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Investigating the Effect of Intellectual Capital on Agricultural Bank of YASUJ Branch

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ABSTRACT

In the present era of development rather than economic capital, human, physical and intellectual needs, we need to invest, because without this capital, the other investments will be made to improve organizational performance and thus lose their good quality and will be removed from the ideal case.
Given the importance of intellectual capital and its relationship with the organization as an important issue, in this study, a quantitative approach, the study uses a survey technique intellectual Capital: How big is the performance branch of the Agricultural Bank YASUJ?
The results suggest that there is a significant relationship between intellectual Capital (the human capital) with agricultural Bank. There is a significant relationship between intellectual capital (the capital the structural) with agricultural Bank. There is a significant relationship between Intellectual Capital (the capital of the customer) with agricultural Bank. There is a significant relationship between the total amount of intellectual capital with agricultural Bank. There is a significant relationship between age with agricultural Bank. But, there is a not significant relationship between work experience with Agricultural Bank.

KEYWORDS: organizational performance, intellectual capital, human capital, structural capital, relational capital.

INTRODUCTION

Problem Statement

in today's leading organizations and companies, knowledge's share is gradually increasing more than other sources so as continuity and profitability of many organizations and companies is related to knowledge. Therefore, as intangible assets and intellectual capital of organizations and companies become richer, better and faster they can achieve high levels of growth and development. The major challenge in this field is conceptualization, understanding, and evaluation of intellectual capital. Knowledge management helps organizations to use and identify their capacities and capabilities in order to attain knowledge-based economy.

By the middle of the twentieth century, it was thought that the main reason for the backwardness of developing countries is the lack of financial and physical capital. Therefore, developing countries often tried to obtain their financial and physical capital through different ways to compensate for their backwardness, which in turn, it resulted in increasing their affiliation and destructing political and economic foundations. However, experience has proved that physical and financial capital injection does not accelerate development in developing countries. Only those countries that have a strong administrative structure and efficient and specialist work forces can correctly use their financial and physical capital in the process of development. In today's economy, generating and developing wealth is mainly originated from intangible (intellectual) assets, and economic developments of the most successful organizations indicate that escalating value is based on intangible assets not physical assets (Shojaei et al., 2010, 22).

The elements of wealth production in the industrial economy periods were some physical and tangible assets such as land, labor, money, and machines, which led to producing wealth when these economic elements were combined. In the industrial economy, knowledge was not given much importance as a factor of production, but in the today's knowledge-based economy, intangible assets in the process of wealth production are considered more important than physical and tangible assets (Bontis, 1998, 3013). In other words, in knowledge-based economy, intangible assets are considered among the most important organizational assets, and the importance of such assets in potential success of organizations is more than tangible assets (Flam Holts et al., 2002, 201). In short, it can be said that intellectual capital founds the foundation of individual, organizational, and national competition.

Various organizations such as banks should strive so as to organizations create value and improve their performance through changing intellectual capital into tangible assets.

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Performance is the way of doing duties and assigned responsibilities. In other words, it indicates the behaviors associated with the individuals' career (Rajaeipor & Rahimi, 2008, 64). Performance should not encompass the past findings. In fact, performance is the way of a branch's competition that aspires to achieve its goals, and is a set of actions that individuals reveal in association with the career (Yu et al., 2009). Performance is usually measured by various criteria. In the present study with regard to the issue and population, that is Agricultural Bank staff of YASUJ branch, the criteria include four dimensions: growth, profitability, customer satisfaction, and consistency.

In the study, the dependent variable is organizational performance, which includes four dimensions (growth, profitability, customer satisfaction, and consistency). The independent variables include intellectual capital with dimensions such as human capital, structural capital and relational capital (client), as well as demographic or field variables such as education, work experience, marital status, and age.

The purpose of the research is to figure out the level of intellectual capital among Agricultural Bank staff of YASUJ branch and its effect on performance (growth and profitability) of the branch.

Research Significance

The concept of intellectual capital is suitable field for profitability of human and physical capital and is regarded as a way to achieve success. Managers and those who can create intellectual capital in an organization, they will make the way of organizational and occupational success smooth and improve performance of the organization. In traditional views, economic and physical capital and human resources played the most important role, but in the current world, intellectual capital is required more than economic and physical capital and human resources for development, since without the capital, use of other assets will not be optimal. As a result, the organization will lose its quality and its ideal state is removed. Given that the primary purpose of an organization is to improve its performance, and it will encounter failure without a good organizational performance, therefore, recognizing the factors affecting the performance of intellectual capital is important and necessary.

Theoretical Basics

Intellectual Capital

Stewart believes that intellectual capital is a set of knowledge, information, experience, intellectual assets, competition, and organizational learning that can be used to create wealth. In fact, intellectual capital of all staff covers their organizational knowledge and capabilities to create value added and sustained competitive advantages (Ghelich Li & Mashbaki, 2006, 130-145).

Benitez defines intellectual capital as a set of intangible assets (resources, capabilities, competition) obtained from organizational performance and value creation (Benitez, 1998, derived from Ghelich Li & Mashbaki, 2006, 130-145).

Advinson and Malone define intellectual capital as "information and knowledge applied to work to create value" (Vasylah, 2008, quoted from Dastgiri & Mohammadi, 2009).

Benitez and Holland, in their article in 2002, defined intellectual capital as "intellectual capital indicates a store of knowledge that exists in some points of time in an organization. The relationship between intellectual capital and organizational learning in this definition is taken into consideration (Benitez &Holland, 2008; quoted from Dastgiri & Mohammadi, 2009).

Ross et al. believe that intellectual capital is those assets that measure an organization's ability to create wealth. The property has not an objective and physical nature and is an intangible asset that organizational performance and relationships outside the organization are obtained using assets related to human resources. All these features create value within organizations and the values obtained cannot be exchanged because it is a purely local phenomenon (Ross et al., 2005; quoted from Dastgiri & Mohammadi, 2009).

At the end of 1990, several authors such as Brooking (1996), Advinson and Malone (1997), Stewart (1997) and Aswiby (1998) started to provide frameworks for us to understand intellectual capital, as well as easier implementation of the issues related to IC (e.g. measurement, disclosure, and reporting). Even though nuance difference can be seen in the frameworks, this variation causes large variances in the context of intellectual capital issues. The studies conducted about IC are placed at different levels (individual, inner-organizational, and outer-organizational levels). As a result, IC is not merely limited to the knowledge available for individuals, but it includes knowledge stored within organizational databases and business processes and communications (Aalam Tabrizi, 2009, 79-96).

Organizational Performance

1. Crest Model: In this model, the factors that are considered in the improvement of productivity and performance are presented as CERES, and it is recommended that their status be positively changed for improvement. These factors include commitment and communication, respect, enthusiasm, security and support, and practical training (Kermanshah and Sa'adatmand, 2006, 8).

2. Murray Inswert and Newell Smith's Model: according to the model, the factors affecting performance include the following:

$P = R_C .C.E.V (P_T.R_W)$

P = Performance, the amount of goals realized.

R_C = Clearness of role, the level of clearness of duties and responsibilities.

C = Competence, required abilities for management.

E = Environment, the level of environment consistency and practical support of environmental factors towards efforts to achieve the goals of organization.

V = Values, the value system of the environment, targeting mechanism, decision-making organization, managers and employees.

P_T = Preferred turn, to what extent people prefer their gob to other jobs.

R_W = reward, the degree of effectiveness of organization's reward system (Inswert and Smith, 1996, 25).

3. Model ACHIEVE

The model was provided by Paul Hersoy and Kennete Bgamchhard in the book " organizational behavior management" using resources in 1987. According to the model, performance indicators of work force in organizations include the following:

P = f (A, C, H, I, E, V, E)

This measures performance based on seven variables including:

A) ability, B) Jobs Recognition C) organizational support D) performance feedback E) credit, environmental consistency

The following questions can be considered in order to investigate the factors that can affect performance:

1. Do the employee can perform the job?
2. Do they have a good understanding of what and how should they do to do the job?
3. What level of organizational support is required?
4. Is there any process for continuous supervision and feedback? (Rezaeian, 2008, 424)

In data envelopment analysis (DEA), input and output factors are jointly evaluated and there is not any limitation of single-input and single-output.

Another fundamental property of DEA model is its compensatory feature. Simply put, this feature allows the decision maker to compensate the deficiency or weakness of its outputs helping from other output or compensate additional consumption in some of the inputs by saving in other inputs.

In Fisher's model, the indicators for performance evaluation are divided into three categories including qualitative, semi-quantitative, and quantitative indicators. Qualitative indicators are mainly argumentative, which are based on subjective judgment and individual perception (such as organizational culture, leadership, and moral characteristics). In semi-quantitative indicators, objective indicators are replaced with quantitative indicators. In other words, little value is determined for people's qualitative indicators. Quantitative indicators are those that can indicate various activities of organization as numbers and digits.

Research History

Shahani and Khaef Ellahi (2009) conducted a study entitled "Effect of Intellectual Capital on the Performance of Sepah Bank branches in Tehran, which the results showed positive impact of intellectual capital components on performance of the branches. In the meantime, the greatest influence is dedicated to customer capital, then, structural capital and human capital are placed in the second and third position of influence, respectively. In addition, as the most important scientific contribution of the research, it has been recognized that customer capital plays a mediator role between structural and human capital and organizational performance.

Madhoshi and Nezhad Amiri (2008) in a study entitled "Measuring Intellectual Capital And Assessing Its Relationship With Financial Outcomes Of Companies" came to the conclusion that there is a positive relationship between intellectual capital and financial returns; intellectual capital and future financial returns; growth rate of intellectual capital and growth rate of future financial returns of investing companies in the Tehran Stock Exchange.

Shojaei et al. (2010) conducted a research titled "Identifying the Interactions between the Components of Intellectual Capital Using Structural Equation Modeling in the Iranian Banking Industry." The study indicates that intellectual capital that is primarily defined as intangible assets may be used as a resource to create sustainable competitive advantages. Components of intellectual capital will lead to the creation of value, if they interact with each other.

Aswiby was the first person who divided intellectual capital into three broad domains in 1997:

1. Human capital - in the area of personal competence
2. Structural capital- in the area of internal structure, and
3. Relation capital - in the area of external structure

Bontis (2000) in Malaysia conducted a research in order to investigate components of intellectual capital including human, structural and customer capital in two sectors of service and non-service activities in the country. The study revealed that structural capital had a huge impact on occupational performance of the both sectors. Although human capital was important in the both sectors, the greater effect of the capital was on structure of non-service companies than service companies.
Polic in banking industry measured intellectual capital performance in Austrian banks within the years 1993 - 1995 and Croatian banks during the years 1996-2000 using intellectual coefficient of value added. The results of these two studies revealed a significant difference in ranking the banks based on traditional accounting and performance measures. Polic's study showed that in many service firms, intellectual capital is not still considered as aligned with physical and financial capital. That is why serious inconsistency can be seen in new measurement models and existing accounting system.

Research Hypothesis

1. There is a significant relationship between intellectual Capital (the human capital) with agricultural Bank.
2. There is a significant relationship between intellectual Capital (the capital the structural) with agricultural Bank.
3. There is a significant relationship between Intellectual Capital (the capital of the customer) with agricultural Bank.
4. There is a significant relationship between the total amount of intellectual capital with agricultural Bank.
5. There is a significant relationship between age with agricultural Bank.
6. There is a significant relationship between work experience with agricultural Bank.

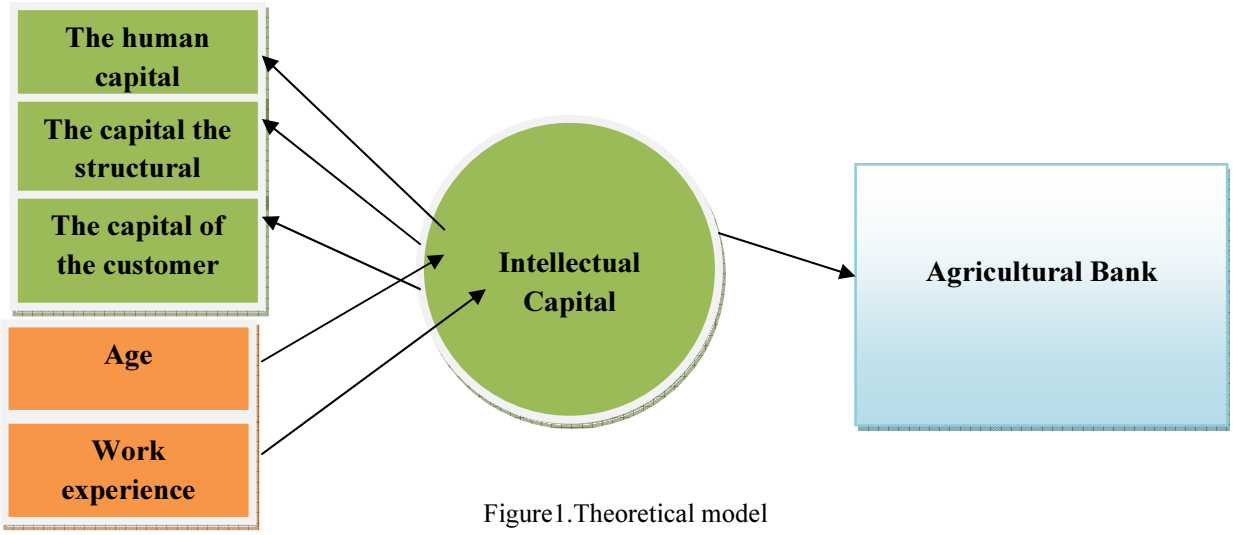

Figure1.Theoretical model

RESEARCH METHOD

The present research is a quantitative research, uses field method and has been conducted by using survey technique.

The present study was undertaken by using quantitative approach and the research method used field method; documentary techniques have been also used in preliminary studies. The research technique is survey, of course library studies technique has been also used.

Data collection is carried out by using questionnaire. Sample population is all employees of the Agricultural Bank YASUJ. 77 individuals were selected based on census.

In this study, face validity was used for validation, so that the questionnaire items were examined by several professors of sociology and the revised points were included in the questionnaire. Cronbach's alpha coefficient was used to assess the reliability. Regarding to high Cronbach's alpha coefficient, all the variables were approved at the final./.7 for the reliability of the questionnaire.

Data Analysis

1-There is a significant relationship between intellectual Capital (the human capital) with agricultural Bank.

To investigate the relationship between these two variables, the Pearson correlation coefficient is used. The findings are summarized as follows:

H_0: $\rho = 0$

H_0: $\rho \neq 0$

Table (1). Pearson correlation results of the one hypothesis

agricultural Bank		
.51	r	**Intellectual Capital (the human capital)**
.000	Sig	
77	N	

The results show that because the correlation coefficient values (r=. /51) at a significance level (α=. /05) is significant, therefore, the null hypothesis is rejected and the research hypothesis is confirmed with confidence level of 95%. So there is a significant relationship between intellectual Capital (the human capital) with agricultural Bank, and the relationship is positive and direct. The relationship is average.

2-There is a significant relationship between intellectual Capital (the capital the structural) with Agricultural Bank.

To investigate the relationship between these two variables, the Pearson correlation coefficient is used. The findings are summarized as follows:

H_0: $\rho = 0$

H_0: $\rho \neq 0$

Table (2). Pearson correlation results of the one hypothesis

agricultural Bank		
.48	r	**Intellectual Capital (the human capital)**
.000	Sig	
77	N	

The results show that because the correlation coefficient values (r=. /48) at a significance level (α=. /05) is significant, therefore, the null hypothesis is rejected and the research hypothesis is confirmed with confidence level of 95%. So there is a significant relationship between Intellectual Capital (the human capital) with agricultural Bank, and the relationship is positive and direct. The relationship is average.

3-There is a significant relationship between intellectual capital (the capital of the customer) with Agricultural Bank.

To investigate the relationship between these two variables, the Pearson correlation coefficient is used. The findings are summarized as follows:

H_0: $\rho = 0$

H_0: $\rho \neq 0$

Table (3). Pearson correlation results of the one hypothesis

agricultural Bank		
.41	r	**between Intellectual capital (the capital of the customer)**
.000	Sig	
77	N	

The results show that because the correlation coefficient values (r=. /41) at a significance level (α=. /05) is significant, therefore, the null hypothesis is rejected and the research hypothesis is confirmed with confidence level of 95%. So there is a significant relationship between intellectual capital (the capital of the customer) with agricultural Bank, and the relationship is positive and direct. The relationship is average.

4-There is a significant relationship between the total amount of intellectual capital with Agricultural Bank.

To investigate the relationship between these two variables, the Pearson correlation coefficient is used. The findings are summarized as follows:

H_0: $\rho = 0$

H_0: $\rho \neq 0$

Table (4). Pearson correlation results of the one hypothesis

agricultural Bank		
.47	r	**total amount of intellectual capital**
.000	Sig	
77	N	

The results show that because the correlation coefficient values (r=. /47) at a significance level (α=. /05) is significant, therefore, the null hypothesis is rejected and the research hypothesis is confirmed with confidence

level of 95%. So there is a significant relationship between total amount of intellectual capital with agricultural Bank, and the relationship is positive and direct. The relationship is average.

5-There is a significant relationship between age with Agricultural Bank.
To investigate the relationship between these two variables, the Pearson correlation coefficient is used. The findings are summarized as follows:
H_0: $\rho = 0$
H_0: $\rho \neq 0$

Table (5). Pearson correlation results of the one hypothesis

	agricultural Bank	
	-.46	r
Age	.000	Sig
	77	N

The results show that because the correlation coefficient values (r=-. /46) at a significance level (α=. /05) is significant, therefore, the null hypothesis is rejected and the research hypothesis is confirmed with confidence level of 95%. So there is a significant relationship between age with agricultural Bank, and the relationship is negative. The relationship is average.

6-There is a significant relationship between work experience with Agricultural Bank.
To investigate the relationship between these two variables, the Pearson correlation coefficient is used. The findings are summarized as follows:
H_0: $\rho = 0$
H_0: $\rho \neq 0$

Table (6). Pearson correlation results of the one hypothesis

	agricultural Bank	
	.16	r
Work experience	.07	Sig
	77	N

The results show that because the correlation coefficient values (r=. /16) at a significance level (α=. /05) is significant, therefore, the null hypothesis is confirmed and the research hypothesis is rejected with confidence level of 95%. So there is a not significant relationship between age with agricultural Bank. Thus, Hypothesis 6 is rejected.

Conclusions

As mentioned in today's leading organizations and companies, knowledge's share is gradually increasing more than other sources so as continuity and profitability of many organizations and companies is related to knowledge. Therefore, as intangible assets and intellectual capital of organizations and companies become richer, better and faster they can achieve high levels of growth and development. The major challenge in this field is conceptualization, understanding, and evaluation of intellectual capital. Knowledge management helps organizations to use and identify their capacities and capabilities in order to attain knowledge-based economy.

Due to the importance of intellectual capital in this study sought to examine the relationship between intellectual capital and its dimensions, age and experience as independent variables and the dependent variable would be the branches of the Agricultural Bank.

The results of the study are as follows:
- There is a significant relationship between intellectual Capital (the human capital) with agricultural Bank, and the relationship is positive and direct. The relationship is average.
- There is a significant relationship between Intellectual Capital (the human capital) with agricultural Bank, and the relationship is positive and direct. The relationship is average.
- There is a significant relationship between intellectual capital (the capital of the customer) with agricultural Bank, and the relationship is positive and direct. The relationship is average.
- There is a significant relationship between total amount of intellectual capital with agricultural Bank, and the relationship is positive and direct. The relationship is average.
- There is a significant relationship between age with agricultural Bank, and the relationship is negative. The relationship is average.
- There is a not significant relationship between age with agricultural Bank. Thus, Hypothesis 6 is rejected.

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