Measuring Human Intellectual Capital (HIC) Elements of a Business School at a Private Sector University

Malik Umer Ayub
Lecturer
School of Business and Economics
University of Management and Technology (Pakistan)
C-II, Johar Town, Lahore
Tel: +92 42 5212801-10 (Ext: 394)
E-mail: umer.ayub@umt.edu.pk

Dr A. Rashid Kausar
Professor of Knowledge Management
University of Management and Technology (Pakistan)
C-II, Johar Town, Lahore
Tel: +92 42 5212801-10 (Ext: 387)
E-mail: ark@umt.edu.pk

Abstract

The emerging interest in Intangible Capital and Intellectual Capital (IC) has shifted from business firms to institutions such as universities and research centers during the last eight to ten years. As for as creating and managing of intangible assets are concerned, Universities are assumed to play an important role in today's knowledge based economy. Since there is a high demand for knowledge workers/k. managers/k. leaders in the new k-based world economy, including Pakistan, so the role of the business school of universities in the country has become very vital in producing and then ultimately meeting this huge demand of the market. This paper is the result of a research study that explains the factors influencing the Human Intellectual Capital (HIC) of a business school of a well reputed private sector university. These elements are grouped into seven main components. By measuring the elements of the Human Intellectual Capital (HIC), one can have an idea about the intangible assets which becomes basis for providing the comparative advantage of the business school among the universities.

Key words: Intellectual Capital, Human Intellectual Capital, Intangible Assets
Paper Type: Empirical

Discipline Track Area: Knowledge Management
Journal Name: Journal of Intellectual Capital

1. Introduction

Intangible Capital and Intellectual Capital (IC) have become a vital issue not only for enterprises, investors and other stakeholders but also for academics in the past eight to ten years.

Although much of the emphasis in the past has been on private firms as for as their IC analysis is concerned but now there is a strong growing need to extend this to institutions such as universities and research centers. This latest extension is because of the fact that the universities' main objectives are the production and diffusion of knowledge and their most important investments are in research and human resources (Elena, 2004). Despite the fact that their main inputs and outputs are basically intangibles there are very limited instruments to first identify, measure and then manage them (Canibano, 2004).

In Pakistan initially business and economics education was supposed to be looked after by the Government education department, both at the federal and provincial levels. However with the start of economic reforms in last ten to fifteen years demand for managers started growing rapidly and private sector investors took the initiative to set business schools in different areas of the country. The growing number of business school in the country became high because of huge market demand which could not be met by the public sector institutions. As a matter of fact, school has to prosper and continuously improve to stay in the market in future. Intellectual activities stem form the Intellectual Capital which the business school is actually possessing. One of the most important components of IC is Human Intellectual Capital (HIC) which is the author's focus of study in this present research.

The present study revolves around two major things, first the identification of the important elements of HIC of business school and then finding how significant they are as the performance parameter of the business school. The tool kit for this research was designed by the author himself after extensively going through different research papers most of them focusing on the same lines to achieve the objectives. Results of the analysis showed that different variables were considered as the necessary elements of Human Intellectual capital (HIC) of a business school but the factor analysis using SPSS enabled

us to identify only those which were to be considered in their increasing order of importance

2. Literature Review

Business schools have attained strong recognition over the passed ten to fifteen years all over the world. The concept took a start in U.S and we initially observed a rather conservative, stereotype and curriculum based activities in such schools which are presently showing considerable amount of changes in the form of vast flexibilities, rigorous researches and collaborative learning activities (Selen, 2001). According to Selen there is always an attempt to keep realigning itself (Business School) with today and tomorrow's business needs. Business schools presume to teach other organizations (Osborne and Cowen, 1995). Thus Business Schools can be considered to highly Intellectual Capital intensive organizations and candidates for empirical studies on Intangible assets management (Basu and Sengupta, 2007). Universities are pivotal and perpetuating conceptions and practices of organizations through their role in management education (Franklin et al. 1998). 'Academic capitalism' has been defined as institutional and professional market to secure external funds for higher education, where return on investment gains precedence over social returns (Slaughter and Leslie, 1997). McClellan et al. (2006) argued on academic capitalism, where rise of globalization has caused severe constraints on funding of higher education by the Government, resulting in the academic institutions to be more business oriented for long-term sustainability rather than their previous characteristics of social organizations. Hence in order to achieve milestones in the academic competition, the institution does not have any other option but to increase their intellectual activities to stay in the competition.

In recent times Intellectual Capital (IC) is considered as the critical antecedent for the sustained performance of an organization (Bierly and chakrabarti, 1996; Bontis 1996, 1998, 1999, 2000, 2003; Brennan and Connell, 2000; Grant, 1996; Kogut and Zander, 1992; Spender, 1996). As a matter of fact a few have gone even further that knowledge assets have become more important to business success than the traditional factors of production (or achieving financial goods) (Choo and Bontis 2002; Drucker 1993;

Edvinsson and Malone, 1997; Stewart 1997; Sveiby 1997). In this new paradigm, Intellectual Capital (IC) comprises of three components: Human Intellectual capital (HIC), Structural Intellectual Capital and Relational Intellectual capital (Bontis, 1999, 2001; Edvinsson and Malone, 1997; (Nahapiet and Choshal, 1998; Petty and Guthrie, 2000; Sveiby 1997). (Stewart, 1997) defines Intellectual Capital (IC) as intellectual material – knowledge, information, intellectual property and experience- that can be put to use to create wealth. Hence Intellectual Capital (IC) is the possession of knowledge, applied experience, organizational technology, customer relationships and professional skill that provide a competitive edge in the market (Edvinsson and Malone, 1997). Based on the notion that "what is measured, is managed", (Kaplan and Norton 1992). In author's opinion "what is identified and achieved, is measured". So in the identification and then measurement of Intellectual Capital (IC) becomes critically important for institutions in the knowledge based era. There are several frameworks that attempt to measure the IC including the balanced scorecard (Kaplan and Norton, 1992), the IC Navigator (Edvinsson and Malone, 1997), the Intangible Assets Monitor (Sveiby, 1997) and others (Bontis, 2001; Bontis et al, 1999 for a comprehensive review). Most of the historical research in the field concentrates on examining the relationship between Intellectual Capital (IC) and performance (Ashour, 2000; Bontis, 1998, 1999; Bontis and Fitz-enz, 2002; Brennan and Connell, 2000; Brooking, 1997; Bontis, et al, 2000; Guthrie and Petty, 2000; Joia, 2000; Marques and Garrigos, 2003; Roos and Roos, 1997). This study is also aimed as an attempt to identify and describe the HIC by examining both stock and flows of knowledge resources. It aims to generate specific hypothesis that link HIC components with Business schools performance of university of Management and technology.

(Davenport et al, 1998) conducted a study on 31 projects in 24 companies in 1998 first to identify and then to evaluate success factors in Intellectual Capital (IC) projects (Davenport et al, 1998). Eighteen projects were determined to be successful; five were considered failures, and eight were too new to be rated. The common factors identified among successful Intellectual Capital (IC) projects in this study were- senior management support, clearly communicated Intellectual Capital (IC) projects goals, linkages to academic achievement performance, multiple channels for knowledge

transfer, motivational incentives for knowledge workers, a knowledge friendly culture, arrangements of technical and behavioral trainings for the knowledge management users, and ability to identify, capture and transfer critical tacit knowledge were considered to be the key to success of Intellectual Capital (IC) projects as mentioned in some later researches (Koskinen, 2001). Skill level of employees, and identified knowledge sources were also found to be important in some other studies (Holsapple and Joshi, 2001).

However, the most significant factor found by the researchers, was organizational and cultural issues associated with user motivation to share and use knowledge (Alavi and Leidner, 1999). It was experienced that promoting a culture of knowledge sharing with in the organization, rewarding employees for knowledge sharing, and creating a "best practices" repository influence Intellectual Capital (IC) processes (Barna, 2002).

3. Methodology

Brennan and Connell (2000) summarize 14 empirical research studies on different ingredients of Intellectual Capital (IC). There research shows that a variety of data collection methodologies were used including interview, case study, questionnaire, survey of annual reports and focus groups. Surveys through questionnaires were often used and usually involved larger sample sizes offering stronger empirical support. Following this the author decided to conduct a survey through a questionnaire. Since the main objective of the research study was to identify and measure the HIC of the business school of a private sector university, so the questionnaire included only those factors which had direct relationship with the Human Intellectual capital (HIC) of the business school and were revealed in most of the previously conducted researches. Every factor influencing the Human Intellectual capital (HIC) contained several variables. Human intellectual capital (HIC) refers to a combination of factors (including variables) that reflect the individual talent in the institutions and development of its human resources (Ashour, Bontis, 2004). According to (Edvinsson and Malone, 1997) Human Intellectual Capital (HIC) is the sum of worker's qualifications, skills, experience, motivation level, capabilities and innate knowledge. Moreover Bontis (1998) describe Human Intellectual capital (HIC) as the organization's collective capability to extract the best solutions form

the knowledge of its individuals. According to (Ramizes and Lorduy, 2007) Human Intellectual capital (HIC) is the set of explicit and tacit knowledge of the universities personnel acquired through formal and informal educational and actualization processes embodied tin their activities.

Thus a special attention was given by the author to include all these aforementioned considerations in the questionnaire as this was done by different researchers in their research to identify the main elements of Human Intellectual Capital (HIC). Moreover a test-run of questionnaire using a statistical software SPSS was performed by the author to verify the reliability and validity of the questionnaire. This is actually done by calculating the Chronbatch-α value of the questionnaire. The acceptable range of C-α is usually 0.70 and above, whereas the questionnaire used for the present study by the author yielded the C-α value as 0.84 which is of course more than the acceptable range. Moreover, considering the intellectual ability of the respondents, 7-point likert scale was used.

The respondents of the questionnaire were all the intellectual people of the business school ranging from research associates to full professors. The questionnaire was administered by the author himself and the respondents' feed back were recorded on the spot.

3.1. The Time Bracket

The time bracket for this research, and which has already been revealed in the literature review, is from 1995 till present.

3.2. Target Population

The target population for the present study is a private sector university, University of Management & Technology (UMT). Very briefly about the history of UMT as it was founded in 1990 as the Institute of Leadership and Management (ILM). ILM was established by leading educationists, professionals, and industrialists with an aim to enhance the organizational and individual effectiveness. Guided by the noble mission of helping others in actualizing their limitless human potential to its finest shape, ILM

sought to respond to the challenges of information-based economy, globalization, and ever increasing complexity.

UMT – now an independent, not-for-profit, private institution of higher learning – received her degree-granting charter first as the Institute of Management and Technology (IMT) in 2002 through an Act of the Assembly of the Punjab. Later, on 16 June 2004, IMT became University of Management and Technology through the passing of a similar Act by the Punjab Assembly.

In September 2007, the Higher Education Commission (HEC), Pakistan, upgraded the category of UMT from 'Category X'/ previous 'Category B' to 'Category W'/ previous 'Category A'. UMT now ranks among the few select universities in the country in this category. (web site: www.umt.edu.pk)

3.3. Surveyed Population

School of Business & Economics (SBE) of University of Management & Technology (UMT) is one of the top business schools amongst the various business schools of private sector universities. Since the purpose of study is the identification and importance of various elements of Human Intellectual Capital (HIC) of the business school, so the surveyed population or the frame of the sample is the faulty of the SBE of UMT.

3.4. Sampling Technique

A convenient random sampling technique was used and the final sample size comprises of 20 full time faculty members representing 51.3 percent of the total population. The business school's full time faculty includes research associates, lecturers, assistant professors, associate professors and full professors.

3.5. Variables and Analysis

The questionnaire focused on seven main factors of Human Intellectual capital (HIC) of the business school. Every factor itself comprised of several variables. Complete detail of the main factors along with their variables is as follows:

Faculty & Qualification factor is measured in terms of

- Number of full time faculty and its qualification
- Presence of part time faculty and its qualification
- Presence of PhD and foreign qualified faculty
- Academic achievement of the faculty members
- Joining of new faculty members resulting as an increase of intellectual assets of the school

Incentives to Faculty is determined by

- Incentives being given to the faculty for their research and publications
- Timely and proper disbursement of salaries to the employees as a reward for their commitment and loyalty
- Faculty members having any distinction/award from HEC or any other body for his/her achievement
- Faculty members' ability to become leader (in bringing new ideas and taking initiative)
- Number of faculty members rated outstanding as a reward for their contribution towards imparting knowledge

Training, Research & Development is gauged using

- Training sessions for each faculty member (technical as well as behavioral)
- Years of professional/ industrial experience
- Faculty members involved in translating market needs into strategies and goals of university
- Knowledge sharing hours spent by faculty members with each other
- Faculty members involved in professional training/consultancy

Academic Supporting Staff's performance is judged through

- Their role in accomplishment of the goals

Culture is seen as

- By creating best practices and having a repository effect on IC processes of the business school
- Rewarding employees for knowledge sharing of academic support activities
- Promoting an environment of knowledge sharing within the organization

The Role of Senior Management is determined by

- Senior management support for the success of knowledge sharing, creating, and application processes
- The Leadership commitment of the senior management as it is critical for the success of knowledge management (KM) processes
- Its keenness and supportive of enhancing competency level of faculty and staff

Student Enrolment as a parameter of success and growth of the business school is found through

- The induction of new students in all the schools' programmes being offered
- By participation of students in different research oriented tasks
- By the pursuit of students for higher education (from undergraduate to graduate)

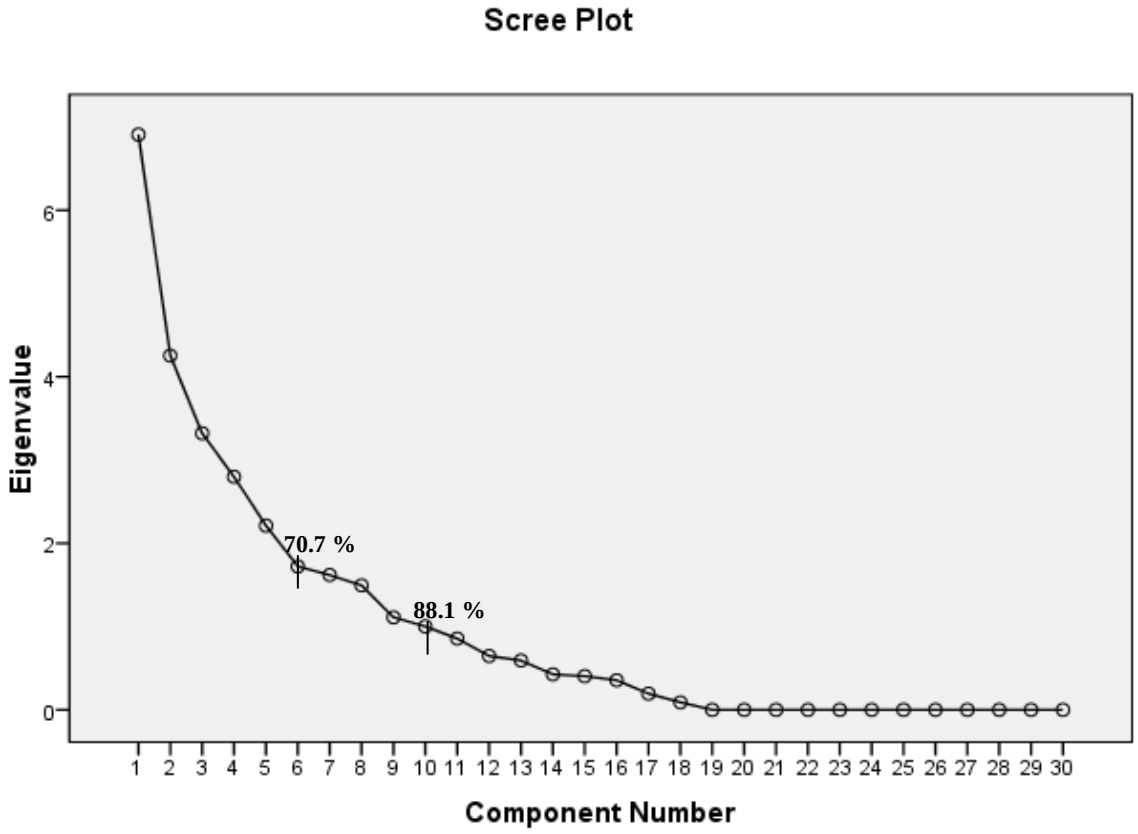
Here in this study, the factor analysis is applied on the explanatory variables with the main objective of selecting the most important one. The result of the factor analysis are provided in the Table-1 along with the communalities (in the last column) showing the percentage of variance explained by common factors and percentage of variance (in the heading row) showing the relative importance of these factors. The author has used the correlation matrix and principal component method for factor extraction with no rotation of the axis for ease in interpretation. All of these communalities are greater than 0.73.

Note that table-1 is placed in the Appendix.

The most important decision is the selection of factors to be taken. Malhotra [2007] is suggesting a dozen of methods and opines to use as many of them simultaneously.

Figure 1 is showing a Scree Plot for the analysis which may be used for the selection of factors. The plot is suggesting a 6 factor analysis which is explaining mere 77% of the total variation present in the data. Increasing the number of factors to 10 increases this percentage up to 88.1% which is quite sufficient and acceptable.

Figure-1: Scree Plot



3.6 Interpreting Factors

Interpretation is facilitated (supported) by identifying the variables that have large loadings on the same factor. The factor can then be interpreted in terms of the variables that load high on lt.

Factor-1:

In this factor, loadings are highest for the senior management support in helping the cause for the success of knowledge sharing, creating, and application processes and importance of incentives being given to faculty for their research and publications. The corresponding communality values are also more than 90% have been explained by the extracted common factors. As we have already mentioned, that the common factors identified among successful Intellectual Capital projects were senior management support along with motivational incentives for knowledge workers for their performance (Bhaskar and Kalyan, 2007). So, this factor may be named as senior management support driven factor. The remaining indicators, for this factor does not have sufficient communality powers to take into consideration.

Factor-2

Factor loadings are highest for training sessions, technical as well as behavioral for each faculty member. Communality powers for both the variables are 83% and 95% respectively and are quite sufficient for profiling. As it is indicated in the aforementioned literature that the arrangements of technical and behavioral trainings for the knowledge management users are necessary, in order to ensure the successful competition of IC projects (Bhaskar and Kalyan, 2007). So, this factor may be profiled as training driven factor. No other variable could be taken seriously from the remaining list of variables.

Factor-3

Factor loading are the highest for the faculty members involved in professional consultancy. The corresponding communality value is 89% which is again quite sufficient. As IC processes involve major investments in a wide spectrum of areas related to knowledge capture, storage, value addition,, distribution and finally educating

employees about the benefit of knowledge creations and sharing (Davenport, 2000), so this factor may be termed as consultancy driven factor.

Factor-4

For this very factor the loading is highest for the foreign qualified faculty for the business school and is explained 92% by the extracted common factor. So this factor may be characterized as faculty qualification driven.

Factor-5

The importance of number of full time faculty members is the variable for which the factor loading is highest after the importance of foreign faculty for business school variable, whose communality power is quite strong and explained 85% by the extracted common factor. Since the core area of this research were full time faculty members of the business school which were the respondents of this study as well , so this study was predominantly built on the views and perceptions of full time faculty members of the business school, who are also the principal knowledge workers of the school. This an alignment with the views expressed by (Raub, 2004) who emphasized on 'key organizational factors' who should be targeted for the identification and success of IC activities. So this factor must be labeled as full time faculty driven.

Factor-6

The next highest loading for the factor are the two variables, namely, the significance of presence of PhD faculty for business school and the faculty members turn out in last six months. Both of the above mentioned variables are having high communality powers and are explained 93% and 94% by the extracted common factors respectively. Although these factors may seem to be different from each other, in fact they are not. If the presence of PhD faculty is quite significant then their retention in the business school is also vary important. So this factor may be classified as the faculty retention driven.

Factor-7

This factor has the highest loading for the variable comprising of number faculty members rated outstanding in student feedback is carrying weight. The corresponding communality power is 94% which is again quite significant. So this factor may be categorized as student feed back driven.

Factor-8

The highest loading for this factor is for the variable comprising of faculty members doing PhD as a part of their academic achievement. The communality in the last column of the table-1, for the variable, stands at 88%. So this factor may be labeled as academic achievement driven factor.

Factor-9

This factor has the highest loading for the variable, 'creating best practices has a repository effect on IC capital processes of the business school. Since the most significant factors found by the researchers, was organizational and cultural issues associated with user motivation to share and use knowledge (Alavi and Leidner, 1999), so it was experienced that promoting a culture of knowledge sharing within the organization, rewarding employees for knowledge sharing, and creating a "best practices" repository influence on IC processes (Barna , 2003). Hence this factor must be term as culture driven.

Factor-10

The last and the only candidate for the factor's label is, 'faculty members having the ability to be come leader (in bringing new ideas and taking initiative) are important for the business school. The corresponding communality stands at 87% which is quite enough for this factor to be considered important. So, this factor may be termed as leadership driven.

This finishes the interpretation of the extracted factors. Hence, the factor analysis converted the given 30 highly correlated Human Intellectual Capital (HIC) related characteristics into 10 mutually exclusive, duly sorted common factors, shown in Table-2

Table 2: Factors' Profile

Factor No.	Factor's Name
1	Senior management support driven
2	Training driven
3	Consultancy driven
4	faculty qualification driven
5	Full time faculty driven
6	Faculty retention driven
7	Student feed back driven
8	Academic achievement driven
9	Culture driven
10	Leadership driven

It is now quite easy to identify the most important elements of Human Intellectual Capital (HIC) of School of Business &Economics (SBE) of University of Management & Technology (UMT). Moreover, the analysis has provided us the other important factors in decreasing order of importance. Senior management support has topped the list. SBE of UMT has taken considerable steps to motivate the faculty members at both individual and group levels towards the process of creating and distributing knowledge. The organization provides better pay packages than those of similar activities and standards. Apart from the salary, there are number of incentives for positive contributions in the knowledge activities. The non-PhD members are always encouraged to complete doctoral program. The institute, sometimes, even bears the financial burden of PhD programs undertaken by few faculty members, who enroll in the SBE M Phil leading to PhD program. An appreciable amount of incentive facilities are being provided to the faculty members in order to increase knowledge activities in the community. Nominees to

seminars, external programs and conferences are also provided to the members. There are also monitory incentives for publications of papers in national and international journals and edited course materials published by the organization. The faculty members, however, feels the prime movers for writing articles and books are peer recognition and annual job appraisal.

The next important element of HIC factor analysis provided, is regarding training. Apart from faculty development programs, SBE of UMT sends selected faculty members to specialized training programs from time to time. Such specialized inputs help the faculty adapt to new technologies and changes in the management systems and thereby increasing the Intellectual Capital of the SBE.

The next important element of HIC is the involvement of different faculty members in providing the consultancy to the different external firms. This is also quite regularly done by the SBE faculty and therefore becomes responsible in enhancing the intellectual ability of faculty.

The fourth important element is faculty qualification. One can deliver the goods only if he/or she is capable of delivering that goods. A very considerable amount of attention is provided to the faculty's qualification by the management at SBE. Always try to select the best from the whole lot and therefore again becoming responsible to increase the Human Intellectual capital (HIC) of the school.

Full time faculty is the next important element related to HIC in the list. Since the core area of this research were full time faculty members of the business school which were the respondents of this study as well , so this study was predominantly built on the views and perceptions of full time faculty members of the business school, who are also the principal knowledge workers of the school. This an alignment with the views expressed by (Raub and Wittich, 2004), who emphasized on 'key organizational factors' who should be targeted for the identification and success of IC activities. Thus this factor is given a vital attention at SBE of UMT.

The next important determinant relating to HIC in the list is faculty retention. A very few faculty members have left the SBE in the last few months due to the above mentioned steps. So the intellectual asset at SBE is very much retained.

The next important element of HIC at SBE is arrangement of regularly conducted feedback of its faculty. This keeps the faculty alert to maintain the best and up to date knowledge in them selves to survive and prosper for longer periods of time. The SBE faculty has been maintaining the outstanding feedback for quite some time.

The next important element of HIC of SBE in the list is the academic achievement of the full time faculty. Much has already been said in this regard while explaining the first element which is about senior management support for the faculty at SBE.

The next important element of HIC of SBE at UMT is cultural related. Since the most significant factors found by the researchers, was organizational and cultural issues associated with user motivation to share and use knowledge (Alavi and Leidner, 1999), so it was experienced that promoting a culture of knowledge sharing within the organization, rewarding employees for knowledge sharing, and creating a “best practices” repository influence on IC processes (Barna , 2003). At present SBE of UMT is processing most of the above mentioned things.

The next important element of HIC of SBE is the plate form to provide leadership. The following statement taken from the website of UMT is a clear reflection of their policy towards leadership;

University of Management and Technology's mission is to prepare a new breed of leaders, courageous, sincere individuals with the intellectual abilities, cross cultural versatility, practical skills and ethics needed to operate in today's business world.

So this was the list of important factors relating to Human Intellectual Capital (HIC) of SBE of UMT revealed, after conducting the factor analysis using SPSS by the author.

4. Conclusion

The present study will be useful to identify the most important elements of Human Intellectual Capital (HIC) of School of Business & Economics (SBE) of University of Management & Technology (UMT). There are several main areas identified where Human Intellectual Capital (HIC) is found. Top management support is critically important as it has direct influence on the stocks and flow of knowledge. Training, research and development of the faculty are another important area Human Intellectual Capital (HIC) that needs to be addressed. Full time faculty's qualification and its professional excellence matters a lot. This is very important for a business school to retain its full time faculty, especially when it has invested quite heavily on their improvement and intellectual growth. So faculty retention is very important for the business school to maintain its Human Intellectual Capital asset.

Academic achievements, as a part of faculty's growth and learning, at business school are very vital to increase the Human Intellectual Capital. Much importance needs to be provided for the incentives given to the faculty for their valuable contribution in research and publications. Timely and proper disbursement of monitory rewards to the employees has a definite impact on their commitment and loyalty. Faculty members having the ability to become leader (in bringing new ideas and taking initiative) are significant.

The role of academic supporting staff is very vital for the accomplishments of the goals. Finally promoting a culture of knowledge sharing within the organization has a great influence in Intellectual Capital Processes of business school.

5. Limitation of the Study

The current study is only focusing on the identification of the main elements of Human Intellectual Capital (HIC) of a business school. In future the author is intending to determine how these elements of Human Intellectual Capital (HIC) are affecting the performance of the business school.

Appendix

Table-1: Component Matrix											
Human Intellectual Capital Indicators	**Components**										**Communalities**
	6	2	3	4	5	6	7	8	9	10	
	23.026	14.178	11.069	9.329	7.374	5.74	5.394	4.981	3.702	3.337	
The importance of number of full time faculty members	0.33	0.207	-0.416	0.372	0.423	-0.333	0.047	0.058	0.265	-0.128	0.846
The qualification of the full time faculty is an important factor to be considered.	0.395	0.521	-0.234	-0.222	-0.153	0.277	-0.032	-0.155	0.266	-0.032	0.728
The presence of part-time faculty is also very significant.	0.469	0.285	0.328	-0.42	0.35	-0.105	0.205	0.361	-0.031	0.129	0.909
Foreign qualified faculty for a business school is very important	-0.096	-0.102	-0.337	0.571	0.199	-0.427	0.17	0.36	0.274	0.048	0.917
The presence of PhD faculty is very significant for a business school.	0.323	0.361	-0.056	-0.112	-0.001	0.543	-0.208	0.308	0.449	-0.208	0.927
The faculty members doing PhD as a part of their academic achievements is quite significant.	0.407	0.386	0.239	-0.105	-0.27	-0.072	-0.31	0.543	-0.103	0.139	0.88
Joining of new faculty members (in last six months) is having an impact.	0.495	-0.487	0.389	-0.202	-0.254	-0.091	0	0.151	0.129	-0.428	0.97
Number of faculty members left (in last six months) is something that is alarming and needs to be addressed.	0.245	-0.252	-0.028	0.416	0.416	0.54	0.012	0.351	-0.206	-0.103	0.939
Importance of incentives being given to the faculty for their research and publications.	0.741	0.062	0.382	0.034	-0.163	0.044	0.17	-0.356	-0.047	-0.104	0.896
Timely and proper disbursement of salaries to the employees has a definite impact on their commitment and loyalty.	0.625	0.287	0.122	0.441	0.197	-0.003	-0.295	-0.269	-0.177	0.023	0.912

Do you think faculty members having any distinction/award from HEC or any other body is significant.	0.565	-0.026	0.165	0.468	-0.28	0.305	0.363	0.111	-0.187	0.087	0.924
Faculty members having the ability to become leader (in bringing new ideas and taking initiative) are important.	0.192	-0.659	0.091	0.096	-0.039	-0.048	-0.499	0	0.076	0.354	0.872
Number of faculty members rated outstanding in student feedback is carrying weight.	0.323	0.266	-0.549	0.27	-0.346	0.048	0.397	0.035	-0.331	0.058	0.944
Training sessions for each faculty member (technical) are necessary.	0.076	0.507	0.425	0.342	-0.033	0.414	0.083	-0.098	0.231	0.396	0.959
Training sessions for each faculty member (behavioral) are necessary.	-0.236	0.678	0.305	0.082	0.354	-0.064	-0.085	-0.239	0.152	0.046	0.834
Years of professional/ industrial experience are of considerable importance.	0.494	0.263	0.337	0.268	-0.03	-0.242	0.415	0.126	0.055	-0.157	0.773
Faculty members involved in translating market needs into strategies and goals of university is a matter of great satisfaction.	0.556	-0.228	-0.322	0.356	-0.252	-0.182	-0.287	-0.055	0.263	0.191	0.88
Knowledge sharing hours spent by faculty members with each other is important.	0.644	0.206	-0.358	-0.221	-0.296	-0.12	0.1	-0.243	0.004	-0.109	0.817
Faculty members who have professional association/membership are of value.	0.57	-0.219	0.452	0.268	-0.108	-0.067	-0.369	-0.079	-0.272	-0.011	0.882
Faculty members involved in professional training/consultancy are of greater value.	0.329	-0.467	0.51	0.016	0.29	-0.048	0.37	0.042	0.084	0.262	0.888
The role of the academic support staff is very important for the accomplishment of the goals.	0.531	0.575	-0.045	-0.232	-0.011	-0.405	-0.074	0.259	-0.123	0.136	0.94

Promoting a culture of knowledge sharing within the organization has a great influence on Intellectual Capital processes of business school.	0.734	0.237	-0.476	-0.232	0.057	0.117	-0.029	-0.019	-0.005	0.005	0.894
Rewarding employees for knowledge sharing of academic support activities has an impact on IC processes.	0.512	-0.03	-0.592	0.074	0.433	0.15	0.04	-0.308	-0.047	0.124	0.943
Creating best practices has a repository effect on IC processes of the business school.	0.292	-0.381	0.119	0.137	-0.617	0.013	0.18	-0.059	0.39	0.068	0.837
Senior management support is very helpful for the success of Knowledge sharing, creating, and application processes.	0.798	0.128	0.239	-0.304	0.16	-0.159	-0.029	-0.061	0.068	0.18	0.895
Leadership commitment of the senior management is also critical for the success of KM processes.	0.617	0.005	0.212	0.412	0.229	-0.082	-0.293	-0.075	-0.03	-0.42	0.923
Senior management is keen and supportive of enhancing competency level of faculty and staff.	0.284	-0.647	0.15	-0.114	0.363	-0.05	0.257	-0.233	0.16	-0.007	0.815
New student enrolment reflects the success and growth of the business school.	0.452	-0.493	-0.161	-0.357	0.309	0.335	0.018	0.172	0.014	-0.003	0.838
Participation of students in different research oriented tasks is a healthy activity.	0.585	-0.233	-0.131	-0.625	0.073	-0.077	0.026	-0.092	-0.073	0.065	0.834
The pursuit of students for higher education (from undergraduate to graduate) is a kind of business school's achievement.	0.406	-0.514	-0.565	0.083	-0.123	0.02	-0.06	0.197	-0.053	0.092	0.824

Extraction Method: Principal Component Analysis.

a. 10 components extracted.

Bibliography

Alavi, M., & Leidner, D. (1999). Knowledge Management System: Emerging views and practices from the field. *32nd Hawaii International Conference on System Sciences.* IEEE Computer Society.

Ashour, A. S. (2000). Knowledge capital management, reinventing management paradigm in the 21st century. *12th International Conference on Training and Management Development Towards Arab Learning Organization*, (pp. 25-27). Cairo.

Barna, Z. (2002). *Knowledge Management: A Critical E-Business Strategic Factor.* San Diego State University: Unpublished Masters Thesis.

Basu, B., & Sengupta, K. (2007). Assessing Success Factors of Knowledge Management Initiatives of Academic Institutions – a Case of an Indian Business School. *The Electronic Journal of Knowledge Management , 5* (3), 273 - 282.

Bennet, D., & Bennet, A. (2002). *The rise of knowledge Organization* (Vol. 1). Springer.

Bierly, P., & Chakrabarti, A. (1996). Generic knowledge strategies in the US pharmaceutical industry. *Strategic Management Journa* , 123-35.

Bontis, N. K. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital* , 85-100.

Bontis, N. (1999). Managing organizational knowledge by diagnosing intellectual capital: framing and advancing the state of the field. *International Journal of Technology International Journal of Technology* , 433-62.

Brennan, N., & Connell, B. (2000). Intellectual capital: current issues and policy implication. *Journal of Intellectual Capital* , 206-40.

Canibano, L. S. (2004). Measurement, management and reporting on intangibles. State of the art . 81-113.

Choo, C. W., & Bontis, N. (2002). *The Strategic Management of Intellectual Capital and Organizational Knowledge.* Oxford University Press, New York, NY.

Elena, S. (2004). Knowledge management and intellectual capital in European universities.

Grant, R. (1996). Toward a knowledge-based theory of the firm . *Strategic Management Journal* , 109-22.

Holsapple, C., & Joshi, K. (2000). An investigation of factors that influence the management of knowledge in organizations. *Journal of Strategic Information Systems , 9* (2/3), 235-61 .

Joia, L. (2000). Measuring intangible corporate assets: linking business strategy with intellectual capital. *Journal of Intellectual Capital* , 68-84.

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard-measures that drives performance. *Harvard Business Review* , 71-9.

Marques, D. a.-S. (2003). Validating and measuring IC in the biotechnology and telecommunication industries. *Journal of Intellectual Capital* , 332-47.

Marr, B., Gupta, O., Pike, S., & Roos, G. (2003). Intellectual capital and knowledge management effectiveness. *Management Decision* , 771-781.

McGregor, J., Tweed, D., & Pech, R. (No. 1, 2004). Human capital in the new economy: devil's bargain? *Journal of Intellectual Capital , 5* (1), 153-164.

Nahapiet, J. a. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review* , 242-66.

Namasivayam, K., & Denizci, B. (2006). Human capital in service organizations: identifying value drivers. *Journal of Intellectual Capital , 7* (3), 381-393.

Nerdrum, L., & Erikson, T. (2001). Intellectual capital: a human capital perspective. *Journal of Intellectual Capital , 2* (2), 127-135.

Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation.* Ohio, USA: Oxford University Press.

Osborne, R. L., & Cowen, S. S. (1995). Business schools must become learning organizations – or else. In R. L. Osborne, & S. S. Cowen, *The Learning Organization* (Vol. 2, pp. 28–31). Cleveland, Ohio, USA: MCB University Press .

Petty, R. a. (2000). Intellectual capital literature review: measurement, reporting and management. *Journal of Intellectual Capital* , 155-76.

Ramirez, Y., Lorduy, C., & Rojas, J. A. (2007). Intellectual capital management in Spanish universities. *Journal of Intellectual Capital , 8* (4), 732-748.

Raub, S. a. (2004). Implementing Knowledge Management: Three Strategies for Effective CKOs. *European Management Journal* , 714-724.

Sa´nchez-Can˜ izares, S. M., & Guzman, T. L. (2007). Organizational culture and intellectual capital: a new model. *Journal of Intellectual Capital , 8* (3), 409-430.

Sanchez, M. P., & Elena, S. (2006). Intellectual capital in universities Improving transparency and internal management. *Journal of Intellectual Capital , 7* (4), 529-548.

Seleim, A., Ashour, A., & Bontis, N. (2004). Intellectual capital in Egyptian software firms. *The Learning Organization , 11* (4/5), 332-346.

Selen, W. (2001). Learning in the new business school setting: A collaborative model. *The Learning Organization , 8* (3/4), 106-111.

Senge, P. M. (1990). *The Fifth Descipline: The Art and Practice of the learning Organization.* New York: Currency Dobleday.

Slaughter, S., & Leslie, L. L. (1997). *Academic Capitalism: Politics, Policies and Entrepreneurial University.* Baltimore: MD: Johns Hopkins University Press.

Slaughter, S., & Rhoades, G. (2004). *Academic Capitalism. in the new economy.* Baltimore: MD: The Johns Hopkins University Press.

Spender, J. (1996). Making knowledge the basis of dynamic theory of the firm. *Strategic Management Journal* , 45-62.

Stewart, T. A. (1997). *Intellectual Capital: The New Wealth of Organizations.* Double Day, New York, NY.

Sveiby, K. E. (1997). The intangible asset monitor. *Journal of Human Resource Costing and Accounting* , 73-97.

Zhou, A. Z., & Fink, D. (2003). The intellectual capital web A systematic linking of intellectual capital and knowledge management. *Journal of Intellectual Capital , 4* (1), 34-48.