# The Level of Disclosing Intellectual Capital in the Gulf Cooperation Council Countries

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#### **Abstract**

Intellectual Capital (IC)is considered as a management style in operating a firm's assets. The level of disclosing intellectual capital in theGulf Cooperation Council Countries differs from one company to the other due to its voluntary nature and the lack of appropriate regulations. Therefore, this study aims to measure the level of disclosing intellectual capital in the Gulf Cooperation Council Countries. Extensive literature review was carried out and a checklist of 78 items was developed to measure the level of disclosing intellectual capital for the companies that are listed in the Gulf Cooperation Council Bourses. The findings show that the overall level of intellectual capital disclosed in theGulf Cooperation Council is 73% but it varies across the sampled firms according to countries and industry type. The study recommends that the GCC Bourses have to develop a formal guideline for intellectual capital disclosure in order to create harmony in disclosing information and equality between users of financial information and at the same time to enhance firms' value.

**Keywords:** Intellectual Capital; Human Capital; Structural Capital; Relational Capital; Voluntary Disclosure.

### 1. Introduction

Financials and financial crisis have increased the need for disclosing relevant information for decision makers (Al-Khadash & Al-Sartawi, 2010). Intellectual capital is considered as one of the main components of a knowledge-based economy, which will enhance firm value, competitive advantage, improve internal controls and increase the capability of managing firm assets (Ranani&Bijani, 2014 and Al-Musalli & Ismail, 2012).

Accordingly, fully disclosed information plays an important role in reducing the agency problem by representing managements' transparency and accountability in conducting a business (Al-Sartawi et al. 2016 b and Al-Sartawi, 2016). Moreover, disclosing information about intellectual capital reflects the ability of the firms in managing their assets to create long-term competitive advantage (Ranani&Bijani, 2014) by increasing the percentage of knowledge-based investments. Stewart (1997) defined Intellectual capital as the knowledge that transforms raw materials and makes them more valuable. Moreover, Mavridis, (2005) stated that intellectual capital is the way of dealing with assets. In certain developing countries such asthe Gulf Council Countries(GCC), disclosing intellectual capital is still not highly used by organizations and has not been formally regulated. Intellectual capital would contribute in enhancing corporate governance level through changing management style toward structuring and formation of relevant strategies and policies to protect investors and users of financial information and reducing the agency problem (Al-Musalli&Ismail,

2012). Nevertheless, there are a limited number of researchesfocusing on the intellectual capital, especially in developing countries.

Accordingly, the objective of this study is to highlight the level of disclosing intellectual capitalin the GCClisted companies as a voluntary disclosure. The GCC countries, as a part of the developing capital market, have paid a lot of attention to improving its regulations by developing corporate governance policies (Al-Sartawi, 2015; Al-Sartawi & Sanad 2015; Al-Sartawi, 2013 and Hamdan & Al-Sartawi, 2013); encouraging voluntary disclosure; and investing in human resources andinformation systems. Based on its geographical location, the GCCis considered as the heart of the Middle East, providing quick and efficient access to every market in the region. The GCC always aims at attracting domestic and foreign investors using several incentives, such as having no personal or corporate income tax. It offers a hundred percent foreign ownership of real estate in almost all sectors and business assets. Moreover, the GCC as a financial center has become an intended destination for a lot of foreign investors (AlMatrooshi et al. 2016 and Al-Sartawi et al. 2016 a). As a result, these investors seek forqualified and talented human resources and developed infrastructure of information systems to invest in a certain country. This infrastructure of talented human resources and developed information systems is provided through focusing, increasing, educating the society and disclosing about the level and the importance of investingin intellectual capital. Therefore, the research objective can be developed as a research question as follows:

What is the level of Intellectual Capital (ICL) disclosed by the GCClisted companies?

Based on the findings of this study, the researcher proposes recommendations that might aid standard setters and regulatory bodies in the GCC to establish strategies that would encourage knowledge-based investment by the listed companies and governments. Furthermore, such researchis not only significant for preparers and users of financial information, but will also encouragepolicy-makers inthe GCC Countries to adopt the concept of knowledge-based economy. Additionally, managers might realize the importance of intellectual capital and adopt better practices in managing their assets. This will result in better provision of information to stakeholders and enhance the characteristics of employers.

### 2. Literature Review

Attracting or developing talented employees and adopting advanced technological infrastructure will increase the capability of preparing and disclosing relevant information for decision makers, which will eliminate the information asymmetry and agency problems (Al-Sartawi, 2017). Therefore, disclosing such information will decrease the costs of agency, defend the investors' rights and improve their confidence', improve data transparency and eliminate monitoring costs and information asymmetry (Yue-Duan, et al, 2007; Mousa&Desoky, 2012; and Sanad & Al-Sartawi, 2016). Similarly, Basuony& Mohamed (2014) argued that firms tend to disclose more information causing a reduction in information asymmetry and agency costs.

Furthermore, disclosure in general is a very crucial source of information to all internal and external, shareholders and stakeholders as it helps them to make appropriate financial decisions (Alhazaimeh et al, 2014&Botosan 1997). Besides, financial disclosure which contents information about intellectual capital serve as an indicator forfirms'ability in maintainingits value by developing and applying proper procedures to manage the assets such as corporate governance mechanisms (Madhani, 2014; Hamdan et al. 2013b and Al-Sartawi et al. 2013).

The theory of intellectual capital developed through time from different researchers such as Sveiby (1997) and (Edvinsson and Malone, 1997). These researchers established the foundations of the way in which intangible factors determine the success of companies. Their respective models—"Intangible Assets Monitor" (IAM) (Sveiby, 1997) and "Skandia Navigator" (Edvinson and Malone, 1997)—are representative of the assumptions, principles, and foundations of the intellectual capital standard theory. However, later contributions from other academics and specialists have developed and refined the standard theory

As mentioned by Boudreau & Ramstad, (1997) Intellectual Capital can be defined as business intangible value that includes people, natural relationships and technological infrastructure. Additionally, intellectual capital considered as a tactical component of the real capital which makes the companymore attractive and competitiveness (Sharifi&Bijani, 2014).

Based on the above definition of intellectual capital we can summarized that intellectual capital considered as the key component for any future successes (Sharifi&Bijani, 2014). Furthermore, intellectual capital cane be introduced as the accumulated pool of knowledge about recourses and users of these resources which includes physical and intangible assets, management style, internal and external communication lines, human skills and abilities in adding values or solving problems and technological infrastructure (Sharifi&Bijani, 2014 and Boudreau & Ramstad, 1997)

Accordingly, nowadaysintellectual capital can be isolated into three parts. The first one is Human Capital which focuses on the availability of skills, ability, talent and know-how of employees that is necessary to apply the firm's strategy. The second one is Structural Capital which emphasizes the availability of knowledge applications, databases, information systems, processes and other infrastructure required to support the process of executing strategies. Finally, the third one is the Relational Capital which concentrates on the outside linkage of the company with suppliers and customers that empowers it to secure its merchandising transaction in an easy way(Stewart, 1997).

Due to the openness of the economies of the GCC countries with the global economy, the huge developments in the technological infrastructure and the variety of external linkage of the company with suppliers and customers thatthe GCC countries are being more concerned about the attributes that could attract the investors such as clear regulation, corporate governance, transparency and technological infrastructure(Al-Sartawi & Hamdan 2012; Al-Sartawi & Hamdan 2013 and Hamdan et al. 2013 a).

However, empirical studies on IC have been growing since 1988 but in GCC are still at an early stage and it is not very popular in those countries (Al-Musalli&Ismail, 2012). On the other hand, a study that was conducted in Bahrain- by Sarea and Alansari (2016) revealed that investing in intellectual capital will decrease earning management practices because the existence of talented employees and the style of management applied will lead the company to be more interested in real revenues rather than manipulating the numbers.

Additionally, a study conducted by Al-Musalli&Ismail (2012)examined the relationship between board of directors' characteristics (educational level diversity, nationality diversity, board interlocking, board size and number of independent directors) and intellectual capital performance in a sample of 147 banks in Gulf Cooperation council (GCC) countries for the period 2008-2010 revealing that IC performance of GCC listed banks is low because of the negative relationship with theindependent directors in GCC listed banks.

Therefore, this study would be an important contribution in filling the gap in the current literature by determining the level of intellectual capital disclosed by the companies that are listed in the GCC Bourse.

### 3. Methodology

## **3.1 Sample Selection**

The empirical study of the current research depends on a sample which includes all the listed companies in the GCC Bourses for the year 2015. However, the required data for calculating ICL were gathered from 274 companies out of 289 companies listed under the financial sector. Table (1) shows the sample distribution according to country and industry type (Banking, Insurance and Investment) as the structure of the financial sectors and their regulations in the GCC are similar. Moreover, the financial sector is the largest sector due to the size of funds invested in it.

**GCC Countries**  $\overline{QAT}$ KSA UAE **OMA**  $B\overline{A}\overline{H}$ KUW **TOTAL** Industry IN EX \*Sample % 36 9 80 29% 12 8 7 0 Banks 0 0 0 8 0 0 0 80 5 5 5 0 7 0 92 Insurance 35 1 35 0 0 0 1 91 33% 7 57 7 113 Investment 21 0 13 0 4 0 11 2 10 103 38% Total 54 2 92 0 26 0 17 0 23 2 **73** 285 11 100% \*Per country 92 **17** 21 274 52 26 66

**Table 1:** Sample distribution according to country and industry

The researcher used the companies' websites, GCC Bourses' websites and financial reports to gather the data required for this study. Some of the companies were excluded from the study because their websites were not functioning and some of them were excluded because they did not have published financial reports on their websites. In addition, a few companies were suspended from trading in the bourses. Table (2) shows the reasons for excluding companies from the selected sample.

**Table 2:** Reasons of Excluded Companies

Item	Number	Percentage
Listed companies in GCC Bourses under financial sector	285	100%
Suspended from GCC Bourses	(5)	(2%)
Company's website was not working	(1)	(0.4%)
The company has no website	(1)	(0.4%)
No published financial reports on website	(2)	(0.7%)
Closed companies	<u>(2)</u>	(0.7%)
Total companies included in the sample	274	96%

#### 3.2 Level of Intellectual Capital Disclosure

Different researchers have used different indexes to measure ICL. For example, Al-Musalli& Ismail (2012); Abdulsalam et al. (2011); Goh (2005) and Ho and Williams (2003) used the Value Added Intellectual Coefficient (VAIC) method developed by Pulic (1998). On the other hand, Ho et al. (2012) developed an index based closely on the work of Bukh et al. (2005) and Rimmel et al. (2009) in order to measure ICL. They hadassigned 27 items to the employees, 14 items to the customers, 5 items to information technology, 8 items to processes, 9 items to research and development and 15 items to strategic statements. The current study used an ICL index consisting of 78 items. The researcher selected these items based on previous studies' checklists (Ho et al.,2012; Bukh et al., 2005; and Rimmel et al.,2009).

The ICL index is binary-based, that is, if a company reported an item which was included in the checklist it received a score of 1 and if the company did not report an item, a score of 0 was allocated. Accordingly, the Index for each company was calculated by dividing the total earned scores of the company by the total maximum possible scores appropriate for the company. The formula below shows the way of calculating the ICL index:

$$ICL = \sum_{i=1}^{\infty} \frac{di}{n}$$

Where:

di:disclosed item equal to 1 if the company met the checklist item and 0 otherwise. n: equals the maximum score each company can obtain.

<sup>\*</sup> Included – Excluded

### 4. Data Analysis

### 4.1 ICL Index

As mentioned before the level of intellectual capital is measured by dividing the total score of every company by the maximum probable scores. In general, themaximum score of IC level is 78 points.

 Table 3:
 Frequency of Level of Intellectual Capital per Item

Item	N. companies	*Index	Item	N. companies	Index	Item	N. companies	Index	Item	N. companies	Index
1	252	0.92	25	229	0.84	49	151	0.55	73	251	0.92
2	231	0.84	26	202	0.74	50	212	0.77	74	232	0.85
3	242	0.88	27	150	0.55	51	119	0.43	75	213	0.78
4	231	0.84	28	243	0.89	52	219	0.80	76	204	0.74
5	227	0.83	29	182	0.66	53	189	0.69	77	244	0.89
6	238	0.87	30	230	0.84	54	182	0.66	78	260	0.95
7	246	0.90	31	217	0.79	55	199	0.73			
8	167	0.61	32	200	0.73	56	186	0.68			
9	181	0.66	33	191	0.70	57	121	0.44			
10	223	0.81	34	230	0.84	58	188	0.69			
11	192	0.70	35	114	0.42	59	191	0.70			
12	210	0.77	36	121	0.44	60	184	0.67			
13	227	0.83	37	114	0.42	61	183	0.67			
14	198	0.72	38	228	0.83	62	223	0.81			
15	224	0.82	39	136	0.50	63	145	0.53			
16	230	0.84	40	193	0.70	64	217	0.79			
17	226	0.82	41	181	0.66	65	218	0.80			
18	231	0.84	42	167	0.61	66	124	0.45			
19	216	0.79	43	210	0.77	67	183	0.67			
20	161	0.59	44	208	0.76	68	182	0.66			
21	218	0.80	45	218	0.80	69	204	0.74			
22	191	0.70	46	173	0.63	70	211	0.77			
23	247	0.90	47	242	0.88	71	249	0.91			
24	162	0.59	48	213	0.78	72	211	0.77			

<sup>\*</sup>Calculated by dividing total scores of each item by total maximum scores which was 274

From the above table, the range of ICL per item was between 42% (114 companies applying items 35 and 37) to 95% (260 companies applying item 3). Therefore, it can be concluded that the majority of the GCC companies are disclosing a good level of IC through their financial reporting. Besides, the level of IC was calculated using the frequency of the number of items achieved by each company, as reported in table 4.

**Table 4:** Grouping companies by number of items achieved

Items achieved	Frequency companies	Percentage companies (%)	Content index
23	1	0.36	29%
24	2	0.73	31%
26	1	0.36	33%
27	2	0.73	35%
32	3	1.09	41%
33	1	0.36	42%
34	2	0.73	44%
36	1	0.36	46%
39	4	1.46	50%
41	1	0.36	53%
42	1	0.36	54%
43	3	1.09	55%
44	5	1.82	56%

4.7	2	0.72	F0.64
45	2	0.73	58%
46	1	0.36	59%
47	5	1.82	60%
48	6	2.19	62%
49	7	2.55	63%
50	5	1.82	64%
51	5 9 9	3.28	65%
52	9	3.28	67%
53	10	3.65	68%
54	14	5.11	69%
55	10	3.65	71%
56	9 8	3.28	72%
57	8	2.92	73%
58	13	4.74	74%
59	9	3.28	76%
60	13	4.74	77%
61	9	3.28	78%
62	17	6.20	79%
63	20	7.30	81%
64	8	2.92	82%
65	13	4.74	83%
66	8	2.92	85%
67	8 5	1.82	86%
68	10	3.65	87%
69	11	4.01	88%
70	12	4.38	90%
71	4	1.46	91%
Total	274	100	

Table 3 shows the frequency of companies according to the total items disclosed. The range of the disclosure index lies between 29% (23 items) and 91% (71 items). One company (0.36% of the sample companies (1/274)) obtained the lowest total disclosure level. On the other hand, fourcompanies (1.46% of the sample companies) obtained the highest level which was 91% (71 items). Additionally, the highest frequency of disclosure level was 81% (63 items) achieved by 20 companies (7.30% of the sample). Therefore, it can be summarized that 261 (95%) of GCC companies are considered as having a satisfactory level of IC disclosure in their financial reporting.

Accordingly, the researcher conducted a multiple comparison (as shown in tables 5and6) between the companies to check whether the level of IC will be different from one country to the other in the GCC and between the different types of industries.

**Table 5:** Multiple Comparisons of the Level of Intellectual Capital Disclosure (Per Country)

Country	N.	Mean	S.D	KSA	Kuwait	Bahrain	Qatar	Oman	UAE
KSA	52	0.69	0.08		.05619*	.0445	. 1122*	. 0224	. 0623*
	32	0.09	0.08		(.014)	(.159)	(.001)	(.444)	(.003)
Kuwait	66	0.74	0.13	05619*		01168	.05604	03375	. 00620
	00	0.74	0.13	(.014)		(.703)	(.092)	(.233)	(.753)
Bahrain	21	0.73	0.19	0445	.01168		. 06772	02207	. 07189
	21	0.73	0.19	(.159)	(.703)		(.090)	(.538)	(.545)
Qatar	17	0.80	0.13	1122*	05604	06772		08980*	04983
	17	0.80	0.13	(.001)	(.092)	(.090)		(.019)	(.123)
Oman	26	0.71	0.19	0224	.03375	.02207	.08980*		. 03996
	20	0.71	0.19	(.444)	(.233)	(.538)	(.019)		(.141)
UAE	92	0.75	0.9	0623*	00620	07189	.04983	03996	
	92	0.73	0.9	(.003)	(.753)	(.545)	(.123)	(.141)	
Total	274	0.73	0.12						

Post- Hoc test: LSD value above and Sig. value between brackets.

<sup>\*</sup> The mean difference is significant at the 0.05 level.

Results show that the level of intellectual capital disclosure differed from one country to the other in the GCC. The lowest level was (69%) in KSA and the highest one was (80%) in Qatar. Moreover, some of differences were positive and significant like the difference between UAE and KSA (0.0623) which means that the level of disclosure in the UAE is significantly much better than KSA. Meanwhile, some of differences were negatively significant such as the differences between Oman and Kuwait (-0.03375) indicating that the level of disclosure in Kuwait is significantly much better than in Oman.

Furthermore, the researcher conducted a comparison between companies according to industry type (Banking, Insurance and Investment). Table 6 concludes that the banks report the lowest level when compared to investment and insurance companies, while the investment disclose the best level when compared to the other types of industry. However, the differences between means were not significant.

Table 6:	Multiple Comparisons of the Level of Intellectual Capital Disclosure
	(Per Industry Type)

Industry	N.	Mean	S.D	Banks	Insurance	Investment
Banks	80	0.72	0.12		.02204	.02728
	80	0.72	0.12		(.248)	(.142)
Insurance	91	0.74	0.11	02204		.00523
	91	0.74	0.11	(.248)		(.770)
Investment	102	0.74	0.14	02728	.00523	
	103	0.74	0.14	(.142)	(.770)	
Total	274	0.73	0.12			

Furthermore, the results show that the overall level intellectual capital disclosure was 73% which is considered as a good level of disclosure by the GCC companies.

### 5. Conclusion and Recommendations

Intellectual capital indicates the ability of firms in managing their own assets and at the same time reflects their value (Ranani&Bijani, 2014). Accordingly, the current research focuses on the level of intellectual capital disclosure in the GCC Countries. A checklist of 78 items was adapted to measure thelevel of intellectual capital disclosed by GCC companies. The results showed that the total level of intellectual capital was 73%. Consequently, it can be concluded that the listed companies in the GCC countries bourses present a good level of intellectual capital disclosure (more than 50%) based on Wallace's (1988) index disclosure classification. The current research extended the previous studies conducted in the GCC Countries by using a wider checklist, using a larger sample (274) and conducting a comparison study among the all GCC countries. As a result, this paper is important as it seeks to contribute empirical evidence to the literature regarding the intellectual capital in developing countries in general and particularly in the GCC Countries. Additionally, this paper also provides empirical evidence to interested parties such as users, preparers, regulators and researchers inthe GCC countries about the importance and the benefits of the intellectual capital in creating firms value and maintaining its future sustainability byattracting investors and achieving real profits.

Therefore, the research recommends that the GCC Bourses have to develop a formal guideline for intellectual capital disclosure to create harmony in disclosing information in order to create equality between users of financial users and at the same time to enhance firm's value.

The research was conducted using the financial sector in the GCC Countries, thus, the sample size is small when compared to the total companies listed. Furthermore, while some companies did not have a website, some companies' websites were not functioning. Hence, the information was not completely provided. Therefore, the study findings may not be generalized. The researcher, as a result, suggests having a further study that investigates the relationship between intellectual capital and performance.

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Inte	ellectual Capital Level (ICL) Index		
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