

New Approach of Reaching Necessary Knowledge in the Process of More Efficient Organizing of The Business System

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Abstract — Management as a scientific discipline has experienced different changes: from the traditional, classical to the modern and postmodern. In order that the managers could conduct efficient and effective organizing in the business system, they need appropriate knowledge for the same. In this paper we deal with the unique concept of reaching necessary knowledge in the process of organizing based on knowledge bases. Here we suggest a new concept and we represent it as a unique solution and we will update knowledge base only to some knowledge with the use of Protégé editor, an open code platform, by which we can quickly and simply provide all necessary knowledge updated in it. Suggested concept can be to the managers a good basis for efficient use of all necessary knowledge for the management of all activities in the business system. In the paper is specially emphasised and represented the organizing as one of the jobs of the manager, while planning, leadership, control, directing the information and knowledge, directing the staff, employment, efficient use of new technologies and similar are only partly presented.

Keywords - organizing, management, knowledge base, more efficient work

I. INTRODUCTION

Basic holders of the organizational activities in each business system are managers. They are decision-makers and organizers of the activities and all this with the aim that the decisions which are made, get realized. In order to successfully realize the decisions, the managers should design the model of organization which will support their conception and to direct the behaviour of the employees in order that they behave in accordance with the aims of the business system. Successful managers in its activities rely on the theories of organizing and management.

Management is the process based on the scientific methods of decision making from the area of directing, planning, organizing and control in order that the business system realizes maximum results with minimum investments and thereby realizes the mission and aims due to which was founded. The most important components of the jobs with which the management deals with are planning, directing, organizing and control and large number of authors, those functions expand with directing information and knowledge, directing the staff, employment, efficient application of the new technologies and similar.

In order to observe a different approach to monitoring and implementation of the new ideas in quicker reaching knowledge in the process of organizing, we will introduce

some other terms which are necessary there. Those are before all semantic web and knowledge bases.

The term semantic web has introduced Tim Berners Lee (2001) as a clear structure to the contents of the Web page. It originated as a necessity of a more efficient finding of certain information and knowledge. It is based on the idea that the information on the web becomes machine readable. Instead of documents linked with hyperlinks it should use the interrelated data (information) which have a specific structure and meaning [1].

In order for the idea of a semantic web to function, computers would have to have an access to the collections of information. It has to ensure the rules for reasoning on data, and to enable the presentation of data and knowledge [2].

Here we use the Protégé editor, an open code platform for update of knowledge which enables: reading and storing knowledge. Protégé editor gives a rich gathering of structures for modelling and activities that encourage creation, visualization and manipulation of knowledge which are represented in different formats.

II. INTRODUCTION TO MANAGEMENT

Today, the time of modern business, modern manner of business, modern manner of business and global trade, for those who decide are necessary new technological solutions for a quick reach to knowledge. In this paper we offer one such solution which can provide to the managers quick reach to the necessary knowledge. Quality managers in the business system must have appropriate knowledge, skill and experience from the area of management.

The management represents the success of disposal of limited resources or funds, that is, the ability of conducting the given job with what is available. The aim is that with as less as possible investment in resources are achieved as bigger results of economic activity, which is possible by effective and efficient activities. Each business system represents a certain organizational system. Organizational systems are very complex and the digital society sets before them increasingly complex requirements. In front of the managers are set increasingly complex assignments which can realize only those who have appropriate knowledge and experience and skills for that. The success of the operation of the business or other organizational system depends of his/her competence. Their aim is to rationally use the limited resources that the set

goals realize with as much higher degree of efficiency and effectiveness.

Management as the other scientific disciplines has experienced different changes: from traditional, classical up to the modern and postmodern paradigm, from the business system as the closed system where the efficiency and control are basic principles, up to the system without paper, without the people, with the computer integrated production. The most significant changes appear under the influence of information technology and networking. Some visions and some good ideas are not achieved because the employees are those who give flexibility and creativity to the business system.

In his book "The Future of Management" (2007), Gary Hamel urges managers to turn their back on the existing managerial manner of thinking and to embrace and nourish the practice of innovation. He considers that the most of the managerial principles and systems is based on the unnecessary managerial paradigm and that the managerial innovations are the basic source of the competitive advantage [3].

Search of the solutions for the security of the progress of management as a discipline must be based on the basics of the functions – enabling instead of commanding. Answers to the following questions can surely contribute to the security of the progress of the management. Can the management be improved so that it acts efficiently and effectively in the economic development and to respond to the needs of the employees? How to ensure team work and good organization for the achievement of the desired assignments and goals?

In the contemporary conditions of business, business systems must find the best way which means the harmonizing of the level of profitability, meeting the needs of the customers or the service users, strengthening of the competitive position, efficient use of resources and key elements of the progress and responsibility[4]. Good knowledge base could assist them in it.

Changes that happen in the business systems and especially in the process of organizing shall be oriented on the new technological solutions with which would be established some new principles and whose beginning could be found also in the practices of some business systems. It is necessary to know and question long term managerial practices that dominated in the previous period on the one side and the practice based on new technological solutions of the advanced business systems of the present, on the other hand. In this paper, the authors suggest the application of the new practice based on the knowledge bases.

Managers of the future shall base their work on the new models in whose basis will be the following components [5]:

- Common vision and brave mission,
- Minor hierarchy and wide range of control,
- Small self-managing teams with the exchangeable guidance,
- Freedom of opinion,
- Great number of the economic experimentation,
- Thick network of communicating,
- Rewarding the most successful with excellent ideas,
- Team work for the development of the products,

- Customer or the user in the focus
- Efficient use of the new technological solutions based on the knowledge bases.

We should bear in mind that it has not come to the end of the management but that its future is just coming, but it should be conceived in the appropriate manner, because they will increasingly less conduct its classical functions.

III. TERM AND DEFINITIONS OF ORGANIZING

It is considered that the process of organizing is based on the long term experiences and new knowledge necessary to ensure to the business system effective and efficient business. Managers are in the constant pursuit that in the conditions of fast changes organize business in the manner that will respond to the requirements of time and that its business system make competent to respond to the challenges of time.

In the process of organizing of the working processes, the managers perform a great number of different activities which are the continuation of the planning function. Both of these functions make the gathering of activities on the preparation of business. By the establishing of the goals of work of the business system and adoption of plans of business, the management approaches to the creation of the organizational assumptions for their efficient achievement. Those assumptions are consisted of the whole spectrum of organizational activities, which are based on the principle of division of work and coordination between the executors of the partial assignments.

Organizational structure presents formally established system of relations between the individuals and groups in which their mutual connections are established by the disposition of assignments, responsibility and authority. The concept of the organisational structure is an abstract concept that on the basis of the assumed situations in which the business systems can be found, creates different models. Organisational structure is based on the system of connected roles in which their mutual relations are defined by the certain behaviour in completing the assignments, so that the roles can block each other if it is not honoured the prescribed behaviour in accomplishing the assignments.

Organizational structure should be conceptualized that it represents the framework in which it will be enabled the achievement of the set goals in the harmonized manner. It has to be in accordance with the strategic plans of the business system, its activities, products, territories and markets. Organizational structure should not be mystified and unnecessary complicate. The most efficient are the simplest organizations, which gather people in order to perform the business better, quicker and less expensive than on the any other way.

If the business system is going to be organized as the centralized or decentralized depends of the business it should be completed. In the present time which is characterized by big, frequent and unforeseen changes, there is a need that the business system is ready for those changes, to react in short time and to adapt to the newly created conditions. Observed from that angle, bigger and quicker adaptability have the decentralized business systems, whose components can be quickly and adequately adapted to the new conditions.

Centralized business systems have their place in the stable and predictable environment. They usually have more complex structure and more levels of management, what makes them static. Regardless of that, their advantage is the fact that such structure makes the business system more compact and unique, strengthens the control function of the management, enables that the authorizations are concentrated in the hands of the small number of highly educated, energetic and efficient people, increases the possibility of realization of the strategic and other important plants.

At the decentralized business systems, connections between the parts are much looser, hierarchical levels are much less, what results with more direct and easier communication between the highest and the lowest levels. Decentralization enables quick, realistic and planned delegating of the authorizations which in big business systems often exists only on the paper, organizational units are getting closer to the market and makes them easier to direct, facilitates the quick reactions on the changes in the environment, provides the opportunity for proving to the large number of the talented managers.

Great number of authors considers that the basic functions of the management are: planning, organizing, management and control [6], but there is also those authors who expand these functions with directing the information and knowledge, directing the staff, employment, efficient use of the new technologies and similar. Some of the functions in this paper we will mention only briefly while the organization is considered in more detail, as much as we consider necessary to be able to understand that activity of the manager.

With the use of the Protégé editor, we will update basic terms related with the functions of the manager, and those are: planning (planiranje), organizing (organizovanje), management (rukovođenje), control (kontrola), directing the information and knowledge (upravljanje informacijama i znanjem), directing the staff (upravljanje kadrovima), efficient use of the new technologies and employment (efikasno korišćenje novih tehnologija i zapošljavanje) (Figure 1).

Planning, as the function of the management includes the selection of the mission, goals and actions for their achievement. Although, planning conducts professionally appropriate services in the business system is "necessary and inevitable responsibility of all managers" (Schermerhorn). Successfulness of the manager is based on their ability to *see beyond*, to understand the dynamic environment and to find future answers for the successful business in the new and continuously changeable conditions.

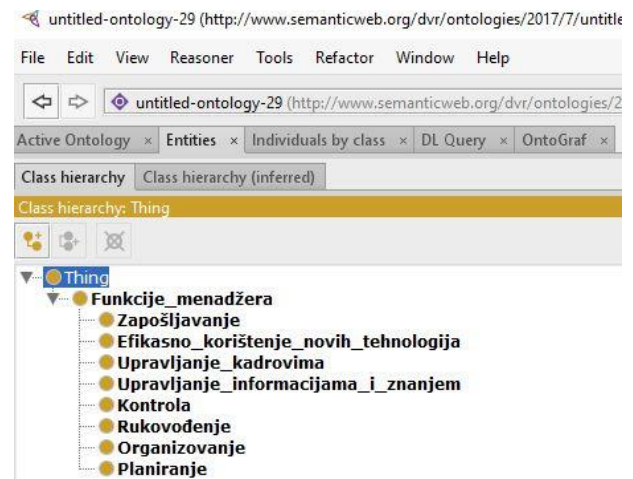


Figure 1 Functions of the manager

As the starting function of the management, the process of planning can be observed on the basis of the following phases:

1. Defining the goals (at all levels of the business system),
2. Estimation of the real position of the business system in the functional surroundings,
3. Foreseeing future events,
4. The procedure of making plans and
5. the implementation of plans and realization of the business results.

Basic knowledge on the planning are presented in figure 2. "Function of the manager – planning".

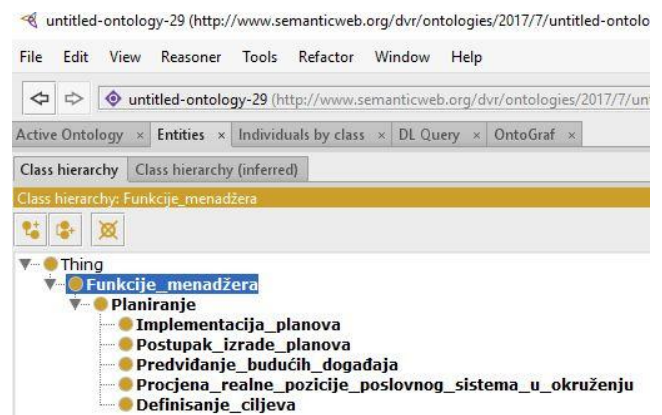


Figure 2. Function of the manager - planning

Leadership – directing human resources

The assignment of the function of directing the human potential in the business system is related on completing and maintenance of the workplaces in the organizational structure, education, improvement and training of the employees. System of directing people in the broad sense includes the research of the human resources, staffing, the development of the employees, relations with the employees and unions.

Control

Control is the process of establishing if the work of the business system matches with the planned and taking corrective actions if that is not the case.

The control presents the supervision over the business activities of the business system, its parts and holders of its functions. The process of controlling compares the achieved results with the standards and assignments which the business system has set as its goals in the form of plans or other development documents. In order that the control would be efficient, it must be timely.

Controlling is the measurement and correcting of the individual and group activity, in order that the business and processes be carried out according to the established plan. With controlling are compared achieved results with the planned and connects i.e. integrates and rounds the overall process of the management. With the use of Protégé editor we will update basic terms related with the control as one of the basic functions of the manager.

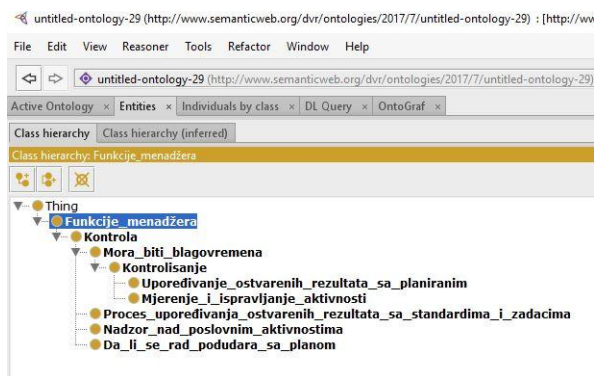


Figure 3. Function of the manager - control

If it comes to the basic explanation of the term management as a skill of conducting businesses with the assistance of people, it should not be specially proven the significance of its function, which has a simplified name, employment. Under such name, it is possible to include a broad meaning of this important function of the management, which relates on the management of the staff policy in the business system, which implies the complex activity of directing human resources.

IV ORGANIZING

Organizing is the activity of the management that provides the harmonious linking of the people who procure, distribute and use the funds for work in the aim of the successful business. It is based on the division of work between the participants in the process of business. On that basis the overall business of the business system is distributed on the individual groups of workers and then on the individuals. In that manner is achieved the specializing of the groups and individuals for certain businesses and thereby is provided the increase of the efficiency of the overall business. The division of work itself demands the coordination between the working groups but also between the individuals in the working groups, so in the jurisdiction of the organizing appear also the activities of the coordination. Efficiency of the

coordination is provided by achieving the appropriate authority of the executives. It implies the jurisdiction of the executives in coordinating of the businesses of the groups and individuals but also its responsibility for the success of all parts as well as the whole business system.

The function of organization presents the activity inherent to the business system as the dynamic system. Organization system of the business system acts by its inner strength, encouraged by the goals of its business and encouraged from the human element in its structure. It is inherent to the business system to constantly improve itself and develops its business. Organizing is manifested as the conscious preparation of the activities and its role is expressed directly, after the establishing the goals of the business. Because the goals of business of the business system are established in the process of planning, these two functions of the management are mutually complemented. Therefore, after the established goals by plan, the management approaches to providing the conditions for the harmonious connecting of the human potentials with the material elements of the production or service. It involves also the activities on engagement of the necessary staff, on the procurement of the funds for the production or servicing as well as securing of more favorable position of the business system on the market. Well organized business system is successfully doing business and acquires greater profit. Management of the business system uses organizing for more efficient combining of the human and material resources, adapting to the conditions of the environment. Wherein the prominent efforts of the management comes to surface that with the good organizing is secured as much as favorable position of the business system, due to the fact that in the market exchange is verified the justifiability of the overall business and also organizing. Organizing, as the element of the management is expressed over the organizational structure and organizational form as the appropriate conducting of the activity of the harmonious connecting of the parts in the entirety of the business system [7]. That is one of the most important activities of the management. In the process of organizing of business, the managers conduct the great number of activities, which are the continuation of the function of planning. Both of these functions make the collection of activities on the preparation of the business. By the establishing of the goals and making the business plans, the management approaches to the creation of the organizational assumptions for their efficient realization. Those assumptions are consisted of the wide spectrum of the organizational activities, which are based on the principle of the division of work and coordination between the executors of the partial assignments. Basic activities in the process of organizing (figure 4) which needs to be conducted in order to enable efficient achievement of the goals of business are as follows:

- Establishing of all jobs that needs to be done,
- Connecting jobs into assignments and division on the employees,
- Grouping the businesses and forming the organizational units,
- Mutual harmonizing and unification of the grouped jobs into the unique system,

- Decentralizing of businesses and authorizations.

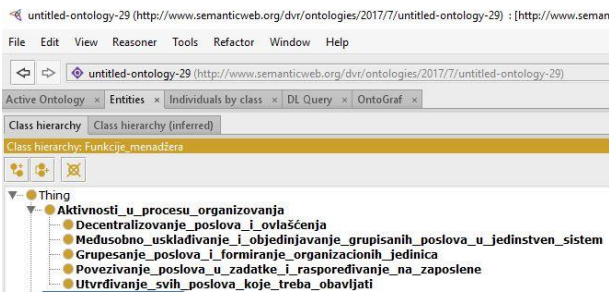


Figure 4 Activities in the process of organizing

The mentioned activities of the management in the process of organizing of business present the complex procedures based on the principles of effectiveness and efficiency. The process of organizing it is necessary to form the internal division of jobs and assignments and choose the appropriate organizational form of the business system. The integral arrangement includes the appropriate organizational structure and organizational form represents the physiognomy by which is represented to the environment.

In the theory and practice of the organization of the business system, the structure represents the harmonious disposition of the human and material resources and appropriate relations between them, what enables efficient functioning of the business system of the organizational system. Under the structure is included the disposition of the funds for work, materials and workers within the business system and their connecting into the appropriate entirety. The basic role of the organizational structure of the enterprise is the security of the efficiency of business and effectiveness of economic activities.

Conducting of the division of work includes the disposition of the certain jobs on the individuals or appropriate groups of executors. Managers define the elementary working procedures and individual jobs and connect them into the appropriate assignments which can be, in the form of concrete tasks awarded to the individual executors. Only the forming of the working assignments is conducted through the organizational measures, which are expressed in the form of:

- Division of work
- Specializations of the employees,
- Expansion of the work assignments of the individual executors and
- Innovation in the structure and duration of the working hours.

With the use of the Protégé editor we will update the basic terms related for the organizational measures (Figure 5)

By the division of work on the individual employees, it is enabled to the certain worker easier mastering of the part of work than its entirety, due to the fact that the individual is not

often sufficiently competent to perform all operations in the framework of some complex work. By the division of work on the individual executors, it is enabled the specialization of the workers for the certain type of work.

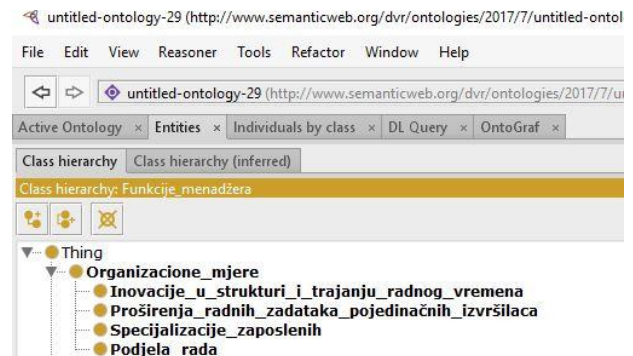


Figure 5 Organizational measures

V. SUMMARY

In this paper we have dealt with the unique concept of reaching the necessary knowledge in the process of organizing based on knowledge bases. It is a new concept and unique solution based on the knowledge base. We have updated the knowledge base only with the some knowledge and we used for it Protégé editor, an open code platform. Protégé editor can enable us quick and simple reaching the necessary knowledge which are updated in it. The suggested concept can be a good basis to the managers for efficient using of all necessary knowledge for directing of all activities in the business system. In the paper is specially emphasised and presented organization as one of the jobs of the managers, while planning, leadership, control, employment are only partially presented. The following activities could be related on the more complete updating of the knowledge base and more complete citing the sources of that knowledge.

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