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**PROVIDING A CONCEPTUAL MODEL FOR KNOWLEDGE
MANAGEMENT IMPLEMENTATION IN ISFAHAN PAYAME NOOR
UNIVERSITY FROM ADMINISTRATORS' AND FACULTY MEMBERS'
POINT OF VIEW**

Ali Bazaei¹, *Asie Lotfi², Jabbar Hashemi², M. Reza Montazerion², Abolfath Farahani²

¹*Department of Business Administration Faculty of Management Studies & Research, Islamic Azad University, Tehran Central Branch. Iran*

²*Department of IT Management, Electronic Branch, Islamic Azad University, Tehran, Iran*

**Author for Correspondence*

ABSTRACT

The purpose of this study is to provide a conceptual model for knowledge management implementation in Isfahan PNU from the administrators' and faculty members' point of view. Methodology of research is survey study. It is also applied research in terms of its objective. Descriptive and inferential statistics have been used for data analysis (Pearson correlation coefficient and multivariate regression). The research population includes Isfahan PNU administrators, experts and faculty members, that a cluster random sample of 150 people was selected. The data collection tool was a questionnaire made by the researcher with 50 questions that examined 6 components of knowledge-based organizational strategies, organizational structure, knowledge-based education and training of human resources, knowledge-based organizational culture, information and communication technology, financing and knowledge management components and was administered after determining its validity and reliability of 0/8059. The results showed that the strategy of the organization, organizational structure, organizational culture, information technology, financing, knowledge management and knowledge management programs are associated. The results of variance analysis also showed that there is a linear relationship between independent and dependent variables in all the models, and in other words appropriateness of the model was approved.

Keywords: *Knowledge Management - Knowledge Management Infrastructures - Conceptual Model - Organizational Structure – ICT*

INTRODUCTION

At the present time, because of the increase in complexity and volume of information, it requires organizational requirements different from past periods. In today's competitive world, the most striking characteristic of which is the rapid change of environment, there is no doubt that relying on physical and tangible assets cannot help an organization to reach its intended goals. In fact, if organizations want to maintain their current position in the market or want to improve their progress and they need to pay more attention to their intellectual capitals more than before. In this era, the attention of organizations' administrators is more attracted to factors such as knowledge and creativity and consequently knowledge-oriented people are more important than practical people. On the basis of the current theoretical framework, a factor that causes sustainable and competitive advantage for the organizations is the knowledge in the minds of employees created due to their experience and skills as well as knowledge in the processes and structures of the organization and the mass documents of the organization. Today, a undeniable truth is glaring that with the advent of the knowledge era following the information age, the paradigms of some fields such as management have radically changed. The importance of this issue is to an extent that, most successful organizations and companies in the world are accelerating toward knowledge and its management. Experts believe that 80s was the decade of quality movement and 90s was the decade of reengineering and the present decade is the decade of knowledge management. Knowledge management is a concept that has become more important with regard to the emphasis of the

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fourth plan for country's development on knowledge-based development and knowledge-based economy. Knowledge management can be defined as a way to improve performance, productivity and competitiveness, improving business efficiency, sharing and use of information within the organization, a tool to improve decision-making, a way to get the best methods, a way to reduce costs and innovate in organization. In the area of higher education, knowledge management is also one of the fundamental elements that if used successfully, helps universities to offer innovative services and it is in the knowledge-based environment that universities and colleges are able to maintain their competitive advantage and scientific superiorities. By entering the knowledge era, knowledge is considered as the most important asset of the organization and organizational success has become dependent on its ability to create, acquire, use and transfer knowledge. Hence, in order for organizations to be able to make use of the opportunities in today's dynamic environment and gain competitive advantage, they need to effectively manage knowledge resources. One of the requirements of knowledge management is to identify and provide its infrastructures. Knowledge management can not otherwise be seen as the basis for development and national economy. For better implementation of knowledge management in organizations, it is necessary to study conceptual foundations and infrastructure in the organization. (Nemati, 2004) Nowadays, the presence of universities and institutions of higher education in the market of knowledge and use of knowledge management to achieve organizational goals is known as an imperative factor. Although, the development of education in a suitable structure can be useful, if the knowledge is not managed and knowledge development is not in line with the needs of society, it cannot solve many problems. Therefore, this idea should be inculcated among researchers and academics that what leads to scientific progress is sharing of knowledge with others, not non-publishing it. Accordingly, to achieve rapid scientific progress of the country, synergies in research and scholarly activities and subtracting scientific gap with advanced countries will be possible only as a result of attention to knowledge management. All resources in case of such an approach can be continually optimized to achieve the desired goals and duplication and addressing parallel works can be avoided, and the subjective knowledge established among researchers can become objective knowledge and in addition to avoid the loss of experience and information, its publication becomes possible and conditions for the survival and the success of the university in the competitive arena will be provided. We got to believe that all universities in the country, have resorted to such action (Knowledge Management) from long ago and this is considered a dire need for all managers in the state system of higher education. Therefore, investigating the current status of universities in terms of having the necessary infrastructure to implement knowledge management and prepare them to share knowledge and best practices is an important preparatory activity. Although knowledge management in recent years has enjoyed a great reputation, especially in the education and the business sector, it has still confusions about the best practices for using it. This is more noticeable in the developing countries, because as compared with developed countries, little research has been done about it. Hence, this study aims to introduce infrastructural and influencing factors on knowledge management from experts' and specialists' point of view and also addresses the situation of these factors in PNU and given the variables under study, the conceptual model for knowledge management implementation would be provided. For successful implementation of knowledge management, just like any other endeavor, there are a few areas where reasonable results guarantees successful performance. These areas are defined as critical success factors. Analysis and evaluation of success factors, through identification of key areas that are critical for the implementation of knowledge management, provides important insights. Therefore, knowledge management needs to identify and evaluate these areas for measuring its success potentials. The findings of studies in the field of knowledge management are a major source for identifying critical success factors of knowledge management. In this paper, different views of some leading writers such as Alazemi and Zaeri in the field of the critical success factors in the implementation of management knowledge has been used to create a suitable framework (Alazemi & Zaeri, 2003). These success factors can be seen in Table 1. All these factors have been used in a situation that can create sustainable competitive advantage for the organization and through this knowledge sources can be best used.

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Table 1 - Summary of the critical factors for successful knowledge management implementation

| Writer | Critical factors of success | Writer | Critical factors of success |
|------------------------------|--|-------------------|---|
| Skirmi | 1. The support of senior management, 2. Clear connections with business strategy, 3. Being knowledge-oriented, 4. Having insight, 5. Leader in science, 6. Process of systematic knowledge, 7. Proper knowledge infrastructure, 8. Creating a culture supporting innovation, learning and knowledge. 9. Technical infrastructure supporting knowledge works. | Choi | 1. Staff training, 2. Participation of employees, 3. Teamwork, 4. Empowering employees, 5. Leadership and commitment of senior management, 6. Restrictions of organization, 7. Infrastructures of information systems, 8. Tendentious atmosphere, benchmarking, 9. Knowledge structure. |
| Davenport, De Long and Bears | 1. Relation to economic performance or industry value, 2. Organizational and technical infrastructure, 3. Standard, flexible knowledge structure, 4. Knowledge-oriented culture, 5. Clear objective and language, 6. Changes in motivational techniques, 7. Multiple channels for knowledge transfer 8. Supporting senior management. | Skirmi and Amidon | 1. Strong links with business requirements, 2. Having a good attitude, 3. Knowledge leadership 4. Culture of creating knowledge and sharing it, 5. Continuous Learning, 6. Proper technological infrastructure, 7. Process of systematic knowledge. |
| Steele | 1. Employees should be involved in the new model, 2. Lines of communication must be open, 3. Sharing information, 4. Updating knowledge, 5. Supporting manager. | Manasku | 1. Conscious community, 2. Setting the ground, 3. Support infrastructure (appropriate technology), 4. Upgrading the process (creating and sharing knowledge). |
| Basi | 1. Individuals' learning (how, what), 2. Individuals' performance (how), 3. Sharing | Huxley | 1. Structured knowledge, 2. Organized knowledge (goal is sharing, and applying knowledge more quickly and efficiently than competitors). |
| Whigs | 1. The knowledge assets - that are applied – should be nurtured and maintained and, where possible, be used by individuals and organizations. 2. Knowledge-oriented processes- that are to create, manufacture, collect, organize, transfer, integrate, application and protection of knowledge- must be accurate and be clearly managed in all affecting areas. | Marie | 1. The availability (if there is knowledge, should be available for recovery), 2. Precision of retrieval (If available, can be retrieved), 3. Being effective (accurate and useful knowledge retrieval), 4. Availability (knowledge is available at the required time). |
| Davenport and Proosak | 1. Technology (network), 2. Creation and dissemination of knowledge, 3. Sharing knowledge, 4. Knowledge electronic storing, 5. Education, Culture and Leadership, 6. Issues related to trust, 7. Knowledge infrastructure. | Trusselr | 1. Proper infrastructure, 2. Leadership and strategic commitment of management, 3. Provide incentives for sharing, 4. Finding the right people and data, 5. Culture, 6. Technology, 7. Transfer capability (available for allies), 8. Teaching and Learning. |
| Libowitz | 1. The strategy of knowledge management, with supporting from senior management, 2. Chief Knowledge Officer, 3. Devices and systems of Knowledge Management, 4. Incentives to motivate employees to share knowledge, 5. Culture of support for knowledge management. | Fynran | 1. Creating culture, 2. Sharing of knowledge and information, 3. Creative knowledge, 4. Participation of employees (90 percent of the success of knowledge management is due to use of knowledge users and encouraging knowledge sharing). |

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The present study investigated the critical success factors in the implementation of knowledge management, and six factors that can be said were considered by most experts of knowledge management, were chosen as knowledge management infrastructures as the following: knowledge-oriented organizational strategies, knowledge-based organizational structure, knowledge-based education and training of human resources, knowledge-based organizational culture, information and communication technology, financing knowledge management programs. This model has six components of knowledge management infrastructure in an organization that is obtained by investigating the opinions of experts of knowledge management in the field critical success factors of knowledge management.

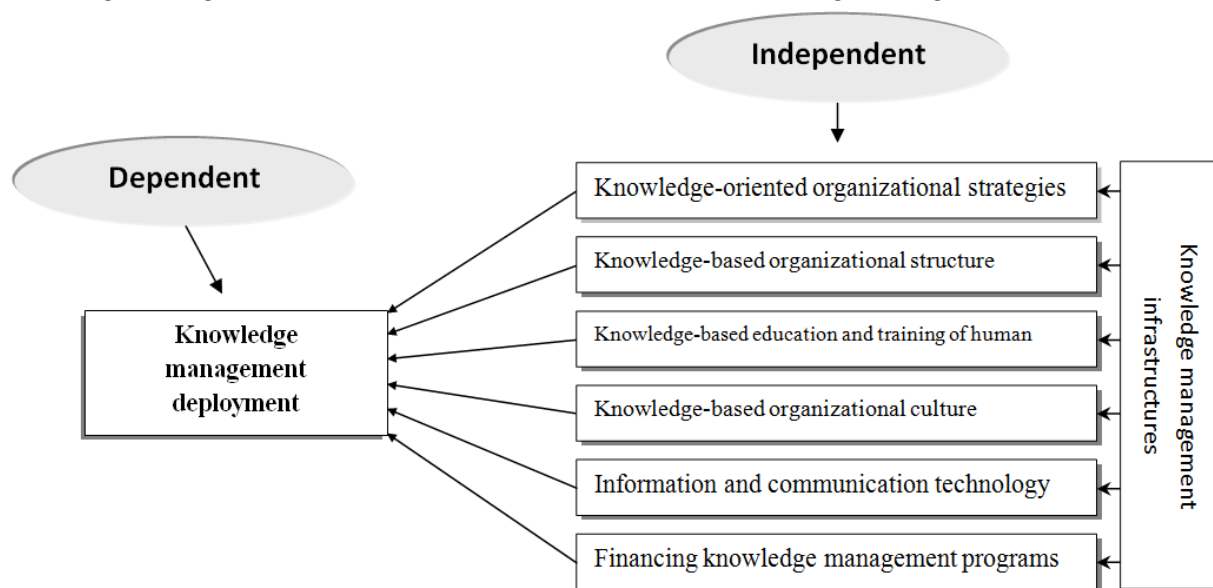


Figure 1 - The theoretical model of research

As can be seen in the analytical model of the research, underlying factors of knowledge management are independent variables and knowledge management deployment is the dependent variable.

MATERIALS AND METHODS

The objective of this study was to evaluate the current status of the necessary infrastructure to implement knowledge management in PNU. Research hypotheses are: A) There is a meaningful relationship between organizational strategies and deployment of knowledge management in PNU. B) There is a meaningful relationship between organizational structure and deployment of knowledge management in PNU. C) There is a meaningful relationship between human resources and deployment of knowledge management in PNU. D) There is a meaningful relationship between organizational culture and deployment of knowledge management in PNU. E) There is a meaningful relationship between information technology and deployment of knowledge management in PNU. F) There is a meaningful relationship between financing of knowledge management programs strategies and deployment of knowledge management in PNU. The research population includes Isfahan, Shiraz and Tehran PNU administrators, experts and faculty members, that a cluster random sample of 150 people was selected. Methodology of research is survey study. It is also applied research in terms of its objective. This study seeks to provide a conceptual model for knowledge management implementation in PNU and provide recommendations to improve the system. In this research, correlation method is used for data analysis. To determine the correlation between variables, the Pearson correlation coefficient was used. Multivariate regression (stepwise) has been used in this study. To collect the required data from the population, a questionnaire made by the researcher was used. The questionnaire consisted of two parts: 1) The first part, which included questions about gender, age, level of education and work experience. 2) The second part, which included 50

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questions. Questions 1 to 5 are about knowledge-oriented organizational strategies component, questions 6 to 10 are about knowledge-based organizational structure component, questions 11 to 15 are about knowledge-based education and training of human resources component, questions 16 to 20 are about knowledge-based organizational culture component, questions 21 to 25 are about information and communication technology component, questions 26 to 30 are about financing knowledge management programs component, and question 31 to 50 are about knowledge management component. To assess the validity of the research instrument (questionnaire) content validation was used. That is, first for any of infrastructures several questions were designed and then after modifying the questions, the initial list of the questionnaire was prepared and was given to university professors, scientists and experts and according to their opinion questions that were recognized not to be appropriate in terms of form and content were removed and proper questions were replaced. Finally, a questionnaire containing 50 questions was prepared and evaluated for reliability. To determine the reliability of the instrument (questionnaire), internal comparison method was used. Therefore, the questionnaire was distributed among a group of population and after collection, Cronbach's alpha coefficients was calculated for each 7 parts of the questionnaire (knowledge-oriented organizational strategies, knowledge-based organizational structure, knowledge-based education and training of human resources, knowledge-based organizational culture, information and communication technology, financing knowledge management programs). At the end, the Cronbach's alpha was calculated for the whole questionnaire by calculating the average of the sum of the parts of the questionnaire

Table 2 - Cronbach's alpha values for research variables

| Variables | Number of questions | Chronbach's alpha |
|---|---------------------|-------------------|
| knowledge-oriented organizational strategies | 1 – 5 | 0/7921 |
| , knowledge-based organizational structure | 6 – 10 | 0/8333 |
| knowledge-based education and training of human resources | 11 – 15 | 0/8655 |
| knowledge-based organizational culture | 16 – 20 | 0/7911 |
| information and communication technology | 21 – 25 | 0/8198 |
| financing knowledge management programs | 26 – 30 | 0/7425 |
| Dependent variable: knowledge management deployment | 31 – 50 | 0/7972 |
| The overall alpha value of the questionnaire | | 0/8059 |

Table 3 - Gender distribution of the sample

| Gender | Frequency | Frequency percentage | Cumulative frequency percent |
|-----------|-----------|----------------------|------------------------------|
| Male | 86 | 57/3 | 57/3 |
| Female | 58 | 38/7 | |
| No answer | 6 | 4 | 96 |
| Total | 150 | 100 | 100 |

Table 4 - Age distribution of the sample

| Age | Frequency | Frequency percentage | Cumulative frequency percent |
|-----------------------|-----------|----------------------|------------------------------|
| Younger than 25 years | 11 | 7/4 | 7/4 |
| 26 – 30 years | 29 | 19/3 | 26/7 |
| 31 – 35 years | 35 | 23/3 | 50 |
| 36- 40 years | 31 | 20/7 | 70/7 |
| 41 – 45 years | 24 | 16 | 86/7 |
| Older than 45 years | 15 | 10 | 96/7 |
| No answer | 5 | 3/3 | 100 |
| Total | 150 | 100 | |

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Table 5–education level distribution of the sample

| Education | Frequency | Frequency percentage | Cumulative frequency percent |
|-------------------|-----------|----------------------|------------------------------|
| Associate degrees | 23 | 15/3 | 15/3 |
| BA | 82 | 54/7 | 70 |
| MA | 28 | 18/7 | 88/7 |
| PhD | 14 | 9/3 | 98 |
| No answer | 3 | 2 | 100 |
| Total | 150 | 100 | |

Table 6–work experience distribution of the sample

| Work experience | Frequency | Frequency percentage | Cumulative frequency percent |
|--------------------|-----------|----------------------|------------------------------|
| Less than 5 years | 12 | 8 | 8 |
| 6 – 10 years | 37 | 24/7 | 32/7 |
| 11 – 15 years | 33 | 22 | 54/7 |
| 16 – 20 years | 29 | 19/3 | 74 |
| 21 – 25 years | 24 | 16 | 90 |
| More than 26 years | 11 | 7/3 | 97/3 |
| No answer | 4 | 2/7 | 100 |
| Total | 150 | 100 | |

Inferential analysis of data:

The first hypothesis:

There is a meaningful relationship between organizational strategies and deployment of knowledge management in PNU. In this hypothesis, data on the organizational strategies was obtained from questions 1 to 5 and data on knowledge management was obtained from questions 31 to 50 and then the correlation between these two variables was examined; the Pearson correlation coefficient test results are given in the following table:

Table 7: calculating the correlation coefficient for the first hypothesis

| Variable | R | Sig (2 tailed) | N |
|---|-------|----------------|-----|
| Knowledge management Organizational strategies | 0/711 | 0/000 | 150 |

According to the values shown in Table 7, it can be said that since the significance level (sig) is equal to 0/000, so the test is significant at 99% confidence level ($\alpha = 0.01$), the research hypothesis is accepted, and we can conclude that there is a correlation between the organizational strategies and implementation of knowledge management. ($r=0/711$ and $r^2=0/505$) Since the value of calculated correlation coefficient is between zero and one, the correlation is defective and direct.

The second hypothesis

There is a meaningful relationship between organizational structure and deployment of knowledge management in PNU. In this hypothesis, data on the organizational structure was obtained from questions 6 to 10 and data on knowledge management was obtained from questions 31 to 50 and then the correlation between these two variables was examined; the Pearson correlation coefficient test results are given in the following table:

Table 8: calculating the correlation coefficient for the second hypothesis

| Variable | R | Sig (2 tailed) | N |
|--|-------|----------------|-----|
| Knowledge management Organizational structure | 0/573 | 0/000 | 150 |

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According to the values shown in Table 8, it can be said that since the correlation between organizational structure and knowledge management in the population was calculated to be ($r=0/573$ and $r^2=0/328$), which is greater than the critical value, in order words the obtained sig is less than the 0/01 error level. So the research hypothesis is accepted at 0/05 error level. Therefore, there is a correlation between the organizational strategies and implementation of knowledge management. Also, since the value of calculated r is between zero and one, the correlation is defective and direct.

The third hypothesis:

There is a meaningful relationship between human resources and deployment of knowledge management in PNU. In this hypothesis, data on the human resources was obtained from questions 11 to 15 and data on knowledge management was obtained from questions 31 to 50 and then the correlation between these two variables was examined; the Pearson correlation coefficient test results are given in the following table:

Table 9: calculating the correlation coefficient for the third hypothesis

| Variable | R | Sig (2 tailed) | N |
|---|-------|----------------|-----|
| Knowledge management Human resources | 0/621 | 0/000 | 150 |

According to the values shown in Table 9, it can be said that since the significance level (sig) is equal to 0/000, so the test is significant at 99% confidence level ($\alpha = 0.01$), the research hypothesis is accepted, and we can conclude that there is a correlation between the human resources and implementation of knowledge management. ($r=0/621$ and $r^2=0/385$) Since the value of calculated correlation coefficient is between zero and one, the correlation is defective and direct.

The fourth hypothesis:

There is a meaningful relationship between organizational culture and deployment of knowledge management in PNU. In this hypothesis, data on the organizational culture was obtained from questions 16 to 20 and data on knowledge management was obtained from questions 31 to 50 and then the correlation between these two variables was examined; the Pearson correlation coefficient test results are given in the following table:

Table 10: calculating the correlation coefficient for the fourth hypothesis

| Variable | R | Sig (2 tailed) | N |
|--|-------|----------------|-----|
| Knowledge management Organizational culture | 0/221 | 0/000 | 150 |

According to the values shown in Table 10, it can be said that since the correlation between organizational culture and knowledge management in the population was calculated to be ($r=0/221$ and $r^2=0/048$), which is greater than the critical value, in order words the obtained sig is less than the 0/01 error level. Therefore, there is a correlation between the organizational culture and implementation of knowledge management. Also, since the value of calculated r is between zero and one, the correlation is defective and direct.

The fifth hypothesis:

There is a meaningful relationship between information technology and deployment of knowledge management in PNU. In this hypothesis, data on ICT was obtained from questions 21 to 25 and data on knowledge management was obtained from questions 31 to 50 and then the correlation between these two variables was examined; the Pearson correlation coefficient test results are given in the following table:

Table 11: calculating the correlation coefficient for the fifth hypothesis

| Variable | R | Sig (2 tailed) | N |
|-----------------------------|-------|----------------|-----|
| Knowledge management ICT | 0/271 | 0/000 | 150 |

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According to the values shown in Table 11, the obtained sig is less than the 0/01 error level. The research hypothesis is accepted and means that there is a correlation between ICT and implementation of knowledge management. Also, given the value of calculated correlation ($r=0/271$ and $r^2=0/073$), it can be said that there is a linear defective positive relationship between these two variables.

The sixth hypothesis:

There is a meaningful relationship between financing of knowledge management programs strategies and deployment of knowledge management in PNU. In this hypothesis, data on financing knowledge management programs was obtained from questions 26 to 30 and data on knowledge management was obtained from questions 31 to 50 and then the correlation between these two variables was examined; the Pearson correlation coefficient test results are given in the following table:

Table 12: calculating the correlation coefficient for the third hypothesis

| Variable | R | Sig (2 tailed) | N |
|---|-------|----------------|-----|
| Knowledge management Financing KM programs | 0/295 | 0/001 | 150 |

According to the values shown in Table 12, it can be said that since the significance level (sig) is equal to 0/001, so the test is significant at 99% confidence level ($\alpha = 0.01$), the research hypothesis is accepted, and we can conclude that there is a correlation between financing KM programs and implementation of knowledge management. ($r=0/295$ and $r^2=0/087$) Since the value of calculated correlation coefficient is between zero and one, the correlation is defective and direct.

Regression analysis of the research hypotheses:

Respectively, during the first six stages, variables of organizational strategy, human resources, organizational structure, financing knowledge management programs, ICT, and organizational culture have been added, each of which has the highest levels of correlation with knowledge management. According to the table, all the calculated sig values are smaller than (0/05), indicating that there is a linear relationship among all independent variables with knowledge management (dependent variable) as following model:

Knowledge management = (organizational structure) 0/219 + (human resources) 0/225 + (organizational strategy) 0/299 + 2/703 + (organizational culture) 0/068 + (IT) 0/087 + financing KM programs (0/103)

Information related to coefficient of determination (R^2), multiple regressions (R), adjusted coefficient of determination (\bar{R}^2), and standard error of estimates is given in the model summary.

Table 13: calculating coefficient of determination, multiple regressions coefficient, adjusted coefficient of determination, and standard error of estimation (Summary of the model)

| Model | Multiple correlation | Coefficients of determination | Adjusted coefficients of determination | Standard error of estimation |
|-------|----------------------|-------------------------------|--|------------------------------|
| 1 | 0/638 (a) | 0/407 | 0/405 | 0/64991 |
| 2 | 0/661 (b) | 0/436 | 0/433 | 0/61835 |
| 3 | 0/696 (c) | 0/484 | 0/481 | 0/59901 |
| 4 | 0/724 (d) | 0/524 | 0/520 | 0/57161 |
| 5 | 0/755 (e) | 0/570 | 0/567 | 0/55023 |
| 6 | 0/782 (f) | 0/611 | 0/608 | 0/52884 |

(a) predictor: (fixed), organizational strategies
 (b) predictor: (fixed), organizational strategies, human resources
 (c) predictor: (fixed), organizational strategies, human resources, organizational structure
 (d) predictor: (fixed), organizational strategies, human resources, organizational structure, financing KM programs
 (e) predictor: (fixed), organizational strategies, human resources, organizational structure, financing KM programs, IT
 (f) predictor: (fixed), organizational strategies, human resources, organizational structure, financing KM programs, IT, organizational culture

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According to the table above, the coefficient of determination is 0.657, i.e. the 65.7% of the variation in the dependent variable is explained by the regression. Standard error of the estimation that shows the amount of data dispersion around the regression, according to the table above is 0.40996. Here, in order to investigate the multivariate alpha and beta of this research, namely the coefficients of linear regression equation (testing correlation rate between variables), analysis of variance or ANOVA table was used.

Table 14: calculating variance analysis

| Sig. | sum of squares | Degrees of freedom | Mean square | F | Sig. |
|------------|----------------|--------------------|-------------|---------|----------|
| Regression | 57/162 | 1 | 57/162 | 131/406 | 0/000(a) |
| Residuals | 64/411 | 148 | 0/435 | | |
| Total | 121/573 | 149 | | | |
| Regression | 65/698 | 2 | 32/833 | 86/444 | 0/000(b) |
| Residuals | 55/875 | 147 | 0/342 | | |
| Total | 121/573 | 149 | | | |
| Regression | 71/499 | 3 | 23/833 | 69/687 | 0/000(c) |
| Residuals | 50/074 | 146 | 0/342 | | |
| Total | 121/573 | 149 | | | |
| Regression | 7/322 | 4 | 18/830 | 59/213 | 0/000(d) |
| Residuals | 46/251 | 145 | 0/318 | | |
| Total | 121/573 | 149 | | | |
| Regression | 78/299 | 5 | 15/659 | 52/196 | 0/000(e) |
| Residuals | 43/274 | 144 | 0/300 | | |
| Total | 121/573 | 149 | | | |
| Regression | 80/301 | 6 | 13/383 | 46/468 | 0/000(f) |
| Residuals | 41/272 | 143 | 0/288 | | |
| Total | 121/573 | 149 | | | |

(a) predictor: (fixed), organizational strategies
 (b) predictor: (fixed), organizational strategies, human resources
 (c) predictor: (fixed), organizational strategies, human resources, organizational structure
 (d) predictor: (fixed), organizational strategies, human resources, organizational structure, financing KM programs
 (e) predictor: (fixed), organizational strategies, human resources, organizational structure, financing KM programs, IT
 (f) predictor: (fixed), organizational strategies, human resources, organizational structure, financing KM programs, IT, or organizational culture

RESULTS

According to the table of variance analysis, it is observed that there is a linear relationship between the independent variables and the dependent variable in all models. The coefficient of determination is non-zero, the regression coefficient is not zero and all the six variables of organizational structure, organizational strategies, financing KM programs, information technology, organizational culture and human resources either individually or together are linearly correlated with knowledge management variable.

CONCLUSION

Conclusion of the first hypothesis testing:

In this hypothesis, the relationship between organizational strategies and knowledge management deployment in PNU was examined and the correlation between these two variables was confirmed. Knowledge and knowledge management play a key role in the organization and establish an inseparable

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relationship with strategic management and organizational strategies. Thus, corporate strategy development must be done according to the intellectual capital and organizational knowledge so as to create a sustainable competitive advantage. Test results indicate that there is a positive correlation between these two factors. The obtained correlation between these two variables is ($r=0/711$ and $r^2=0/505$) so it can be said that there is a strong relationship between them and the results of the study by Alimardani and Hosseini confirms this finding.

Conclusion of the second hypothesis testing:

Correlation between organizational structure and knowledge management deployment in PNU was proposed in this hypothesis. By entering the knowledge era, organizations must be flexible and adaptable in order to gain opportunity in the dynamic environment. Dimensions of traditional structures are unable to fully describe the structure of knowledge-based organizations, because the structure and informal relationships have played an important role in these organizations. Correlation between these two factors was confirmed. According to the results, ($r=0/573$ and $r^2=0/328$) was obtained and the relationship is positive and direct and considering the resulted value, their relationship seems to be strong, the results of Ravel in 2000 confirms the results of this research.

Conclusion of the third hypothesis testing:

In this hypothesis, correlation between human resources and knowledge management deployment in PNU was proposed. Most organizations have realized that their success is not due to physical assets, but is because of the experiences and skills of their employees. Organizations have realized that their knowledge about how to do things is considered as an important asset of the organization that should be managed like other valuable assets; the test results indicate that the correlation between these two factors is positive. The obtained correlation between these two variables is ($r=0/621$ and $r^2=0/385$), so it can be said that there is a strong relationship between them. In this regard, the study results of Jamshidnezhad 2008 and Hosseini 2007 confirm the results of this study.

Conclusion of the fourth hypothesis testing:

In this hypothesis, the relationship between organizational culture and knowledge management deployment in PNU was examined and thus the correlation between these two variables was confirmed. The results correspond to the results of the studies by Davenport, Prusak, Troosler, Feniran. Test results indicate that there is a positive correlation between organizational culture and knowledge management in PNU. Since the obtained correlation between these two variables is ($r=0/221$ and $r^2 = 0/048$), it can be said that the relationship between them is not very strong and given that the correlation obtained lies between 0 and 1, it is defective and direct.

Conclusion of the fifth hypothesis testing:

In this hypothesis, the relationship between ICT and knowledge management deployment in PNU was examined. There are different tools and techniques to implement knowledge management, which are supported by ICT. Knowledge management uses IT as a strong tool to improve its processes. Based on Person correlation coefficient testing, ($r=0/271$ and $r^2 = 0/073$), which indicates the relationship between them is not very strong. Thus, the correlation between these two variables was confirmed. In this regard, the results of Cong and Pandya, 2003 and Pazhoohan 2008 confirm the results of the present study.

Conclusion of the sixth hypothesis testing:

The correlation between financing KM programs and knowledge management deployment in PNU was introduced in this hypothesis. Based on the results, the correlation between these two variables is significant. Also ($r=0/295$ and $r^2=0/293$) that according to the obtained result, the relationship between them does not seem to be so strong that research results correspond to the results of Hassanzadeh, 2008. The component of organizational strategies is most correlated with knowledge management in PNU.

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There is a strong correlation between knowledge management and components of organizational structure and human resource. Financing KM programs and information technology had a weak correlation with KM deployment. The lowest correlation is related to the component of the organizational culture.

The results obtained from the regression equation suggest that there is a linear relationship between all the independent variables and knowledge management deployment (the dependent variable); in other words, the appropriateness of the model used was approved.

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REFERENCES

- Alavi, M and Leidner D.E. (2000).** Review knowledge management and knowledge management system: Conceptual foundations and research issues. *Organization studies*, vol. 14, No. 4, pp: 335-343.
- Alazmi, M & Zairi, M. (2003).** Knowledge management critical success factors, in: *Journal of knowledge management* vol. 15, No. 3, pp: 107-136.
- Allee, Verna. (1997).** *The knowledge evolution, expanding organization.* Boston: Butter worth-Heinemann.
- Bajaria, H. (2000).** Knowledge creation and management: inseparable twins. In: *Total Quality Management*, vol. 11, No. 4, pp: 502-573.
- Barney, J.B. (1991).** Firm Resources and Sustained competitive advantage. *Journal of Management* vol. 17, pp: 99-120.
- Blackler, F. (1995).** The knowledge, knowledge work and organization: An overview and interpretation. *Organization studies*, vol. 16, No. 6, pp: 1021-1046.
- Choi, B and Lee, B. (2003).** Knowledge management as a catalyst for innovation within organization. *Organization study.* vol.18, No. 7, pp:403-417.
- Dalkir, K. (2005).** *Knowledge management in theory & practice.* Elsevier Butterworth Heinemann. P: 7.
- Danport, T. & Prosak, I. (2000);** *Knowledge Management.* Translated by Rajman, H, SAPCO publishing, first edition Tehran.
- Graham, A, B, and Pizzo, v. G (1996).** A question of balance: case studies in strategic knowledge management. *European management journal*, vol. 4.
- farhanghi, A. & Safarzadah, H. Khademi, M. (2003);** *Theories of corporate communications,* Institute of Cultural Services Rasa, Tehran.
- Hassan zadah, M, (2007);** *Knowledge management (infrastructure and concepts).* publications, library, second edition Tehran.
- Holsapple, C. W. (2003).** Knowledge and its attributes, in *handbook on knowledge management*, volume 1k (ed. C. W. Holsapple). New York: Springer Verlag, 2003, pp: 165-188.
- Hong, nga, v. (2005).** Nexus between organizational culture and IT and implementation in Vietnamese organizations. A Doctoral Thesis, Swinburne University of technology, Australia.
- McDermott, R. and O'Dell C. (2001).** Overcoming cultural barrier to sharing knowledge. In: *Journal of knowledge management.* vol. 6, No. 1, pp: 45-53.
- Nichani, M. (2004).** Understanding organizational culture for knowledge sharing. *Community admin team*
- Nemati, M. (2005);** *Knowledge management and higher education: concepts and approaches,* letters of Higher Education, No. 12. P.18.

Research Article

Radingh ,A,(2006); Knowledge management (success in the global economy based on the data)
Translated by Latifi , M,H, second edition, Samt Publication, Tehran

Rowley, J. (2000). Is higher education ready for knowledge management? the international journal of educational management Bradford: vol. 14, p.325.

Sajadi, M.,& Hussein, A& Shafaghat ,K.(2007); Effective implementation of knowledge management in the public sector, Proceedings of the National Conference on Knowledge Management, Tehran.

Wang, c. l. , Ahmed, p. k. (2003) structure & structural dimensions for knowledge-based organization, measuring business excellence, vol. 7, issue 1:12.

Watson, J. (2003). Applying knowledge management: techniques for building corporate memories. Morgan Kaufman publishers, pp: 4-7.