



Effective Factors Influencing on the Implementation of Knowledge Management in the Agricultural Bank of Qom Province

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Received: 20 May 2015,

Accepted: 03 September 2015

Abstract

The main objective of the present work was to study the factors affecting the deployment of knowledge management in Agriculture Bank of Qom Province. It was a causative-relational study in terms of data collection. Also, it was a field study, non-experimental in terms of variables control. Sample size was estimated by Morgan table and the data were collected by a questionnaire. The statistical population included manager, experts and assistants of Agriculture Bank in Qom Province including 250 people. Sample size was calculated ($n = 152$) by Morgan table. The reliability was estimated by a pretest with 20 questionnaires filled out by a statistical population similar the studied one. The validity was confirmed by experts whose advice was taken care of about modifying or replacing some questions. Finally, Cronbach's alpha was estimated for the questionnaire to be 0.81. To achieve research objectives, the descriptive statistics of frequency, mean, variance, and standard deviation and the inferential tests of correlation and multiple regressions were conducted by SPSS Statistical Software Package. Results revealed the significant relationship of knowledge management deployment with organization culture, knowledge sources, organization memory, and information technology at the one percent level with modified determination coefficient of 0.632. In other words, 63.2% of the variation of the dependent variable was accounted by independent variables (organization culture, knowledge sources, organization memory, and information technology).

Keywords:

Organizational Culture, Sources of knowledge, Institutional memory, Technology of information, Agricultural Bank

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INTRODUCTION

By passing of the Industrial Revolution and entry into the new millennium, liquidity raw material of land have lost their former importance that are considered critical factors for formed and organizational growth in the past and other are not limited to growth engine of organizations and manual human resources, capital and the manual human resources; so that, the old ways of managing organizations are not responding to the rapid changes of the surrounding environment. Today, all working groups and scientific acknowledge, in order to, organizations be able to compete in the world, should be operate as continued and sustained around science and knowledge. Now that is called knowledge era, organizations witness to the environments that are increasingly more dynamic and challenging. Change is an integral part of today's world, in other words, change is the only constant component (Karimi, 2004) it said, knowledge management involves to any kind of activity that has the experience and knowledge of mental attention so that it can help to synergy the knowledge by detected and sharing them. The synergistic of knowledge can be attributed to the joint creation of knowledge. This sharing of the knowledge creation, direct collaboration is not in the knowledge creation but also to create knowledge that based on knowledge (the created earlier knowledge) which implies to the shared. Therefore, knowledge management refers to the process that has a beginning and the process of evolution. This process of obtaining such understanding of the tacit knowledge, explicit, the sharing of development and utilizes and understanding it to create new knowledge. At this beginning stage which is dedicated to identifying and understanding of hidden science in the mind, to mature stage that is to understand, use and re-create. This process will unfold as tacit knowledge and hid the explicit knowledge and re-created of knowledge that Nonaka and Takuchi called as a cycle of knowledge management (Nonaka and Takuchi, 1996). Lin and Su (2009) achieved to the results that the contractor can enhance the effectiveness of their projects with the use of

knowledge and the development and transfer them to each other. Zack *et al.* (2009) have concluded that organizational culture has more effective on the structure of strategy and knowledge management and Knowledge management as a middle role in the effectiveness of the organization and culture has positive impact on the effectiveness of organization. Zheng *et al.* (2010), have concluded that organizational culture has more effective on the structure of strategy and knowledge management and Knowledge management as a middle role in the effectiveness of the organization and culture has positive impact on the effectiveness of organization.

MATERIALS AND METHODS

This study in terms of objective is applied and the type of research is causal- relationship that was conducted by a scrolling methods. Also this study in terms of data collection is a type of cross sectional that performed in the year of 2014 and in terms of place, this research in the Agricultural Bank of Qom to determine the factors affecting on implementation of knowledge management that has done in the Agricultural Bank of Qom. The examined population, in this study consisted of managers, experts and contributing experts in the Agricultural Bank of Qom that according to the statistics is about 250 people. The sample size was calculated on the basis of Morgan ($n = 152$). The main instrument used in this study was a questionnaire. The questions design by using theoretical fundamentals and investigations and the hypotheses research, that were carried out on it after determining the validity and reliability necessary amendments and were used of field study to complement and fill it. To determine the reliability of questionnaire to implementation of pretest by distributing of 20 questionnaires was used between the similar statistical population with the studied Statistical Society (Agricultural Bank of Ray city), that after the collecting and completed questionnaires, Cronbach's alpha coefficients are determined by using the SPSS software which was (0.83).

Table 1: Distribution of individual characteristics of the sample

Variable	Frequency(n)	Percent	Cumulative Percent
Age groups (years)			
22 to 32 years	42	27.8	27.8
33 to 42 years	51	33.8	61.6
43 to 52 years	43	28.5	90.1
53 and over	15	9.9	100
Total	151	100	-
Feature (variable)			
Gender	Male	105	69.5
	Female	46	30.5
Total	151	100	
Feature			
The educational level			
	Diploma	32	21.2
	Associate Degree	24	15.9
	BA	42	27.8
	Master of Science	38	25.2
	PhD	15	9.9
Total	151	100	
Experience			
1to 5 years	53	35.10	35.10
6 to 10 years	35	23.17	58.27
11to 15 years	27	17.89	76.16
16 to 20 years	17	11.25	87.41
21 to 25 years	9	5.97	93.38
26 and over	10	6.62	100
Total	151	100	-
Feature			
Position	Manager	37	24.50
	Experts	70	46.35
	The assistance of experts	44	29.13

RESULTS AND DISCUSSION

Description to the frequency indicated that highest frequencies of the studied subjects are in the age group of 31 to 40 years and the lowest frequencies are in ages of 53 and over. The mean age of them was about 38 years with a standard deviation 4.53 in the range of 33 to 42 years. The numbers of 151 respondents were, 105 male and 46 female. In other words, 69.5 percent of the respondents were male and 30.5 percent female. The obtained information from the educational level of the respondents showed that 27.8 % of the subjects are with the highest frequency of 42 in graduate-level education. The obtained information in the field of experience showed that the respondent sample 35.1% of the subjects is with the highest frequency of 53 with 1 to 5 years' experience. The distribution of the sample indicates that the majority of 70 people (46.35%)

of respondents are on their occupational experts and the minimum number of 37 people (50.24%) on their manager. Table 1 shows the distribution.

Correlation analysis

According to the research hypotheses, the results of the correlation independent variables include organizational culture, knowledge resources, organizational memory, information technology with the successful dependent variable of knowledge management in the Agricultural Banks are as follows Table 2. The results of the Pearson's correlation show that there is significant relationship between organizational culture, resources of knowledge, technology and organizational memory, the contained information with successful implementation of knowledge management systems in Agricultural Bank of Qom.

Table 2: Correlated variables of research with the dependent variable in the successful deployment of knowledge management system

Variables	Correlation coefficient of Pearson	p-value
Organizational Culture	0.587**	0.001
Sources of knowledge	0.768**	0.005
Institutional memory	0.653**	0.002
Technology of information	0.451**	0.009

** : Significant at the one percent level

Description of the dependent variable (implementation of knowledge management)

In order to measure implementation of knowledge management, was designed 40 items in Likert type scale (1= Very Low, 2= Low, 3= Average, 4= High, 5= very much) and the respondents were asked to select the desired option, in this test, to the first option is given too low to the very high option is given 5 score, according to this scoring, the maximum score 200 and minimum is 40. The implementation of knowledge management in the Agricultural Bank on the basis of the scores and their scores were categorized in terms of three levels (low, medium, fine) that divided with the equal intervals that Table 3 frequency distribution of the mean shows standard deviation and coefficient of variation to implementation of knowledge management in Agricultural Bank. The results of descriptive findings show that deployment of knowledge management in the Agricultural Bank, with a mean of 142 and standard deviation of 7.75 was in moderate level. The maximum amount of knowledge management in Agricultural Banks of 173 and the minimum was 109.

Regression analysis of factors affecting on successful implementation of knowledge management systems

The factors affecting on successful imple-

mentation of knowledge management system, were evaluated by regression analysis. The advantage of regression analysis is specified a set factors that directly effect on the dependent variable. Regression analysis was performed through the stepwise in the present study.

The factors affecting on successful implementation of knowledge management system, were evaluated by regression analysis. The advantage of regression analysis that is specified set factor that directly effect on the dependent variable. Regression analysis was performed through the stepwise in the present study. According to Table 4 amount of adjusted coefficient of determination is 0.632 (Adjusted R square). This shows that 63.2% of the changes of dependent variable could be explained by the independent variables.

According to the coefficients of the variables in step 4, can be considered the following equation for the factors affecting on successful implementation of knowledge management systems in the Agricultural Bank

$$Y = 182.004 + 12.283X_1 + 26.508X_2 + 11.948X_3 + 8.477X_4$$

Y: The successful implementation of a knowledge management system in the Agricultural Bank

X₁: sources of knowledge

X₂: organizational culture

Table 3: distribution of the studied sample in terms of implementation of knowledge management in the agricultural bank (n=151)

Categories	Frequency	Percent	Cumulative Percent
Weakly	45	29.80	29.80
Medium	70	46.36	76.16
Good	36	23.84	100
Total	151	100	-

Minimum: 109 Maximum: 173 Average ratings: 142 Standard deviation: 7.57

Table 4: Model summary and coefficient

	B	Std	t	Beta	p-value
Step constant coefficient	182.004	21.138		8.610	0.000
X ₁ sources of knowledge	12.283	3.341	0.261	3.198	0.002
X ₂ organizational culture	26.508	6.418	0.314	4.130	0.000
X ₃ institutional memory	11.948	3.573	0.285	3.343	0.001
X ₄ information Technology	8.477	3.161	0.216	2.281	0.008
R=0.810 R ² =0.656 Adjusted R Square=0.632					

X₃: institutional memory

X₄: information of technology

The results obtained of the dependent variable on the successful implementation of knowledge management system in the Agricultural Banks, suggests that there is a significant relationship in the level of one percent between the independent variables, organizational culture, sources of knowledge, organizational memory and information technology. The results of the investigation of [Fathiyan and Ehsani \(2006\)](#), [Lin and Su \(2009\)](#), [Majidiyan *et al.* \(2009\)](#), [Ormazdi and Tabarsa \(2008\)](#) that there is a significant relationship between the knowledge management and organizational culture. The organizational culture is the impact of factor on knowledge management programs in line. This study showed that there is significant relationship between the technology of information and knowledge management systems. That result of investigation [Fathiyan and Ehsani \(2006\)](#), [Majidiyan *et al.* \(2009\)](#), [Ormazdi and Tabarsa \(2008\)](#), [Rahimniya and Alizadeh \(2008\)](#), [Shaemi \(2005\)](#), that there is a significant positive relationship between the technology of information and knowledge management systems in line. There were a significant correlation between the sources of knowledge and knowledge management, that this results of research with the result of [Abzarie and Kermani \(2005\)](#), [Hagnazr \(2009\)](#), [Zarabadi pour and Zargar pour \(2007\)](#), that there is a significant relationship between the sources of knowledge and knowledge management that is aligned and consistent. There is a significant correlation between the organizational memory and knowledge management. This result of investigation with the result of [Abdullahi *et al.* \(2008\)](#), [Hagnazar \(2009\)](#), [Rez-](#)

[vaniyan and moghaddam \(2007\)](#), [Ormazdi and Tabarsa \(2008\)](#) and [Zafariyan *et al.* \(2008\)](#) research That there is a significant relationship between the organizational memory and knowledge management which is aligned and consistent.

RECOMMENDATIONS

Strengthening the participatory of institutional culture: organizational culture of an organization plays a vital role in the success of knowledge management, and it is necessary to spread the culture of knowledge in organizations.

Development and expand the culture of innovation and transfer of knowledge to sharing between the banks and financial and credit institutions as well as between employees who are knowledge-oriented.

To establish stable and successful elements of knowledge management and tier of tools and resources this needed to be allocated to certain budget.

The more relationship between banks and universities and also research centers active in the field of knowledge management and institutional problems that arise in practice.

The organization should try to use of experience, the accumulated knowledge by its employees.

Providing the appropriate information system for the storage, transfer and exchange of knowledge, such as the Internet and Intranet.

ACKNOWLEDGEMENT

The authors are grateful to all respondents including managers and experts also assistance of experts in the Agricultural Banks of Qom Province whom without their participation this research would not be conducted.

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How to cite this article:

Esmaily, M., Niknami, M., & Badragheh, A. (2016). Effective factors influencing on the implementation of knowledge management in the agricultural mank of Qom province. *International Journal of Agricultural Management and Development*, 6(2), 205-210.

URL: http://ijamad.iaurasht.ac.ir/article_523366_eab8d2ec72c3f5d62828fb7ac0a4cf0b.pdf



بررسی عوامل مؤثر بر استقرار مدیریت دانش در بانک کشاورزی استان قم

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تاریخ دریافت: ۳۰ اردیبهشت ۱۳۹۴

تاریخ تایید: ۱۲ شهریور ۱۳۹۴

مدیریت دانش

هدف کلی پژوهش حاضر بررسی عوامل مؤثر بر استقرار مدیریت دانش در بانک کشاورزی استان قم بود. پژوهش حاضر از نظر نحوه گردآوری داده‌ها علی-ارتباطی بود. ضمن این‌که پژوهش یک نوع پژوهش میدانی بود و از نظر کنترل متغیرها غیر آزمایشی و برآورد حجم نمونه بر اساس جدول مورگان و جمع‌آوری اطلاعات مورد نیاز از طریق تکمیل پرسشنامه صورت گرفته است. جامعه آماری تحقیق شامل مدیران، کارشناسان و کمک کارشناسان بانک کشاورزی استان قم می‌باشد که بر اساس آمار حدود ۲۵۰ نفر می‌باشد. حجم نمونه آماری بر اساس جدول مورگان محاسبه شد ($n=152$). برای تعیین پایایی پرسشنامه به اجرای پیش‌آزمون با توزیع ۲۰ پرسشنامه در بین جامعه آماری مشابه با جامعه آماری مورد مطالعه اقدام شد و سپس جهت تأیید روایی محتوایی پرسشنامه از دید خبرگان، پرسشنامه جهت مطالعه توزیع گردید که پس از مشورت‌های لازم و پیشنهاد خبرگان سوالات نامفهوم تعدیل یا حذف شده و سوالات جدید به پرسشنامه اضافه شد و در نهایت پرسشنامه اصلی بعد از این مراحل تدوین و توزیع شد و مقدار آلفای کرونباخ آن ۰/۸۱ به‌دست آمد. به منظور دستیابی به اهداف تحقیق و سوالات از آمار توصیفی فراوانی، میانگین، واریانس، انحراف معیار و در بخش آمار استنباطی از آزمون‌های همبستگی و رگرسیون چندگانه به کمک نرم‌افزار آماری SPSS استفاده شد. بر اساس یافته‌های موجود بین متغیرهای مستقل فرهنگ سازمانی، منابع دانشی، حافظه سازمانی و تکنولوژی اطلاعات و متغیر وابسته استقرار مدیریت دانش در سطح یک درصد ارتباط معنی‌داری وجود دارد و مقدار ضریب تعیین تعدیل شده، ۰/۶۳۲ به‌دست آمد و این یافته تحقیق نشان می‌دهد که ۶۳/۲ درصد از تغییرات متغیر وابسته توسط متغیرهای مستقل (فرهنگ سازمانی، منابع دانشی، حافظه سازمانی و تکنولوژی اطلاعات) تبیین می‌شود.

واژگان کلیدی:

فرهنگ سازمانی، منابع دانش، نهادی، حافظه، تکنولوژی اطلاعات، بانک کشاورزی

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