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Influence of Intellectual Asset on Competitive Advantage of Higher Institution of Learning in Kenya

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Abstract:

In today's competitive global market, intellectual assets have become important in achieving institution competitive advantage. This is due to inadequate government funding which has led to stiff competition amongst institutions of higher learning in Kenya to attract Self Sponsored Programme (SSP) students in order to meet the short-fall. This paper aims to review current literature and contributes a set of empirical evidence that capture the current state of intellectual asset and institution competitive advantage in Kenya. Pragmatism philosophical paradigm and explanatory survey research design was utilized. Target population of 450 was considered, out of which a sample of 212 employees drawn from 28 universities were obtained using Slovin's sample size formula. Simple random sampling technique was adopted. Questionnaires were then administered to these employees. Multiple regression analysis was used to analyze data collected. The findings revealed positive significant relationship between institution competitive advantage and human capital, between institution competitive advantage and structural capital, and between institution competitive advantage and relation capital. F-test as an overall test indicated high significance effect of intellectual asset on institution competitive advantage. It was concluded that the findings extended the use of competitive advantage and resource based view theories. Subsequently, it extended the literature on the match between intellectual assets on institution competitive advantage. The findings clarified the alignment of intellectual asset on institution competitive advantage for practitioners to best allocate intellectual resources based on their capability.

Keywords: *Intellectual, Asset, Institution, Competitive, advantage*

1. Introduction

Intellectual assets are the types of intangible internal knowledge an institution is known to possess in relation to its competitive environment. They refer to institutional attributes that can be acquired, developed, nurtured, and leveraged for external and internal institutional environment (Srivastava *et al.*, 1998). Subsequently, Mondal and Ghosh (2012) argued that intellectual assets otherwise referred to as intangible business factors as well as intangible assets of the institution, which have a major effect on its overall success as well as its performance. These intellectual assets although indicated under goodwill, they are not clearly listed in the balance sheet. Lev (2001) and Sullivan (2000), explained intangible assets as knowledge that can yield benefits which aid organization to generate value and therefore a claim to future profits that does not have physical, bond, stock as well as financial embodiment. In addition, accounting researchers argued that goodwill is defined as the difference between book value of entity's identifiable assets and the market value of the enterprise and therefore the difference is an intangible asset which is another term that defines goodwill (Choong, 2008).

In recent years, importance of the effects of intangible assets in firms has been characterized by the increase of its importance (Augier & Teece, 2005; Aulbur & Kannan, 2004). According to Sudarsanam *et al.*, (2006) and Stewart (2003), the drivers for an institutional competitive advantage as well as the reasonable source of capital within an organization are referred to as the intangible assets (Stewart, 1997; Sveiby, 1997; Edvinsson & Malone, 1997; Petty & Guthrie, 2000). According to Kohli and Jawroski (1990) and Homburg, *et al.*, (2004), the institution's big competitive advantage will be gained as a result of this internal and external knowledge development in terms of market orientation in which promotes dissemination, systematic acquisition, as well as the use of information to guide implementation and strategic development. Since, competition is accumulation of intellectual assets by many institutions as well as to seek effective utilization of resources to yield profitable actions in terms of competitiveness (Bismuth & Tojo, 2008).

According to Teece (1998), the truth of the matter is that to secure the institution's competitive power, knowledge has to be in play as the strategic asset. Although knowledge has mostly been seen as most treasured resource that last as well as creating a sustainable competitive advantage, it is also identified as a treasured corporate resource (Nonaka *et al.*, 2000). Additionally, Nonaka (2008) argued that knowledge is the sure foundation of long-term competitive advantage. This is a fundamental shift in the institution value

system, away from financial and tangible assets towards the innovative utilization of a nexus of quasi-assets, competences and intangible assets primarily in the form of knowledge intangibles of institutions derived from distinctive capabilities (Cuganesan & Silvi, 2006).

So as to be different from other institutions, it is progressively essential to have institution management utilizing intellectual assets for example technology, network with customers, human resource, brands as well as organizational skills which no other competitor can easily imitate. Bontis *et al.* (2000) discovered that intellectual assets for instance relation or customer capital, structural capital and human capital had positive relationship with business performance whether non-service and service organizations besides the industry type. Additionally, Bontis (2002) affirmed that the current trend is for institutions to focus more on intangible assets and less on material assets when in quest of competitive advantages have a better survival chance. Similarly, those institutions with sufficient intellectual capital also have a better survival chances (Daley, 2001). According to Roos *et al.* (1997) the only type of asset that have the ability to be rare, non-substitutable, inimitable and valuable is the intangible assets, therefore, are deemed as a basis of continued competitive advantage.

Intangible capital as also known as the intellectual asset, may constitute eighty percent of an organization's market value thus are deemed as very important though they are often not stated on financial statements (Fornell, 2000). According to Hazlina & Zubaidah (2008), intellectual assets have increasingly played an important role in an organization's competitive advantage, which can yield benefits to an institution or a company. Thus, it is believed that intangible assets in the form Knowledge are acquiring eminence than ever before as a matter of achieving competitive advantage and of survival for the institution to compete tactically (Latif *et al.*, 2012). An emphasis by Thornhill and Gellatly (2005) associated a track record of development of institutions with investment in intangible assets. Tsen & Hu (2010) further explained that for institutions to gain momentum for reforms is impossible without investing in intangible assets.

According to resource based theory, and competitive advantage theory, resources that are not substitutable, synergistic, tacit in nature, and inimitable result in viable competitive advantage of institutions (Barney, 1991), where, competitive advantage imply to abilities or attribute, company assets, that seem impossible to duplicate or surpassed by competitors (Porter, 1985). According to Yusoff & Daud (2010) and Kalique *et al.* (2011), the most important source of competitive advantage in several organizations in a knowledge- based economy is the intellectual and knowledge capital, they continued to claim that intellectual capital is considered as the focal point of organizational capabilities since its foundation is the organizational knowledge. Anderson (2004) argued that all existing knowledge assets in an institution is a way through which it can gain a competitive advantage and assure its permanent activity. Moreover, in the knowledge-based economy, the main factor of a viable competitive advantage function of an organization is knowledge and learning (Hsu & Fang, 2008).

When an organization develops a distinctive core competency, sustained competitive advantage can be achieved (Hoffman *et al.*, 2006). Tovstiga & Tulugurova (2007) maintained that organizations that succeed in mobilizing their intellectual assets in the form of technological skills, knowledge, strategic capabilities and experience towards creating service or product offering and creating new process, increasingly attained competitive advantage. Therefore, organizations have realized the benefits of managing their intangible assets. The development of stakeholder relationships, brands, culture and the reputation of the organization is readily viewed as providing sustainable sources of business advantage (Chong *et al.*, 2000).

According to Oghojafor *et al.* (2011), institutions at this information age achieve sustainable competitive advantage through their concern with holistic and steadfast interest in influencing core competencies and intellectual assets. Suggestions by Malone and Edvinsson (1997), stated that the intangible asset difference result from the difference between company's book value and its market price. Further, Porter (1990) suggested that getting profits that surpass those of competing products or same yields as competitor is possible through intellectual assets. Intellectual assets seen as positional advantages also known as differentiation or cost as they define the organization's position in the industry as front-runner in either differentiation or cost.

Sveiby (1997) categorized intellectual assets into three sections namely: internal structure indicator, signifying the structured knowledge of the institution like models, patents, culture, informative systems, and the group of people whose core activity is the safeguarding of the structure as well as the external structure indicators which are all the relations with external agents for instance suppliers, customers, the image, and the brand of the company, competence indicators which comprise competition amongst professionals in the institution. All of these intellectual assets are within the three categories recommended by Sveiby (1997) indicators of innovation and growth, indicators of stability and indicators of efficiency (Canizares *et al.*, 2007; Kaufmann & Schneider, 2004). Scholars have categorized three types of intellectual assets namely: human capital, customer capital and structural capital which make one axis of achieving competitive advantage (Stewart, 1998). For the purpose of this paper the intellectual assets were categorized into the following categories: structural capital, human capital and relation capital which were discussed individually.

Structural Capital (SC) encompassed processes, systems, structures, brands, intellectual property and other intangibles that are owned by the institutions but do not appear on its balance sheet (Roos *et al.*, 2001). It can be conceptualized as the fluid intangible assets such as processes, routines, culture, and the more formally crystallized structural capital is codified in an organization's policies, procedure booklets, and intellectual property (Carson *et al.*, 2004). Structural capital (SC) contains all the non-human storehouses of knowledge in organizations, which include the databases, organizational charts, process manuals, strategies, routines and anything whose value to the organization is higher than its material value (Bontis, 1999).

Additionally, Roos *et al.* (1997) defined SC as the knowledge left inside the organization when employees stop working. In accordance with Bontis (1998), if organizations have inadequate procedures and systems, intellectual capital will not reach its peak of prospective competitive advantage. Another important feature of SC is its capacity to compose, allowing intellectual capital to be

calculated and managed, in any stage of examination (Bontis, 1998). Nevertheless, structural capital is of great value to the firm in the long run; it is important to emphasize the fact that it is insufficient on its own in creating a long term competitive advantage. In order to develop human capital elements, such as employee competencies, skills and experience, structural capital must provide support mechanisms in the form of organizational routines, capabilities and a motivated attitude within the corporate culture for employees (Bontis, 1996). This supportive culture is necessary to motivate staff and encourage them to try new ideas even if they do fail (Bontis, 1996).

According to Roos *et al.* (2001) human capital (HC) defined the skills, intellectual agility, and competence of the individual employees. In other words, intellectual capital consists of abilities, knowledge, and skills of the organization staff that can be used in determining institutional problems where human capital has been linked to increased institution performance (Ordonez de Pablos, 2003). Therefore, it is not adequate alone to generate a sustained competitive advantage despite human capital being one element of intangible asset (Newell & Tansley, 2007). Bontis *et al.* (2001) described human capital as representative of an individual knowledge asset of an organization's employees. Roos *et al.* (1997) also argued that employees generate intangible asset throughout their intellectual attitude as well as their competency alertness. In a learning institution, employees are deemed the most important corporate asset despite the fact that they are not owned by the institution.

Hudson (1993) defined HC as a grouping of four aspects: experiences, attitude, culture and inheritance. Richtner & Edvinsson (1999) maintained the view that HC is the standards, skills as well as the relationship ability; transforming an individual into a more long-term organizational capital and a combined know-how as worked on by the employee. On the knowledge based theory, Tulugurova & Tovstiga (2007) identifies knowledge as the main competitive resource of any organization, where the organization's strategic knowledge is perceived as the essential resource.

According to Seetharaman (2004), reputations, branding, relationships, and strategic alliances with suppliers and customers holds the external revenue creating facets of the Relational capital (RC) of an organization. Other most important relations inside the relational capital realm are the public, management, employees, shareholders, associations as well as the institutions (Bueno *et al.*, 2004). Customer capital is one and the same as the relation capital which is the knowledge that is established to the supplier-customer correlation when institutions are running a business. According to Bontis (1999), any potential undertakings of an institution concerning its clients signified relation capital. Auxiliary justification by Saint-Onge (1996) has invoked the relational capital, which conceals the knowledge, bounded by all affiliations in an institution from competition, customers, suppliers, government or the associations.

Furthermore, Richtner and Edvinsson (1999) indicated that relation capital is the value of customer potential, customer position and customer relationships, and in conclusion, Chen *et al.* (2004) claimed that without human capital, relation capital is impossible to accomplish. Relation capital means the appropriate use of market information with the aim of retaining and attracting customers. Actually, this type of investment consists of external and internal environment of an organization, besides the organization associations with competitors, customers, trade associations, suppliers as well as the government. According to Chen *et al.* (2004) customer capital growth depends on the way structural capital and human capitals are supported.

2. Methodology

The explanatory survey research design was used in the study. This type of design is primarily concerned with determining "what is" and the state of affairs as they exist (Gall *et al.*, 2007). Explanatory design was used to determine causal relationship between variables (Saunders *et al.*, 2011). The explanatory survey was deemed ideal for the study because it involved collecting data at one point in time on intellectual asset and competitive advantage of public universities in Kenya and then establishing their effects without manipulation of variables. Target population of 450 was considered, out of which a sample of 212 employees drawn from 28 universities were obtained using Slovin's sample size formula. Questionnaires were then administered to employees of the public universities. Multiple regression analysis was used to analyze data collected.

3. Results

Correlation analysis was performed thereafter hypotheses were tested using multiple linear regression analysis to check the relationship between independent and dependent variables.

3.1. Correlation Analysis of Intellectual Asset and Institution Competitive Advantage

Correlation analysis was performed to test the theoretical proposition regarding correlation between intellectual asset and institution competitive advantage. There was positive significant relationship between institution competitive advantage and structural capital ($r = 0.853$, $P < 0.01$). The correlation of human capital and institution competitive advantage was certainly significant ($r = 0.842$, $P < 0.01$). The relationship of institution competitive advantage and relation capital was positively significant ($r = 0.854$, $P < 0.01$). This shows that there is degree of association between intellectual asset and institution competitive advantage as shown in Table 1.

		MCA	MSC	MHC	MRC
MCA	Pearson Correlation	1			
	Sig. (2-tailed)				
MSC	Pearson Correlation	.853**	1		
	Sig. (2-tailed)	.000			
MHC	Pearson Correlation	.842**	.863**	1	
	Sig. (2-tailed)	.000	.000		
MRC	Pearson Correlation	.854**	.886**	.866**	1
	Sig. (2-tailed)	.000	.000	.000	

Table 1: Correlation Analysis of Intellectual Asset and Institution Competitive Advantage

** Correlation is significant at the 0.01 level (2-tailed).

Key: MCA= Competitive advantage, MSC= Structural capital, MHC= Human capital and MRC= Relation capital

3.2. Model Summary of Intellectual Asset and Institution Competitive Advantage

Regression model summary results between intellectual asset and institution competitive advantage, indicates that three dimensions of independent variable explained 92% (R2 = 0.920) of the variance on institution competitive advantage and they were statistically significant and positively related to institution competitive advantage. As indicated, the residuals were not correlated since the regression was 2.025 (The Durbin-Watson statistic) which falls within the normal range as presented in Table 2.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.959 ^a	.920	.918	.08787	2.025

Table 2: Model Summary of Intellectual Asset and Institution Competitive Advantage

a. Predictors: (Constant), MRC=Relation capital, MHC=Human capital, MSC=Structural capital

ANOVA model results as in model 1 indicated that with F-test value of 640.239 as illustrated by overall test of significance shows good model fit and with (p value 0.000<0.05) the level of significance was statistically vastly substantial (Table 3). Therefore, the model was suitable to predict institution competitive advantage using relation capital, structural capital and human capital.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.831	3	4.944	640.239	.000 ^b
	Residual	1.297	168	.008		
	Total	16.128	171			

Table 3: ANOVA Model of Intellectual Asset and Institution Competitive Advantage

a. Dependent Variable: MCA= Competitive advantage

b. Predictors: (Constant), MRC=Relation capital, MHC= Human capital, MSC= Structural capital

The multiple regression results of standardized beta coefficients indicated that structural capital ($\beta = 0.320$, $t = 2.366$, $P < 0.05$), human capital ($\beta = 0.242$, $t = 2.772$, $P < 0.05$) and relation capital ($\beta = 0.406$, $t = 2.896$, $P < 0.05$) were positive and statistically highly significant predictors of institution competitive advantage. Multicollinearity was not a problem since the variables had VIF of less than 10 and tolerance values of above 0.2 as displayed in Table 4.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	.172	.094		1.829	.069		
	MSC	.334	.141	.320	2.366	.019	0.356	2.811
	MHC	.264	.095	.242	2.772	.006	0.188	5.319
	MRC	.404	.140	.406	2.896	.004	0.816	1.226

Table 4: Coefficient Analysis for Intellectual Asset and Institution Competitive Advantage

a. Dependent Variable: MCA= Competitive advantage, MSC= Structural capital, MHC= Human capital and MRC= Relation capital

4. Discussion

ANOVA model results as in model 1 indicated that with F-test value of 640.239 as illustrated by overall test of significance shows good model fit and with (p value 0.000<0.05) the level of significance was statistically vastly substantial. In other words, structural capital, human capital and relation capital were statistically highly significant predictors of institution competitive advantage. The findings were in line with Fornell (2000) that intangible capital as also known as the intellectual asset may constitute eighty percent of an organization’s market value but are deemed as very important though they are often not stated on financial statements. This means the drivers for an institutional competitive advantage as well as the reasonable source of capital within an organization is the intangible assets (Stewart 2003; Sudarsanam et al., 2006)

From the model summary results, the three independent variables explained only 92% ($R^2 = 0.920$) of the variance on institution competitive advantage and they were statistically significant and positively related to development of institution competitive advantage. This indicated that the three independent variables predicted development of institutional competitive advantage. The findings concurred with Ghosh and Mondal (2012), they defined intellectual assets as intangible business factors or intangible assets of the organization, which have a substantial effect on overall business success as well as its performance. These intellectual assets although indicated under goodwill, they are not clearly listed in the balance sheet.

5. Conclusion

Empirical findings of this study confirmed the significant relationship between institution competitive advantage and intellectual asset. Moreover, the study confirms the extension use of resource based view and competitive advantage theories. Results of this study provided valuable information and guidelines that would be useful to Kenyan public universities policy makers and implementers, in addressing issues and designing appropriate measures or interventions on intellectual asset to positively impact institutions competitive advantage.

6. Recommendations

Future studies might explore what other types of intellectual assets that could steer to the development of unique institutional competitive advantage, in respond to external influences, as a result of changing educational environmental philosophies.

7. References

- i. Augier, M., & Teece, D. J. (2005). An economics perspective on intellectual capital. In B. Marr (Ed.), *Perspective on intellectual capital. Multidisciplinary insights into management, measurement and reporting*. Boston: Elsevier.
- ii. Anderson, M. (2004): *Measuring Intangible Value: The ROI of Knowledge Management*,
- iii. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 99-120.
- iv. Bismuth, A., & Tojo, Y. (2008). Creating value from intellectual assets. *Journal of Intellectual Capital*, 9(2), 228-245.
- v. Bontis, N. (1996). There's a price on your head: Managing intellectual capital strategically. *Business Quarterly*, 60, 4
- vi. Bontis, N. (1998). Intellectual Capital: An Exploratory Study that Develops Measures and Models. *Management Decision*, 36(2), pp. 63-76.
- vii. Bontis, N. (1999). Managing organisational knowledge by diagnosing intellectual capital: framing and advancing the state of the field. *International Journal of Technology Management*, 18(5-8), pp. 433-446.
- viii. Bontis, N., W. C. C. Keow and S. Richardson (2000). Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital*, 1(1), pp. 85-100.
- ix. Bontis, N. (2001). Assessing knowledge assets: a review of the models used to measure intellectual capital. *International Journal of Management Reviews*, 3(1), pp. 41-60.
- x. Bueno, E., Salmador, M. P., and Rodriguez, O. (2004). "The role of social capital in today's economy", *Journal of Intellectual Capital*, 5, 4.
- xi. Carson, E., Ranzijn, R., Winefiel, A., Marsden, H. (2004). Intellectual capital: Mapping employee and work group attributes. *Journal of Intellectual Capital*, 5, 3.
- xii. Chen, j. zhu, z .and H.Y. xie (2004). Measuring Intellectual capital: A new Model and Empirical study. *Journal of Intellectual capital*, 5(1):195-212.
- xiii. Chong, C. W., Holden, T., P. and Schmidt, R. A. (2000). Where Does Knowledge Management Add Value? *Journal of Intellectual Capital*, 1, (4): 366-383.
- xiv. Choong, Kwee, K. (2008), Intellectual capital: definitions, categorization and reporting models, *Journal of Intellectual Capital*, 9 (4), pp. 609-638.
- xv. Daley, J. (2001). The intangible economy and Australia. *Australian Journal of Management*, 26(3) Special August Issue.
- xvi. Daud, S. and Yusoff, W. F. W. (2010). How Intellectual Capital Mediates The Relationship Between Knowledge Management Processes and Organizational Performance?. *African Journal of Business Management*, 5(7): 2607-2617.
- xvii. Edvinsson, L. and Malone, M.S. (1997). *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*, HarperCollins, New York, NY.
- xviii. Edvinsson, L. and A. Richtner (1999), Words of value- giving words to IC, Skandia.
- xix. Fornell, C. (2000), Customer asset management, capital efficiency, and shareholder value. Paper presented at Performance Measurement, Past, Present and Future Conference, July.
- xx. Gall, M. D., Borg, W. R. & Gall, J.P. (2007). *Educational research: An introduction*. (8th ed). New York: Pearson's Education Inc.
- xxi. Hazlina, H. and Zubaidah, Z.A. (2008). Relationship between intellectual capital and firms' performance: evidence from public listed companies in Malaysia. *Proceedings of International Accounting Business Conference, Johor Bahru, Malaysia*.
- xxii. Hofman, J., Hoelscher, M. and Sorenson, R. (2006), *Achieving Sustained Competitive Advantage: A Family Capital Theory*, *Family Business Review*, 19 (2): 135-145.
- xxiii. Homborg, C., Krohmer, H., and Workman, J.P.Jr. (2004). A Strategy Implementation Perspective of Market Orientation. *Journal of Business Research*, 57, 1331-1340.
- xxiv. Hsu, and W. Fang, (2008), Intellectual capital and new product development performance: The mediating role of organizational learning capability. *Technological forecasting & Social Change*, pp. 1-14.
- xxv. Hudson, W. (1993), *Intellectual capital: How to build it, enhance it, use it*, New York: John Willey.
- xxvi. Khalique, M., J. A. N. Shaari, A. H. bin M Isa and A. Agee (2011) Role of Intellectual Capital on the Organizational Performance of Electrical and Electronic SMEs in Pakistan. *International Journal of Business Management*, 6(9).

- xxvii. Kannan, G., & Aulbur, W. G. (2004). Intellectual capital. Measurement effectiveness. *Journal of Intellectual Capital*, 5(3): 389–413.
- xxviii. Kaufmann, L. and Schneider, Y. (2004), Intangibles: A synthesis of current research. *Journal of Intellectual Capital*, 5 (3), 366- 388.
- xxix. Kohli, A.K, and Jaworski, B., (1990). Market Orientation: The Construct, Research Propositions, and Managerial Implications. *Journal of Marketing*, 54(4):1-18.
- xxx. Latif, M., Malik, M. S., & Aslam, S. (2012). Intellectual capital efficiency and corporate performance in developing countries: A comparison between Islamic and conventional banks of Pakistan. *Interdisciplinary. Journal of Contemporary Research in Business*,4(1): 405–420.
- xxxi. Lev, B. (2001). *Intangibles: Management, Measurement, and Reporting*, Brookings Institute Press, Washington.
- xxxii. Mondal, A., & Ghosh, S. K. (2012). Intellectual capital and financial performance of Indian banks. *Journal of Intellectual Capital*, 13(4): 515–530.
- xxxiii. Nonaka, I., Toyama, R., & Nagata, A. (2000). A firm as a knowledge-creating entity: A new perspective on the theory of the firm industrial and corporate change. *Oxford*, 9(1), 1.
- xxxiv. Nonaka, I. (2008) *The knowledge creating company*. Boston, MA: Harvard Business Review.
- xxxv. Oghojafor, B.E.A., Dakare, O. & Sulaimon, A.A. (2011). Assessing the small and medium enterprises environment in Nigeria. *International Journal of African Studies*, 4, 22-27.
- xxxvi. Ordonez de Pablos, P. (2003). Intellectual capital reporting in Spain: a comparative review. *Journal of Intellectual Capital*, 4, 1.
- xxxvii. Petty, R. and J. Guthrie. (2000). Intellectual capital literature review: Measurement, reporting and management. *Journal of Intellectual Capital*, 1(2), 155-76.
- xxxviii. Porter, M. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*, Free Press, New York, NY.
- xxxix. Porter M. E. (1990). *The Competitive Advantage of Nations*, Macmillan, London.
- xl. Ramezan, M. (2011). Intellectual Capital and Organizational Organic Structure In *Knowledge Society: How Are These Concepts Related?* *International journal of Information Management*, 31(1): 88–95.
- xli. Roos, J., Roos, G., Edvinsson, L., and Dragonetti, N.C. (1997). *Intellectual Capital: Navigating in the new business landscape*, Houndmills: Macmillan Business.
- xlii. Roos, G., Bainbridge, A., and Jacobsen, K. (2001). Intellectual capital analysis as a strategic tool. *Strategy and Leadership*, 29, 4.
- xliii. Saint-Onge, H. (1996), ‘Tacit knowledge: the key to the strategic alignment of intellectual capital’, *Strategy & Leadership*, 24(2), pp. 10–15.
- xliv. Sanchez-Canizares, Sandra M., Miguel A. and Lopez-Guzman, T. (2007), Organizational culture and intellectual capital: a new model. *Journal of Intellectual Capital*, 8(3): 409-430.
- xlvi. Saunders, M., Lewis, P., & Thornhill, A. (2011). *Research Methods for Business Students*. India: Dorlington Kindersley India Pvt.Ltd.
- xlvi. Seetharaman, A., Teng Low, K.L., and Saravan, A.S. (2004). “Comparative justification on intellectual capital”, *Journal of Intellectual Capital*, 5, 4.
- xlvii. Silvi, R. and Cuganesan, S., (2006), "Investigating the Management of Knowledge for Competitive Advantage: A Strategic Cost Management Perspective", *Journal of Intellectual Capital*, 7(3): 309-323.
- xlviii. Srivastava, R., Shervani, T., & Fahey, L. (1998). Market-based assets and shareholder value: A framework for analysis. *Journal of Marketing*, 62 (1) :2–18.
- xlix. Stewart, T. (1997). *Intellectual capital: The new wealth of organizations*, New York, NY: Doubleday Dell Publishing Group.
- l. Stewart, T.A. (1998) *Intellectual Capital – The New Wealth of Organizations*, 1st ed., Nicolas Brealey Publishing, London.
- li. Stewart, T. (2003). *The wealth of knowledge: Intellectual capital and the twenty-first century organization*. New York, NY: Doubleday Dell Publishing Group.
- lii. Sudarsanam, S., Sorwar, G., & Marr, G. (2006). Real options and the impact of intellectual capital on corporate value. *Journal of Intellectual Capital*, 7(7), 308.
- liii. Sullivan, P.H. (2000), “Value-driven Intellectual Capital”, Wiley & Sons Publishing.
- liv. Sveiby KE, (1997). The Intangible Assets Monitor, in *Journal of Human Resource Costing & Accounting*, 2,1.
- lv. Tansley, C. and Newell, S. (2007). Project social capital, leadership and trust. *Journal of Managerial Psychology*, 22, 4.
- lvi. Teece, D. (1998). Capturing value from knowledge assets: The new economy, markets for know-how and intangible assets. *California Management Review*, 40(3), 55-79.
- lvii. Thornhill, S., & Gellatly, G. (2005). Intangible assets and entrepreneurial finance: the role of growth history and growth expectations. *International Entrepreneurship and Management Journal*, 1(2):135–148.
- lviii. Tovstiga, G. and Tulugurova, E. (2007), Intellectual Capital Practices and Performance in Russian Enterprises. *Journal of Intellectual Capital*, 8 (4): 695- 707.
- lix. Tsen, Shu-Hsiao and Hu, Hsiang-ling (2010). A Study of the organizational competitiveness and intellectual capital indicators of international tourist hotels, *Human Resource Management Student Newspaper*, 10 (1), 79-104.