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Management laboratories; functions & patterns

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ABSTRACT

The higher the position of manager in management level, the more his complex decisions frequency and the broader the scope and intensity of positive or negative effects. Management laboratory is a tool for development of managers' decision making skills in simulated or virtual space which allows provision of rapid, scientific and instructive feedback while allowing making different decisions without worry about its consequences. Use of this method in the well known faculties of management in the world (especially Harvard Commercial School) is expanding. The present research studies functions and patterns of management laboratory. In study of functions, effect of management laboratory shows reinforcement of public section in Johari window through education and feedback and self openness. In Webber Theory, manager's power source reinforces three legal, reward and punishment and specialized sources of managers and provides tools for realizing meritocracy and manager election in ideal bureaucracy pattern. In patterns section, five patterns of physical simulation, virtual simulation, physical games, computer games and temporary organizational rotation have been studied and case study of three successful global experiences and two Iranians experiences has been done. All of these studies show increasing application of management laboratory in the world and necessity of performing more researches on its requirements and challenges.

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Introduction

Management decision making skill and its challenges are the important subjects discussed by the elites and university authorities so that HERBERT A.SIMON regarded management as decision making art and Mintezberg has regarded it as top of 10 roles of management. Faculties of management and MBA courses all over the world try to give more efficient and effective graduates to organizations and companies by developing strategic and insight intelligence (Sepehri, 2009). However, research indicates that real education is realized in practice and with try and error and classic and academic methods of management education are not useful for real world. Some business schools designed games and saloons for testing management and asked their students to increase their skills by performing them and exposing to simulated space. The advances in the field of educational technologies and virtual simulation of business space caused to develop idea of management laboratories to virtual world and web and increased its attraction. Although management laboratory is a reformist and new approach in management faculties of the world and different structural, software, hardware and content challenges in formation and development of these laboratories (Pengzhi, 2004): growing trend in creation and utilization of this method in the well known faculties of management in the world such as Harvard indicates promising future of general chance and enriching this method.

Review of literature

Herbert Simon (winner of Noble Prize of Economy in 1987) defined management as decision making art and explains 3 stages for general decision making process:

- Intelligent activities (finding decision making positions)

- Design activities (creating, developing and analyzing scenarios and different ways)
- Selection activity(selection among scenarios)

His research indicates limitation of managers to satisfaction decision making (against optimal decision) due to time limitation, ambiguities about future and high expense of acquiring information about different opportunities and equipments. On the other hand, Simon believes that when persons accept membership in an organization, they lose their independence in decision making to some extent while he regards participation and cooperation as important. On the other hand, they allow the organization to penetrate into their decisions. Strategies of this penetration include: labor division, work performance manuals, framing powers, communication system, education and inspiration.

Pengzu studies structural and content requirements of management laboratories development in faculties of management and believe that their formation and development require strategies in four fields: suitable structure design, providing hardware equipment, providing software equipment and compiling content and suitable scenarios.

Theorists of group and organizational creativity regard paying role as one of the most effective methods of involvement and creative training to the managers. Some of these researchers believe that technique of playing role can involve the manager in use both brain hemispheres by exposing him to different positions.

Research methodology and its questions:

The present research has two key questions:

A-what are the main functions of management laboratory?

B- What are the common patterns of management laboratory?

Finding of the present article is about functions based on library studies and about patters resulting from Best Practice Method.

Functions of management laboratory

Management laboratory plays different functions for managers some of which are:

- Increasing public domain in Johari window: Johari window is a diagram which determines four different positions is based on the manager's recognizing him and others' recognizing manager. The manager who has more public domain will make more desirable decisions. Management laboratory causes to increase public domain in Johari window.
- Education and feedback: in management laboratory, each manager has many opportunities for try and error and sees his work feedbacks or will learn from it or enjoy it.
- Self openness : in management laboratory , each manager will the opportunity to adopt solutions and decisions which they escape from under real conditions or have no opportunity to experience in spite of personal tendency due to organizational limitations and he will help his self openness.
- Increasing the manager's specialized source of power in Webber theory: according to Webber theory, managers have five sources of power. These sources and effect of management laboratory on them are given in table 1:

Table 1: effect of management laboratory on each one of Webber's sources of power

| effect of management laboratory | Source of power | Row |
|---|-----------------------|-----|
| Increasing skill of using legal power | Legal and formal | 1 |
| Virtual reward and punishment and observation and management of its effects | Reward and punishment | 2 |
| Increasing self confidence of the manager for enjoying specialized power | Specialized | 3 |
| Facilitating and intensifying effect in case of personal influence | Personal influence | 4 |
| Facilitating and intensifying effect in case of traditional power | Traditional | 5 |

- Development of meritocracy and manager training: meritocracy is one of the main results for perfect execution of ideal bureaucracy pattern of Max Webber; management laboratories are test space in which it is possible to test management power and performance of potential managers of the organizations. It is also possible to train the future managers by performing management and simulation games of different positions.

Finding and patterns:

Management laboratories have been experienced in different forms in the world. In this research, five samples with case study of each one of them are given:

- Physical simulation: in this method, real saloon or space is allocated to this case and managers are involved in management education process while interacting with other trainees or persons playing important roles. An example of this process is given in human resources research unit of National Iranian Oil Company. In this saloon, persons perform management games.
- Virtual simulation: this method is based on management and information technology scenarios. In this research, virtual organizational experience is possible for the person through organizational virtual simulation and managerial functional definition for the tester. Different decisions are analyzed and computer scientific sources are accessible. Valid example of this method is short term courses of management in

Management School of Harvard University. In this example, different courses of strategic management , sale management , project management etc are generalized to the future managers in Interactive and Online space.

- Physical games: international game of drink and games of Iran Fanab Company are examples of such different laboratories. Game of drink tests decision making method in providing sources and raw material and sale chain and games of stock exchange and capital city of Fanab Company aims at exercising financial management and entrepreneurship. Main advantage of these games is simple use, noncomplex scenarios and testing by the persons unfamiliar with working with computer.
- Computer games: in these games, limitation of internal and environmental sources and management of market, competitors, customers and government challenges are the main bases. In many games, manager Manages relations with competitors and supervisory institutions in addition to making the best decisions inside the organization. This method is the best method for those interested in management of executive affairs. Tigon Company (manufacturer of some games such as gaujet factory is one of the most important persons active in this field).
- Laboratory training and temporary rotation of managers: in this method, managers achieve higher levels of management and make different decisions through controlled, temporary and periodical displacement and perform education and testing during work. Toyota Automotive Company uses this method for on the job training of managers in different levels of the organization.



Figure 1: different patterns of management laboratory

Summary and conclusion:

Dream of converting management to experienced science such as chemistry and physics has been in mind of founders and leaders of Faculties of management. Limitations and risks and expenses of decision making in the real world led many managers to rely on classic management educations but knowledge resulting from these educations is rarely converted to insight and skill. The first management laboratories are rooted in intra-organizational training and temporary job rotation. The primary experiences of management laboratories lead to production of physical games and testing saloons and managerial game. Development of information and communication technology allows simulation of the organizations and interactive scenario and management laboratory education was welcomed in the well known universities in the world. These educations have effective functions especially in organizational behavior.

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References:

- [1] Alvani Seyed Mehdi, 2010. Public management, Tehran, Nei Press, 2010, edition 36.
- [2] Peng-zhi QU .2004.Thought about the Construction of Laboratory in Economy and Management ,School of Management, Shanghai Univ., Shanghai 201800, China (find at: http://en.cnki.com.cn/Article_en/CJFDTOTAL-SYSY200404029.htm)
- [3] Sepehri M., Ghahremani A .2009. Research on business, Tehran, Industrial Management Organization.
- [4] www.farnab.ir
- [5] <http://www.daneshju.ir/forum/sitemap/t-19984.html>
- [6] Samad A.2006.techniques of personal and group creativity, Tehran, Education and Research Higher Institute Press.
- [7] Azimi R., Firoozkoobi M.2006. Laboratory management, planning and organization, Tehran, Bank Elest Press.
- [8] <http://learninggames.blogfa.com>
- [9] Higgins James .2009.101 techniques of creative problem solving (guide of new thoughts for business), translated by Ahmad Poor Dariani M. , Tehran , Amir Kabir Press, second edition