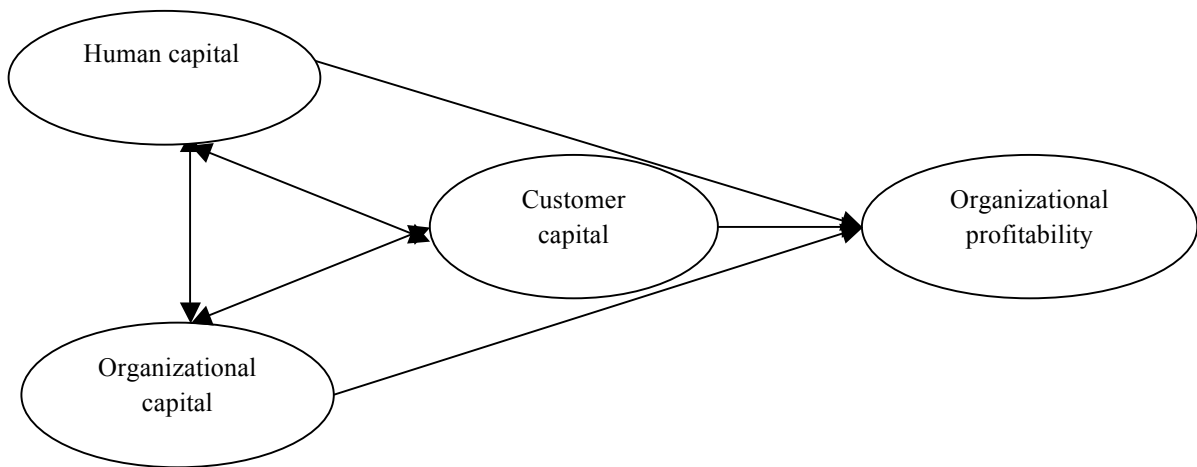
(1990) include the generation and dissemination of market intelligence as well as managerial action.

2. LITERATURE REVIEW

Since there are other sources (Bontis, 1999; Roos et al, 1997) which have extensively reviewed the IC literature, the focus of this paper will efficiently turn to defining the constructs we intend to measure. The following definitions by a variety of researchers summarize some of the highlights of this field:

- IC is elusive, but once it is discovered and exploited, it may provide an organization with a new resource-base from which to compete and win (Bontis, 1996);
- IC is the term given to the combined intangible assets of – market, intellectual property, human-centred and infrastructure – which enable the company to function (Brooking, 1996);
- IC includes all the processes and the assets which are not normally shown on the balance sheet and all the intangible assets (trademarks, patents and brands) which modern accounting methods consider ... it includes the sum of the knowledge of its members and the practical translation of his/her knowledge (Roos et. al., 1997);
- IC is intellectual material – knowledge, information, intellectual property, experience - that can be put to use to create wealth. It is a collective brainpower or packaged useful knowledge (Stewart, 1997);
- IC is the pursuit of effective use of knowledge (the finished product) as opposed to information (the raw material) (Bontis, 1998), and
- IC is regarded as an element of the company’s market value as well as a market premium (Olve et al., 1999).

Cohen et al. (1993) warn that just like the human body’s muscles, IC suffers from “if you do not use it, you lose it”. The Gottlieb Duttweiler Foundation (a Swiss think-tank) undertook studies into IC and found that only 20% of knowledge available to an organisation is actually used (Brooking, 1997). It is within this context that the desire to model and measure IC originates. Researchers and practitioners alike are enamoured by the vast opportunity that IC can offer for both knowledge generation and value-added services respectively. Generally, researchers in the field have identified three main constructs of IC that include: human capital, structural capital and customer capital.



Conceptual model of (Bonis, 1998)

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2.1. Hypotheses

H1: Significant relationship exists between intellectual capital and organization profitability in Insurance Alborz of Tehran province.

H2: Significant relationship exists between organizational capital and organization profitability in Insurance Alborz of Tehran province.

H3: Significant relationship exists between human capital and organization profitability in Insurance Alborz of Tehran province.

H4: Significant relationship exists between customer capital and organization profitability in Insurance Alborz of Tehran province.

2.2. Dependent variable

Human capital:

Save knowledge of member an organization that includes members of staff competencies and attitudes

2.3. Customer capital

From the knowledge of channel marketing and customer relations is an organization

Profitability of organizational insurance:

In this research, profitability is organizational profitability of insurance branches include interest, other income after total cost.

Descriptive statistics:

Descriptive statistics related to intellectual capital and components of organizational profitability and their components and following tables show Mean, standard deviation, Min and Max:

Table 1. Descriptive statistics.

Variables	Min	Max	Mean	Sd
Structural capital	2.30	4.80	3.82	0.41
Human capital	2	4.60	3.45	0.52
Customer capital	2.23	4.85	3.55	0.41

Based on the table, the highest mean components of intellectual capital is related to human capital (4.85) and the lowest amount is customer capital (4.60).

As general principle, if amount of Durbin-Watson between 1.5 and 2.5 can be dependent and therefore amount of 1.54 showed there is possibility use of this regression.

Table 2. Coefficient regression of first hypothesis.

Variables	Coefficient regression	Square coefficient regression	Adjusted correlation	P-value
Human capital	0.770	0.593	0.587	0.01

In above mentioned table, p-value is 0.01 and less than 0.05 and therefore the regression is significant.

Table 3. Coefficient variable.

	B	Sd	Beta	t	P-value
Intercept	391157987.7	438041355.3		8.9	0.01
Coefficient variable	0.376	0.04	0.77	9.7	0.01

$$\text{Customer capital} = 3911579861.7 + 0.376 (\text{Human capital})$$

In according to above mentioned regression, it can be said that each unit increase of human capital can lead to raise 0.376 units of customer capital in Alborz insurance

Table 4. Analytical regression.

Variables	Coefficient regression	Square coefficient regression	Adjusted correlation	P-value
Human capital	0.386	0.149	0.136	0.01

In above mentioned table, p-value is 0.01 and less than 0.05 and therefore the regression is significant.

Table 5. Coefficient variable of Organizational capital.

	B	Sd	Beta	t	P-value
Intercept	3244140190.34	542492001.6		5.98	0.01
Coefficient variable	0.161	0.05	0.386	3.4	0.01

In according to available data can be written regression as following:

$$\text{Organizational capital} = 3244140190.34 + 0.161 (\text{Human capital})$$

In according to above regression, it can be said that one unit increase in human capital rise organizational capital as much as 0.161 in Alborz insurance

Table 6. Analytical regression of human capital.

Variables	Coefficient regression	Square coefficient regression	Adjusted correlation	P-value
Human capital	0.677	0.458	0.450	0.01

In according to above table, p-value is 0.01 and less than 0.05 and regression is significant.

Table 6. Coefficient variable of customer capital.

	B	Sd	Beta	t	P-value
Intercept	3327202927.4	60176739.4		5.5	0.01
Coefficient variable	0.79	0.11	0.677	7.4	0.01

In according to available data can be written regression as following:

$$\text{Customer capital} = 333720927.4 + 0.79 (\text{Organizational capital})$$

Table 7. Analytical regression of human capital.

Variables	Coefficient regression	Square coefficient regression	Adjusted correlation	P-value
Human capital	0.363	0.132	0.118	0.01

In according to correlation between organizational capital and organizational profitability is 36.3% and its relationship is intensity. Therefore, significant relationship exists between organizational capital and organizational profitability. In other words, organizational capital can determined approximately 13.2% changes of organizational profitability in Alborz insurance.

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Table 8. Coefficient variable of organizational profitability.

	B	Sd	Beta	t	P-value
Intercept	-121490033667.8	26959094255.3		-4.5	0.01
Coefficient variable	15.01	4.8	0.363	3.1	0.01

In according to available data can be written regression as following:

$$\text{Organizational profitability} = -121490033667.8 + 15.01 (\text{organizational capital})$$

In according to above regression can be said that by increasing each unit in organizational capital leads rise organizational profitability in Alborz insurance

Table 9. Analytical regression of human capital.

Variables	Coefficient regression	Square coefficient regression	Adjusted correlation	P-value
Human capital	0.277	0.077	0.062	0.05

In according to the table, correlation between human capital and organizational profitability is 0.277. Therefore, null hypothesis is rejected and with confidence of 95% significant relationship exists between human capital and organizational profitability. Thus, 7.7% of changes related to organizational profitability in Alborz insurance by human capital are determined ($R^2=0.077$).

Table 10: Coefficient variable of human capital

	B	Sd	Beta	t	P-value
Intercept	-91731439330.7	26959094255.3		-3.93	0.01
Human capital	4.8	2.06	0.277	2.3	0.05

In according to available data can be written regression as following:

$$\text{Organizational profitability} = -91731439330.7 + 4.8 (\text{human capital})$$

In according to above regression can be said that each unit increase of human capital leads to raise as much as 4.8 units in organizational profitability in Alborz insurance of Tehran

Table 11. Analytical regression of customer capital.

Variables	Coefficient regression	Square coefficient regression	Adjusted correlation	P-value
customer capital	0.428	0.184	0.171	0.01

In according to the table, there is correlation between customer capital and organizational profitability (0.428). Therefore, the null hypothesis is rejected with confidence of 99% and customer capital and organizational profitability. In other words, significant relationship exists between customer capital and organizational profitability. In other words, 18.4 changes of organizational profitability in Alborz insurance by customer capital are determined ($R^2=0.184$).

Table 12: Coefficient variable of customer capital

	B	Sd	Beta	t	P-value
Intercept	-158389498287.6	31559744379.4		-5.02	0.01
Human capital	15.2	3.97	0.428	3.8	0.01

In according to available data can be written regression as following:

$$\text{Organizational profitability} = -158389498287.6 + 15.2 (\text{customer capital})$$

Based on the regression each unit increase in customer capita can lead to increase 15.2 units for organizational profitability in Alborz insurance of Tehran

Table 13. Analytical regression of customer capital.

	B	Beta	t	P-value
Intercept	-158389498279		-5.02	0.01
Customer capital	15.16	0.43	3.8	0.01

In according to available data can be written regression as following:

$$\text{Organizational profitability} = -15839498279 + 15.16 (\text{customer capital})$$

In according to above regression can be said that increase each unit of customer capital can lead to raise 15.16 units of organizational profitability.

3. RESULTS OF RESEARCH

In according to simple coefficient regression and Pearson correlation coefficient leads to significant relationship between human capital and customer capital with confidence of 99%. It means if human capital increase or decrease, customer capital will increase or decrease and 77% correlative coefficient is significant. In according to multiple analytical regressions, significant relationship exists between human capital and customer capital and organizational capital; while, just significant and positive relationship between human capital with organizational profitability of Tehran branches. Intellectual capital through extensive relationships, fluid and interact with people to help them evaluate their intellectual capital, knowledge and skills to develop the network. Capital associated with building awareness and trust relationships and makes sure that intellectual capital can increase.

Following, in according to simple coefficient regression and Pearson correlative coefficient, significant relationship exists between human capital and organizational profitability with confidence of 99%. It means if organizational capital increase or reduce, organizational profitability will increase or reduce. In according to coefficient regression of 3.36% and relationship is relatively strong intensity. Furthermore, regression of model can increase each point in organizational capital as much as 15.01 units to amount of organizational profitability.

In according to test Pearson coefficient regression and results indicated that significant relationship exists between customer capital and organizational profitability with confidence of 99%. It means, increase each unit of human capital and or reduce profitability will increase or reduce organizational profitability. It means coefficient regression between human capital and organizational capital is 42.8% and it shows intensity relationship between variables. Furthermore, based on model of regression can be said that each point of organizational capital increase as much as 15.01 to organizational profitability. Concept of structural dimension is created by fundamental principle: Create conditions in which people can express their potential and distinctive quality, support for optional use of power, interference in the determination of relevance and finally development opportunity to valuable recourses. In according to above mentioned issues, today people who have capacity of capital structure and use structural capital and widely control future career development. Therefore, People with vision and clear goals, and determine the proper management of these assets can to achieve profitability.

REFERENCES

[1] Bontis, Nick. (1997). Intellectual capital questionnaire. Hamilton, Canada: Institute for Intellectual Capital Research Inc.

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- [2] Bontis, Nick. (1996). "There's a Price on your Head: Managing Intellectual Capital Strategically", *Business Quarterly*, Summer, 40-47.
- [3] Brennan. N, Connell. B (2000), *Intellectual capital: current issues and policy implications*, MCB University Press, p1-41
- [4] Brennan. N,(2001), *Reporting intellectual capital in annual reports: evidence from Ireland*, MCB UP Ltd, pp.423 – 436
- [5] Brooking, A. (1996). *Intellectual capital - core asset for the third millennium enterprise*. London: International Thomson Business Press, 8, 12-13, 76.
- [6] Bontis .N,(2000), *INTELLECTUAL CAPITAL AND BUSINESS PERFORMANCE IN MALAYSIAN INDUSTRIES*, *Journal of Intellectual Capital*,p1-17
- [7] Bontis .N (1998), *intellectual capital: an exploratory study that develops measure and models, management decision*, p63-76
- [8] Bontis .N(1996),*there is a price an your head :managing intellectual capital strategically ,business Quarterly*
- [9] Bozbura .F, (2004) "*Measurement and application of intellectual capital in Turkey*", *Learning Organization, The*, Vol. 11 Iss: 4/5, pp.357 – 367
- [10] Chen .j,(2004), *measuring intellectual capital: a new model and empirical study*, *Journal of Intellectual Capital*, Vol. 5 Iss: 1, pp.195 – 212
- [11] Chen, M. C., Cheng, S. J., & Hwang, Y. (2005). *An empirical investigation of the relationship between intellectual capital and firms market value and financial performance*. *Journal of intellectual capital*, 6(2), 159-176.
- [12] Chatzkel .j, (2003) "*The collapse of Enron and the role of intellectual capital*", *Journal of Intellectual Capital*, Vol. 4 Iss: 2, pp.127 – 143
- [13] Deng, S. and Dart, J. (1994), "Measuring market orientation: a multi-factor, multi-item approach", *Journal of Marketing Management*, Vol. 10, pp. 725-42.
- [14] Edvinsson .L (1997) , *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower* [Hardcover]
- [15] Flamholtz Eric G., Maria L. Bullen, Wei Hua, (2002) "*Human resource accounting: a historical perspective and future implications*", *Management Decision*, Vol. 40 Iss: 10, pp.947 - 954
- [16] Gupta.O, Roos.G, (2001) "*Mergers and acquisitions through an intellectual capital perspective*", *Journal of Intellectual Capital*, Vol. 2 Iss: 3, pp.297 - 309
- [17] Hudson, W. (1993), *Intellectual Capital: How to Build it, Enhance it, Use it*, John Wiley & Sons, New York, NY
- [18] Hyun .S, (2009). *Creating a model of customer equity for chain restaurant brand formation*, Department of Hospitality and Tourism Management, Virginia Tech, Blacksburg, VA 24061, United States p529-539
- [19] Johansson. U(1999) *MOBILISING CHANGE:CHARACTERISTICS OF INTANGIBLES PROPOSED BY 11 SWEDISH FIRMS*. School of Business, Stockholm University,p1-31
- [20] Kennedy. F, (1998) "*Intellectual capital in valuing intangible assets*", *Team Performance Management*, Vol. 4 Iss: 4, pp.121 – 137
- [21] Kaplan. R (2004), *Converting Intangible Assets into Tangible Outcomes*, p96-102
- [22] Kohli, A.K. and Jaworski, B.J. (1990), "Market orientation: the construct, research propositions, and managerial implications", *Journal of Marketing*, Vol. 54, pp. 1-18.
- [23] Lichtenthal, J.D. and Wilson, D.T. (1992), "Becoming market oriented", *Journal of Business Research*, Vol. 24, pp. 191-207.
- [24] Ludewig. O/ Sadowski. D, (2009). *Measuring Organizational Capital*, JEL-Classification: D 24, L23, and M29. P393-412
- [25] Marr.B,(2004), *Measuring and benchmarking intellectual capital*, Cranfield School of Management, Cranfield, UK,p559-570

- [26] Marr, B., Gupta, O., Pike, S. and Roos, G. (2003c), "Intellectual capital and knowledge management effectiveness", *Management Decision*, Vol. 41 No. 8, pp. 771-810
- [27] Nahapiet, J., & Ghoshal, S. (1998), Social capital, intellectual capital, and the organizational advantage, *Academy of Management Review*, 23: 242–266.
- [28] Narver, J.C. and Slater, S.F. (1990), "The effect of a market orientation on business profitability", *Journal of Marketing*, October, pp. 20-35.
- [29] Nelson, R., Winter, S. (1982), *An evolutionary theory of economic change*. Cambridge, MA: Belknap Press.
- [30] Nicolini, D. (1993), "Apprendimento organizzativo e pubblica amministrazione locale", *Autonomie Locali e Servizi Sociali*, Vol. 16 No. 2.
- [31] Olve, N.G., Roy, J., and Wetter, M. (1999). *A practical guide to using the balanced scorecard – performance drivers*. Chichester: John Wiley & Son.
- [32] Roos, G., Roos, J., Edvinsson, L., and Dragonetti, N.C. (1997). *Intellectual capital - navigating in the new business landscape*. New York: New York University Press.
- [33] Sanchez M. (2000), *MANAGEMENT OF INTANGIBLES: AN ATTEMPT TO BUILD A THEORY*, *Journal of Intellectual Capital*.vol.1.N.4.p312-327
- [34] Scholz, C./ Stein, J./ Bechte, R. (2005), *Human Capital Management: The Saarbruecken Formula*. University of Saarland Business Administration OB, HRM, IT-Management .p1-6
- [35] Schultz, T. W. 1961. Investment in human capital. *American Economic Review*, 51: 1–17.
- [36] Stewart, T., Ruckdeschel, C. (1998), Intellectual capital: The new wealth of organizations, *Performance Improvement*, V37.Iss7, pp56-59
- [37] Stewart, T. (1997). *Intellectual Capital: The New Wealth of Organizations*. Doubleday/Currency: New York.
- [38] Sullivan, J. P. Jr, Patrick H. Sullivan Sr, (2000) "Valuing intangibles companies – An intellectual capital approach", *Journal of Intellectual Capital*, Vol. 1 Iss: 4, pp.328 – 340
- [39] Tayles, M, (2002), *DEALING WITH THE MANAGEMENT OF INTELLECTUAL CAPITAL: THE POTENTIAL ROLE OF STRATEGIC MANAGEMENT ACCOUNTING*, Working Paper No 02/16, 2-18
- [40] Youndt, M. A., Subramaniam, M., Snell, S. A. (2004), Intellectual capital profiles: An examination of investments and returns, *Journal of Management Studies*, 41: 335–362.
- [41] Van der Meer-Kooistra, J., Siebren M. Zijlstra, (2001) "Reporting on intellectual capital", *Accounting, Auditing & Accountability Journal*, Vol. 14 Iss: 4, pp.456 - 476
- [42] Walsh, J. P., & Ungson, G. R. (1991), Organizational memory. *Academy of Management Review*, 16: 57–91.