# Evaluation of Organizational Learning process based on Marquardt model. Case study: municipality of Mahabad city

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**Abstract:** In the current competitive world, the agency has a chance to sustain which could be adapted itself to the environmental changes continually. The environment changes leads the agencies to pursue always the better solutions and approaches in order to accommodate to the environment and thus attain the competitive advantage. Therefore, one of the ways for acquiring sustainable competitive advantage, is focusing on persistent learning of employees for approach to the organizational targets with highest influence. The aim of the present research is the review the organizational learning level by using Marquardt Model (Systematic Learning Organization Model) in the Mahabad municipality. In order to assay hypothesizes, Binomial test has been used. Finally, the component of learning organization has been categorized by using of bar bias diagram. The findings show that, the learning dynamic, organizational evolution, enrichment of individuals and technology implementation Has been realized in municipality of Mahabad But the knowledge management component is unrealized. With regard to these results, could be said that, the municipality of Mahabad city was a Learning organization and, indeed must work in the field of development and implementation of technology.
**Keywords:** Learning Organization, Organizational Learning, Measure Organizational Learning.

## INTRODUCTION

In recent decades of twenty century, evolutions began among thoughts of great institutions managers along with conducted researches in the world reliable universities technology institutions. For first time, this revision of scientific structure was called learner institution in the Journal of Massachusetts technical university in a paper under institutions evolutions.

In the course of these evolution, too eminent professor of Kiptown university i.e John Moller & Feller Barent posed wisdom management and knowledge creation in the south African countries [10].

## CONCEPTUAL FRAMEWORK

In modern competition businesses environments, learning organizations maintain is an important priority. Their abilities to manage learning capability at all personnel and organizational levels, has made them capable to modern products and services, new marketing strategies and leading methods in learning inversion rapidly[4].

On the other hand, the organizational benefits and presenting better services to clients and related to the quality of staffs work life. Organizations should look for the perfect development of staff's potential abilities to respect their social religious and needs.

Historically, before learning Organization, at first, the conception of Organizational learning has been developed and the conducted research were on Organizational learning which creation necessary fields in order to forming theory learning Organization. Today, Organizational learning has been considered increasingly among Organizations which interest in raise up competitive advantage, innovation and effectiveness [14]. Simon, has described, Organizational learning as growth of insight and successful revision of Organizational problems by someone until its results reflected in structural elements and Organization results [13].

Some debate has arisen from an existent dichotomy in the use of the terms "organizational learning" and "the learning organization". Both concepts are so intimately related that sometimes they are used interchangeably in the literature. The difference between organizational learning and the learning organization refers to process versus structure. Organizational learning is used to describe certain type of activities that take place in an organization. Organizational learning is a construct, which implies that the entity called an organization actually gets engaged in the process of gathering and processing information, and as a consequence its potential behavior

is changed. Learning organization is a construct related to an organization that has a thoughtful philosophy for anticipating, reacting, and responding to change, complexity, and uncertainty. The learning organization refers to a particular type of organization: it is an organization that is good at organizational learning. The consequence of this debate is that the concept of organizational learning always comes first and the learning organization follows, but they are mutually inclusive. This dichotomy also implies that organizational learning is a complex and multidimensional phenomena [8].

Marquardt has provided slightly comprehensive description in his valuable book under creation of learner institution: In systematic description, a learning Organization is an organ which learns collectively and robustly and evolves itself continuously so that could best collect, manage and use of data with aim to success of Organizational body [14].

The learning Organization literature indicates that people learn with creation of concepts of data and incorporating these concepts to knowledge and then someone who determine reaction of Organization to environment. The amplitude of knowledge acceptance in the Organization and nature of Organizational culture, determine Organizational theories and climate.

The interaction between people inside and outside of Organization determines their operation and activity in the Organization and will be reflected in application, policies, understanding of the clients, Competitor , suppliers, founders, observes and regulators [11].

**Systematic Learning Organization Model (Marquardt systematic model):**



**Fig. 1: Systematic Learning Organization Model**

Organization, people, knowledge and technology sub-systems are needed to progress and to increase learning and each of them affect on other fourfold sub-systems. These sub-systems are needed to create and keep organizational learning and enjoyment. Fivefold sub-systems are statistically correlated to each other and complement each other. If one of these systems is weak or is not present, other sub-systems will seriously be weakened [10].

**RESEARCH OBJECTIVE**
**Main Objective**
Identification of realization grade of Organizational learning process in municipality of Mahabad City".

**Specific Objective**
1. learning dynamic identification: personal, collective, institutional
2. Identification of institutional evolution: Perspective, culture, approach and structure.
3. Identification of people potentiation: Management employees, clients, partners, supplies and society.
4. Identification of knowledge management: Acquire, creation save, retrieval, transfer and utilization.
5. Identification of technology utilization: knowledge data system, learning based on technology and support electronic application system.

**Hypothesis**: In case study sample, Mahabad municipality:
1. The learning dynamic has been occurred at personal, collective, institutional levels.
2. The institutional evolution has been realized in perspectives culture, approach and structure dimensions.
3. The potentiation of individuals has been conducted on management, employees, clients, partners, suppliers and society levels.
4. Knowledge management, i.e acquire, creation, save, retrieve, transfer and utilization of knowledge has been occurred.
5. Technology utilization such as knowledge data system, learning based on technology and electronic application support systems has been formed.

**METHODOLOGY**
The present research is provisional in terms of time, results of research is applied and about process is integrated, as well as in terms on research's aim is descriptive (case study) and logically is inductive. municipality of Mahabad city and statistic group includes of 45 persons of senior, middle and operational managers and administrative, technical experts who responded to questionnaires.

In order to  evaluation of Organizational learning level and collection of data to test research hypothesizes in Mahabad municipality , the questionnaire consists of 5 learning dynamic items, Organizational evolution, potentiate of individuals knowledge and technology which is called profile questionnaire of learner Organization has been distributed  between experts and

managers of these Organization and collected following response to questionnaire. The individuals responded based on a criteria of 5- point of likert type. These 5 - point begins from very low spectrum (1) and ends with more high one (5). Also, For statistical data analysis, nonparametric binomial test was used.

**RESULTS**

After data collection and analysis was obtained by binomial tests the following table

**Table 1: binomial test with a probability equal results**

| Components | Grouping | Observed value | Observed Prop. | Test Prop. | Asymp. Sig. (2-tailed) |
|---|---|---|---|---|---|
| learning dynamic | Group 1: ≤ 3 | 8 | 0.18 | 0.50 | 0.000 |
| | Gourp 2: > 3 | 37 | 0.82 | 0.50 | |
| | Total: | 45 | 1.00 | 1.00 | |
| organizational evolution | Group 1: ≤ 3 | 9 | 0.20 | 0.50 | 0.000 |
| | Gourp 2: > 3 | 36 | 0.80 | 0.50 | |
| | Total: | 45 | 1.00 | 1.00 | |
| enrichment of individuals | Group 1: ≤ 3 | 11 | 0.24 | 0.50 | 0.001 |
| | Gourp 2: > 3 | 34 | 0.76 | 0.50 | |
| | Total: | 45 | 1.00 | 1.00 | |
| knowledge management | Group 1: ≤ 3 | 28 | 0.62 | 0.50 | 0.135 |
| | Gourp 2: > 3 | 17 | 0.38 | 0.50 | |
| | Total: | 45 | 1.00 | 1.00 | |
| technology implementation | Group 1: ≤ 3 | 14 | 0.31 | 0.50 | 0.016 |
| | Gourp 2: > 3 | 31 | 0.69 | 0.50 | |
| | Total: | 45 | 1.00 | 1.00 | |

1. As can be seen in the table above, Factors relating to learning dynamics can say that 82% of the members of the sample mean score is greater than 3. Also since the test significance level smaller than 0.05 is. So we can assume H0 rejected the claim that learning dynamics have occurred in the municipality of Mahabad.

2. As can be seen in the table above, Factors relating to Organizational Evolution can say that 80% of the members of the sample mean score is greater than 3. Also since the test significance level smaller than 0.05 is. So we can assume H0 rejected the claim that Organizational Evolution have occurred in the municipality of Mahabad.

3. As can be seen in the table above, Factors relating to enrichment of individuals can say that 76% of the members of the sample mean score is greater than 3. Also since the test significance level smaller than 0.05 is. So we can assume H0 rejected the claim that enrichment of individuals have occurred in the municipality of Mahabad.

4. As can be seen in the table above, In relation to knowledge management initiatives can say that just 38% of the members of the sample mean score is greater than 3. Also, since the test significance level greater than 0.05. is. So we can not reject the hypothesis H0 and the claim that knowledge management took place in the municipality of Mahabad, will not be accepted.

5. As can be seen in the table above, Factors relating to technology implementation can say that 76% of the members of the sample mean score is greater than 3. Also since the test significance level smaller than 0.05 is. So we can assume H0 rejected the claim that technology implementation have occurred in the municipality of Mahabad.

**Further Findings**

In line with the results of further research, Error bars in a chart based on 95% confidence interval for the mean of each component is calculated A comparison has been made to rank the components in this diagram: Figure 1 is observed with the following results:
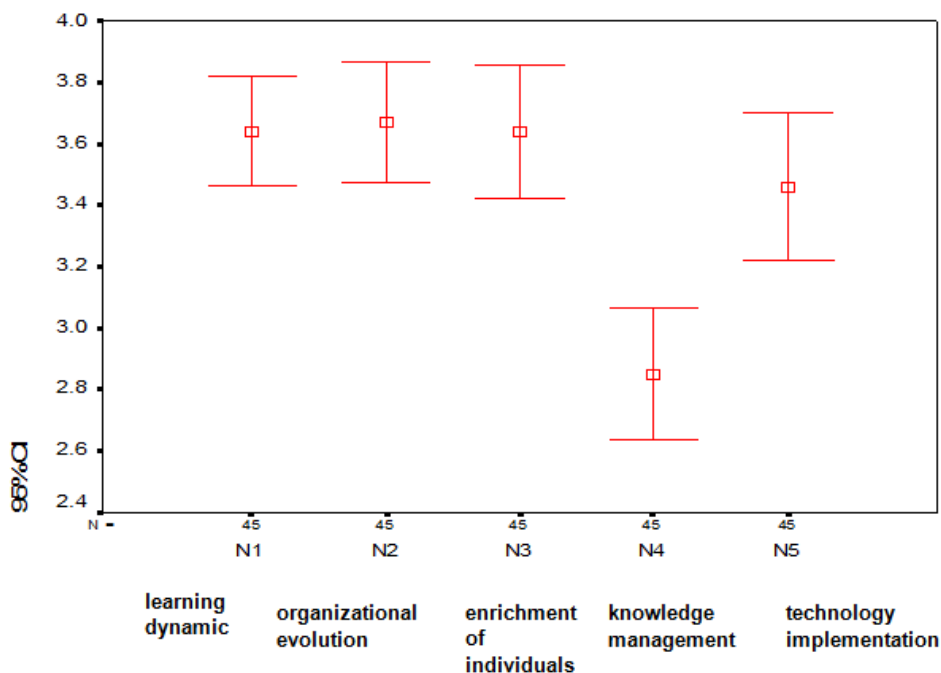
**Fig 2: Ranking of the components of the learning organization in the City of Mahabad**

By Observing Figure "2" The following results are obtained:

**Table 2: Ranking of the components of the learning organization in the City of Mahabad**

| Components of the learning organization | Priority |
|---|---|
| organizational evolution | First |
| enrichment of individuals | Second |
| learning dynamic | Third |
| technology implementation | Fourth |
| knowledge management | Fifth |

According to the results above, the perspective of the respondents Component of organizational evolution, enrichment of individuals, learning dynamic, technology implementation and knowledge management are ranked first to fifth. So we can conclude that the variable has a higher rank, than has been achieved in the municipal city of Mahabad.

**CONCLUSIONS AND RECOMMENDATION**

Based on the findings of the research component of the organizational evolution, enrichment of individuals, learning dynamic and technology implementation the municipal city of Mahabad. However, knowledge management component is unrealized. Given these results, we can say that the municipality of Mahabad a learning organization . However, we have to take action in the field of knowledge management.

Accordingly, proposals to strengthen the components of the learning organization for the City of Mahabad will be provided:

**Proposed solutions for knowledge management:**
1. Designing systems that are available to municipal employees can easily get the internal and external environment and to collect.
2. Design and deployment of systems and structures that can encrypt and store important knowledge and, if necessary, those who need to use information
3. Of projects that generate knowledge and provide learning opportunities to engage employees, support.
4. Organization and its members continually develop strategies for sharing learning across the organization.

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