

Sharing Practices and Actions for Making Best Use of Organizational Knowledge in Libraries
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Becoming a Learning Organization: A Case Study of the National Library and Archive of Iran

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Abstract:

The research explores if NLAI (National Library and Archives of Iran) has provided the proper condition to attain the goals of becoming a learning organization and build leadership from within; as well as the extent to which it is ready regarding staff's viewpoints for capturing the organizational knowledge and making it available for reuse.

The survey method is employed using an organized questionnaire based on Wick & Leon Model with 5 factors: Leadership, Assessment Program, information, Innovation, Implementation. Validity of the tool is measured through consulting some experts in knowledge and information science and management fields. Also, the Cronbach's Alpha 97% confirms the Reliability of the tool.

The population consists of all staff holding a BS degree and having 10 years work experience whom were 326 staff. Among them 213 staff completed the questionnaire. Data analysis is done using one-sample t-test, independent samples t-test and ANOVA.

NLAI readiness to become a learning organization evaluated significantly high regarding vision based leadership. Whereas, having a written policy or vision reflecting organization's goals and staff awareness of their manager's vision were evaluated low with mean rates of 3.9 and 3.15 respectively. Considering assessment program, irrational expectations from people work's outcome got mean rank

of 3.62 and existence of a written and clear plan for attaining organization's goals, mission and vision got 3.32.

Regarding information reception and dissemination, staff tendency to improve and update their scientific knowledge was the highest with 3.63 mean rank and information flow without paperwork and bureaucratic restrictions was the lowest. Innovation and creativity has been evaluated to be low and all the items related to this category had a mean rank below 3. Also, staff evaluation of organization administration and implementation, was in an average level.

Overall, NLAI is in a middle range of readiness to become a learning organization. The components of vision based leadership had the highest and innovation and creativity had the lowest point of achievement respectively. Therefore, the administration needs to consider more toward innovation and creativity and also implementation in NLAI. However, other components have not been fully accomplished yet.

Keywords: Innovation and creativity, Information dissemination, Leadership, Assessment Program, National Library and Archives of Iran, Learning organization, Wick and Leon Model

Introduction:

In today's competitive world, only those organizations that can adapt to the fast changes in the environment have a chance of survival. These changes force the organization to pursue best practices to achieve competitive advantage. One way to achieve sustainable competitive advantage is through continuous learning and transformation. Traditionally managed organization can no longer keep up with the capabilities and technologies of competitors. Facilitating learning and learning faster than the competition can help organizations survive and prosper in such a dynamic environment (Shahayi, 2006).

According to Garvin (2008), in a learning organization, employees continually create, acquire, and transfer knowledge, helping their company adapt to the unpredictable faster than rivals. They argue that three building blocks are required for creating a learning organization: a supportive environment, concrete learning processes, and leadership that reinforce learning. Research centres and libraries can benefit from this concept. These organizations play a critical role by collecting, preserving, and transferring knowledge and values, thus facilitating individual and social development. To be dynamic and effective, these organizations need to make radical changes in their structure as well as the attitude of managers and employees. Becoming a learning organization is a crucial step in acquiring the ability to adapt to changes in the global business environment (Akhavan and Jafari, 2006).

Knowledge is considered a key factor in development. In recent decades, knowledge creation and knowledge flow and use have become the catalyst for development, especially in newly developed countries and countries in transition. Knowledge is the key strategic asset in the 21st century and organizations that value knowledge invest in developing the best strategy for identifying, developing, and applying the knowledge assets they need to succeed. The concept of learning organization has been expanded to learning society and learning nation to describe countries that make the most of the knowledge cycle.

Learning is the most important way of improving performance in the long-term, and leading organizations in the future are those that can effectively exploit the capabilities, commitment,

and learning capacity of all the members. A learning organization learns from mistakes or recognizes when old solutions no longer apply. A culture that learns and adapts as part of everyday working practices is essential. A learning organization is more prepared for the unexpected (Akhavan and Jafari, 2006).

There is a difference between the concept of learning organization and organizational learning, the former being a process and the latter a structure. Although organizations learn in order to achieve their goals, a learning organization is one which is founded on a learning culture and structure. Today, organizations have recognized the importance of adopting a learning structure and use the ability of all their employees at all the levels of the organization to survive and prosper. A learning organization engages everyone in problem solving and continuous improvement based on the lessons of experience is the epitome of continuous organizational change and growth. Learning has become a key competitive advantage that determines the power and success of organizations (Shahlayi, 2009). Thus, organizations must create continuous learning opportunities, encourage team learning and collaboration, create systems to capture and share learning, and provide strategic leadership for learning (Yang et al., 2004).

The purpose of the present research is to examine the factors in becoming a learning organization in a case study of the National Library of Iran (NLI). These factors include: (1) leadership; (2) planning; (3) information dissemination; (4) innovation; and (5) implementation.

Literature Review

There is an extensive body of research on factors in building a learning organization, and different models have been proposed, including the seminal models of Senge (1990), Marquardt(2002), and Watkins and Marsick (1993).

Eslambolchi (2005) applied Wick and Leon's (1995) model of learning organization to Imam Sadiq University. This model consists of five dimensions, i.e. leadership, planning, information dissemination, innovation, and implementation. The results showed that this university enjoys a leadership with clearly defined visions, but suffers from planning, innovation, information dissemination, and implementation.

Azargoon and Fahiminia (2012) used Watkins and Marsick's (1993) model in their study of organizational learning in the NLI. They found that the NLI is at an average level in all the dimensions of this model, i.e. dialogue and inquiry; continuous learning; team learning and collaboration; empowerment; systems to capture and share learning; organizational connection to the environment; and strategic leadership.

Abdullah and Kassim (2008) examined the perceptions of organizational learning practices among university librarians in Yemen. Using the Dimensions of the Learning Organization Questionnaire (DLOQ) (Watkins and Marsick, 1993), they showed that the mean scores of learning practices at the organizational level were not enough to consider Yemeni university libraries as learning organizations. They also showed that the mean score rating for private university libraries was higher than the mean score for public university libraries.

Haley (2010) examined the relationship between learning organization dimensions and academic library performance. Using Watkins and Marsick's DLOQ, they found that continuous learning had the highest mean among the dimensions of organizational learning.

Michael and Higgins (2002) identified the characteristics of a learning organization and assessed whether the Nanyang Technological University (NTU) Library meets the criteria of being a learning organization based on fifteen characteristics drawn from the literature: shared vision; participatory management; training opportunities; learning attitudes; team working; trust and togetherness; open communication; experimental and forgiving climate; employee empowerment; knowledge management infrastructure; leadership; fun and rewarding work; customer relationships; adaptability and non-bureaucratic structure. They found that NTU successfully met nine out of fifteen criteria.

Methodology

The present research is a survey in the National Library of Iran (NLI). A questionnaire was developed based on the model proposed by Wick and Leon (1995) with 57 items. The conceptual model and its dimensions are provided in Table 1. Face and content validity of the instrument was confirmed by a panel of experts in the field of information science and management. Moreover, a Cronbach's alpha of 0.97 was obtained, indicating the high reliability of the questionnaire. The population consisted of all the employees of NLI with at least a master's degree and 10 years of experience. 326 questionnaires were distributed among them, of which 213 were returned. One-sample t-test, independent samples t-test, and analysis of variance were used for data analysis. Normal distribution was confirmed for all the tests by calculating skewness and kurtosis of the variables.

Table 1. Factors in becoming a learning organization

Leadership	Having a clearly defined vision
	Incorporating human resource management into the organization's vision
	Collaboration in formulating the vision
	Awareness of performance gaps
	Creating opportunities for participation
	Having clearly defined objectives
Planning	Having measurable plans for achieving the vision
	Alignment of plans with the vision
	Participation of managers and employees in planning
	Evaluation of plans, processes, and progress
	Having realistic expectations of employees
Information Dissemination	Free flow of information
	Accessibility of information

	Informing employees about the organization's plans and activities
	Sharing research findings and evaluation results
	Awareness of expectations in the internal and external environment
	Seeking others' opinions and views on how to improve the situation
Innovation	Having a safe environment
	Valuing novel ideas
	Creating opportunities
	Risk-taking
	Embracing change
	Having an open environment
Implementation	Valuing human resource development and appreciating research and learning
	Attempting to develop and promote scientific knowledge
	Fair distribution of resources
	Pragmatism
	Applying research findings to practice
	Fair performance evaluation
	Flexible work schedule

Findings

Table 2. Readiness of NLI to become a learning organization

Variables	N	Mean	SD	Theoretical Mean	t	df	Sig.	Result
Readiness	213	177.93	44.722	174	1.282	212	0.200	Average
Leadership	213	31.36	7.112	27	8.941	212	0.000	High
Planning	213	38.28	9.976	36	3.338	212	0.001	High
Dissemination	213	28.96	7.883	27	3.633	212	0.000	High
Innovation	213	35.06	12.397	39	- 4.637	212	0.000	Low
Implementation	213	44.27	13.475	45	0.793	212	0.429	Average

Given the results of t-test ($t= 1.282$; $df= 212$; $p = 0.05$) and given that there is no significant difference between the calculated mean (177.93) and the theoretical mean (174), it can be concluded that NLI's readiness to become a learning organization is at an average level.

NLI is in a good condition in terms of leadership given the results of t-test ($t = 8.941$; $df = 212$; $p = 0.05$) and given that there is a significant difference between the calculated mean (31.36) and the theoretical mean (27).

Planning is higher than average in NLAI given the results of t-test ($t = 3.338$; $df = 212$; $p = 0.05$) and given that there is a significant difference between the calculated mean (38.28) and the theoretical mean (36).

Information dissemination in NLI is higher than average given the results of t-test ($t = 3.633$; $df = 212$; $p = 0.05$) and given that there is a significant difference between the calculated mean (28.96) and the theoretical mean (27). On the other hand, the t-value for innovation is negative ($t = -4.637$; $df = 212$; $p = 0.05$) and there is a significant difference between the calculated mean (35.06) and the theoretical mean (39), indicating that innovation is lower than average in NLI.

Finally, implementation is at an average level in NLI given the results of t-test ($t = -0.793$; $df = 212$; $p = 0.05$) and that there is no significant difference between the calculated mean (44.27) and the theoretical mean (45).

Table 3. Descriptive data related to respondents' views about NLI's readiness to become a learning organization divided by department

Respondents	Mean	SD	SE
Cataloguing & Information Services Departments*	165.04	38.34	3.59
Research & Education Department	183.41	48.64	6.33
Archive Department	206.58	41.46	6.55
Total	177.93	44.72	3.06
* Consists of four departments: Information Processing Department; Manuscripts & Rare Books Department; Public Information Services Department; References and Research Department.			

The results show that the employees of the Archive Department of NLI have a higher perception of readiness for becoming a learning organization. One-way analysis of variance was performed to examine the differences between these groups (Table 4).

Table 4. The results of one-way ANOVA for differences in readiness of different NLI departments for becoming a learning organization

Variance	Sum of Squares	df	Mean Squares	F	Sig.	Result
Between-Group	53521.151	2	26760.575	15.168	0.000	Statistically Significant
Within-Group	370490.793	210	1764.242			
Total	424011.944	212	-			

The F-value (15.168) is significant at the 0.05 level. Thus, there is a significant difference between different NLI departments in readiness for becoming a learning organization. Scheffe's post hoc test was used to explain the difference between different departments (Table 5).

Table 5. Scheffe's post hoc test

Departments		Mean Difference	Standard Error	Sig.
Research& Education Department	Cataloguing & Information Services Departments	18.363*	6.736	0.026
Archive Department	Cataloguing & Information Services Departments	41.531*	7.719	0.000
	Research& Education Department	23.168*	8.603	0.028

The results of Scheffe's test show significant differences between different departments. According to the respondents, the Archive Department is readier than other departments for adopting a learning structure, followed by the Research& Education Department and the Cataloguing & Information Services Departments.

Discussion and Conclusion

Learning is crucial in social institutions. Increased complexity and rapid, unpredictable changes have increased uncertainty in the business environment. As a result, knowledge and learning have become key factors in adapting to these changes. The present research aimed to examine the factors in becoming a learning organization in a case study of the National

Library of Iran (NLI). Using Wick and Leon's (1995) model, NLI's readiness to become a learning organization was assessed in five dimensions, i.e. leadership, planning, information dissemination, innovation, and implementation.

Leadership

The first and probably the most important step in creating a learning organization is to establish a firm foundation based on a shared vision about learning. Scholars in the field of management consider vision to be a critical factor for the success of organizations in today's turbulent and competitive environment. In the process of becoming a learning organization, leadership style can be crucial for successful implementation of plans and initiatives. Effective leadership entails creating a shared vision, encouraging personal insights, and communicating with others to gain their trust and support. According to Daft (1998), effective leadership is at the core of building a learning organization. Without a leader committed to learning, the organization is bound to fail. The leader is the only one who can guarantee that the organization will face future realities. Thus, the leader is in the best position to observe and outline the gap between the current state and the vision. The leader must have a clearly defined vision and stay committed to it. This vision must motivate those who try to realize it (Wick and Leon, 1995).

The means obtained for different leadership factors showed that having a clearly defined vision (9.3), having clearly defined objectives (3.8), and creating opportunities for participation in formulating the vision (3.62) were the most important ones. Having a shared vision determines the type of knowledge that is created, stored, and shared in the organization (Marquardt, 2002). Top management must have a clear understanding of the work conditions and facilitate the free flow of information through different channels. Self-scrutiny is important for learning organizations. There are various ways for tapping into the perceptions of employees, the most effective of which is meetings between the management and the employees.

The results of t-test were significant and indicated that NLI's leadership is appropriate for becoming a learning organization. It must be noted that in addition to having a clearly defined vision, commitment of the top management to pursue and promote the vision is crucial to its realization. Also the employees should understand, accept, and implement the vision, and rewards and incentives can help in motivating them.

Planning

According to Wick and Leon (1995), having clear measurable plans is the second most important dimension of a learning organization. Planning is crucial to realization of an organization's vision. Learning organizations measure their progress, have consistent plans, and involve the members in the planning process. Having realistic expectations of employees (3.62) and having measurable plans for achieving the vision (3.32) were the most important planning factors. The results of t-test were significant and indicated that NLI's readiness in terms of planning is higher than average.

Information Dissemination

A learning organization thrives on knowledge and information. Lack of knowledge and information can make the organization susceptible to environmental threats. A learning organization is fully aware of its competitors, its customers, changes in the environment, and its current situation. According to McLagan and Nel (1995), employees require two types of information: (1) strategic information, which refers to information about what the

organization is trying to achieve in the short or long term, and (2) tactical information, which refers to information about the organization's current operating environment. The first step in becoming a learning organization is to fully understand the external reality. Organizations also need to have a good understanding of their internal environment and effectively disseminate information through different channels.

The results indicated that the most important information factors were awareness of expectations in the internal and external environment (3.37), accessibility of information (3.24), employees' information about the organization's plans and activities (3.24). The results of t-test were significant and showed that NLI's readiness become a learning organization was higher than average in terms of information dissemination.

Innovation

An organization with a vision-based leadership, clearly defined plans, and good sources of information can foster creativity and innovation. Innovativeness is a product of various factors; it may be triggered by performance gaps or by competition. To encourage learning, organizations must move from mechanical to dynamic and flexible structures, which requires a new management philosophy that embraces risk-taking (Argyris and Schön, 1978).

The results showed that none of the innovation factors had a mean greater than 3. Valuing novel ideas (2.93), having an open environment (2.92) were the most important factors. Risk-taking and embracing change had the lowest means. The results of t-test showed that innovation is below average in NLI, which negatively affects its readiness to become a learning organization. Previously, Jamali and Neshat (2010) showed that the NLI's climate does not promote creativity.

Innovation is encouraged in a safe environment where mistakes are regarded as a learning opportunity and an essential component of discovery. Moreover, the impact of the external environment on innovation and creativity within the organization should not be overlooked. The reward system can be used to support people for taking risks and developing themselves by meeting challenges and solving problems, not as a punishment device that would discourage innovation.

Implementation

Implementation is the action taken to implement output of decision making (Wick and Leon, 1995). Learning is possible only through implementation and practice. Providing employees with regular formal and informal feedback about how well they are meeting goals can improve implementation (Bur Bur, 2006).

The results showed that none of the implementation factors had a mean greater than 3.5. Identifying the learning needs of employees over the last three months (3.5) and managers' ability to communicate with employees (3.44) were the most important implementation factors. Overall, the results indicated significant weaknesses in this dimension, as the mean of other items were significantly lower than average:

1. Fair allocation of budget between different plans (2.4)
2. Management fulfilling their promises (2.56)
3. Understanding the important role of cooperation in performance (2.69)
4. Effective use of skilled employees (2.7)
5. Constant availability of work equipment and supplies (2.89)
6. Structured training courses for employees (2.94)

7. Concentration of learning and development plans on continuous improvement (2.98).

Finally, the results of t-test showed that implementation in NLI is lower than average. Solving the problem of different departments of an organization that aspires to become a learning organization is a major challenge. Roles are flexible in a learning organization and multi-tasking is promoted. Multipurpose training, multiple job assignments, and job rotation are commonly practiced to increase workforce flexibility (Baghi, 2003).

Differences in the Views of Respondents by Department

The results showed significant differences between the views of employees of different departments. The results of Scheffe's post hoc test indicated that the Archive Department is readier than other departments for adopting a learning structure, followed by the Research & Education Department and the Cataloguing & Information Services Departments.

Such an overview of NLI allows for identifying the strengths and weakness of this organization. All the members of the organization need to understand the statuesque and must identify and overcome the barriers to becoming a learning organization. Overall, this study showed that NLI's readiness to become a learning organization is average. Azargoon and Fahimnia (2012) used Watkins and Marsick's (1993) model in their study of organizational learning in the NLI. They found that the NLI is at an average level in all the dimensions of this model, i.e. dialogue and inquiry; continuous learning; team learning and collaboration; empowerment; systems to capture and share learning; organizational connection to the environment; and strategic leadership.

There are other studies that have been carried out in library settings and are consistent with the present findings, but these studies are not compared to the present research due to differences in the mission and goals of the libraries (e.g. Sattari et al., 2011; Lashkari et al., 2011; Abdullah and Kassim, 2008; Eslambolchi, 2005). The following suggestions can help NLI on its path to becoming a learning organization:

- **Top management:** The top management at NLI must have a clear understanding of the working conditions and facilitate the flow of information through different channels. Self-scrutiny is important for learning organizations. There are various ways for tapping into the perceptions of employees, the most effective of which is meetings between the management and the employees.
- **Human resources:** Human resource development (HRD) is another major factor for organizations that wish to adopt a learning structure. It is a starting point for increasing productivity as well as the quality of products and services. In addition to training, the learning needs of employees must be identified and their progress must be evaluated. Restructuring the HRD Department, fair allocation of resources among different departments and plans, and job rotation can be effective in this regard.
- **Innovation:** The reward and evaluation systems should be flexible and encourage innovation. Employees must be encouraged to take calculated risks. This climate requires participatory and non-hierarchical management. Managers should be regarded as coaches, not as authority figures. Managers requires certain skills to be able to facilitate change and should provide feedback to employees and teams. Innovation flourishes in a safe environment where mistakes are tolerated as a learning opportunity. Other factors that can encourage innovation are: involving creative employees in decision-making and planning at the highest levels of the organization, increasing employees' motivation, respecting them, and rewarding them based on merit. It is also imperative to assign employees with relevant skills to different tasks

in order to create a friendlier environment. Having flexible work schedules, giving employees more freedom, supporting novel ideas, learning from successful ideas implemented in other organizations, and empowering employees are other factors that can contribute to fostering innovation in NLI. Innovation must be incorporated into the library's culture as a norm and value.

- **Implementation:** Learning organizations never become accustomed to problems, rather they look at them from new perspectives which leads to incubation of new ideas and solutions. A learning organization provides information about budgets, profits and losses to all its members, and free flow of information within the organization is supported. Changing the organizational structure, reconsidering administrative procedures, increasing transparency and reducing bureaucracy, placing quality over quantity, and motivating employees to understand, accept, and implement the organization's vision are other factors that can help NLI on its path to becoming a learning organization.

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