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Identifying the Facilitating Factors in Using the Intellectual Capital of Staff in the Organization (Case Study: West Iran Melli Bank Branches in Tehran)

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Abstract: This research has been carried out by the purpose of identifying factors facilitating use of intellectual capital by personnel at Iran Melli Bank's branches located in West of Tehran in 2014-15. Research methodology was applied in type and data collection method was survey-descriptive. The research population consisted of 900 personnel of Iran Melli Bank's branches located in West of Tehran from whom 272 persons were selected by the use of incidental sampling method and as the intended sample mass by implementing Morgan Table. Data collection method was based on Bontis in 1998 intellectual capital standard, Nahapit and Ghoshal in 1998 social capital, Fung and Chui in 2009 knowledge management, Wang and Benitez-Amedo in 2015 information technology and Hafsted in 1980 organizational culture questionnaires. Questionnaire reliability was evaluated by the use of Cronbach's alpha which value was over 0.8 for all variables. Content validity was also applied to test the questionnaire validity and for the same reason the questionnaires was confirmed by experts. Collected data analysis and examination of the implementation of questionnaires was done by the use of Smart PLS software at two parts of measurement model and structural part. At measurement model, the technical feature of the questionnaire that is reliability and factor load of items were analyzed and required corrections were made and at structural part, structural model equations for the analysis of the research hypotheses were analyzed.

Key words: Social capital, knowledge management, information technology, organizational culture, intellectual capital

INTRODUCTION

Statement of the problem: Since 1990s, world growth pattern by the occurrence of information technology evolution and the expansion of information society has experienced principle changes. Today, organizations have started entering into knowledge based economy (Giju *et al*., 2010). The economy in which knowledge and invisible properties are the most important production factors and the biggest advantage of the organization and knowledge is the most challenging capital it has supplanted financial and physical capitals of the contemporary economy world.

Now a days natural and visible blessings and properties are the key to organizational and community accomplishment but possession of intellectual management capitals and such capitals within the very fluctuating and challenging environment is the key point of success. Invisible properties of every organization consist of trade mark, loyal company customers, complacent personnel, creative personnel, dynamic and flexible organizational culture, competent and efficient managers, organizational risk tolerance, good impression of the organization among personnel and apposite management of these capitals has undeniable importance in today's competitive world. Intellectual capital is a subject which deals with management and arrangement of these capitals (Bozbura and Beskese, 2007).

Intellectual capital is one the most important organizational capabilities which can aid organizations in terms of knowledge creation and sharing to a large extent and establishes stable competitive advantage for them in comparison with other organizations. Intellectual capital is a phrase for a combination of invisible market capitals, intellectual capital, human capital and fund intellectual capital which strengthen the organization for performing its activities (Bontis, 1998). Intellectual capital is the present stock of a company which is available at a certain period of time. Intellectual capital considerably improves competitive condition of the organization by adding value to the key beneficiaries of the organization (Marr, 2004). There are several factors which affect the intellectual capital of those inside the company which are known as intellectual capital facilitators. These factors which have been directly and indirectly mentioned in different researches include organizational culture, information

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technology, social capital and knowledge management (Ali, 2005; Serenko and Bontis, 2013; Huang and Liou, 2012; Daud and Yusoff, 2011).

Since, banks play important role in facilitating trade and Foreign and local investment and in contact with the world knowledge based economy and are not untouched by the present currents they need to implement a long-term approach pay more attention to intellectual capital currents and their importance in today's economy in line with competitive advantage achievement and reaching organizational goals and take measures in identifying facilitating factors of these currents that is expanding inside organization intellectual capital. This research is an attempt to answer the question that what are the factors facilitating use of intellectual capital by personnel at Iran Melli Bank's branches located in West Tehran and how much each of these factors affects intellectual capital of individuals.

Theoretical principles

Knowledge management: Knowledge management is a process by which organizations acquire skills in terms of learning (internalizing knowledge), encoding knowledge (externalizing knowledge) and knowledge transmission and distribution (Malhot, 2000). Knowledge management is a process of identifying intelligent property and creating culture and information fund an intellectual which encourages comprehensive cooperation. This process is in search of creating intelligent capital by the use of obtaining and training whatever the staff knows. In fact, the principle issue in terms of the staff is the determination and extraction of the precious jewelry of knowledge from the depth of the information sea (Bellinger *et al*., 2004). Sing and Kant knowledge management is a systematic and intentional cooperation process of the organizational staff technology, processes and structures by increased value and innovation.

Information technology: Chaffey and Wood (2005), consider information technology as one of the technology sources which is used for business information collection and management. These resources include software, hard ware and communicational networks to manage information.

Information technology refers to technologies which enable people in saving, recording, processing recycling and information transmission and receiving. This phrase includes new technologies such as computer, transmission by fax and other communicational tools.

Social capital concept: Gooshal and Nahapit consider Social capital as the total potential and practical available resources which are accessible through relations networks of a person or a society. In their perspective Social capital is an important ability and property of the organization which can largely assist the organization in terms of knowledge creation and sharing and create advantage for them in comparison with other organizations (Hasanzade and Mogimi, 2010)

The same as other capital forms this concept has actualized the access to some purposes which does not happen in the absence of it and without any similarity with other forms of capital, social capital principally exists between communicational players (Lin, 2001). Has defined it as established resources within Social capital which accessible and move along all network nexus (Rostila, 2011).

Intellectual capital: Intellectual capital refers to a set of knowledge oriented properties which belong to the organization and are considered as characteristics of it by increasing value to the key beneficiaries of the organization and considerably lead to the improvement of competitive organizational situation (Marr, 2004).

Human capital: Human capital shows the available knowledge stock of the organization.

Organizational capital: Organizational capital consists of all non-human knowledge savings of the organization which include data sites, organizational diagrams, process administration instructions, strategies and administrative programs. Customer capital shows the potential power of the organization because of invisible external factors (Behroz and Moshbeki, 2005).

Organizational culture: Organizational culture is a simple pattern of suppositions which are presented by a number of people and expanded so that in accord with external factors and cause of coordination within the group (Morsing and Oswald, 2009). Avoiding lack of trust: refers to the ways by which human communities have learnt to cope with lack of trust (Marijo, 2008).

Individualism refers to the fact that how much it is expected from the members of a community to live independent from other members of the society.

Male orientation: Refers to the separation of roles on the basis of sex in society (Marijo, 2008).

Power distance: Refers to the limit which the members of a country are willing to accept unusual spread of power, wealth and credit (Marijo, 2008).

Literature review: Hasan and Salehi (2011) have studied the role of knowledge sharing and intellectual capital components and innovative behavior. Their research findings showed that intellectual capital does not affect innovative behavior in a direct way but with the intervention of knowledge sharing (as a mediator variable) this relation is strengthened and correlation coefficient gets reinforced.

Abdol Maleki and Norizade (2014) have studied the role of social capital in creating intellectual capital of the sports federations' staff. The findings of this research showed that in Islamic republic of Iran federations' staff there is a positive and significant relation between social capital and intellectual capital.

Khasmafkan *et al*. (2014) have studied the impact of intellectual capital, organizational learning capability and performance efficiency of auto industry new products. Research results show that human capital in fact by the use of organizational learning capability improve performance efficiency of the new product development and also the presented model has been protected by the presented data.

Shaemi *et al*. (2013) have studied organizational culture relation and university staff reinforcement. In the sample under the study, inter-staff trust and independence with organizational leadership has the highest correlation.

Rezayi *et al*. (2013) by modeling the impact model of organizational culture on knowledge sharing and creating agility to suppress future crisis events by the use of non-operant defense view. This research finding shows that organizational culture has a predictive effect on staff knowledge sharing.

Rajabi *et al*. (2012) in their research have presented a model to implement knowledge management in Iran's police force management and have reported that knowledge is an invisible capital and property in organization and information technology is very important in acquiring and distributing knowledge. Somprach *et al*. (2015) have studied the impact of organizational culture on teachers learning. The results showed high rate of correlation between organizational culture and learning behavior among teachers.

Serenko and Bontis (2013) in their research entitled world knowledge management ranking and intellectual capital and these two structures are highly attended in knowledge oriented economy of today and have dual relation and significance with each other.

Zohdi have studied the relation between social capital and intellectual capital. The research population in this study consisted of the Kordestan University staff whose sample size was 285 persons. The results showed the structural, cognitive and social capital relational aspects on intellectual capital. Huang and Liou (2012) have studied the impact of social human and structural capital, on knowledge production and its impact on technical knowledge.

De Castro and Verde (2012) have analyzed the knowledge properties in technology oriented companies. They have tried to present a model by which they can measure knowledge stock or intellectual capital by considering different theoretical backgrounds.

Daud and Yusoff (2011) in their research entitled intellectual capital as the mediator between knowledge management and organizational performance and concluded that a combination of intellectual capital and knowledge management can facilitate organizational performance.

MATERIALS AND METHODS

The research population consisted of 900 personnel of Iran Melli Bank's branches located in West Tehran from whom 272 persons were selected by the use of incidental sampling method and as the intended sample mass by implementing Morgan Table. Data collection method was based on Bontis (1998) intellectual capital standard, Nahapiet and Ghoshal (1998) social capital, Fong and Choi (2009) knowledge management, Wang *et al*. (2015) information technology and Hafsted organizational culture questionnaires. Questionnaire reliability was evaluated by the use of Cronbach's alpha which value was over 0.8 for all variables. Content validity was also applied to test the questionnaire validity and for the same reason the questionnaires was confirmed by experts. Collected data analysis and examination of the implementation of questionnaires was done by the use of Smart PLS software at two parts of measurement model and structural part. At measurement model, the technical feature of the questionnaire that is reliability and factor load of items were analyzed and required corrections were made and at structural part, structural model equations for the analysis of the research hypotheses were analyzed.

Data analysis and examination: According to Table 1 results facilitating factors have significant relation with intellectual capital and all four variables of social capital, organizational culture and information technology and knowledge management were at 99% level of certainty and had significant relation.

Structural equation modeling: The results of Smart PLS software indicate that social capital, organizational culture, information technology and knowledge

Table 1: Pearson correlation coefficient between research variables

Items	Intellectual capital	Knowledge management	Organizational capital	Social capital	Information technology
Intellectual capital	1				
Knowledge management	0.839	1			
Organizational culture	0.904	0.825	1		
Social capital	0.842	0.737	0.828	1	
Information technology	0.785	0.703	0.0.762	0.724	1

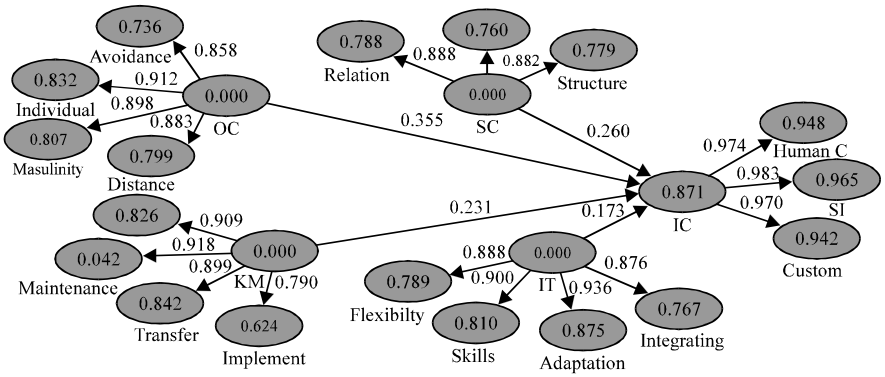

Fig. 1: The relationship between the identified factors and intellectual capital together with standardized coefficients

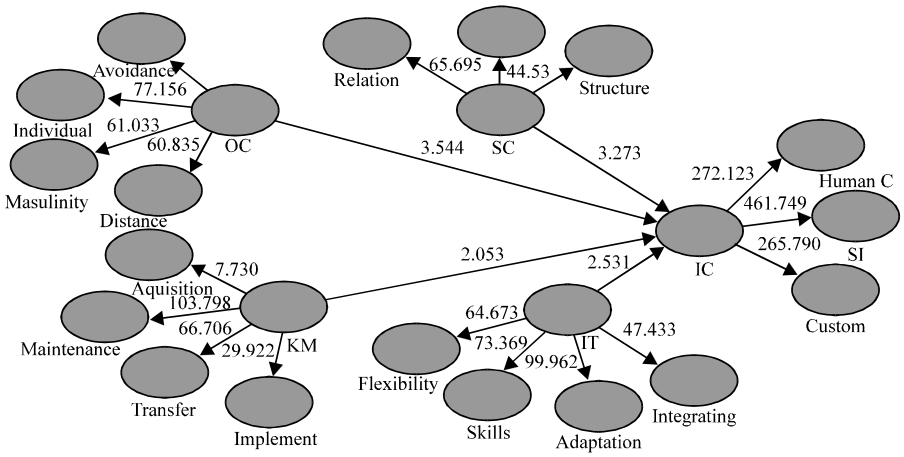

Fig. 2: The relationship between the identified factors and intellectual capital together with t-coefficients

management and intellectual capital impact on the employees of Bank Melli Iran who work in the branches located in West Tehran and based on the determination coefficient obtained from the Smart PLS software, 87% of identified factors identified are able to predict the variable of the intellectual capital. In the following Fig. 1, the research model with standardized coefficients and t-values show the values that are derived from the output of the Smart PLS software. Figure 1 and 2 also shows that t ratio is >1.96 and hence, the identified factors have a significant relationship with intellectual capital.

Since, the analysis was done for two variables to assess the factor loading items and all items with factor loading were >0.4, we did not mention them in the overall research model to avoid confusion due to the large number of questions. Here is measured using path analysis hypotheses. The results of Smart PLS software show that social capital, organizational culture, information technology and knowledge management is related to intellectual capital of Bank Melli Iran's employees who work in the branches located in West Tehran

RESULTS AND DISCUSSION

Research hypotheses test results: In Table 2 is the test results presented through the table. The results show that there is a significant relation between social

Table 2: Research hypotheses test results

Hypothesis	Standardized equations	t-value	Hypothesis accepted/rejected
There is a significant relation between facilitating factors and intellectual capital of Iran Melli Bank Tehran City West branches' staff	-	-	Accepted
There is a significant relation between knowledge management and intellectual capital of Iran Melli Bank Tehran City West branches' staff	0.231	3.694	Accepted
There is a significant relation between information technology and intellectual capital of Iran Melli Bank Tehran City west branches' staff	0.173	3.763	Accepted
There is a significant relation between social capital and intellectual capital of Iran Melli Bank Tehran City West branches' staff	0.260	2.103	Accepted
There is a significant relation between organizational culture and intellectual capital of Iran Melli Bank Tehran City West branches' staff	0.355	2.382	Accepted

capital, organizational culture, information technology and knowledge management and intellectual capital of Iran Melli Bank Tehran City west branches' staff and intellectual capital is predictable up to 87% of predictability capability.

First subsidiary hypothesis: There is a significant relation between knowledge management and intellectual capital of Iran Melli Bank Tehran City West branches' staff. The obtained results confirmed this hypothesis. Knowledge management causes enablement and knowledge transition in between organizational entities such as individuals, councils and units. Also, new knowledge acquiring and creation through organizational processes is a critical factor in knowledge management. Obtained results are in line with findings reported by Serenko and Bontis (2013), Daud and Yusoff (2011), Serenko *et al.* (2010), Hsu (2008), Hasan and Salehi (2011), Rahman and Mahbobe (2011), Danesh and Zakery (2010).

Second subsidiary hypothesis: There is a significant relation between information technology and intellectual capital of Iran Melli Bank Tehran City West branches' staff.

The obtained results confirmed this hypothesis. Organizations and companies by the use of information technology enhance their capabilities of better and simpler responsibility performance and are able to change their performance through this. The obtained results are in line with that reported by Rajabi and Mohammady (2013), Nekodari and Yagobi (2011) and Neefe (2001).

Third subsidiary hypothesis: There is a significant relation between social capital and intellectual capital of Iran Melli Bank Tehran City West branches' staff.

The obtained results confirmed this hypothesis. Social capital is considered as the total of all potential resources which is defined on the basis of personal and social relation. The obtained results are in line with that reported by Huang and Liou (2012), Hansen (2010), Maleki and Norizade (2014).

Fig. 3: Since research hypotheses were confirmed the research model is accepted

Fourth subsidiary hypothesis: There is a significant relation between organizational culture and intellectual capital of Iran Melli Bank Tehran City West branches' staff.

The obtained results confirmed this hypothesis. Values and experiences of one organization staff make it superior to other ones. Organizational culture causes the unity and integrity of the staff to the organization which is reflected in their understanding of the way to interact through a mutual understanding by efficient cooperation with each other and also enables the organization to cope with the external factors. The obtained results are in line with that reported by Shaemi *et al.* (2013) and Rezayi *et al.* (2013).

Research model after data analysis and examination: According to the obtained results the research model would be like the following one (Fig. 3):

CONCLUSION

Research findings showed that social capital, knowledge management, information technology and organizational culture have significant relation with intellectual capital.

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