

## Surveying of Social Capital and Knowledge Management on Rroductivity of Employees at Islamic Azad University 13<sup>th</sup> Reign

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**Abstract:** This paper presents a theoretical framework on the relationship between knowledge management, social capital and human resource productivity within Islamic Azad University. Therefore, the focus of this study is Surveying of Social Capital and Knowledge Management on productivity of Employees at Islamic Azad University 13th reign. Reviews literature has studied on resources-advantage theory of social capital, knowledge management and productivity to propose ways within the organization to improve their ability to manage knowledge, capital, and culture and achieve sustained superior performance. Data has collected from 318 workers of IAU in East Azerbaijan Province (13th reign) of Iran by three researcher-made questionnaires with study of variables and all the reliability and validity of measures has examined. In order to analyze the data resulted from collected questionnaires deductive and descriptive statistical methods are used, and to display some statistical data we used column diagram and in deductive level to test the hypothesis of the research we used T-test has performed to compare means of the constructs between variables and Pearson correlation coefficients. The results provide some evidences to support links between knowledge management, social capital and productivity. Furthermore, it shows employee, who have higher knowledge management and social capital dimensions in organization, probably have more productivity than the others. Findings show that, that there is a positive relationship between knowledge management, social capital and productivity of Iran's Islamic Azad University in East Azerbaijan province.

**Key words:** Social Capital, Knowledge Management, productivity, Employees, Islamic Azad University.

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### INTRODUCTION

Since the creation, human being has always tried, having time and place limits, to make utmost use of accessible resources. In no time or under no circumstances, have there been unlimited facilities available. The world is experiencing an era which has been termed the "knowledge age" or the "knowledge economy". In this new context, knowledge is the primary commodity, and knowledge flows are regarded as the most important factors in the economy. (Sewry & Sunassee, 2002). Knowledge Management as the word implies, the ability to manage "knowledge". Knowledge is the full utilization of information and data, coupled with the potential of people's skills, competencies, ideas, intuitions, commitments and motivations. Knowledge management is an audit of "intellectual assets" that highlights unique sources, critical functions and potential bottlenecks which hinder knowledge flows to the point of use. It protects intellectual assets from decay, seeks opportunities to enhance decisions, services and products through adding intelligence, increasing value and providing flexibility. Both theoreticians and practitioners of management are on the lookout for answers to perennial questions of how to determine factors which affect effectiveness of business organizations. In that quest so called 'soft aspects of management,' such as organizational culture, knowledge management, social capital and productivity, are increasingly credited for their role in the way business is done (Damirchi, 2010).

The concepts of knowledge management and social capital are used here to describe how organizations use and develop their knowledge and human capital, and productivity. We expect that the organizational processes behind these concepts are strongly connected to the dynamic capabilities of the organization. The study aims to understand how knowledge management is related to social capital and productivity in Islamic Azad University. The research questions are:

- What is the knowledge management, for knowledge in 13 region of Islamic Azad University?
- What are the connections between knowledge management, social capital and productivity and the dimensions of knowledge management and social capital?

This paper presents a theoretical framework on the relationship between knowledge management, social capital and human resource productivity within Islamic Azad University 13 region. Therefore, the focus of this

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study is Surveying of Social Capital and Knowledge Management on productivity of Employees at Islamic Azad University 13<sup>th</sup> reign.

### **1- Literature Review:**

#### **2.1- Knowledge Management:**

Karl Wiig(1996) defines knowledge as “the insights, understandings, and practical know-how that we all possess – is the fundamental resource that allows us to function intelligently.” There are two types of knowledge: tacit knowledge and explicit knowledge, as supported by Duffy (1999), Nonaka(1998), Tiwana(2000), Zack (1999b). (Sewry, Sunassee, 2002). Early research suggested that a successful KM effort needs to convert internalized tacit knowledge into explicit knowledge in order to share it, but the same effort must also permit individuals to internalize and make personally meaningful any codified knowledge retrieved from the KM effort. Subsequent research into KM suggested that a distinction between tacit knowledge and explicit knowledge represented an oversimplification and that the notion of explicit knowledge is self-contradictory. Specifically, for knowledge to be made explicit, it must be translated into information (i.e., symbols outside of our heads) (Serenko&Bontis 2004). Later on, Ikujiro Nonaka proposed a model (SECI for Socialization, Externalization, Combination, Internalization) which considers a spiraling knowledge process interaction between explicit knowledge and tacit knowledge (Nonaka& Takeuchi 1995). In this model, knowledge follows a cycle in which implicit knowledge is 'extracted' to become explicit knowledge, and explicit knowledge is 're-internalized' into implicit knowledge. More recently, together with Georg von Krogh, Nonaka returned to his earlier work in an attempt to move the debate about knowledge conversion forwards (Nonaka& von Krogh 2009).

Knowledge Management (KM) owes much to disciplines such as philosophy, psychology, social sciences, management sciences, economics and computing. Indeed, researchers rely on the variety disciplines to advance concepts and models for KM, while practitioners use them to progress methods for developing Knowledge Management Systems (KMS). However, neither researchers nor practitioners seem to look beyond their influences to others relevant to KM and KMS, and indeed often full proposed by fellow KM scholars, As a result, a wide variety of ideas – philosophies, theories, concepts, models etc. – are used to conceptualize KM. A multitude of KM models with a wide range of approaches are apparent in the literature and praxis. Recently, there have been different attempts to classify them. Whereas some scholars e.g. Earl (2001); Kakabadse et al. (2003), provide a classification of KM models into different schools and approaches according to their 'orientation', others e.g. Gebert et al.(2003); Herder et al.(2003) perceive different dichotomies in KM models (Moteleb& Woodman, 2007).

According to Bhatt (2001) KM is a process of knowledge creation, validation, presentation, distribution and application (Bhatt, 2001). KM embodies organizational processes that seek synergetic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings. Malhotra (2000) also mentions that KM requires re-consideration of everything in the organization and caters to the critical issues of organizational adaptation, survival and competence in the face of increasing discontinuous environmental change (Zaim, 2008).

#### **2.1.1- Knowledge Management of the People:**

At the Knowledge Management of the People level, the focus is on managing people, their behavior, their expectations, and their potential to contribute to the success of the knowledge management effort. There should also be a concerted effort to encourage employees to share and use knowledge in the workplace, and to reward people who do so. The framework proposes the following activities to achieve this:

1. Manage people as individuals
2. Encourage Sharing and Use of Knowledge
3. Encourage Individual Learning and Innovative Thinking
4. Implement reward plans and incentives to promote above(Moteleb& Woodman, 2007).

#### **2.2- Social Capital:**

The first thing of importance in a theory capable of informing practice would be a clear definition and understanding of the subject of the theory. Put differently, being able to formulate clearly and consistently what one is speaking about is important. However, over the last 10 years reviewers of social capital research and theories have observed no emerging agreement on a precise definition of social capital (Nahapiet and Ghoshal, 1998; Schuller, Baron and Field, 2000; Field, 2002; Nahapiet, 2008). Mondak even saw a risk of the concept becoming muddled and deprived of any distinct meaning (Mondak, 1998).

Social capital theory and research point clearly to the importance of networks, relationships, trust, norms and identity as potential explananda for the creation and sharing of knowledge. Nahapiet and Ghoshal's (1998) paper theorizes how, and in which ways, social capital is important. However, while the demonstration of the importance of social capital is essential, it may not be sufficient to meet the criterion of a good theory in

Lewin's terms. Gaining a more practical understanding of how the dimensions of social capital evolve and interact is of particular importance in this respect (Nahapiet, 2008).

They identified three such clusters of facets, which they call: the structural, the cognitive and the relational dimension of social capital. A further specification in terms of operationalization into facets is presented as follows:

- The structural dimension: Network ties, network configuration and appropriable organization,
- The cognitive dimension: Shared codes and language, shared narratives,
- The relational dimension: Trust, norms, obligations and identification (Rønning, 2008).

### **2.3- Human Resources Productivity:**

Human resources, as the most expensive and most valuable source of capital and the organization is considered as the most important factor in the operational chain of any organization, have long proven a great success, and organizations that have paid attention to this issue miniature the works place. The main goal of understanding factors affecting productivity of human resources is the main goal of researchers following. According to Taheri (2007), all researchers believe that human resources increase productivity but cannot be offered to improve productivity combined effect of various factors. One of the most important goals in any organization is to promote productivity and given that humans are created productivity central to the demands he puts behind organizations key work (Rahimi & et.al, 2011).

Uulton (1990) studied about labor productivity in the industrial sector in England during the 1970s and 1980s using the panel data. The results show that investment in new technology gives significant contribution towards growth of labor productivity in the industrial sector, whereas, increase in price of intermediate goods makes labor productivity to decrease. Apergis et al. (2008) studied the relationship between labor productivity, innovation and technology transfer in the services industry in six selected countries in Europe. They found that research and development (R&D), human capital and international trade could accelerate innovation process and facilitate transfer of technology. The results show that there is a balanced relationship between labor productivity, innovation and technology transfer in the long run. Furthermore, R&D, trade and human capital statistically have important and significant impact towards labor productivity through innovation and indirectly through increased spread of technology (Rahimi & Damirchi, 2011).

In terms of the dimensions of human resources productivity a vast amount of researches and surveys have been carried out. In consideration, "Hersey and Gold Smith" Model, due to its universality and attention to recognition of components which are effective in providing human resources productivity (John Wiles & et.al, 2011, p31), has been chosen as the significant ground for the exploration of the dimensions of human resources productivity in this proposal, especially because this model has been the basis of tens of studies in this field. Based on this theory, human resources productivity consists of seven dimensions. These dimensions are composed of: A- Ability (knowledge and skills), C- Clarity (conception or imagination of the role), H- Help (organizational support), I- Incentive (intention), E Evaluation (operation feedback), V- Validity (justice), E- Environment (environment proportionality).

Combining all the seven letters makes up the word ACHIEVE, which the model is known by (Bernard C. Beaundreau, 2009). The dimensions of this model are defined below:

- Ability (knowledge and skills): It refers to the knowledge and skills of the followers in doing a task successfully which includes the knowledge related to the task, experience related to the task and merits related to the task.
- Clarity (conception or imagination of the role): It corresponds to the conception and acceptance of the work method, place and the way to deal with the job. This conception needs clarity in objectives and distinct way in reaching them.
- Help (organizational support): Some of the organizational supports include human resources, budget, facilities, accessibility of products and the quality.
- Incentive (intention): People by nature are inclined to follow those tasks which end up in rewards and refrain from other tasks. Rewards can be palpable or impalpable.
- Evaluation (operation feedback): Evaluation is said to be the daily actions feedback and occasional assessments. If people are not aware of their shortcomings, improvement of their actions cannot be expected.
- Validity (justice): It is referred to proportionate and realistic decisions made by the manager for the human resources.
- Environment (environment proportionality): It is referred to those foreign agents that can affect actions even when having necessary capability, clarity, support, and incentive. The key environment components are competition, changes in market conditions, government regulations, preparations and ... (Bordbar & et.al, 2009).

### **2- Research Objectives:**

The Main purpose of this study is understand and determines the effect of Social Capital and Knowledge Management on productivity of Employees at Islamic Azad University 13th reign.

To achieve the above objective we determine under Secondary objectives:

- Understanding and determine the effect of knowledge management on social capital in 13 region of Islamic Azad University.
- Understanding and determine the effect of knowledge management on productivity in 13 region of Islamic Azad University.
- Understanding and determine the effect of social capital on productivity in 13 region of Islamic Azad University.

**3- Research Hypotheses:**

In this paper have one main hypothesis and nine secondary hypotheses. The statistical way of analysis of hypotheses is two ways,  $H_1$  is acceptance of hypothesis and  $H_0$  is rejecting of hypothesis. In other words, it means that  $H_1$  has positive meaning and  $H_0$  has negative meaning.

1- There is a relationship between knowledge management and social capital in 13 region of Islamic Azad University

1-1- There is a significant relationship between Knowledge validation and social capital in 13 region of Islamic Azad University.

1-2- There is a significant relationship between knowledge distribution and social capital in 13 region of Islamic Azad University.

1-3- There is a significant relationship between Knowledge presentation and social capital in 13 region of Islamic Azad University.

1-4- There is a significant relationship between Knowledge creation and social capital in 13 region of Islamic Azad University.

1-5- There is a significant relationship between Knowledge Application and social capital in 13 region of Islamic Azad University.

2- There is a relationship between knowledge management and productivity in 13 region of Islamic Azad University

2. 1 -There is a significant relationship between Knowledge validation and productivity in 13 region of Islamic Azad University.

2. 2 -There is a significant relationship between knowledge distribution and productivity in 13 region of Islamic Azad University.

2. 3 -There is a significant relationship between Knowledge presentation and productivity in 13 region of Islamic Azad University.

2. 4 -There is a significant relationship between Knowledge creation and productivity in 13 region of Islamic Azad University.

2. 5 -There is a significant relationship between Knowledge Application and productivity in 13 region of Islamic Azad University.

3- There is a relationship between social capital and productivity in 13 region of Islamic Azad University.

3 -1 -There is a significant relationship between Structural dimensions and productivity in 13 region of Islamic Azad University.

3 -2 -There is a significant relationship between cognitive dimensions and productivity in 13 region of Islamic Azad University.

3 -3 -There is a significant relationship between relationship dimensions and productivity in 13 region of Islamic Azad University.

**4- Methodology:**

This study focuses on Social Capital, Knowledge Management and productivity of Iranian Islamic Azad University (IAU) in 13th reign. Data has collected from 318 workers of IAU in East Azerbaijan Province (13th reign) of Iran by three researcher-made questionnaires with study of variables. Knowledge Management Questionnaire, a 15 item scale according to Bhatt (2000) theory, and Social Capital questionnaire, a 10 item according to Nahapiet and Ghoshal's (1998) theory and Labor productivity Questionnaire, a 21 item according to Bernard C. Beaundreau, (2009), all the reliability and validity of measures has examined. Questionnaires reliability was estimated by calculating Cronbach's Alpha via SPSS software that is shown in the table 1.

**Table 1:** Results of questionnaires reliability from SPSS software.

Variables	Cronbach's Alpha
Social Capital	0.82
Knowledge Management	0.86
productivity	0.79
All	0.85

In order to analyze the data resulted from collected questionnaires deductive and descriptive statistical methods are used, and to display some statistical data we used column diagram and in deductive level to test the hypothesis of the research we used T-test has performed to compare means of the constructs between variables and Pearson correlation coefficients. The analysis has performed with SPSS.

**5- Analysis And Conclusion:**

**6.1- Descriptive Analysis:**

Almost Eighty-five percent of the participants work full time. Seventy-nine percent are male and twenty one are female. Sixty-seven percent are married. The responder’s degree is 8.49 percent M.A or PHD, 49.68 percent BA, 27.99 percent DA, and 13.86 percent Under DA have degree. It means that the most of the employees have university degree. (Table 2)

**Table 2:** Responders degree.

Valid	Degree	Frequency	Percent	Valid Percent	Cumulative Percent
	MA or PHD	27	8.49	8.49	8.49
	BA	158	49.68	49.68	58.18
	DA	89	27.99	27.99	86.16
	Under DA	44	13.86	13.86	100.0
	Total	318	100.0	100.0	

Table 3 shows work experience of the responders. According to table 4, from the precedence point of view about 9.12 percent of responders have less than 2 years’ work experience, and 19.18 percent have between 3-5, 27.67 percent 6-8, 19.81 percent 9-11, 12.89 percent 12-14 and finally 11.32 percent have more than 15 years of managing experience. It shows that People with more experience are less than 11 years.

**Table 3:** Work Experience of the responders.

Work Experience					
Valid		Frequency	Percent	Valid Percent	Cumulative Percent
	Under 2	29	9.12	9.12	9.12
	3-5	61	19.18	19.18	28.30
	6-8	88	27.67	27.67	55.97
	9-11	63	19.81	19.81	75.78
	12-14	41	12.89	12.89	88.68
	More than 15	36	11.32	11.32	100.0
	Total		100.0	100.0	

Table 4 reports descriptive statistics including means and standard deviation for samples.

**Table 4:** Means and standard deviations for variables.

Variable	mean	SD
Statistical characteristics		
Knowledge validation	6.12	0.48
knowledge distribution	5.26	0.37
Knowledge presentation	4.29	0.35
Knowledge creation	4.21	0.32
Knowledge Application	5.92	0.42
knowledge management	5.79	0.39
social capital	5.98	0.43
productivity	5.64	0.38

**6.2- Hypothetical Analysis:**

Table 5, which present the correlations and t-test of each of the eleven items of first main hypothesis “There is a relationship between knowledge management and social capital in 13region of Islamic Azad University”. The results show that knowledge management and their dimensions are all significantly and highly related with social capital. Strong positive correlation was found between Knowledge validation and social capital (r=0/492 and t=10.04). Also was found Strong positive relationship between all dimensions of knowledge management and social capital.

**Table 5:** Pearson’s correlation coefficients and t-test of variables.

Independent Variables	dépendent Variable	n	Pearson Correlation	t-test	Level of sig.
Knowledge validation	social capital	318	0.492	10.04	.001
knowledge distribution	social capital	316	0.358	6.81	.002
Knowledge presentation	social capital	312	0.43	8.45	.000
Knowledge creation	social capital	317	0.476	9.71	.001
Knowledge Application	social capital	316	0.428	8.42	.000
knowledge management	social capital	318	0.741	19.65	.003

Table 6, which present the correlations and t-test of each of the eleven items of first main hypothesis “There is a relationship between knowledge management and productivity in 13region of Islamic Azad University”. The results show that knowledge management and their dimensions are all significantly and highly related with productivity. Strong positive correlation was found between Knowledge distribution and productivity ( $r=0/51$  and  $t=10.63$ ). Also was found Strong positive relationship between all dimensions of knowledge management and productivity.

**Table 6:** Pearson’s correlation coefficients and t-test of variables.

Independent Variables	dépendent Variable	n	Pearson Correlation	t-test	Level of sig.
Knowledge validation	productivity	317	0.392	7.54	.001
knowledge distribution	productivity	312	0.51	10.63	.004
Knowledge presentation	productivity	312	0.482	9.84	.001
Knowledge creation	productivity	316	0.472	9.5	.002
Knowledge Application	productivity	318	0.386	7.42	.000
knowledge management	productivity	318	0.532	11.18	.001

Table 7, which present the correlations and t-test of each of the eleven items of first main hypothesis “There is a relationship between social capital and productivity in 13region of Islamic Azad University”. The results show that social capital and their dimensions are all significantly and highly related with productivity. Strong positive correlation was found between cognitive dimensions and productivity ( $r=0/543$  and  $t=11.4$ ). Also was found Strong positive relationship between all dimensions of social capital and productivity.

**Table 7:** Pearson’s correlation coefficients and t-test of variables.

Independent Variables	dépendent Variable	n	Pearson Correlation	t-test	Level of sig.
cognitive dimensions	productivity	315	0.543	11.4	.002
relationship dimensions	productivity	318	0.449	8.94	.001
Structural dimensions	productivity	317	0.482	9.84	.003
social capital	productivity	318	0.628	14.37	.002

The results provide some evidences to support links between knowledge management, social capital and productivity. Furthermore, it shows employee, who have higher knowledge management and social capital dimensions in organization, probably have more productivity than the others.

Findings show that, that there is a positive relationship between knowledge management and social capital of Iran’s Islamic Azad University in East Azerbaijan province. Also, we find that there is a positive relationship between knowledge management and productivity of Iran’s Islamic Azad University in East Azerbaijan province. Finally, we find that there is a positive relationship between social capital and productivity of Iran’s Islamic Azad University in East Azerbaijan province.

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