

## Investigation of Intellectual Capital and Effective Factors on it in Agricultural Bank of Kohgiluyeh and Boyer Ahmad Province

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**Abstract: Background and Objective:** intellectual capital is a topic that is formed in the shadow of economic, social and managerial recent development, and its purpose is trying to use of knowledge effectively in management and upgrading and improving the organizations, and it has attracted much attention in today's environment. This study has been designed and implemented to evaluate intellectual capital and effective factors on it in Agricultural bank of Kohgiluyeh and Boyer-Ahmad Province. **Materials and methods:** This descriptive-analytic study has been performed as cross-sectional. Its statistical population included all employees, including managers, experts and other employees of the branches and centers of Agricultural Bank of Kohgiluyeh and Boyer-Ahmad province, and it is done in September 2012. 183 employees were participated in this project and completed the questionnaire. Collected and coded information was analyzed using SPSS, Ver. 17 software. **Findings:** Mean and standard deviation of amount of intellectual capital in Agricultural bank of Kohgiluyeh and Boyer-Ahmad province have been 49.3 (9.6), in gamut of human capital, they have been 49.3 (9.1), in gamut of costumer (relational) capital have been 49.8 (11.9) and in gamut of structural capital have been 48.3 (12.4). Age, job tenure and education have had significant relationship with amount of intellectual capital. In this study, other variables such as gender and management post have had no significant relationship with intellectual capital. **Conclusion:** These scores indicate the middle and low level of intellectual capital and its scopes in Agricultural bank of Kohgiluyeh and Boyer-Ahmad province and planning appropriately to upgrade and improve that is necessary.

[Enayat Mohamadpour, Rahim Ostovar, Abdol Khalegh Gholami, Mosa Ramroudi, Syed Kamaluddin Hosseini, Yaghub Ansari, **Investigation of Intellectual Capital and Effective Factors on it in Agricultural Bank of Kohgiluyeh and Boyer Ahmad Province.** *J Am Sci* 2013;9(8s):15-18]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>. 4

**Keywords:** intellectual capital, effective factor, Agricultural bank, Iran.

### 1. Introduction

Intellectual capital actually includes intellectual seeps and human inventions and innovations. Jurists have different opinions about its nature and rights. Some consider it as moral rights and some consider that as personal rights and they believe that it is only for protecting personal profits of innovator and it is not heritable and transferable. In other words, in these rights, protection of an innovator and creator is considered. Intellectual capital provides a base of new sources that organization can compete through that. Buntis (1999) believes that the intellectual capital consists of effort for effective use of knowledge (final product) versus information (raw material). This concept, for the first time, was introduced in 1991, when Scania Swedish Company began implementing a series of innovative scientific methods for the special attention to its intangible assets. If we consider the growth of hardware power

as an important indicator, we must say that until 2021, when we celebrate thirties of concepts of intellectual capital, computers will achieve the capacity equivalent to human brain's capacity. At that time how the value of the company assets can be evaluated? Studies in this case show that the most important assets are the intangible assets. Intellectual capital includes knowledge, information, intellectual asset and experience that can be situated for wealth. Intellectual capital is collective mental ability or key knowledge as a set (Buntis, 1996). Atafar and Alitaghian (1387) say that intellectual capital, knowledge management, and intangible assets are three important factors indetermining the value of an organization. Intellectual capital is an issue that has formed in the shadow of the economic, social and managerial recent developments and it has attracted much attention in today's environment. With the advent of the knowledge-based economy,

intellectual capital has become increasingly important.

Monavarian and Gholipour (1385) also argue that organizations are entering into knowledge-based economy at which the knowledge and intangible assets are recognized as the most important competitive advantage of organizations and how to use it has an important effect on the success and survival of organizations. Intangible assets have an important effect on the performance and implementing the organization strategies: so recognition, measurement and management of these assets have special important. Situation of intellectual capital is considered less in governmental or private organizations in our country. According to the require of Agricultural bank of Kohgiluyeh and Boyer-Ahmad province, as one of the mother and pioneer banks in banking industry of country, for equipping to latest management knowledge of the world, investigating and determining the amount of intellectual capital was essential. This study was designed and implemented to evaluate intellectual capital and effective factors on it in Agricultural bank of Kohgiluyeh and Boyer-Ahmad Province.

## 2. Materials and methods

This descriptive-analytic study has been performed as cross-sectional. Its statistical population included all employees, including managers, experts and other employees of the branches and centers of Agricultural Bank of Kohgiluyeh and Boyer-Ahmad province during the studied time from the beginning of Feb. until the end of March in 2013. Present employees have been 188 people but 5 people didn't complete the questionnaire. 183 questionnaires were completed appropriately and were analyzed and evaluated. Researchers referred to the workplace of employees and after explaining the research project, they have asked them to complete the questionnaire.

Research tool was a standard questionnaire that was used in Scania Swedish industrial Company for the first time and then it was used in other institutes and also it has been adjusted and native for our country by Moghimi et al in 1385. Questionnaires were five-item likert-type. Suitable reliability and stability have had 0.87 and it has been included 53 questions. Thus, situation of intellectual capital and its components has been studied in three gamut: human, structural and relational from the perspective of employees of Agricultural bank of Iran in province level. Scoring and interpretation of score was done as following: the score of options was considered as: completely agree 5; agree 4; neither agree nor disagree 3; disagree 2; completely disagree 1 and score of each person was calculated

from 100. Scores were assigned as following: Score between 74 and 100 indicate high level of intellectual capital in organization. Score between 47 and 74 shows that intellectual capitals are in middle level in your organization.

Score less than 47 indicate that intellectual capitals require upgrading in the organization. After distributing the questionnaire among the statistical sample, collected and coded information was prepared for entering to computer. For analyzing data, central and dispersal indicators and frequency tables and Chi-squared test was used.

## 3. Findings

Age of studied people with a minimum of 21 years and a maximum of 54 years has had a mean of 36.1 and standard deviation of 11.5 years. In this study, 37 people (20 %) of employees were under age of 30 years and 91 people (50 %) were between 30-40 years and 68 people (30%) were under age of 40 years. 174 people (95%) of studied employees of Agricultural bank of Kohgiluyeh and Boyer-Ahmad province were male and 9 people (5%) were female. Five people of them had not answered the questionnaire; 51 people (28%) of studied employees had diploma degree and less; 29 people (16%) had associate degree and 68 people (55%) had Bachelor (undergraduate) degree and more. From employees of Agricultural bank of Kohgiluyeh and Boyer-Ahmad province, 25 people (20%) have had a job tenure less than 10 years and 101 people (55%) have had a job tenure between 10 and 20 years and 46 people (25%) had a job tenure more than 20 years.

Age has had a significant relationship with intellectual capital and its gamut: structural capital, relational (customer) capital and human (trust) capital, so that young and old people were considered less score for intellectual capital and its dimensions. Relational capital has not had a significant relationship with gender. Although female employees have evaluated intuitively that the gamut of relational capital in Agricultural bank of Iran is low. Also, structural capital has not had a significant relationship with gender. Female employees were given more scores for the third gamut, structural capital. Human capital has had a significant relationship with employee education, so that the educated people have evaluated that the intellectual capital of Agricultural bank of this province is more. People with diploma degree towards the people with associate degree have evaluated the human capital less. And graduate and more have reported the lowest evaluation for human capital in bank. Intellectual capital and its three dimensions have not had a significant relationship with job tenure. Intellectual capital from the

perspective of studied employees has had a significant relationship with job tenure in the gamut of structural capital. In general, amount of intellectual capital in Agricultural bank of Kohgiluyeh and Boyer-Ahmad province from the perspective of studied employees has had a significant relationship with job tenure. Evaluation

of amount of intellectual capital has decreased with increasing job tenure. Intellectual has had a significant relationship with service postcapital in the gamut of human capital and customer capital. But the gamut of structural capital has not had a significant relationship with service post.

**Table 1:** Intellectual Capital and its three areas in Agricultural Bank of Kohgiloye and Boyer Ahmad Province from the standpoint of staffs, (score of 100) Yasuj, February 2012

Confidence Indices=0/95	The mean (SD)	Description	Row
(59.3 and 38.6)	49.3 (9.1)	Human capital	1
(52.1 and 37.6)	49.8 (11.9)	Customer capital	2
(61.4 and 35.7)	48.3 (12.4)	Capital structure	3
(59.1 and 39.9)	49.3 (9.6)	General intellectual capital	4

**Table 2:** Intellectual Capital and its three areas in Agricultural Bank of Kohgyloye and Boyer Ahmad Province from the standpoint of staffs, (Qualitative Evaluation) Yasuj, February 2012

High	Average	Low	Description	row
2 (1%)	119 (65%)	62 (34%)	Human capital	1
5 (3%)	121 (66%)	57 (31%)	Customer capital	2
5 (3%)	101 (55%)	77 (42%)	structure Capital	3
5 (3%)	104 (57%)	73 (40%)	General intellectual capital	4

**Table 3:** Intellectual Capital in Agricultural Bank of Kohgyloye and Boyer Ahmad Province from the standpoint of staffs, in terms of their age, Yasuj, February 2012

Test	Total	Medium and high Intellectual Capital	Low Intellectual Capital	Description
$\chi^2 = 5/75$ df=2 P < 0/03	37(100%)	17 (46%)	20 (54%)	Less than 30 years
	91(100%)	62 (68%)	29 (32%)	30 to 40 years
	55 (100%)	27 (49%)	28 (51%)	30 to 40 years
	183 (100%)	110 (60%)	73 (40)	Total

#### 4. Discussion and Conclusion:

Majority of employees have evaluated the intellectual capital and its dimensions middle and low. Amount of intellectual capital in Agricultural bank of Kohgiluyeh and Boyer-Ahmad province has been demonstrated the middle level of intellectual capital and its dimensions in Agricultural bank of Kohgiluyeh and Boyer-Ahmad province. Buntis (1999) says: the low intellectual capital means that your organization needs to improve in the field of intellectual capital and moderate intellectual capital means that your organization needs to plan in the field of intellectual capital. Thus, Agricultural bank of this province is located in the moderate level to low level and planning to upgrade it is necessary. In general, middle-aged people have considered most scores for intellectual capital and its gamut, and after that, people over 40 years old, and the lowest scores have been related to young people. This could be due to a low experience of young people and lack of complete familiarity with organization, and also lack of deployment in posts and the use of scores related

to that. Bahrami (1390) in his study at higher education also have considered the age as effective factor on evaluation the intellectual capital in employees of higher education [6]. Setaysh (1388) and Moshabaki (1385) have reported similar results. Gender has not had any significant relationship with intellectual capital and its dimension: human capital, customer capital and structural capital. Seraji Anvari (1384) and Shojaii (1389) have achieved similar result. But they have achieved that the evaluation of intellectual capital in higher education is significantly more in women. In our study population, number of women has been low and maybe if it was more, this difference in our study was significant. Generally, educated people have assessed that intellectual capital and its dimensions are more in bank which it is due to more social consciousness of educated people and having more material benefits. In most similar studies, same results have been achieved. Shojaii (1390), buntis (1999) and Stewart (1997).

In general, in this study, age, education, job tenure and management post have had a significant relationship with amount of intellectual capital and its dimensions. Amount of intellectual capital has reduced with increasing job tenure. In fact, age has a relationship with job tenure and both of these factors have has a significant relationship with intellectual capital and its three gamut. These results are consistent with most other studies, Afrazeh and Baeed Far (1386). Amount of intellectual capital in Agricultural bank of Kohgiluyeh and Boyer-Ahmad province from the perspective of studied employees in gamut of human capital, customer (relational) capital and also in gamut of structural capital and totally intellectual capital have had a significant relationship with service post. Managers have given more scores to intellectual capital and its dimensions. These findings also have showed significant relationship in similar studies, Setayesh (1388) and Buntis (1999). Its reason could be related to more knowledge and education, more experience, more material and moral incentives or all of these cases. Opinion of employees about ways to increase the intellectual capital of Agricultural bank of Kohgiluyeh and Boyer-Ahmad province included: Hold training courses to familiarize employees with the latest new technology of management, supporting the continuing education (higher education) of employees by managerial levels of bank, lack of employees club in order to familiarize more employees and their families together, entanglement and sever job loads with responsibility; Most studies have pointed to the subject of effect of employees knowledge of modern management concepts such as social capital, intellectual capital on improving amount of intellectual capital and therefore increasing efficiency in organization, Sayyed Naghavi (1391) and Rezaei (1389); in general, it can be concluded that more education, older age with more education which included middle-aged employees, has had significant positive relationship with intellectual capital and its dimensions.

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7/25/2013