
Utilizing Employee Intellectual Capital through Enterprise Social Network: A Case Study on Saudi Airlines Aviation Company

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Abstract: This Research aims to clarify the fact of intellectual capital investment by using Enterprise Social Networks in organizations, as a study on the Saudi Airlines Aviation Company. In addition, this research aims to define the role which technology, social capital and organizational culture play it in the organization in this field. This research aims to define the obstacles of intellectual capital investment by using Enterprise Social Networks. The analytic method was used to achieve this goal, whereas this researcher is using questionnaire to collect raw data. The research community consists of organization's employees (14000 employees), a random sample was selected from community of study and it was about (1500 employee). This rustles show that, there are several positive indicators which reflects that, the factor of intellectual capital investment by using Enterprise Social Networks in Saudi Airlines Aviation Company is going well. In the other side, the research found that, there are several factors related to intellectual capital investment by using Enterprise Social Networks which need to be activated for the purpose of using these networks effectively to be able to play its role in documenting, sharing and dissemination of knowledge through it. The research also found that, the best way for Saudi Airlines Aviation Company to earn more benefits is by increasing the use of this network among employees generally and between middle and high management particularly, this shall also include all employees and retired employees to learn from their experience. The research also found that, the employees are not having the awareness or they weren't trained on using and browsing the social media networks, they also are not having the idea about its role or its importance in the company, they don't use it as a tool for training and developing the knowledge of employees. In addition, the company doesn't provide the support whether it physical or mental for the employees to share the knowledge generally or by using networks particularly. The results shown that there are no technology obstacles or frequent breakdowns and this factor is not considered obstacle to use it. One of the most important recommendations that the research found it, verbalizing the training and raise awareness of employee about the role of social media networks in intellectual capital investment, it recommends to increase the use Enterprise Social Networks by employee in the company and support them physically and mentally by using determined system and make an strategy and guideline to clarify the system and how to use the network of company. Finally, the researcher recommends that, more studies that relating to this subject shall be made because it is not available widely in Arabic society.

Keywords: The Saudi Airlines Aviation Company–Knowledge Management–Intellectual Capital– Enterprise Social Networks.

1. Introduction

The technological developments in mid of the 90s made a great changes and a real revolution in the world of communication, the thing which makes people in the community live in a virtual community that control on their interests and use up their

time, one of these interests that is considered the most important one is the social communication which social networks provided it to them through the internet, this world has a role on social ,national identity and social communication in the community.

In this day the person considers his\ her virtual community one of his\ her interests, it maybe dominate on a real social side and on his\ her daily jobs, it also has another role which takes shape in encouraging the internal cooperation and knowledge sharing among employees in the organization, as a virtual community in the scope of the organization particularly and between other organizations generally.

In this view and according to the fast developing, Saudi Airlines Aviation Company must seeking hardly to convey world of airlines by this modern tool and using Enterprise Social Networks to share, save and circulate the intellectual capital investment between its employee and other companies; so it will support the communication with its travelers specially in a project of denationalizing and transfer the company from governmental institution to a private company.

1.1 Research Issue

The researcher finds that, intellectual capital investment between employee of the Saudi airlines Aviation Company by using Enterprise Social Networks is very important to raise the standard of sharing the experience and ideas. In addition, the role of these factors leads to support the ability of competition and promote quality of services which provided to public in this area and the world. From mentioned point we can say that; research issue main question is "What is the fact of intellectual capital investment in the Saudi Airlines Aviation Company by using Enterprise Social Networks?"

1.2 Research Objectives

This research seeks to know the fact of intellectual capital investment by using Enterprise Social Networks in business organizations and set the light on Saudi Airlines Aviation Company as a study of statues. In the light of the research issue about using Enterprise Social Networks in business organizations, this research aims to achieve the main goals of the study as follows:

To identify: the facts of intellectual capital investment by using Enterprise Social Networks in Saudi Airlines Aviation Company, to achieve the main goal of this study's secondary goals are issued as follows:

- Knowing the fact of using Enterprise Social Networks in the Saudi Airlines Aviation Company by employees
- Studying the role of organizational culture, intellectual capital investment, technology and the main obstacles that prevent the investment of intellectual capital by using Enterprise Social Networks in Saudi Airlines Aviation Company.
- Providing real and scientific commendations that participate in the best applying of investment intellectual capital by using Enterprise Social Networks in the Saudi Airlines Aviation Company.

1.3 Research Importance

Scientific interest of this research represented in using Enterprise Social Networks in business organizations in intellectual capital investment and activating factors of active sharing for employee in business organizations which helps in achieving goals of organizations positively and this can be achieved through teamwork. The second role of this research clarifies the importance of Enterprise social networks in documenting knowledge and dissemination it in business organizations and helping these organizations in the best abusing Enterprise Social Networks in it.

1.4 Research Questions

The research seeks to find an answer for the main question about it:

"What is the fact of intellectual capital investment in the Saudi airlines Aviation Company by using Enterprise Social Networks?"

To find an answer for the main question of the research; secondary questions is issued from the main question as follows:

- What is the fact of using Enterprise Social networks by the employee of Saudi Airlines Aviation Company?
- What is the role of Enterprise Social Networks in intellectual capital investment in Saudi airlines Aviation?
- What is the role of organizational culture, social capital, technology and the main obstacles that prevent using Enterprise Social Networks in Saudi Airlines Aviation Company?

2. Theoretical Frame of Research

Knowledge Management

Primordially, the human seeks to promote his life and discovers several secrets of the world for living in stability manner. In the beginning, he lives on collecting fruits, hunting, building a simple shelter, agriculture and hand madding tools of living, this life developed by accumulation the knowledge, experience and experiments through the past years.

(Al kbessy, 2004:56) explained that, the concept of "Knowledge" appeared in the past and developed by the complexity of life and the developing of education manners.

The first king in history who discovers the importance of education was Hammurabi (479 BC) when he built the first school in Mesopotamia, about 2000 Year prehistoric. After that, the Chinese philosopher (Confucius - 551–479 BC) renewed the invitation of knowledge dissemination when he said "The Knowledge is the only way to develop and secular success" He explained the importance of knowledge in the world.

Knowledge Types

Study of (Basrda, 2006) found that, The Knowledge types divide into two main types as follows:

First: Explicit Knowledge means "The knowledge which people can share it with each other, it includes data and information which people can get and store it"

Second: Tacit Knowledge means "Knowledge inclusively which some people know it and not available to someone for knowing it or get it"

Research definitions

The Saudi Airlines Aviation Company

It is global- level includes air- transport to passengers and shipping the commercial goods (Saudi Arabian Airlines Guide, 2014).

Knowledge

(Rebhi Aleyan) sees that knowledge like a high creativity of the human which comes from the vital interaction between the knowledge system elements from human experiences, material and technical capabilities, researching, developing, studies etc... He also said that, the knowledge is generated in a realistic act and it also forming itself in new organizations; one of its features that its available for everyone in the case of the individual has the desire to obtain it by make a full effort especially (people who have the capability of creative thinking) experience or knowledge in a particular subject. (Aleyan, 2008).

Knowledge Sharing

This knowledge sharing can be defined as a communication between two or more sharers. This operation includes an amount of available knowledge in the knowledge resource; through describing the communications with one or more of the knowledge receivers the operation's outcomes are considered as a creation of the knowledge (Usoro, et la, 2007).

Enterprise Social Networks (ESN)

(Emily Mk Logln) defined this definition as the use of the organization to the internal and external social media to connect people who have common internal similar activities between

them. the social instruments may help employees to obtain this knowledge and resources they are needed to work in an effective way. Social Networks projects include using Internet Programs in the work and house as well as third party which includes Social Media Platforms to develop the communication and cooperation between employees. The source is www.techtarget.com, Retrieval Date is 11\11\2014.

Intellectual Capital

It can be defined according to the definition by the organization for cooperation and economic development (1999) as "The economic value of two categories which are considered intangible assets of a particular organization: Regulatory (Structural) Capital and Human Capital (Guthrie, 2001).

Research Type

This research aims to study "The fact of intellectual capital investment by using Enterprise Social Networks in businesses organizations" as a study on Saudi Airlines Aviation Company, this study is based on determining the dimension of knowledge sharing fact in Enterprise Social Networks for the quality and type of use. Furthermore, defining the Intellectual, technological and social dimensions of knowledge sharing. In addition, this research refers to the effect of organizational culture and organization effect on employees, which focus on encouraging, supporting and educating employees about the importance of intellectual capital and invest it in general through Enterprise Social Network.

The researcher identified the most important obstacles that may affect in investment Intellectual capital by using Enterprise Social Networks. He also identified the differences in the level of use of Enterprise Social Networks in Intellectual Capital investment according to the multiple variables to the individuals who are used as a sample in this research. These variables include type, age, career level, number of year's experience, and finally the level of individuals education.

This research falls under the framework of descriptive analytical studies which aims to "Explaining and analyzing characteristics of the determined group or situation that identification adjective controls it, to get adequate and accurate information" (Al- Hayzan 20:1998) .

3. Research Method

The researcher used the descriptive survey method which depends on studying the fact or phenomenon as it existed in the reality. This method also describes it in an accurate way and expressed it in a qualitatively or quantitatively expression" (Abeddat et al, 2000: 219).

The survey means that, collecting information or data about a particular phenomenon and analyzing these data to reach the final results which are using the survey in it. The survey is considered as a part from the descriptive method in research, it similar to other descriptive studies which not control in treating, the survey method is studying the verbalize as it was founded in the nature, this method depends on collecting Data about phenomenon to describe it qualitatively and quantitatively" (Al-Nahry & Al-serahy 2002:218)

The researcher selects this method (descriptive method) because it is suitable for the research and to achieve its purposes. The researcher also uses this method to know the answers which contributes in describe and analysis the responses results by individuals who they are used in the research as a sample. The researcher makes that to identify "the reality of investment Intellectual Capital by using Enterprise Social Networks in business organizations" specifically the Social Network which is applied and used in the Saudi Airlines Aviation Company.

Research limits

Objective limits:

Objective limits exist in this research are limited to, the reality of investment Intellectual Capital in Enterprise Social Networks in business organizations for Saudi Airlines Aviation Company.

Spatial limits:

Spatial limits in this research are limited to main cities which includes the biggest number of Saudi Airlines Aviation Company employees which arranged in descending order according to the number of employee in main cities as follows: Jeddah (Headquarters of Company) Riyadh, Al Dammam and Al-Medina.

Time limits:

The researcher made the field survey during the summer of 2016 from 15\06 to 01\08.

Research Community

Research community consists of Saudi Airlines Aviation Company’s employees (14000 employees) distributed in eleven company sections. They include (Male and female) and who whether existing in the list and working in Saudi Airlines Aviation Company during this research. Researcher is collecting data by using data collecting tools (The questionnaire) in research time.

Research Sample

The researcher used a random sample from the employees of the Saudi Airlines Aviation Company; researcher is depending on choosing a Stratified Relatively Random Sample from the original community of study. This is based on divide the sample in secondary strata in its basics and specifications and makes it suitable for strata which making it equal in its size for the similar classes in research community; Because this way provides the proportional representation for characteristics of community (Abdu Al-Hammed 214:2005).

The research sample also includes “The appearance of units from any part of the community, it helps in reducing the difference in the sample and it provides a high level of accuracy” (Al-Abed & Azzmi 153:1999). The number of sample is (1500 employee) from Saudi Airlines Aviation Company, the community research sample includes the employees of Saudi Airlines Aviation Company. Total number of community research is (1500) employees distributed in four main areas in KSA (Jeddah– Riyadh- Dammam and Al-Medina) the questionnaires in these areas was for 1500 employees, but only 1202 questionnaire are completed.

The mentioned tables below define that:

Table No. (1) Static of simple random sample of research community

Persons of research community sample	Gender	Research community	No. of simple random sample	No. of answers
Saudi Airlines Aviation Company employees	Male	13500	1150	912
	Female	500	350	290
Total		14000	1500	1202

Table No. (2) Recurrences and percentages of research community individuals according to gender

Gender	Number	Percentage %
Male	912	75.8%
Female	290	24.1%
Total	1202	100%

Table No. (3) Recurrences and percentages of research community individuals according to ages

Age	Number	Percentage%
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From (22) To (30)	257	21.7%
From (31) To (40)	384	31.9%
From (41) To (50)	336	27.9%
From (51) and more (51+)	225	18.5%
Total	1202	100%

Table No. (4) Recurrences and percentages of research community individuals according to Educational Qualification

Educational Qualification	Number	Percentage%
General Education	126	10.4%
Secondary Specialist	178	14.8%
High Education	610	50.7%
Postgraduate Studies	288	23.9%
Total	1202	100%

Table No. (5) Recurrences and percentages of research community individuals according to nationality

Nationality	Number	Percentage%
Saudi	1006	94.4%
Non- Saudi	341	5.6%
Total	1202	100%

Table No. (6) Recurrences and percentages of research community individuals according to function

Function	No.	Percentage%
Employee	892	74.2%
Section head	220	18.3%
Managing director	69	5.7%
general Director	18	1.4%
Assistant of general director	3	0.24%
Total	1202	100%

Table No. (7) Recurrences and percentages of research community individuals according to the number of years of the service

service years	No.	Percentage%
Less than (6) Year	256	21.7%
From (6) to (10) Year	214	17.1%
From (11) to (15) Year	190	14.5%
From (16) to (20) Year	169	12.2%
More than (21) Year	373	34.5%
Total	1202	100%

Verity of Internal consistency of research tool

Based on the truth of methods of measures means the test has to be completely true in its results; which reflect the consistency of results when repeating the experiment. From this point, one of truth methods here depends on examining the consistency of research tools by accounting correlation coefficient of core degree with the total degree of research tool. For the purpose of examining the consistency of research tools I use correlation coefficient of "Berson" to find correlation coefficients; all correlation coefficients was positive and the statistical function at level of function (0.01) which provide high level of

Internal consistency of questionnaire tools and paragraphs of the herein research. The tables below show the details of this point.

Table No. (8) Correlation coefficients of Berson between the degrees of every factor and college-level of core which the factor belongs to it:

first core: The role of Social capital in intellectual capital investment through Enterprise Social Networks		second core: The role of knowledge sharing through Enterprise Social Networks in intellectual capital investment		third core: The role of organizational culture in intellectual capital investment through Enterprise Social Networks		Fourth core: The role of technology and its effects on intellectual capital investment through Enterprise Social Networks		Fifth core: The main obstacles in intellectual capital investment through Enterprise Social Networks	
No.	Correlation coefficients	No.	Correlation coefficients	No.	Correlation coefficients	No.	Correlation coefficients	No.	Correlation coefficients
1	0.600**	1	0.451**	1	0.411**	1	0.813**	1	0.834**
2	0.562**	2	0.424**	2	0.432**	2	0.751**	2	0.447**
3	0.451**	3	0.752**	3	0.684**	3	0.654**	3	0.618**
4	0.436**	4	0.784**	4	0.630**	4	0.595**	4	0.789**
5	0.576**	5	0.658**	5	0.749**	5	0.688**	5	0.868**
6	0.513**	6	0.704**	6	0.396**	6	0.684**	6	0.781**
7	0.507**	7	0.786**	7	0.585**	7	0.672**	7	0.498**
8	0.646**	8	0.500**	8	0.808**	8	0.790**	8	0.800**
9	0.734**	9	0.676**	9	0.400**	9		9	
10	0.451**	10	0.743**	10	0.626**	10		10	
			0.506**						

** Static function point 0.01

It is noticed from the previous table that correlation coefficients of every phrase and the total degree of the core which they are belonged to are all represented in statistical function at level of function (0.01) which provide high level of Internal consistency of questionnaire. The researcher also extracted the correlation coefficients between the degree of each core and total degree of questionnaire.

The next table explains correlation coefficients between the degree of each core and total degree of questionnaire:

Table No. (9) Correlation coefficients between the degree of each core and total degree of questionnaire

The core	Correlation coefficients
role of Social capital in intellectual capital investment through Enterprise Social Networks	0.884**
role of knowledge sharing through Enterprise Social Networks in intellectual capital investment	0.894**
role of organizational culture in intellectual capital investment through Enterprise Social Networks	0.845**
role of technology and its effects on intellectual capital investment through Enterprise Social Networks	0.792**
The main obstacles in intellectual capital investment through Enterprise Social Networks	0.661**

** Static function point 0.01

From mentioned table above we find that, the points of Correlation coefficients for six cores in college-level of questionnaire are high points whereas it were between (0.661-0.894), all of these were static function at level of (0.01) that's mean the questionnaire has a high degree of truth.

Stability of research tool

Stability of research tool is discussing the ability of research tool to get the same data from the research sample even the questionnaire is rebated many times. To make sure from firming of tool research, the researcher used “Cronbach Alpha” equation
The mentioned table below explained the reliability coefficients which resulted from using this equation.

Table No. (10) Reliability coefficients of tool research according to its different cores

Core	No. of phrases	Cronbach Alpha coefficient
The role of Social capital in intellectual capital investment through Enterprise Social Networks	10	0.907
The role of knowledge sharing through Enterprise Social Networks in intellectual capital investment	11	0.929
The role of organizational culture in intellectual capital investment through Enterprise Social Networks	10	0.883
The role of technology and its effects on intellectual capital investment through Enterprise Social Networks	9	0.886
The main obstacles in intellectual capital investment through Enterprise Social Networks	8	0.869
Overall the questionnaire	48	0.963

From mentioned table above we find that; the points of reliability coefficients of questionnaire cores are high points whereas it were between (0.896 - 0.929), total of reliability coefficients (0.963)

These high points from reliability coefficients refer to good quality of questionnaire to apply it on research and the ability of dependence on its results and trust in it.

4. Research results

Research has many results obtained by research methods used on research individuals, research sample, of the Saudi Airlines Aviation Company employees.

Based on the foregoing, those results which represent the answers for the research questions are detailed with an arrangement according to the arrangement of the research questions and objectives.

First: results related to research objectives and questions

1- This research achieved the aim of recognizing the actual using for Enterprise Social Networks in business organizations and researching them as a case study on Saudi Airlines Aviation Company. Research achieved this aim through research results. One of the most important of those results is the use of Enterprise Social Networks in Saudi Airlines Aviation Company with a high percentage reached two thirds or (75%) of Saudi Airlines Aviation Company employees. Moreover, research also found that 25% of employees do not care for Enterprise Social Networks.

2- Aim of recognizing the role of social capital in investing the Intellectual capital through Enterprise Social Networks was achieved. Research results found that about 70% of Enterprise Social Networks users were the employees of Saudi Airlines Aviation Company who see that network has an important role in creating new friendships in the various sectors of the company. Furthermore, this aim is also achieved through recognizing that only 49% of Enterprise Social Networks users with a neutral response degree see that there is no any encouragement from their directors at work to share knowledge by using Enterprise Social Networks in the company.

3- Research achieved the aim of knowing the role of knowledge share through Enterprise Social Networks in business organizations in investing Intellectual capital through its results. The most important of those results were that Enterprise Social Networks conducted its important role by documenting implicit knowledge of experts and long-

serving employees in the company and shifting this knowledge to explicit and documented knowledge.

4- Research achieved the aim of recognizing the Organizational culture role in investing the Intellectual capital Enterprise Social Networks in Saudi Airlines Aviation Company through its results. The most significant of those results refers to that 76% of Enterprise Social Networks users see that directors of the administration of the network must hold workshops to enlighten of the importance of investing knowledge and expertise through Enterprise Social Networks.

5- Research also achieved the aim of recognizing the role of technology and its effect in investing Intellectual capital through Enterprise Social Networks in business organizations and as a study case on Saudi Airlines Aviation Company through the results of this research. The most important of which was that all employees who are included as research sample support the availability of Enterprise Social Networks for all employees by 83%. Moreover, the result shows that 65% of users see that they find technical support to any technical problems they face. This also proves that there are a few technical problems in the network.

6- Research achieved the aim of recognizing the main obstacles to investment Intellectual capital through Enterprise Social Networks in business organizations and as a study case in Saudi Airlines Aviation Company. This research achieved this aim through its results which refer that 76% of Enterprise Social Network users see that the non-availability of the network for retired employees is considered as one of the main obstacles of making use of their Intellectual capital and their expertise which retire with them from the company. The results also found that 52% of Enterprise Social Networks users see that they are neutral about the non existence of moral or material support by top management.

5. Research recommendations

Based on research results, researcher sees that there may be a proposal of a set of recommendations which can play a role in developing the investment of Intellectual capital by Enterprise Social Networks in business organizations and make it available for the private sector employees in business sector as follows:

1- Conducting more studies about Enterprise Social Networks in business organizations and its role in knowledge management and the various types of business sectors to enable those results to be universalized widely and not restricted only on research sample.

2- Research confirmed the necessity of Saudi Airlines Aviation Company to enhance the enlighten aspect of the importance of Enterprise Social Networks in the company and its role in knowledge sharing to investment Intellectual capital perfectly. Moreover, increase the enlighten aspect through holding workshops and educational shows about making use of Enterprise Social Networks to gain and share knowledge through this network.

3- Research confirmed the importance of enhancing the establishment of specialized groups includes the main jobs of the sectors compose of the company and those groups must be in an organized pattern. Moreover, research recommends with improving the quality of the special groups and developing the quality of circulating knowledge through them to make use of this knowledge as possible to enable the employees to share knowledge with each others.

4- Research recommends with the importance of management role to enhance trust level between employees with respect to circulate Intellectual capital and knowledge share through Enterprise Social Networks in company and establish a system for moral and material incentives to encourage knowledge share in company generally and use them for Enterprise Social Networks for this purpose too specially.

5- Research recommends with the importance of establishing a guideline and announced strategy by Saudi Airlines Aviation Company management for Enterprise Social Networks in Saudi Airlines Aviation Company.

6- Research confirms the importance of making use of Enterprise Social Networks to develop the means of training and specially developing for specialized professions and generally for administrative professions for employees which represent the majority of the employees in the company through establishing educational channel, live interview

and online courses to contribute in developing the knowledge, intellectual and cultural content in Enterprise Social Networks.

7- Research recommends with the necessity of making Enterprise Social Networks available for retired employees to reduce losing implicit knowledge because of their retirements and activates the contribution of their knowledge and expertise in investing and developing Intellectual capital in company that lead to the development of the company's performance generally.

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