SURVEYING THE EFFECT OF KNOWLEDGE MANAGEMENT ON PRODUCTIVITYOF SOCIAL SECURITY ORGANIZATION'S EMPLOYEES

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Abstract

The main focus of this study is surveying of Knowledge Management on productivity of Employees Social Security Organization of Ardabil Province. Data has collected from 154 workers of SSO in Ardabil Province of Iran by two 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 and productivity. Furthermore, it shows employee, who have higher knowledge management dimensions in organization, probably have more productivity than the others. Findings show that, there is a positive relationship between knowledge management and productivity of Iran's Social Security Organization in Ardabil Province.

Key words: Knowledge Management, productivity, Employees, Social Security Organization

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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 organizations. In that quest so called 'soft aspects of management,' such as organizational culture, knowledge management, and productivity, are increasingly credited for their role in the way business is done (Damirchi, 2010).

The concepts of knowledge management are used here to describe how organizations use and develop their knowledge andproductivity. We expect that the organizational processes behind these concepts are strongly connected to the dynamic capabilities of theorganization. The study aims to understand how knowledge management is related to productivityinSocial Security Organization. The research question is:

- What are the connections between knowledge management and productivityand the dimensions of knowledge management?

This paper presents a theoretical framework on the relationship between knowledge management and human resource productivity withinSocial Security Organizationof Ardabil Province. Therefore, the focus of this study is Surveying of Knowledge Management on productivity of Employees atSocial Security Organizationof Ardabil Province.

LITERATURE REVIEW

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 andSunassee, 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, IkujiroNonaka 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).

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- 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 goals Understanding factors affecting productivity of human resources is the main goal 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).

Oulton (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).

RESEARCH OBJECTIVES

The Main purpose of this study is understand and determines the effect of Knowledge Management on productivity of Employees at Social Security Organizationof Ardabil Province. To achieve the above objective we determine under Secondary objectives:

- Understanding and determine the effect of knowledge management onsocial capital in Ardabil Province of Social Security Organization.

- Understanding and determine the effect of knowledge management on productivity in Ardabil Province of Social Security Organization.

- Understanding and determine the effect of social capital on productivity in Ardabil Province of Social Security Organization.

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 productivity in Ardabil Province of Social Security Organization

  1-1- There is a significant relationship between Knowledge validation and productivity in Ardabil Province of Social Security Organization.

  1-2- There is a significant relationship between knowledge distribution and productivity in Ardabil Province of Social Security Organization.

1-3-   There is a significant relationship between Knowledge presentationand productivity in Ardabil Province of Social Security Organization.

1-4-   There is a significant relationship between Knowledge creationand productivity in Ardabil Province of Social Security Organization.

1-5-   There is a significant relationship between Knowledge Applicationand productivity in Ardabil Province of Social Security Organization.

METHODOLOGY

This study focuses on Knowledge Management and productivity of Iranian Social Security Organization (SSO) inArdabil Province. Data has collected from 318workers of SSO in Ardabil Provinceby tworesearcher-made questionnaires with study of variables. Knowledge Management Questionnaire, a 15 item scale according toBhatt (2000) theoryand 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
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.

ANALYSIS AND CONCLUSION

1- Descriptive Analysis

The responder's degree is 14.9 percent M.A or higher, 44.2 percent BA, 19.5 percentAssociate degree, and 21.4 percentDiplomahave degree. It means that the most of the employees have university degrees. (Table 2)

Table2- Responders degree

Responders degree					
		Freque	Percent	Valid	Cumulative

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		ncy		Percent	Percent
Valid	Diploma	33	21.4	21.4	21.4
	Associate degree	30	19.5	19.5	40.9
	Bachelor	68	44.2	44.2	85.1
	Master's degree or higher	23	14.9	14.9	100.0
	Total	154	100.0	100.0	

Table 3 shows work experience of the responders. According to table 3, from the precedence point of view about 18 percent of responders have less than 5years' work experience, and 28 percent have between 6-10, 28 percent 11-15, 7 percent 16-20 and19 percent do not answer to this question. It shows that people with more experience are less than 15 years.

Table 3- Work Experience of the responders

Work Experience					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<5	28	18.2	22.4	22.4
	6-10	43	27.9	34.4	56.8
	11-15	43	27.9	34.4	91.2
	16-20	11	7.1	8.8	100.0
	Total	125	81.2	100.0	
Missing		29	18.8		
Total		154	100.0		

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

Table 4: Means and standard deviations for variables

Variable Statistical characteristics	mean	SD
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
productivity	5.64	0.38

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 productivity in Ardabil province Social Security Organization". The results show that knowledge management and their

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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 5- Pearson's correlation coefficients and t-test of variables

Independent Variables	dépendent Variable	n	Pearson Correlation	t-test	Level of sig.
Knowledge validation	productivity	154	0.392	7.54	.000
knowledge distribution	productivity	152	0.51	10.63	.001
Knowledge presentation	productivity	149	0.482	9.84	.000
Knowledge creation	productivity	154	0.472	9.5	.000
Knowledge Application	productivity	152	0.386	7.42	.000
knowledge management	productivity	150	0.532	11.18	.001

Findings show that, we find that there is a positive relationship between knowledge management and productivity of Iran's Social Security Organization in Ardabil Province.

REFERENCE

1- Bernard C. Beaudreau, (2009), "The dynamo and the computer: an engineering perspective on the modern productivity paradox", International Journal of Productivity and Performance Management, Vol.59 Iss: 1, pp.7 – 17.

2- Bhatt, G. (2001), "Knowledge management in organizations: examining the interaction between technologies, techniques, and people", Journal of Knowledge Management, Vol. 5 No. 1, pp. 68-75.

3- Bordbar, Gh., et.al, (2009), "Studying the Relationship Between Organizational Education and Human resources Productivity in Yazd City Insurance Industry", Insurance Industry Quarterly, twenty-second year, number 4, pp 179 – 207,

4- Damirchi V. Q., 2009, Principals of Supervision, Merh-e-Gazal Ardabil, Publisher, First Edition, 2009.

5- Mondak, J. (1998). Editor's Introduction in Political Psychology, 19/3:434-40) (Special Issue: Psychological Approaches to Social Capital).

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6- Moteleb, A.A.& Woodman, M., (2007) "Notions of Knowledge Management Systems: a Gap Analysis" The Electronic Journal of Knowledge Management Volume 5 Issue 1, pp 55 - 62, available online at www.ejkm.com

7- Nonaka I., Takeuchi, H. (1995). The knowledge creating company: how Japanese companies create the dynamics of innovation. New York: Oxford University Press. p. 284.

8- Nonaka, I., von K. G., (2009). "Tacit Knowledge and Knowledge Conversion: Controversy and Advancement in Organizational Knowledge Creation Theory". Organization Science 20 (3): 635–652.

9- Rahimi,Gh., Seyyedi M. H., Damirchi V.Q., NoruziM., (2011), Surveying of affecting parameters in human resources productivity and provide appropriate methods for its improvement. Case Study: Social Security Organization of Branches in Region 13, Interdisciplinary Journal of Contemporary Research in Business, April 2011, VOL 2, NO 12, pp194-195

10- Rahimi,Gh.,Damirchi V.Q., (2011), Surveying Of Ethical Climate Indexes On Labor Productivity In Small And Medium Enterprises Of Iran, Asian Journal of Business and Management Sciences, Vol. 1 No. 4 .163-174.

11- Serenko, A.; Bontis, N. (2004). "Meta-review of knowledge management and intellectual capital literature: citation impact and research productivity rankings". Knowledge and Process Management 11 (3): 185–198.

12- Sunassee N. N. &Sewry D. A, (2002), a Theoretical Framework for Knowledge Management Implementation, Proceedings of SAICSIT 2002, Pages 235 – 245.

13- Wilkes,J., Yip, G,, SimmonsK.,(2011), "Performance leadership: managing for flexibility", Journal of Business Strategy, Vol. 32 Iss: 5, pp.22 – 34.

14- ZaimH., (2008), Knowledge Management Implementation in IZGAZ, Journal of Economic and Social Research 8(2), 1-25

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