

INVESTIGATION ON THE RELATIONSHIP BETWEEN ORGANIZATIONAL INTELLIGENCE AND KNOWLEDGE MANAGEMENT IN PUBLIC LIBRARY OF ASTAN QUDS RAZAVI.

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ABSTRACT

The purpose of this study is investigating the relationship between organizational intelligence and knowledge management in the central public library of Astan Quds in Mashhad. This research is based on the descriptive-survey research method. Statistical population of this research includes all librarians working in the central public library of Astan Quds (126 persons). Sampling method was consensus, therefore all the population was considered; out of this 112 person responded to the questionnaire. Two questionnaires have been used for data gathering which are: Albrecht (2003) Organizational Intelligence questionnaire for measuring of organizational intelligence including 49 questions and Bhatt knowledge management questionnaire including 80 question. Professors and specialists of knowledge and information science confirmed the validity of questionnaire and reliability calculated with Cronbach's alpha. Regarding results, there is a significant relationship between organizational intelligence and its parameters and knowledge management and its parameter. The results showed that organizational intelligence in this Public Library was desirable. Based on the research findings, all components of organizational intelligence and knowledge management were above average. Organizational intelligence can increase competition power of an organization and differentiate it from others. This is one of the major factors for upgrading of knowledge management at organizations. The best way to manage knowledge-based organizations such as libraries is use of business intelligence and knowledge management. According to the information center's need, libraries need to innovate and increase productivity and to find strategies for planning and performance. The role of librarians as well as by the need for a new approach to keep pace with the constant changes in their competitive environment and the gap in this field of research in libraries and information centers. This study examines relationship of these factors.

KEYWORDS: knowledge, organizational intelligence, knowledge management, public library.

INTRODUCTION

Past had become a fast and ambiguous trend due to human's stability (Elahiyan, Zavari, 2009).

Passing the era of competitive advantage based on information, we have reached the era of competitive advantage based on knowledge creation (Lang, 2001). Current era is the era of knowledge; a world wherein knowledge is a vital and pivotal commodity or good and knowledge evolution is the most important factor in it (Sunassee & Sewry, 2003). Knowledge as an intangible capital and property of different organizations has become a key source of economy and main factor of competitive advantage (Drucker, 1995) and it, in comparison with other kinds of properties, has a unique nature and it is that the more you use and apply it, the more valuable it will be (Nirmal, Sundaresan, Ray, Bhargava, Glantz, McHugh, 2004).

Currently the capability of organizations in knowledge capital management is their most important advantage. Drucker has clearly claimed that the most valuable organizational property is scientists and their science (Drucker, 1993); Knowledge capital management is an inevitable issue. The most pioneer and advanced organizations are those having the most valuable and updated human knowledge regarding their own enterprise and optimize it (Qolizade 2005, quoted in Khansari 2005). The successful and dynamic reactions of organization in ever-changing economic, technology, social, cultural and political environments depends on their capability to propose related information and find suitable solutions regarding their facing problems. Regarding this, the focus of organizational theorists is on designing intellectual capabilities of organizations and information and communication technologies integrity whose result is a new concept in organizational theory called organizational intelligence (Simic, 2005). Organizational intelligence makes us capable of making organizational decisions. Organizational intelligence means having a comprehensive knowledge of all factors affecting an organization. Having a deep knowledge of all factors like clients, competitors, economic environment, operations, and organizational processes having great

effects on the quality of managerial decisions in different organizations (Abzari, E'tebarian, Satari Qahfarrokhi, 2006). The idea and concept of organizational intelligence involves other paradigms like knowledge management; as the children intelligence had been important in time of Piaget, metaphors which make the ideas of collective intelligence applicable in organizations are important in current era. Although the main focus of organizational intelligence is on knowledge, it involves an area beyond that (Yolles, 2005). Albrecht considers organizational capability and capacity of an organization to collect information and understand the nature of environment and change information to knowledge and valuable solutions as organizational intelligence (Albrecht, 2003). There are 7 main components of organizational intelligence in Albrecht view:

- Strategic outlooking: means the capability to create, deduct and express organizational purposes. Common fate: when all or most members are involved in their duties, they know the organizational mission, and feel having a common purpose and then every one of them would understand the organizational success fatalistic. Tendency to change: every change shows a challenge and achieving new and breathtaking experiences; in other words, it is a new chance to start a new activity. Mood (bravery): despite common fate factor, the element of mood is involved with the great tendency of endowment. Unity and performing: different individuals and groups should make themselves ready to achieve organizational missions and goals. They should divide duties and works and set some regulations to face and communicate with each other and environment. Applying the knowledge: currently operations resulting in organizational successes or failures depend increasingly more on knowledge-based activities, true future decisions, judgment, intelligence, and common feeling of meritocracy and also the accuracy of applied knowledge ingrained in very second and segment of every organization.

- Pressure of the performance: Every one of executors in an intelligent organization shall have his/her own specific administrative position; but this would have much effect when it is a set of mutual expectations and operative obligations toward mutual success (Albrecht, 2003). Organizational intelligence is an important organizational variable which has significant role in organizational efficiency, effectiveness and also intellectual power, so that regarding this, Peter Senge says: if you want your boat (organization) move in a right route you shall have an intelligent organization. Organizational intelligence and knowledge management makes many competitive advantages for every organization and we cannot say that knowledge management is an introduction to organizational intelligence or organizational intelligence is an introduction to knowledge management, since both of them complement each other (Abedi Nejad, 2011). Managers attempt to share stored knowledge among all organizational members by knowledge management. Applying knowledge management changes the available knowledge to a perpetual source and an effective competitive advantage (Huysmans, 2006).

Libraries as knowledge-based institutions have not been far from changes due to new technologies emergence and extensive changes in different organizations. Digital library services, new systems of categorization like taxonomy and folksonomy, online reference services, making storages and clients' guidance in finding different data and information (like text, video, sound...) among many weblogs, portals, wikis, and other ones show that librarians shall coordinate with all these changes to offer due services and meet clients' needs. This issue is vital in public libraries which are in contact with extensive clients. Currently most organizations believe that "good is never good as enough" and they shall achieve more competitive advantages via functional factors like organizational intelligence and knowledge management (Albrecht, 2003). Public libraries are pivotal factors of leadership in this regard as they use organizational intelligence and knowledge management; they can compete with other institutions and achieve more levels of quality, innovation, and effectiveness.

MATERIALS AND METHODS

The purpose of study was applied and it had a descriptive-survey method; the study was to review the relation of variables of organizational intelligence and knowledge management. Due to limited numbers of statistical population there was no sample and capitation method was applied; in other words, the statistical population and sample include all librarians and managers in this Public Library. 126 officials were working in this library in 2013-2014. 112 questionnaires were collected after their distribution. The main independent variable in the study is organizational intelligence which involves 7 factors: strategic outlooking, common fate, tendency to change, mood, unity and performing, Applying the knowledge, and Pressure of the performance.

Two valid questionnaires of organizational intelligence (Albrecht, 2003) and knowledge management were used to make questions. Albrecht questionnaire included 7 aspects and 49 factors and knowledge management questionnaire included 5 aspects and 22 factors which reviewed organizational intelligence and rate of applying knowledge management. Knowledge management questionnaire was extracted from MA thesis of Mahmudi (2012) wherein Bhatt (2001) Model was used for its design and included five aspects: knowledge creation, knowledge valuation, knowledge offer, and knowledge sharing and knowledge application. Its factors were designed in 5 spectrum from “completely disagree” to “completely agree”. The reliability of organizational intelligence questionnaire was 0.804 based on Cronbach’s Alpha coefficient and the reliability of knowledge management questionnaire was 0.969. To control and increase the validity of this questionnaire, we used comments of faculty members of Information Science Group and management scholars.

Demographic review showed that Public Library of Astan-e Quds-e Razavi personnel include 65 (58 %) women and 47 (42 %) men staff, i.e. women are more than men. 27 (24.3 %) are never-married and 84 (75.7 %) are married; and one person did not answer this question. Among librarians 2 (1.8 %) had diploma, 3 (2.7 %) Associate’s Degree, 71 (64 %) had BA, 35 (31.5) had MA and one did not tell his/her degree. Librarians’ age: 57 (50.9%) were under 35, 48 (49.9 %) were between 35 to 45 and 6 (5.4 %) were above 45. Working Year: 4 (3.6 %) less than one year, 21 (18.9 %) between 1 to 5 years, 23 (20.5 %) between 6 to 10 years), 38 (34.2 %) between 11 to 15 years, 18 (16.2 %) between 16 to 20 years and 7 (6.3 %) more than 20 years experience.

Describing Findings Regarding Organizational Intelligence Components

Organizational intelligence has 7 components: strategic outlook, common fate, tendency to change, mood, unity and performing, Applying the knowledge, and Pressure of the performance. Based on Diagram 1 the component of unity and performing had a better condition than other and tendency to change had the worst condition in comparison with other components.

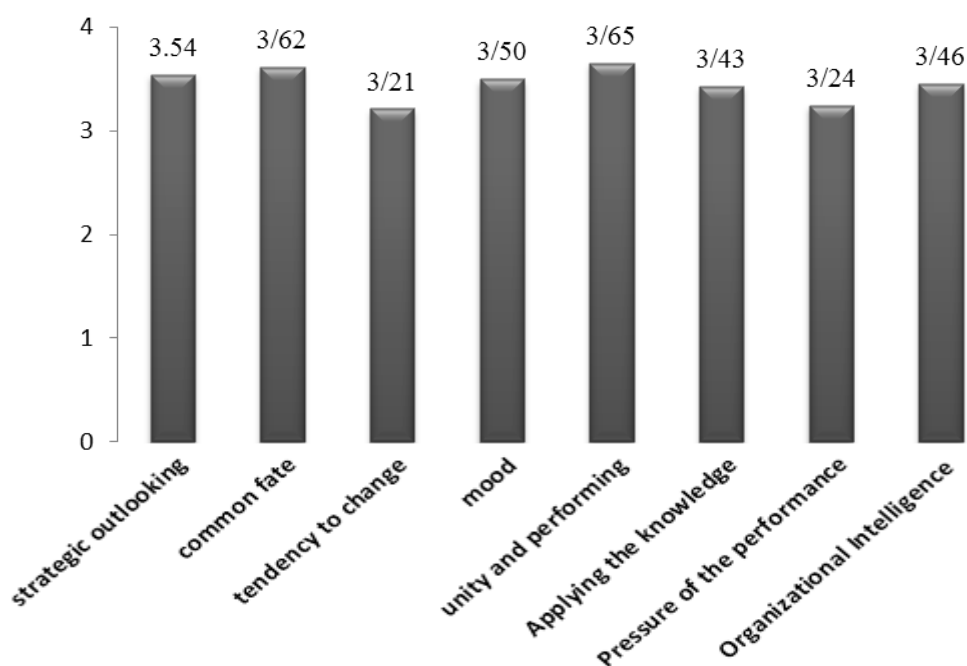


Diagram 1: Comparing Organizational Intelligence Components (Mean View)

Describing Findings Related with knowledge management Components

Knowledge management had 5 aspects: knowledge creation, knowledge valuation, knowledge offer, knowledge sharing and knowledge application. Based on Diagram 2, knowledge sharing aspect had a better condition and knowledge offer had the worst condition.

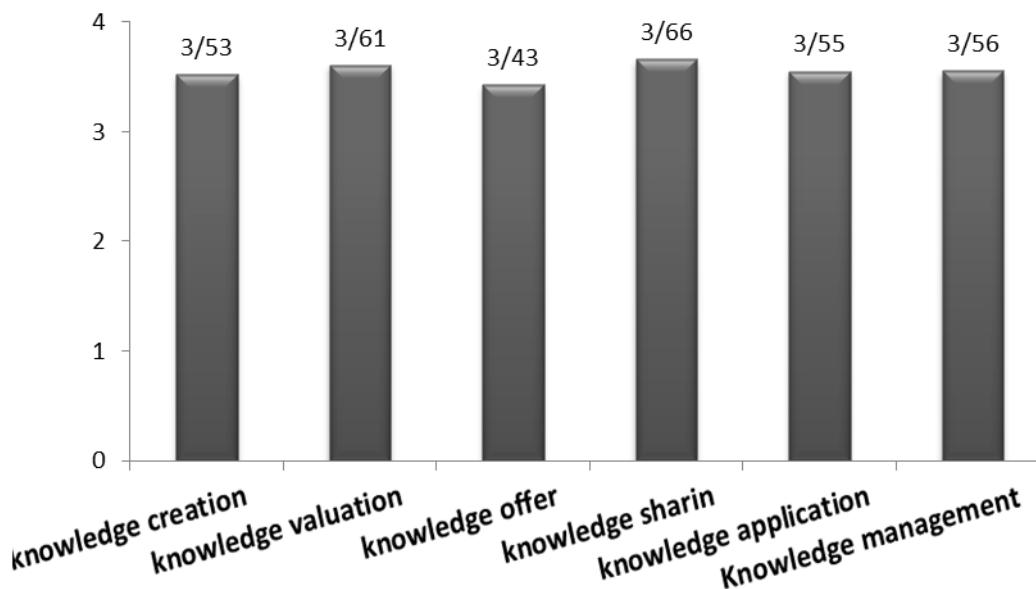


Diagram 2: Comparing Knowledge Management Dimensions (Mean View)

Research Hypotheses:

1. The condition of organizational intelligence is higher than normal in this Public Library.
2. The condition of knowledge management is higher than normal in this Public Library.
3. The condition of components forming organizational intelligence is not the same in this Public Library.
4. The condition of components forming knowledge management is not the same in this Public Library.
5. There is a significant relation between organizational intelligence and knowledge management in this Public Library.
6. There is a significant relation between all components of organizational intelligence and knowledge management in this Public Library.

Research Findings

Reviewing First Hypothesis:

1. The condition of organizational intelligence is higher than normal.

To review the above hypothesis, two-tailed Student's t-test was used to compare the mean of sample with a fixed value. Statistic of this test is shown below:

$$t_{ob} = \frac{\bar{x} - \mu}{s / \sqrt{n}}$$

Table 1: two-tailed Student's t-test for the First Hypothesis

Variable	T-test	Freedom Degree	Significance Level	Mean Differences	Confidence Interval 95 % Difference	
					lower bound	upper bound
Organizational Intelligence in Public Library	8.765	111	0.000	0.46	0.35	0.56

Based on Table 1, as significance level is 0.000 and is lower than 0.05 and as T-test statistic is positive, and the mean of organizational intelligence in this Public Library is more than 3 (normal mean), therefore we can say with 95 % Confidence that: The condition of organizational intelligence is higher than normal. The high rate of organizational intelligence showed that this library could successfully apply and implement organizational intelligence components in managerial and staff level due to reasons like job security, stress-free environment and dominance of friendship atmosphere. However the most impotent reason of this success may be managerial consistency and strategic plans; therefore we can conclude that there is a clear idea of its strategic ideas and organizational goals among its members; also managers and other staffs are totally aware of their own roles and others to reach organizational goals.

Reviewing Second Hypothesis

2. The condition of knowledge management is higher than normal.

The result of this test was reported in Table 2 after two-tailed Student's t-test:

Table 2: Results of Two-tailed Student's t-test for the Second Hypothesis

Variable	T-test	Freedom Degree	Significance Level	Mean Differences	Confidence Interval 95 % Difference	
					lower bound	upper bound
					Organizational Intelligence in Public Library	10.167

Based on Table 2, as significance level is 0.000 and is lower than 0.05 and as T-test statistic is positive, and the mean of knowledge management in this Public is more than 3 (normal mean), therefore with 95 % Confidence the condition of knowledge management is higher than normal. Results showed that knowledge management had an acceptable score. The high level of knowledge management showed that supreme managers of the organization understood importance of knowledge and management role. One of the reasons for the high level of knowledge management is that most staffs are working in their related expertise and appropriately understand organizational strategies and are parallel with them.

Reviewing Third Hypothesis

3. The condition of components forming organizational intelligence is not the same.

We used two-tailed Student's t-test to compare sample mean with a fixed value to review the above hypothesis. The result was summarized in Table 3:

Table 3: Results of two-tailed Student's t-test for Third Hypothesis

Variable	T-test	Freedom Degree	Significance Level	Mean Differences	Confidence Interval 95 % Difference	
					lower bound	upper bound
					strategic out looking	10.048
common fate	9.261	111	0.000	0.65	0.49	0.75
tendency to change	3.267	111	0.001	0.21	0.08	0.34
Mood	7.477	111	0.000	0.50	0.37	0.63
unity and performing	13.54	111	0.000	0.65	0.56	0.75
Applying the knowledge	6.465	111	0.000	0.43	0.30	0.56
Pressure of the performance	3.463	111	0.001	0.24	0.10	0.38

Based on Table 3, as the significance levels of all organizational intelligence components are 0.000 and lower than 0.05 and as T-test statistic is positive, and the mean of organizational intelligence in this Public Library is more than 3 (normal mean), therefore with 95 % Confidence the condition of organizational intelligence components is higher than normal.

Unity and performing component had a better condition than others and tendency to change had the worst condition among all components; however, it got clear that the conditions of components forming organizational intelligence were not the same. The higher rate of unity and performing showed the personnel commitment toward their work and work space. The lower rate of tendency to change showed personnel ignorance of what will happen and result in future. Trusting in personal capabilities and skills and updating personal and organizational knowledge can make changes some chances for innovation and improvement in every organization.

4. The condition of components forming knowledge management is not the same.

We used two-tailed Student's t-test to compare sample mean with a fixed value to review the above hypothesis. The result was summarized in Table 3:

Table 4: Results of two-tailed Student's t-test for Fourth Hypothesis

Variable	T-test	Freedom Degree	Significance Level	Mean Differences	Confidence Interval 95 % Difference	
					lower bound	upper bound
					Knowledge Creation	8.264
Knowledge Valuation	9.672	111	0.000	0.61	0.48	0.73
Knowledge Offer	6.348	111	0.000	0.43	0.30	0.56
Knowledge Sharing	11.638	111	0.000	0.66	0.55	0.77
Knowledge Application	8.159	111	0.000	0.55	0.42	0.69

Based on Table 4, as the significance levels of all knowledge management aspects are 0.000 and lower than 0.05 and as T-test statistic is positive, and the mean of knowledge management is more than 3 (normal mean), therefore with 95 % Confidence the condition of knowledge management aspects is higher than normal.

Knowledge distribution (sharing) had a best condition and knowledge offer had the worst condition among all aspects; however, it got clear that the conditions of components forming knowledge management were not the same. Making a knowledge-based organization demands focusing on all aspects of knowledge management. Knowledge management components have complementary relations with each other and excessive focus on one aspect and ignoring other aspects would not result in a knowledge-based organization.

Reviewing Fifth Hypothesis

5. There is a relation between organizational intelligence and knowledge management.

We reviewed the effect of organizational intelligence on knowledge management using simple linear regression. Its result is shown in Table 5:

Table 5: Regression coefficient of the effect of organizational intelligence on knowledge management

Independent variable	Regression coefficient	T-statistic	significance level	Correlation coefficient	coefficient of determination R ²
organizational intelligence	0.931	20.33	0.000	0.889	0.790

The significance level of organizational intelligence effect on knowledge management is lower than 0.05, the regression coefficient is 0.931 and positive; therefore we can say, with 95 % confidence that: organizational intelligence had a significant and direct effect on knowledge management; in other words, the more levels of

organizational intelligence among staff would result in more knowledge management in work space; therefore we can say, with 95 % confidence that: there is a positive and direct relation between organizational intelligence and knowledge management. Knowledge and intelligence are keys to achieving constant and sustainable advantage. Knowledge management is a factor which has connections with organizational intelligence and dealing with organizational intelligence by means of current knowledge is a necessity and applying it is an advantage in current competitive world and variety of libraries information.

Reviewing Sixth Hypothesis

6. There is a significant relation between all components of organizational intelligence and knowledge management.

We reviewed the relation of 5 aspects of organizational intelligence and knowledge management by means of Pearson correlation coefficient. Its results is shown in Table 6.

Table 6: The relation of Pearson correlation coefficients of 5 aspects of organizational intelligence and knowledge management

knowledge management organizational intelligence	Knowledge Application	Knowledge Distribution (Sharing)	Knowledge Offer	Knowledge Valuation	Knowledge creation
Strategic outlooking	0/577	0/593	0/659	0/546	0/616
	0/000	0/000	0/000	0/000	0/000
Common fate	0/643	0/583	0/670	0/728	0/578
	0/000	0/000	0/000	0/000	0/000
tendency to change	0/562	0/644	0/749	0/709	0/660
	0/000	0/000	0/000	0/000	0/000
Mood	0/545	0/542	0/631	0/617	0/540
	0/000	0/000	0/000	0/000	0/000
unity and performing	0/636	0/632	0/540	0/557	0/518
	0/000	0/000	0/000	0/000	0/000
Applying the knowledge	0/810	0/816	0/797	0/705	0/658
	0/000	0/000	0/000	0/000	0/000
Pressure of the performance	0/696	0/550	0/655	0/517	0/603
	0/000	0/000	0/000	0/000	0/000

The significance levels of relation of every organizational intelligence component and knowledge management aspects are 0.000 and lower than 0.05 and as T-test statistic is positive, therefore with 95 % Confidence: all organizational intelligence components have positive and significant relation with knowledge management aspects. For example, increasing strategic out looking among personnel would increase their knowledge creation, knowledge valuation, knowledge offer, knowledge distribution (sharing) and knowledge application. Analyzing this test showed that knowledge management components can predict changes regarding organizational intelligence. Therefore, every component of knowledge management may affect organizational intelligence by making the necessary knowledge context and extends organizational intelligence effectiveness in the library.

CONCLUSION

Libraries are big repositories of science and knowledge therefore have determining role in knowledge transfer and increasing the level of science among community members. Regarding, goals and functions of Public libraries and their direct with different social classes, they have a greater role in this regard. Library is an institute which is formed under effect of factors like knowledge, technology, culture, system, structure, individuals, and environment. Librarians, theoretically and functionally, are and will be always changing and consider this change as the secret of their durability and effectiveness in improving process of human society (Fattahi, 2004). Managers

and librarians, as intellectual capitals of libraries and knowledge intermediacy, can constantly learn and update their organizational knowledge and store and apply it whenever necessary.

Regarding all research findings there is positive and significant relations between organizational intelligence components and knowledge management and organizational intelligence and knowledge management in general. The tendency to change and knowledge offer components had the lowest rate which can improve with due strategies. Managing intellectual capital is equal with organizational intelligence. To achieve different aspects of organizational intelligence, managers shall determine long-term purposes for a library and attempt to apply strategic plans to achieve these goals. Focusing on intellectual capital that forms organizational intelligence can create a new chance for knowledge creation. Knowledge management is an undeniable part of every organization based on the study results. Applying knowledge management increases the level of services. Having organizational intelligence and knowledge management in Public libraries can help to have a better organization, leadership, management, decision making and creativity in facing with changing conditions of competitive environment. Regarding the role and importance of organizational intelligence and knowledge management, it is suggested to review following points:

- Supporting plans improving organizational intelligence and knowledge management.
- Creating organizational posts of knowledge manager and analyzer to make an integrated knowledge management system in libraries.
- Using successful experiences of other organizations regarding organizational intelligence and knowledge management application to improve executive and managerial plans.
- It is necessary to measure, review and evaluate organizational intelligence and knowledge management strategies to improve organizational intelligence and knowledge management and making a learning and improving organization.

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