

Interaction of Learning Organization and Organizational Structure

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Today organization is the constantly changing, flexible, entrepreneur or similarly titled organization having the peculiar feature – the constant learning in individual, group or organizational level. Constant learning changes not only the enterprise but the employee and the staff as well. The employee should be acknowledged with the philosophical provisions of learning and the enterprise must ensure its staff suitable communication, self-realization and motivation system.

Learning in individual, group and organizational level is the object of the research of many scientists (Wiegand, Senge, Nanoka, Levit, March et al (see Al-Laham, 2003)). The importance of individual and organizational culture for learning is especially stressed (Barney J.B., 1986; Sackmann S., 1992, much attention has been given to designing of motivation systems and other questions.

But learning and the progress related with it, and changes proceed in specific surroundings where the person-organization is the main character but his/her activity is limited or stimulated by the specific enterprise and the surrounding atmosphere. Every enterprise is organized for some special technological process and this creates some special structure based on labour functional division and specialization. This includes both production and service processes. This is the so called hard structure that often conflicts with requirements raised to learning-changing organization. The hard part of the organization is inert and it changes very slowly. Due to this the contradiction between the propagated theory and the actually existing practice exists – the theory development does not find the necessary medium.

One of such hard factors is the enterprise organizational structures. Mintzberg H.(1976, 1983) paid considerable attention to their theoretical and practical aspects, new organizational structures were also investigated by Lithuanian authors such as Seilius A., (1988) et al. But this problem is very often analyzed separately when the structural issues are revealed one-sidedly.

This work discusses the development possibilities of organizational structures with the requirements of the quickly changing learning organization in mind.

Keywords: *organization, learning organization, organizational structures, changing, flexible, entrepreneur, virtual organization, communication in the organization.*

Introduction

Quickly changing learning organization can successfully develop following the new principles. The increased

requirements for the flexibility, the reaction speed of changes, the individual mastering of new information and its organizational spread is related with the actual change of communication system. While solving these issues we meet with the following problems:

- Organizational structures are closely related with the employee hierarchy, status and last but not least customs–traditions, the change of which encounters with significant opposition;
- Traditional organizational structures should be changed by the new organizational structures. But there is contradiction between the merits of new organizational structures and real production relationships that often become the opposing and limiting factors of the introduction of new organizational structures.

The goal of this paper is to more deeply investigate the advantages and merits of new organizational structures and the actual implementation possibilities in the context of concrete production relationships existing in the enterprise or its environment, and beyond.

The investigation object is the organizational structure of the new enterprise (a group of enterprises) in the context of actual production activity.

Research methods used are as follows: the paper has been written with the help of watching, analogies, analytical-systemic scientific literature method.

The paper has three parts: *The first part* is the formulation of the requirements for the information receipt and its spread in the enterprise. *The second part* presents the analysis of communication systems and the relationship of the existing production relationships. *The third part* investigates the disturbances of the implementation of new organizational structures, the limitations in the context of the impact of the real production relationships.

Information receipt and its spread in the learning organization

The essence of **the learning organization** is best disclosed by **the model of Senge** (1990, 1994, 2000) as it reflects the process dynamics and illustrates the relationship of the organization studies, activity and results (Figure 1).

The first apex of the triangle reflects **the main (essential) ideas of the organization**. Every individual organization starts with some vision, value judgment, goal thus disclosing the purpose and mission of the organization and the strivings of its members. **The learning or-**

ganization is the organization of learning people. Without employees who constantly improve, develop and study there cannot be the learning organization. At the same time one must stress that the members of the or-

ganization who study do not guarantee that the whole organization be the learning one as it becomes such only after the individual knowledge becomes the organization knowledge.

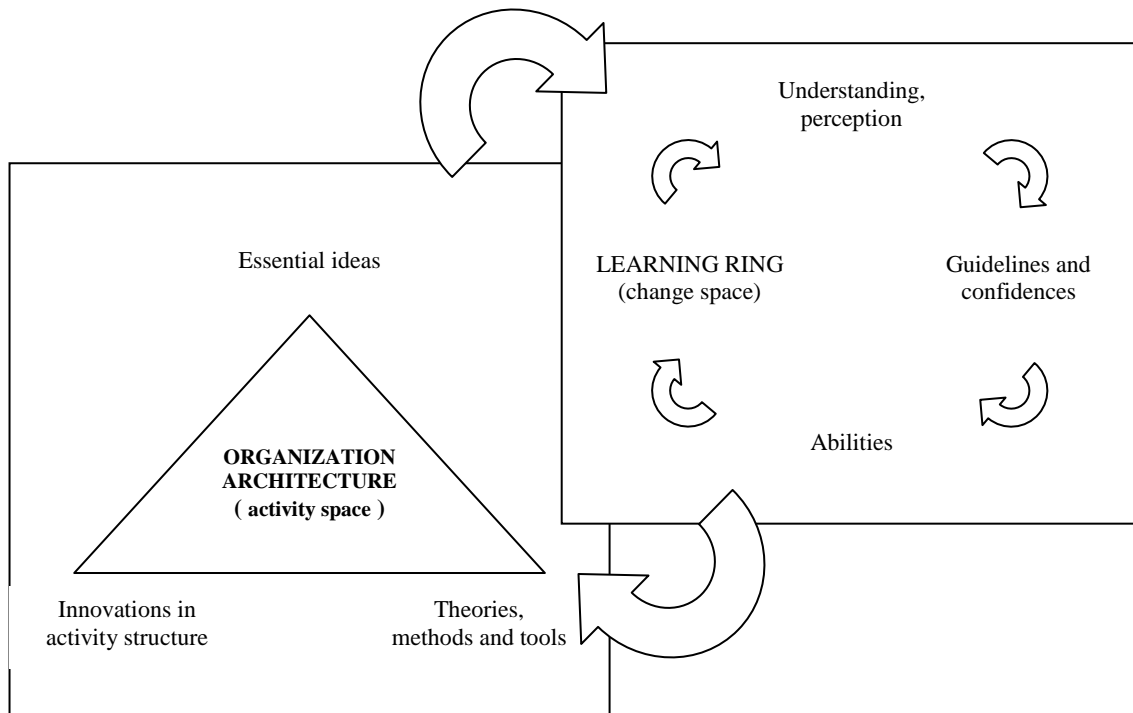


Figure 1. Systematic model of learning organization (Senge, 1990)

The second apex of the triangle shows the adoption of new knowledge – **the learning ring**. The system of motivation and bilateral loyalty is obligatory for the individual knowledge to become organizational knowledge.

The third apex of the triangle presents the backward linkage – **useful is the knowledge and skills that are used practically**. This is the knowledge that changes the theory, the methods used, and the tools, increase the

number of innovations.

Organizational architecture reflects the real activity space where all three above mentioned problems are realized. In the paper the existing organization architecture is limited by organizational structure and is analyzed from the point of view of the realization of these three problems.

The role of the structure becomes much clearer from Figure 2 given by G.Probst et al. (2006).

| | | | |
|-------------------|--|---|--|
| Normative control | Enterprise regulations: – influence of legal laws for knowledge control (privacy rules and signatures) | Enterprise policy: – knowledge vision and mission – definition of important knowledge fields | Enterprise culture: – knowledge spread – innovation spirit – intensive collaboration |
| Strategic control | Organization structures: – conferences, accountability structure, organization with investigation and development, consultation groups Control systems: – EIS, Lotus, Notes | Programmes: – collaboration – creation of essential competences – information presentation | Problem approach: – orientation in top- knowledge objectives – problem-oriented knowledge identification |
| Operative control | Organizational processes; – control of knowledge flows Distribution processes: – knowledge infrastructure – knowledge bearing | Tasks: – knowledge projects – creation of expert data bank – implementation of computer-based learning | Efficiency and collaboration: – knowledge distribution – active knowledge |
| | Structures | Activity | Behaviour |

Figure 2. Knowledge related with the objectives of various levels (Probst G., Raub S., Romhardt K., 2006)

The organization architecture is here realized in:

- **normative level** the formal requirements are defined in valid state and enterprise legal documents describing the basic rules of knowledge management (openness or total, local privacy);
- **strategic level** when long-term organization structure is formed including all the employees working in the enterprise and their groups. It is very closely related with formal computerized control structures. This structure enables the storage of necessary knowledge;
- **operative level** where formed organization structure is used and the knowledge storage and division processes are seen.

Of course, the organization structure is one of the formal elements where some activity can be watched (optionally analogous in the same structures), the significant impact on the enterprise culture is made but this is an important element of the knowledge management.

The organization today is not close, but open enterprise that operates in close proximity with the traditional close enterprise. The conception of the traditional enterprise - close in space and time - has changed. **Today the enterprise is open enterprise from the point of view of inside and outside.** This significantly expands the traditional comprehension of the structure. The learning and changing organization most often does not fit in the frame of one organization. The problems of the change of new knowledge management also arise – **the exchange of information not only inside but also with the external surroundings where special requirements for the knowledge management are raised:**

- do not limit with internal communication-collaboration restrictions;

- estimate that the modern organization is greatly influenced by the enterprise external communication-cooperation conditions.

These factors also influence the enterprise structure.

Communication and the enterprise organization structure

The organization structure is influenced by lots of factors. J.R.Galbraith (1994) defined five main factors that had some influence on the organization structure (<http://www.unf.edu/~gbaker>): strategy/aims, culture, size, technology, and environment. M. Goold and A. Campbell (2002) proposed 9 tests for the estimation of the structure optimality: orientation to the clients, orientation to the authority aims, orientation to the employees, actual realization, special types of cultures, special relationships, unnecessary hierarchy, responsibility and flexibility tests.

When the enterprise structure is investigated from the point of view of internal positions **the unity of the structure and communication should be provided.** The task of the structure is to formulate the ideal communication conditions.

The structure and communication have some impact on the innovation and risk in all the fields of the organization life. In entrepreneur organization this is partially achieved because the structure and communication are created to promote and expand the innovation and possibilities. This is achieved when the structure and communication give the scheme and sufficient amount of information for the employees to be able to use new ideas in all levels of the organization and to be able to achieve great success (Table).

Table

Structure and communication: traditional and entrepreneur organizations
(A. Bosas, 2004)

| Traditional organization | Entrepreneur organization |
|---|---|
| Structure | |
| <ul style="list-style-type: none"> – The power is very centralized, formal hierarchy – Exceptionally formalized – the activity is coordinated with formal rules in mind – Requires the reliable bureaucratic structure and processes with perfect functioning – Functional divisions – The structure promotes hostile/competitive relationships inside the enterprise – Sophistication/complexity and work specialization are especially valued | <ul style="list-style-type: none"> – Low degree of centralization and authorization – Low degree of formalization. Modesty – Requires low and reliable securely functioning bureaucratic structure and processes – Autonomous, self-operating team – Structure stimulates collaboration inside the enterprise – Structure is simple with minimum work description. The employees may be the specialists but work in teams |
| Communication | |
| <ul style="list-style-type: none"> – From top to bottom – Communicate – Formal, with rules in mind – Given in written form – memorandums. Is used for strict control and coordination of the activity related with production and services – Regulates the system, helps to secure constant stable state | <ul style="list-style-type: none"> – Horizontal and from bottom to top – Listen – Productive, the most important is communication, but not the rules that regulate it – Interpersonal – supporting innovations and helping to achieve, that the work should be done in any possible way – Productivity – is used to pass all the data that is useful for new ideas |

It is possible to state that the main relationship of organizational structure and communication is that their purpose in the organization is to make the introduction of innovations, the use of possibilities and the risk accept much easier. The communication models in modern organizations are: from top to bottom, horizontal, and from bottom to top. The entrepreneur organization tries to avoid the situation when all the communication is from top to bottom. The entrepreneur organization uses both formal and informal communication – this is best defined by the concept “productive communication”. The productive communication is made of four elements: (1) the exchange of information (intensively, in real time, with the supporting culture, and with the use of formal productive techniques), (2) clear communication, (3) effective listening, and (4) activity (Cornwall, Perlman, 1990; Jucevičius, 1998; Seilius, 1998; Butkus, 1996).

The enterprise size influences the enterprise structure. The greater the enterprise size, the more formalized structures occur. The administration fulfills the role of the “coordinator”, it employs the working force, and uses structural system and at the same time gives the possibilities for the growth and growth management (Ward, 2003). The necessity for the higher level of work specialization arises. The critical limit of the organization can be reduced giving more autonomy for the individual divisions – profit centres, the increase of the worker autonomy, the concentration of the administration to the solution of the strategic tasks and the project work (Baliga & Hunt, 1988; Donald E. Wynn, Ir, 2004).

New organization structures

Today the traditional structures – functional, linear, linear-staff-organization ones – are duly criticized and the new structures are proposed – matrix, tensor and divisional as well as Likert’s organizational structures with communicating groups. The autocrat principle is avoided in such organizations and the better conditions are given for the staff to participate in the management (A. Sakalas, 2003). In the clover-leaf structure proposed by Lievegood B.C.J. (1973) the project management is offered for the whole organization, while in the screw structure of the organization proposed by Ackof every leader of the higher level has the board of the corresponding level.

With the change of the environment, the approach to the organizational structure itself and the method of its formation varies. When speaking about modern organizations the new concepts appear, such as mobile, horizontal-flat, flexible, user-friendly, fast-rapid, global, unlimited, quickly responding, able to adapt, command-type and network organization (<http://instruct1.cit.cornell.edu>). The enterprise structure today is viewed from the point of view of the long-term position, estimating its diverse relationships in the context of the open market and the necessity for the quick change. Much is spoken about **the network or virtual organizations**. The joining of several business units is peculiar to these structures where the people and work processes communicate in pursue of common results and mutual advantage. There are many forms of organization of virtual enterprise alliance:

- work is organized in parallel in several places/ organizations;
- work is organized in sequence in several places/ organizations;
- work is organized at the same time in the same place;
- work is organized at the different time in the same organization.

The most peculiar feature of the virtual organization is its instability from the point of view of production and manufacturers, suppliers and purchasers. The specific organization structure is determined by the concrete constantly changing internal and external conditions.

Big organizations may become virtual ones when the boundaries between the separate divisions are eliminated. Small organizations may also become virtual enterprises as they may join with the other organizations thus reducing the expenditures and the risk and maximizing the profit. New technologies impact the formation of these structures and with their help everyone may work anywhere – in planes, hotels, cars, golf-courses, beach using the mobile phones, lap-tops, and work in groups with the help of software and faxes. The place remains only the discussion object that enables to cross the cultures and geographical lines at any time.

In conclusion, one can state that all the above mentioned organization structures are temporary and with the change of production needs, demand, supply, the tasks also change and the organization structure is reformed as well. The main feature of new organizational structures is the flexibility and the ability to acclimatize to the changing environment. Here the stress is put on creativity and invention. At the same time the strong teams that join the experts of different fields with the open activity style are created.

But even today there are inner walls in organizations. Hutt, Walker and Frankwick (1995) determined the following barriers of the transition to new organization structure:

- **the territory barriers**. The power, prestige and status of many leaders is acquired because of the position they occupy in some territory. The leaders do not want any changes due to which they would have to share people, information and resources;
- **explanation barriers**. Individual functional groups may have various points of view that create pre-conditions for collaboration differences;
- **collaboration barriers**. Various function groups may have their appointed signs, words, abbreviations, that are clear only for the group members. Finally, there are cultural barriers in different countries.

It is important that organization management structures correspond to the organization goals and the strategy. The formation of organization structure has the long-term strategic character, and the structure is created hoping that it will last for a long period. Thus the structure design is carried out in stages as the extension of the strategic planning, because the organization structure is closely related with the chosen strategy. The enterprise structure should be benevolent for the realization of the activity strategy. Usually the change of the strategy re-

quires the change of organization structure.

The strategy of the successfully developing enterprise most often is not disembodied from collaboration with other enterprises in national and foreign markets. This feature is also closely reflected in Lithuanian economy development.

One of the most important four elements “new game rules” in international competition is the qualitatively **new role of clusters and network construct alliances**. Lithuania cannot reach the international competitiveness in all branches of industry. Neither resources nor competence are sufficient for the purpose. Lithuania is famous in the branches of timber and furniture, clothing, mechanical engineering, and food industry. The analysis fulfilled enabled to segregate all the range of factors limiting the creation of additional legalized clusters: the lack of the confidence between the cluster subjects, uneven technological and management level of various business subjects, poorly developed business information systems, the lack of the experience and competence in the activity partnership, the enterprise deficit, ineffective professional and branch associations, ineffective innovation system (2007 – 2013 Economic..., 2006). The knowledge exchange between partners is very important in strategic alliance. Controversy is very often met here:

- on the one hand, the strategic alliance is based on the mutual confidence and collaboration that creates the optimum learning and knowledge transfer system;
- on the other hand, the moment of the limiting access to knowledge often exists.

The most outstanding example of the correctness of the second statement is the military industry though other branches of industry may also present similar examples. From the first sight it may be closely related with the collaborating alliances. As an example here may be the industry of automobile and computer production, where the assembly often takes place in the developing countries meanwhile the technologically complex component parts may be manufactured in the developed countries.

Very important is the factor of the information change where methods and technologies are used. The divisions are organized in its base and the employee groups where the knowledge change and learning are very intensive. But the exchange of special knowledge is not important between various–distant groups using different technological processes.

Especially important is the knowledge retention for some time in the progressive enterprises from the point of view of technology and organization.

In conclusion, one can state that the establishment of new advanced–network enterprise structures and alliances is important task of the present time. Unfortunately, there are some limiting factors related with the information privacy and the cultural, qualification, technological and similar differences.

Conclusions

1. The concept of quickly changing, learning organization is impossible to realize without respective organization management structures. Thus the change of traditional structures to more advanta-

geous ones beginning with the matrix and ending with virtual structures is one of the most important tasks of the developing organization.

2. The organization structures have to comprise the ideal conditions for the employee communication inside the enterprise and with the partners – enterprises, suppliers, purchasers, etc. comprising the alliances.
3. Traditional (linear, function, staff) structures are changed by matrix, communicating groups, and project structures. At present virtual and network structures are most often discussed as they theoretically present unlimited possibilities to exchange information. The important place in the present day structures is attributed to the clusters and alliances between enterprises. This significantly expands the information accumulation and dissemination, and learning possibilities inside the enterprise and among them.
4. It should be mentioned that there exist the introduction disturbances of the advantageous organization structures. In the first place, these are the disturbances related with the resistance of the employees to the changes – they are rather easily undergone when the structure reorganization is duly organized. Then goes the purposeful information hiding, technical-technological, organizational differences. Thus the reorganization of the organization structures is closely related with the definite conditions of the enterprise and environment, and it requires the corresponding adaptation.

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Besimokančios organizacijos ir organizacinės struktūros sąveika

Santrauka

Šiandieninė organizacija – tai nuolat kintanti, lanksti, antrepreneriška ir panašiai apibūdinama organizacija, kurių kiekvienai būdingas bruožas – nuolatinis mokymasis individualiame, kolektyviniame ir organizaciniame lygyje. Nuolatinis mokymasis keičia tiek įmonę, tiek patį darbuotoją, kolektyvą. Darbuotojai turi būti įsisavinę mokymuisi tinkamas filosofines nuostatas, jiems įmonė turi sudaryti tinkamą komunikavimo, reiškimosi įmonėje, motyvavimo sistemą.

Šio straipsnio tikslas – giliau panagrinėti naujų organizacinių struktūrų teikiamus privalumus ir realias jų realizavimo galimybes konkrečių įmonėje ir už jos ribų egzistuojančių gamybinių santykių kontekste.

Tyrimo objektas – naujos įmonės (grupės įmonių) organizacinės struktūros konkrečios gamybinės veiklos kontekste.

Tyrimo metodai – straipsnis parengtas naudojant stebėjimo, analogijų, analitinį sisteminį mokslinės literatūros metodą.

Mokymasis individualiu, kolektyviniu, organizaciniu lygmeniu yra daugelio mokslininkų tyrimo objektas (Wiegand, Senge, Nanoka, Levit, March ir kiti (žr. Al-Laham, 2003)). Ypač pabrėžiama individualios ir organizacinės kultūros svarba mokymuisi (Barney, 1986; Sackmann, 1992), daug dėmesio skiriama motyvavimo sistemų kūrimui ir kitiems klausimams.

Tačiau mokymasis ir su tuo susijusi pažanga, pokyčiai vyksta konkrečioje aplinkoje, kurioje žmogus ar kolektyvas yra pagrindinis veikėjas, tačiau jo veiklą riboja ar skatina konkrečios įmonės ir aplinka. Kiekviena įmonė yra organizuota kokiam nors technologiniam procesui atlikti, ir tai sukuria tam tikrą struktūrą, paremtą darbo funkciniu pasidalijimu ir specializavimu. Tai pasakytina tiek apie gamybinius, tiek ir apie juos aptarnaujančius procesus. Tai vadinamoji kietoji struktūra, kuri labai dažnai prieštarauja besimokančios – besikeičiančios organizacijos keliams reikalavimams. Kietoji organizacijos dalis yra inertiška, ji kinta labai lėtai. Tada kyla prieštaravimų

tarp propaguojamos teorijos ir realiai egzistuojančios praktikos – teorijos vystymuisi nesudaroma reikalinga terpė.

Vienas iš tokių kietų veiksmų yra įmonės organizacinės struktūros. Jų teoriniams ir praktiniams aspektams daug dėmesio skyrė H. Mintzberg (1976, 1983), naujas organizacinės struktūros nagrinėjo ir lietuvių autoriai (Seilius, 1998) ir kiti. Tačiau ši problema dažnai analizuojama izoliuotai, vienpusiškai nušviečiant atskirus struktūros klausimus.

Šiame darbe nagrinėjama organizacinių struktūrų tobulinimo galimybės, vadovaujantis besimokančios, sparčiai kintančios organizacijos reikalavimais. Straipsnyje išskirtos trys dalys. Pirmoje dalyje formuluojami reikalavimai informacijai gauti ir jos plėtrai įmonės viduje. Antroje dalyje analizuojama komunikavimo sistemų ir veikiančių gamybinių santykių priklausomybė. Trečioje dalyje nagrinėjama naujų organizacinių struktūrų diegimo trukdžiai, apribojimai konkrečių gamybinių santykių poveikio kontekste.

Išvados

1. Sparčiai kintančios, besimokančios organizacijos koncepcijos neįmanoma įgyvendinti be atitinkamų organizacinių valdymo struktūrų. Todėl tradicinių struktūrų keitimas pažangesnėmis, pradedant matricinėmis ir baigiant tinklinėmis, virtualiomis struktūromis, yra vienas svarbiausių besivystančios organizacijos uždavinių.
2. Organizacinės struktūros turi sudaryti idealias sąlygas darbuotojams bendrauti įmonės viduje ir su partneriais – į aljansus įeinančiomis įmonėmis, tiekėjais, pirkėjais ir pan.
3. Tradicines (linijinę, funkcinę, linijinę-štabinę) struktūras keičia matricinė, susisiekiančių grupių, projektinės struktūros. Pastaruoju metu vis dažniau kalbama apie virtualiąsias, tinklines struktūras, kurios teoriškai sudaro neribotas galimybes keisti informacija. Svarbi vieta šiandieninėse struktūrose tenka klasteriams, aljansams tarp įmonių. Tai žymiai išplečia informacijos kaupimo ir paskirstymo, mokymosi galimybes tiek įmonės viduje, tiek tarp įmonių.
4. Tačiau reikia pabrėžti, kad esama tam tikrų pažangių organizacinių struktūrų diegimo trukdžių. Pirmiausia, tai trukdžiai, susiję su darbuotojų pasipriešinimu pokyčiams – jie palyginti lengvai įveikiami, tinkamai organizuojant struktūros pertvarkymą. Toliau – tikslingas informacijos slėpimas, techniniai – technologiniai, organizaciniai skirtumai. Todėl organizacinių struktūrų pertvarkymas glaudžiai susijęs su konkrečiomis vidaus ir aplinkos sąlygomis ir reikalauja atitinkamos adaptacijos.

Raktažodžiai: *organizacija, besimokanti organizacija, naujos organizacinės struktūros, besikeičianti, lanksti, antrepreneriška, virtuali organizacija, komunikavimas organizacijoje.*

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