

Presenting the Model of Learning Organization Based on Learning Organization Dimensions Questionnaire of Watkins-Marsick Case Study, Tractor Manufacturing Complex of Iran

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Abstract: In the era of wisdom centeredness, creating a learning organization as an effective phenomenon in obtaining the stable competitive advantage is a new approach mentioned in management resources frequently. In this organization, the two very influential elements of its excellence i.e. human and knowledge are given more importance. Accordingly, the main event is the incidence of organizational learning process, which orients the knowledge and development of the people and development of the organization and changes the organization into a dynamic and admirable system. In the meantime it is important to recognize the assessment instruments of organizational learning status and the learning level of the organization. The results of this action would be the necessary measures to establish or develop organizational learning. Watkins- Marsick questionnaire was used in the present study with the aim of providing the learning organization model to measure organizational learning process in the organizations under study. The study findings indicate that despite improvements in performance indicators mentioned in questionnaire, there have been no sign of changing the companies into learning organization. These researchers believe that in learning organizations, these two indicators are improved even in the annual period. Non-alignment between the results of hypothesis testing and measuring the performance indices is indicative of this fact that the organizations can show a positive trend applying designs, tools and other techniques in these indices but can be non-learning. The review of theoretical fundamental, the current models of creating learning organization and the study of learning organizations in practice show that the requirement of creating a learning organization, using techniques, methods and practical mechanisms of organizational learning is the belief of the organizations leaders in this theory.

Key words: Organizational learning • Learning organization • Measuring organizational learning • Learning leaders • Learning organization model

INTRODUCTION

Not long ago, organizations worked in lasting and stable environments and it was possible for them to forecast the future events so that managers could manage and lead the organization in a reliable condition. But gradually changes in science, technology, economics, culture and politics quickly influenced organizations. Nowadays, the important factors like globalization and global economy, technology, severe change of work

world, growing influence of customer, raising knowledge and intellectual capital management, changing roles and expectations of the employees, labor diversity and mobility and rapidly expanding change and turmoil have changed the business world. In the beginning of 1990s with the rapid developments and changes in the environment variable, most organizations began extensive efforts for profound changes in their structure and foundation to leave the static molds. Therefore the use of new approaches brought on. The study of management

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knowledge shows that experts in learning organization and organizational learning believe that in the new era, wisdom era, the most important responsibility of leaders and managers is creating the learning organization. What does the learning organization more than others? On the other hand, what is the difference between this organization and others? Where can organizations begin to change into learning organization? Evidently in the learning organization, the most important event is realization of organizational learning process which requires planning and organization, in other words, the process which is in the center of management attention to change the organization into learning through continuous supervision on the manner of its incidence and development. The present study has tried to do the practical example of measuring the learning process to present the suitable model of learning organization for production companies under study, the companies of Iran Tractor Complex through emphasizing the importance of "Learning organization and organizational learning" and developing its topics such as recognizing the learning barriers, systems of measuring the organizational learning and acquaintance with current models of changing into learning organization.

Literature Review and Research Background:

Historically the concept of organizational learning had been developed before the learning organization and it were the researches about organizational learning which have paved the way for the formation of learning organization theory. Argyris and Schon [1] have defined the organizational learning as error detection and correction. Shrivastava [2] has mentioned four perspective of organizational learning as: 1. Compatibility and compliance 2. Developing knowledge and relationships resulting from actions 3. Cooperative thought and perspectives 4. Experience institutionalized. Huber [3] has believed that organizational learning can be used at any level of analysis for individual, group or the entire organization. Mumford [4] has believed using ten behaviors in the formation of organizational learning is necessary; Asking questions, offering suggestions, discovering alternatives, risking and testing, being open and proactive, changing mistakes into learning, evaluating and review, talking about learning, accepting responsibility of self-learning and its development and allowing the occurrence of mistakes and shortcomings. For Senge [5] believing in and practicing five principles of shared vision, personal mastery, mental models, collective learning and the fifth and most important principle i.e.

systemic thinking ability are effective in generative learning (organizational learning). Most of the experts including Senge and Pawlowsky [6] and Najafbagy [7] have mentioned the levels of individual, group and organizational learning in discussing aspects of the learning. Individual learning is indicative of change of skills, visions and beliefs, evolution and change in individual knowledge, acquired attitudes and values by the person through individual study, technology-based training, observation and other ways. Group Learning means that teams and groups think as a single identity, members discuss together, transfer their experiences and knowledge to each other, teach each other and learn from each other, innovate and create. Thus the capacity of members extends. In overall, group learning transfers personal knowledge to organizational knowledge that is usable and available by everyone. The third level is organizational learning. This learning results from sharing insights, knowledge, experience and mental models of the members of the organization. Organizational learning is established based on the knowledge and experience that exists in the memory of the organization and injected to the mechanisms such as policies, strategies and patterns which depend on knowledge saving. Doing this the organization shapes new knowledge in itself or reconstruct, modify and adapt according to the environmental changes. The result of organizational learning manifestation is organizational learning in practice. Gephardt and Marsick [8] have told learning organization has additional capacity for learning, adaptation and change. Choo [9] has believed that the learning organization is exactly the knowledge organization. Watkins-Marsick [10] have believed that learning organizations have features that include: 1. Continuous learning 2. raising the level of research and discussion in the organization 3. encouraging the sense of cooperation and group learning 4. empowerment the employees to reach a collective vision 5. designing and implementing systems for employees participation in learning 6. compatibility of system with its environment 7. strategic leadership.

Marquardt [11] by defining systemic of learning organization has expressed that it learns by power and in form of collective and continuously changes itself in a way that it can gather, manage and use the knowledge in a better way with the aim of the success of organizational complex. Rajabbeygi and Fagih [12] have summarized their study of the learning organization, business process reengineering, total quality management approaches in Table 1:

Table 1: Differentiating learning organization, business process reengineering and total quality management

Subject	Element	Learning organization	Business process reengineering	Total quality management
Organization	Attitude	Systemic	Systemic	Systemic
	Goal	Survival	Survival	Survival
	Strategy	Organizational learning	Integrating of process	Elements communication
	Emphasize	Dynamic	Holistic	Interaction with environment
Environment	Strategy	Interaction with environment	Interaction with environment	Interaction with environment
	Emphasize	Complexity	Customers and technology	Customers and suppliers
Human resources	Strategy	Empowerment	Empowerment	Empowerment
		Participation	Participation	Participation
		Individual ability growth	Increasing of insight	Identifying experts
	Emphasize	Think freedom	Assessment of work result	-
		Discussion	-	-
Development of individual vision	-	-		
Leading	Strategy	Democratic	Autocratic	Democratic
	Emphasize	Vision-building	Integration of processes	Quality improvement
Organizational revolution	Time	Incremental	Rapid	Incremental
	Kind	Infrastructural	Infrastructural	Limited
	Tool	Technical, psychology, sociology	Technical, cultural	Technical, cultural
	Auality of participation	From down level to up level	From up level to down level	From up level to down level and contrary

Therefore learning organizations differ from in the following attributes: 1-Learning is not an extra thing to do, but it is an ordinary part of the job in a learning organization. 2- Learning is not limited to a certain time but it is a process. 3- Cooperation lies underneath of every affair. 4- Individuals help to their organizations by developing them selves. 5- Learning organizations are creative. 6- Learning organizations learn from experiences. 7- It is very exciting to be a member of a learning organizations [13].

The reflectable problem is that how organizational learning can be evaluated to ensure that whether the organization has been learning or not. Organizational learning measurement is somehow harder than defining and describing it. Reviewing relevant literature shows that there are several tools for evaluation and pathology of organizations to measure its degree of being learner. Sobhaninazhad *et al.* [14] have studied that the first cognitive tools were used in the form of a questionnaire as a result of conducted study in some British companies. Strategy, vision, structure, out looking and learning opportunities were the major topics covered in it.

The second questionnaire of Weich and Leon [15] entitled "Evaluation of competencies in the learning organization" has been presented. These two experts arrived at the following pattern through interview, evaluation and observation of four successful learning companies namely Boeing, Analogovicner, Kerning and Lyrsting.

Learning Organization= leadership based on vision * plan, assessment * information * Taking an step * action. The third Cognitive tool was presented by Pearn and his colleagues [16]. They provided a tool which was comprehensive and expanded from the learning instigation and leading point of view but superficial and outward in terms of the whole learning organization. The fourth questionnaire in the book of Sarala and Sarala [17] was categorized according to the values, structure and processes, leadership and making decision, work organizing, training and development and internal and external interactions of the organization. The fifth questionnaire on entitled "The quick test for recognizing the learning organization" was presented by Ganns [18]. He believed that the pioneer learning organization is a part of organization strategy. Answering 11 questions of this questionnaire based on Likert scale clarifies that to what extent the organization under study had been a learner one. The sixth tool "quick test of learning organization", otala questionnaire [19] includes 20 sentences or expressions. The seventh tool, Tannenbaum [20] has emphasized processes and training and accentuate the learning methods relating to the job. The eighth tool of Redding and Catalanello [21] has determined three primary patterns which are categorized as following: traditional, continuous improvement and learning organization. The ninth questionnaire by Mayo and Lank [22] has been very expansive and comprehensive and consists of 187 questions and 9

clause. The central point of this questionnaire is the attention to organizational, individual and team learning factors and the views of the leaders and managers. The tenth questionnaire entitled "organizational learning evaluation questionnaire" was presented by Neefe [23]. Its aim is to gather data about organizational factors and management actions affecting organizational learning ability. The eleventh questionnaire entitled "the profile of the learning organization" was designed and presented by Marquardt in 2002. He expressed the development of five elements of learning, employees, organization, technology and knowledge in the form of systemic pattern of learning organization through doing research on learning organization so he tested the five variables of learning dynamism, organizational evolution, empowerment the persons, knowledge management and using technology in the questionnaire with relative alternatives. The twelfth questionnaire was introduced by Armstrong and Foley [24]. They wanted to know how learning should occur in the working environment for the organization to become learner. These two researchers identified "the mechanism of organizational learning". The thirteenth and perhaps the most comprehensive questionnaire of learning organization belongs to Watkins-Marsick [10] which is known as "the questionnaire of learning organization dimensions". This tool was ordered in four parts, addressing the individual, team, organizational and macro subjects. As a fourteenth tool, "diamond tool of learning organization" was introduced in an article by Moiyilanen [25] which consists of forty sentences, twenties of which considers organizational level and the rest individual level. The result of these evaluations and measurements of learning process in practice was to recognize learning obstacles and to represent the model of learning organization. The surveys show that cultural obstacles, managers resistance, performance - orienting and the lack of learning time, exclusive and uncompetitive environment and politicized environment are rudimentary obstacles of organizational learning. The result of the learning process evaluation, if it is indicative of the inability of the organization under study to become learner, is the representation of pattern for creation of learning organization. The experts have considered the leaning obstacles when representing the models for the creation of the learning organizations. The six-factored pattern of Pearn INVEST [16], the five-factored systemic pattern of Marquardt [11], the

conceptual pattern of Taslimi and Khorshidi learning ability [26], Behnami organizational learning pattern [27], the structured learning pattern of Hong [28], three-staged pattern of Garvin [29], Seajou synthetic pattern of learning flow [30] and the working force pattern of Jorgensen [31] are examples of learning organization creation.

The main objective of this research is the presentation of learning organization model based on Watkins-Marsick questionnaire. To achieve this objective, these special objectives are designed:

- The application of Watkins- Marsick questionnaire to assess the learning process.
- Correlation analysis between two parts questionnaire: learning organization dimensions with performance criteria.
- Using of the results of correlation analysis with the purpose of presenting the suitable model for creating the learning organization.

In line with the above objectives, the hypotheses are designed which are mentioned in the findings analysis section.

MATERIALS AND METHODS

The present research based on its results is applied research because the main objective of every applied research is to discover the application of the basic research findings and solving the problems relating to applicablizing the results of the theoretical researches. This research is quantitative in terms of data and analysis method. The variables in the quantitative researches are measurable and measuring elements (measuring tools) are given. From point of view the implementing logic, this research is deductive. In this research, there is a theory and the researcher tries to test it. The research is segmental considering implementation time, because gathering data about some attributes in the specific time span has been done through sampling of the population. The research is descriptive, non-tentative and surveying considering the control way of the data and the research. The data gathering instruments have been library study and questionnaire of Watkins-Marsick in the second six months of year 2008. The mentioned questionnaire has been designed in two sections. The first section is

alternatives which measure learning in individual, group and organizational dimensions. The second section is functional criteria which according to Watkins-Marsick, learning organizations are expected to show the better condition in these criteria. These criteria have been obtained through library study. The statistical population consists of managers and employees of four companies of Tractorsazy, Motorsazan, Rikhtegary and Ahangary in Iran. All middle and operational managers of these four companies have been involved in testing but Cochran and quota and random sampling have been used for choosing the staff and line employees. On this base, staff employees in number of 116 and line employees in number of 238 have been choosed. For assessing the validity of the questionnaire, construct validity based on factorial analysis technique and for measuring reliability because the questionnaire is based on Likert scale, Split-half testing has been used. The significant quantities obtained in Kaiser, Meger and Olkin (KMO) test were equal to 0.914; in Bartlett test were 5223.661 and the correlation coefficient of 0.8575 for managers and 0.7090 for employees were indicating the validity of the questionnaire. The inferential statistics used were proportional to the variables measurement scale, one-dimensional chi-square test, two-sentence test, Fridman test and chi-square matching test. Descriptive statistics used in the data analysis were of the mode due to the use of Likert scale. The time period of the research was the second six months of 2008 and year 2009.

Research Constraints: As mentioned in theoretical foundations, learning organizations are less discovered and more described. The variety of the features mentioned by the experts has hindered the arrival at the desirable consensus about the assessment method of organizational learning process and identification of learning organization. In other word, in about measurement and assessment of coming learner organizations there is clarity differentiating between mechanism and methods. Watkins and Marsick pattern are included in this limitation too. The other problem that the present research encounters is that the assessment of the organizational learning process has been limited to using the questionnaire.

Findings

The Use of Descriptive Statistics: The individual, group and organizational learning mode of middle and operational managers and staff and line employees in these four under study companies are provided in the following tables:

The value of obtained modes shows that individual, group or organization learning, both for middle and operational managers and staff and line employees in all four companies have been facing obstacles because this value was 3 and less than that. In general, barriers of organizational learning in each four companies were more than that in individual and group learning and these barriers were more impressive for employees comparing to the managers.

Table 2: The individual, group and organizational learning mode of middle and operational managers to differentiation 4 companies

Learning mode	Organizations			
	Tractorsazy	Motorsazan	Rikhtegary	Ahangary
Individual learning mode of middle and operational managers	3	3	3	3
Group learning mode of middle and operational managers	3	3	2	3
Organizational learning mode of middle and operational managers	3	2	1	2

Table 3: The individual, group and organizational learning mode of staff and line employees to differentiation 4 companies

Learning mode		Organizations			
		Tractorsazy	Motorsazan	Rikhtegary	Ahangary
Individual learning mode of employees	Staff	3	3	3	3
	Line	3	3	3	3
Group learning mode of employees	Staff	3	2	2	2
	Line	3	2	1	2
Organizational learning mode of employees	Staff	2	1	1	1
	Line	1	1	1	1

Table 4: The expectance case frequency and observed frequency- main hypothesis test

Classes limits	Observed frequency	Expectance case frequency	Residual (surplus)
Very low	39	96.3	-57.3
little	167	96.3	70.8
Medium	169	96.3	72.8
Much	10	96.3	-86.3
Number of sample	385		

Table 5- the results of chi-square univariate test for variable action of Tractorsazy corporation to change into learning organization

Number of sample	Measured chi-square	df	Test of significance
385	218.335	3	0.000

The Use of Inferential Statistics

The Main Hypothesis of the Research Is: Tractor manufacturing complex companies have taken steps to change into learning organization. Accordingly, the statistical assumptions of H_0 and H_1 are set as follow:

- H_0 : Tractor manufacturing complex companies have not taken steps in changing into learning organization.
- H_1 : Tractor manufacturing complex companies have taken steps in changing into learning organization.

According to the one-variability of hypothesis and multi-valued rating scale, one-dimensional nonparametric chi-square statistic was used for testing and assessing this hypothesis. Of course should be assured the existence of the following conditions when using this way:

- Expected frequency of more than 20% of the cells should not be less than 5.
- Expected frequency of none of the cells should not be less than 1.

The results of the test and assessment for complex companies were given in the following table.

According to the tables information, we can mention that in $\alpha=1\%$, the distribution of observed frequencies is different from expected frequencies. The fact that 5.53 percent of respondents have selected alternatives low and very low and 2.6 percent of respondents have selected alternatives much, so with 99% confidence coefficient we can express that Tractorsazy corporation has not taken a step in changing into the learning organization, so the hypothesis H_1 is rejected. Also, in order to determine the frequency rate of the group that believes Tractorsazy corporation has taken steps to become learning organization have used binomial test in contrary group that are opposition of this belief. The following table shows the results of this test.

It is necessary to explain that respondents have encountered with 5 alternatives of very low, low, medium, much, very much in determining whether tractorsazy corporation has taken steps to become a learning organization choosing the alternatives of low and very low means the negative response and much and very much means the positive response to this question. For this reason the proportion of the test was chosen 5% because the two alternatives of much and very much were chosen as taking step and alternatives low and very low were chosen not taking step. As the above table shows the value of significance level is less than 1%, so in 99% confidence level the respondents believe that Tractorsazy corporation have not taken steps in becoming a learning organization because only 5% of the respondents have chosen alternatives much and very much and 95% percent have chosen low and very low. Similar to the above case, the findings of test this hypothesis in Motorsazan, Rikhtegary and Ahangary companies demonstrates that each three companies have done nothing to become learning organization. Binominal test proves the accuracy of these results but with this difference that the percentage of the group that believe Rikhtegary and Ahangary have done nothing wrong in becoming learning organization is more than that of Motorsazan company. Therefore, in these companies, the hypothesis of under arqument similar with Tractorsazy corporation is rejected too. Test three minor hypotheses first, second and third which had one variable and are tested according to the previous ways, in each four company show that:

- Each four company have taken steps in individual learning dimension to become learning organization.
- Each four company have not taken steps in group learning dimension to become learning organization.
- Each four company have not taken steps in organizational learning dimension to become learning organization.

Table 6: The results of the binominal test about the step taking of Tractorsazy corporation to change into learning organization

Variable levels	Group	Quantity	Observed rate	Test rate	Test significance
Group that believed tractorsazy corporation haven't acted for transformation to learning organization	Persons that have selected low and very low alternatives	206	0.95	0.5	0.000
Group that believed tractorsazy corporation haven acted for transformation to learning organization	Persons that have selected much and very much alternatives	10	0.05		
Addition		216	1.00		

Table 7: Study the trend of performance indexes in four companies of iran Tractor manufacturing complex

Performance indexes	Organizations			
	Tractorsazy	Motorsazan	Rikhetegary	Ahangary
Return on investment	6 percentage increasing	8 percentage increasing	-	3 percentage increasing
Average productivity per employee	Increasing to degree of 9.5 millions rial on person	Increasing to degree of 106 millions rial on person	Increasing to degree of 67 millions rial on person	Increasing to degree of 55 millions rial on person
Time to market for products and services	-	-	-	-
Response time for customer complaints	Reduction to degree of 2 days	Reduction to degree of 2 days	-	Reduction to degree of 3 days
Market share	Constant	2.3 percentage increasing	1.8 percentage increasing	1.4 percentage increasing
Cost per business transaction	0.5 percentage reduction	0.3 percentage reduction	0.2 percentage reduction	-
Customer satisfaction	1 percentage increasing	3 percentage increasing	1.5 percentage increasing	2 percentage increasing
The number of suggestions implemented	4 percentage increasing	4 percentage increasing	7 percentage increasing	3 percentage increasing
The number of new products or services	2 cases	4 cases	3 cases	2 cases
The percentage of skilled workers compared to the total workforce	3.18 percentage increasing	2.8 percentage increasing	3.6 percentage increasing	2 percentage increasing
The percentage of total spending devoted to technology and information processing	7 percentage increasing	9 percentage increasing	4 percentage increasing	4 percentage increasing
The number of individual learning new skills	7.5 percentage increasing	6 percentage increasing	5 percentage increasing	6.5 percentage increasing

While the sub hypothesis number four, five and six have had two variables and the scale of variables measurement have been nominal ranking, nonparametric statistics of Fridman and matching statistics of chi-square were used. In each four company, the results of the tests were similar and consist of:

- The action of Tractor manufacturing complex companies in changing into learning organization is different in individual, group and organizational dimensions i.e. there is no balance condition of learning in these dimensions.
- The action of tractor manufacturing complex companies in changing into learning organization is different in managers and employees' level i.e. there is no balance condition of learning in these levels.
- The action of tractor manufacturing complex companies in changing into learning organization is different in staff and line ranks i.e. there is no balance condition of learning in these ranks. Of course this unbalance in learning is tangible in two companies of Rikhetegary and Ahangary.

The Findings Obtained of Measuring Performance Indexes of Watkins-Marsick Questionnaire: Watkins and Marsick believe that in learning organizations, the mentioned performance indexes would have a growing trend. The following table has been pictured by studying the documents related to these indexes in four companies of tractor manufacturing complex.

Studies show that there have been an ascending trend in the overall figure of these indexes in these four companies during two years of 2008 and 2009, thus the improvement condition in the performance of the companies has been pictured.

Correlation Situation Analysis Between Two Section of Watkins - Marsick Questionnaire: In learning organization, the previous performance indexes manifest in a growing trend. But organization can achieve this improvement by applying other new systems and methods. The emphasize on the productivity human resources, establishment productivity cycle, customer relation management, participative management and suggestion system, quality management systems, total

productive maintenance, lean production, agile organization, organizing system of labor environment, value engineering, statistical quality control, total quality management, improving of department research and development, team building and the management information system are the instances of the effective plans and mechanism in the growth of the above mentioned performance indexes. In other words, there is no correlation and consistency between this part of the Watkins-Marsick questionnaire and the part relating to measuring and assessing learning process in individual, group and organizational dimension. In each four companies, the performance indexes show improvement trend but test hypothesis and findings analysis show that none of them have taken desirable actions to become learning organization.

DISCUSSION AND CONCLUSION

The analysis of the findings display that despite the improvement in performance indexes (knowledge and financial) mentioned in Watkins - Marsick questionnaire, tractor manufacturing complex companies haven't taken any action in changing into the learning organization. Although learning is somehow optimum in the individual dimension but learning in group and organizational dimensions have been undesirable and the obstacles on the way of these dimensions were more extensive than individual learning. Besides, the learning obstacles of the employees have been more than managers and that of line employees were more tangible than staff employees. In other words, the balanced form of learning among managers and employees and line and staff employees have not occurred, of course in the optimum level. In general, the lack of the encouraging space for creativity and innovation, the lack of continuous assessment of training terms effectiveness, the unfavorable condition of meritocracy system, vagueness bonus for group and team efforts, the lack of mutual confidence in the group decision making and sessions, the lack of manifestation of the constructive results in group discussions and consultations, the lack of support for employees risking, less attention to the tranquility of the employees, the low tendency of the employees in transferring their experiences and lack of tendency to modify the attitudes in group discussions are the instances of the barriers which managers and employees have mentioned in the questionnaire. It seems that these barriers relate mainly to the attitudes and views of the managers and the leaders of the companies under study, the phenomenon

that most of the experts and scientists of learning organization theory on existential necessity that i.e. belief leaders and top managers to building learning organization have emphasized. Therefore, the researcher design a questionnaire based on five principles of Senge i.e. individual mastery, mental patterns, group learning, common vision and systemic thinking to solve the defect of Watkins-Marsick perspective and the paradox between its two sections in order to evaluate the degree of the managers and leaders faith to the learning organization in tractor manufacturing complex companies. On this base, H_1 hypothesis which is univariate hypothesis with two-valued nominal measurement scale was designed with the title of "top managers of tractor manufacturing complex companies don't have faith in learning organization", its assessment based on the binominal inferential statistics display that the respondents have answered 593 negative response from total 768 question and therefore this hypothesis was proved with the observed proportion of 77.3% in comparison with 50% test proportion. Thus, there is a relationship between superior management faith and the designed concepts about individual, group and organizational learning in Watkins - Marsick questionnaire. According to this correlation and basic variables of Watkins - Marsick questionnaire and the mechanisms of decreasing or eliminating the barriers in creation of learning organization, the reengineering model of the creation of learning organization for Tractor manufacturing complex companies, according figure 1 were presented.

Learning Center could be played as "learning process leading" for guidance of the organizations and their transformation from the present status towards becoming learner. Learning Center has a mission that realize systematic and effective guidance, pervading and developing learning process i.e. management of learning process. Accordingly, this important point should be emphasized that the leaders and top managers should do the second effort to recognize and understand the concepts of organizational learning and learning organizations theories should do so to use this idea better and fulfill it. Senior managers must come to believe that learning organization theory in practice is not just to accept improvement plan like total quality management. It is not the acceptance of excellent making system like business excellence model. Learning as a social process and by creating fundamental change in the thought and attitudes, shows the valuable status of the humans in the organizations and broader than that the enlightening role of the organization in the society.

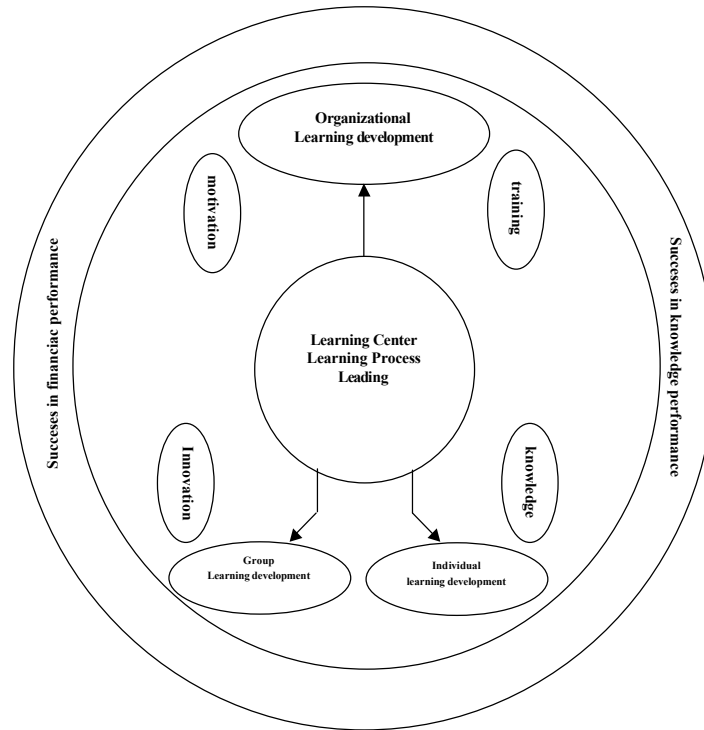


Fig. 1: Reengineering Model of Building Learning Organization, RMBLO

Thus, the perspective of the leaders of tractor manufacturing complex companies should focus on this fact that the theories of “organizational learning” and “learner organization” which emphasize learning process and learning application, is a value approach. The software movement has been created by changing the nature of “leadership by command” into “leadership by vision” which focuses on the evolution and development of think and behavior in leader, managers and employees, i.e. dynamism of knowledge and performance in organization. It seems that the changes of belief, attitude and mental and behavioral values of the managers, leaders and employees regardless of their capacities, dependences and opinions depend on their cognitive ability with the concepts of their theories and plans, advantages and benefits. The duty of learning center is to create the feeling of need for learning and the use of taught as a temporary challenge and the needed motivation for representation of strategies and mechanisms. Familiarity of the leaders by systemic thinking principles and obeying them in each action and performance, determining common vision and creating pervasive commitment in achieving it, reconsider their and employees mental models with the aim of orientating in they change, using the strategies of empowering employees and increasing influencing abilities for

increasing the personal mastery of employees and creating the condition of collective learning are the essential needs and actions which are expected from the learning center to create in leaders and managers. It seems that leaders and managers should do the following duties and actions in order to change their companies into learning organization under the guidance of learning center:

- Make themselves committed to learning culture.
- Emphasize on learning process in planning strategy as a center of thinking and action.
- Fulfill their interest and loyalty to actual pervasive learning.
- Provide learning opportunities for all.
- Edit and implement the supportive systems of learning process.
- Establish the comprehensive relationship and interaction among the persons.
- Emphasize on group work and its advantages.
- Provide the opportunities for the participation of employees in various areas.
- Accentuate both the efforts and results learners’ learning.
- Provide the condition for achieving needed skills.
- Create the space of confidence and synergy.

The reengineering model of building learning organization demonstrates also that for eliminating the barriers of learning and assisting to expand the learning culture and developing the environment for using from learning, emphasizing the four systems of knowledge, training, motivation and innovation can be a effective guidance for making the balance in three -dimensions of learning i.e. individual, group and organizational learning and in the uniformity of learning in the level of managers and employees in order to transform the tractor manufacturing complex companies into learning organization.

Now that the modified questionnaire of Watkins - Marsick is introduced as a new three-parted questionnaire entitled "Questionnaire of recognizing learning organization", is indicative of this important fact that the improvement of performance indexes of knowledge and financial can be the result of being learning organization that there will be a positive correlation among the results of assessment of measuring the faith of senior managers and measuring the learning in individual, group and organizational dimensions. Of course, the opinions of the experts have been used for validation and accreditation of questionnaire and research model. The results of summarizing the ideas of 15 Professor of management having Ph.D have been the effort in increasing the utility structural and behavioral figures of proposed model of the research in year 2009.

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