

## Management Features of Russian and Foreign Universities Management and Organizational Structure

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The article describes the organizational structures of Russian higher education institutions “Volga State Academy of Water Transport” and Czech universities VŠB - Technical University of Ostrava - the differences and peculiarities of organization management system, as well as the content and form of the management process, controls, in which management process is carried out on the relevant functions aimed at problem solving and achieving goals. From this perspective, the management structure of the universities is represented as a system of optimal allocation of functional duties, rights and responsibilities, procedures and forms of cooperation between its controls and the people working in them, that is, perform certain functions on specific issues rests with the experts and each performer or control is specialized in performing certain types of activities.

**Key words:** University structure, University management, University workplaces, Institution of higher learning, Educational institution of higher education, Organization unit.

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Features of functioning of universities make it necessary to coordinate the activities of their departments. Depending on the format of internal division, this problem becomes more acute because the employees of the organization should be related to the unity of goals and objectives, and it is important to be constantly informed about the content of the work and achievements of their colleagues<sup>1</sup>.

### **According to the business dictionary**

Organization is a social unit of people that is structured and managed to meet a need or to

pursue collective goals. All organizations have a management structure that determines relationships between the different activities and the members, and subdivides and assigns roles, responsibilities, and authority to carry out different tasks. Organizations are open systems—they affect and are affected by their environment<sup>2</sup>.

Structured means: arranged in a definite or fixed order or sequence of elements (components, entities, factors, members, parts, steps, etc.)<sup>3</sup>.

There is a relationship between the number of internal divisions and communication between them, because it is increasing one, the second also complicates. In this regard, it is important to clearly the functions that should be performed by a unit to achieve the objectives and

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tasks for which a structural unit operates.

This means that there is a need to avoid uncertainty as to what kind of work should be carried out by specific structural division and who in this structural division should do it. In the case of such uncertainty intra conflicts may occur. In this regard, it is recommended to carry out the formation of the internal structure of their units and control, based on the following criteria:

1. Employees have duties and responsibilities. Employees have certain obligations and duties to their employers. An employee has the duty to follow all directions and orders of the employer, as long as they are legal. He needs to remain loyal to the employer and make reasonable decisions in any situation that may arise. An employee has the duty to perform the work assigned to the best of his ability, and to be flexible to adapt to job changes whenever they may occur<sup>4</sup>.
2. Employees have to cooperate with the employer to control an employee.
3. Employees have to perform duties with proper care and diligence, so accomplish a task, or perform of a duty or obligation. To perform all the work on their own so they cannot delegate their duties to anyone else<sup>5</sup>.

The main principles of the management structure of the organization should be formulated as follows: Management and organizational structure should primarily reflect the goals and objectives of the organization under study, therefore, to submit to the educational process, its needs and objectives; there must be an optimal division of labor between controls (senior management, administrative and managerial staff, etc.) and individual workers, provides a tranquil nature of the work and load in accordance with the norms of labor and an appropriate specialization; management structure should be linked to the definition of powers and responsibilities of each employee and structural unit, with the establishment of a system of vertical and horizontal linkages between them; roles and responsibilities, as well as the powers and responsibilities of employees should be in line with each other, since the disorder can lead to dysfunction of the entire management system; Management and organizational structure should correspond to the

degree of comfort in an organization that provides significant influence on decisions regarding the level of centralization of staff and detail, the distribution of authority and responsibility, degree of autonomy and scope of management control University. In practice this means that attempts to replicate the management structure, operating successfully in such conditions do not guarantee the required results. The implementation of these principles is the need to integrate the study of the structure of university management of many different factors affecting the organizational structure of management.

#### **Main part**

The aim of this article is to compare and study organizational structures of management departments of the University, and in the following articles give options to improve them. The objective is to: review the implementation of the existing organizational structures of management Russian and foreign university<sup>6</sup>.

#### **As the main objects of study are the following institutions**

“ Federal State-Financed Educational Institution of Higher Education “Volga state academy of water transport” (Nizhny Novgorod, Russian Federation). further - “VSAWT”.

Volga Academy is a public educational institution of higher education, under the responsibility of the Federal Agency of Maritime and River Transport (Rosmorrechflot), and is licensed to conduct educational activities in the field of higher, secondary, vocational and postgraduate education.

It is authorized to issue official standard certificates of education, award Candidate of Technical and Economic Sciences degrees. At present, more than 18,500 people are taught at the educational complex: students, who get their bachelor's, master's degrees or diplomas, trainees, and technical specialists who receive a second degree.

The quality of training is primarily determined by the state of the facilities and equipment and the professional level of the teaching staff. The academic complex includes premises with the total area of over 50,500 square meters that comprise lecture rooms, simulators, 34 computer classes, assembly halls, libraries, sports centers, museum fleet, and other academic and

administrative offices.

More than five hundred assistants and professors are involved in the educational process. They train specialists for the whole water transport infrastructure, including fleet, ports, ship repair companies, educational institutions, research institutes and other departments of the field. There are 36 courses of higher professional education and 18 courses of secondary professional education.

The high quality education at FSEI HE "VSAWT" is provided with modern material and technical basis, a wide range of topical scientific research that is done by the Academy professors, their international activities. It can be illustrated by a number of examples.

The academy owns a unique set of training simulators, which are the envy of many Russian transport educational institutions. There are following simulators and their functions:

- The training planetarium u171 "Carl Zeiss" to study the celestial map;
- The simulator N8- 2500 (made by the firm "Vector") is used for the real time navigation plot;
- The simulator NTPro-4000 (made by the company "Transas") to get hands-on skills in ship control under various sailing conditions;
- The navigation simulator NMS-90 MK III (made by the firm "Norkontrol") provides the conventional training of students, Navy officers according to the programs of Radar Observation and Plotting, Automatic Radar Plotting Aids, "The use of the ship's radar on inland waters and waterways";
- The ship mechanic simulator "Norkontrol" is used to train students and cadets of mechanical specialty how to manage ship power plants;
- The Global Maritime Distress and Safety System Navigation simulator (by the company "Transas") is used for the conventional training of students, Navy officers according to the programs of the "Global Marine Distress Means";
- The Training Centre for Natural and Man-made Crisis Prevention (by the company "Transas") is used to train students and professionals according to the program

"The elimination of oil spills on inland waterways";

- The educational and training vessel "Academician" is used for the conventional training of navigators, cadets according to the program of Damage control.

The attention of leading scientists of the Academy is focused on solving of topical problems in the field of water transport development:

- Developing of the transportation organization and the efficiency of transport systems (A.G. Malishkin, V.N. Zakharov, V.I. Kozhukhar);
- Modeling of dynamic processes, management and optimization of transport systems based on the new information and communication technologies (Y.S. Fedossenko, M.I. Feigin);
- Controllability of ships and navigational safety (A.N. Klementyev);
- Development and maintenance of the transport fleet (E.P. Ronnov, S.N. Jilin);
- Economics and management of geographically-transport complexes, development of the main energy saving directions in transport; legal provision of inland waterway transport (V. I. Mineev, V.I. Zhmachinsky, S.S. Podosenov);
- Waterways and ports (A.N. Sitnov, R.D. Frolov);
- Logistics, transportation technology and marketing (V.N. Kostrov);
- Fault detection, repair and modernization of water transport and transport engineering (A.S. Kurnikov, I.A. Volkov, A.B. Kornev);
- Bifurcation theory of dynamical systems and its application in physical systems and transport processes (V.N. Beluh);
- Ship theory, applied ecology, ship and environmental technology (V.L. Etin, V.S. Naumov).

The concept of Russian education modernization emphasizes the importance of professional education and its technical side. In this regard, the topical line of development is to found educational, research and innovation complexes (ERIC).

The first ERIK "The Mechanic" has been set up and has started its activities. The use of such complexes leads to the merging of

educational, industrial and scientific innovation processes and results in the integration of higher education and the real economy sector: shipping companies, shipyards, small businesses. It is particularly important to emphasize that this system ensures the unity of the educational process, research and innovation at all levels of training taking into consideration real needs of the industry<sup>7</sup>.

Vysoká škola báňská - Technická univerzita Ostrava (VŠB – Technical University of Ostrava) (Ostrava city, Czech Republic).

VŠB – Technical University of Ostrava was founded in 1849, and has since grown into a modern institution of higher learning, offering the highest levels of education in technical and economic branches of study, based on the interconnection of science, research, education,

and the creative activity that binds and enhances them.

Ostrava has long been a hub of major industry in central Europe, and study and research at VŠB-TUO is informed by historically close ties with major international companies, as well as by joint research and mobility programs with university partners the world over.

VŠB-TUO is the fourth largest university in Czech Republic with over 20,000 students studying in bachelor's, master's and doctoral degree programs in seven faculties and two all-University study programs. In November 2011 VŠB-TUO was awarded the prestigious ECTS Label, a mark of the quality of implementation of the credit system in bachelor and master study programs according to European standards. This label ensures that our administration of

**Table 1.** Characteristics of management and organizational structure of the universities

| S. No | Features  | “Volga state academy of water transport” | VŠB – Technical University of Ostrava. |
|-------|---|--|--|
| 1.    | The main control  | Conference                               | Rector                                 |
| 2.    | The responsible official  | Rector                                   | Rector                                 |
| 3.    | links between departments   | exist (horizontal)                       | exist (horizontal)                     |
| 4.    | The level of the relationship between the various functional services | low                                      | low                                    |
| 5.    | Degree of subordinates' independence                                  | high                                     | high                                   |
| 6.    | Type of control units   | centralized                              | centralized                            |
| 7.    | Time of the decision  | Prolonged                                | Prolonged                              |
| 8.    | Speed of information transfer between units                           | Low                                      | Low                                    |
| 9.    | Management and organizational structure type                          | Linear-functional                        | Linear-functional                      |

international students has undergone rigorous examination by an agency of the European Commission in order to receive this Label.[8]

Let us dwell on the structure of universities and some functional divisions. Let's consider the organizational structure of the management of each of these universities.

“VSAWT” management is based on the linear-functional management structure. At the head there is the “Conference” of university employees, hereinafter subordination “Academic Council” and “Rector”. By the principle of specialization of organizational substructures - Senior management (Rector's Office): Vice-rector for educational and methodical work; Vice -rector for Research; Vice-Rector for security; Vice-Rector

for the Convention's preparation are submitted to the rector. Rector of the University is a member of the university and responsible for the performance of the university official. Further, each specialized functional substructure is submitted to, respectively, the person of senior management (vice-rector) responsible for this activity.

Each lower manager is delegated authority within the boundaries of the performed function, then the execution of certain functions on specific matters entrusted to specialists. Specialists of the same profile are combined into a single profile subdivisions control system and make decisions that are required for the structural subdivisions.

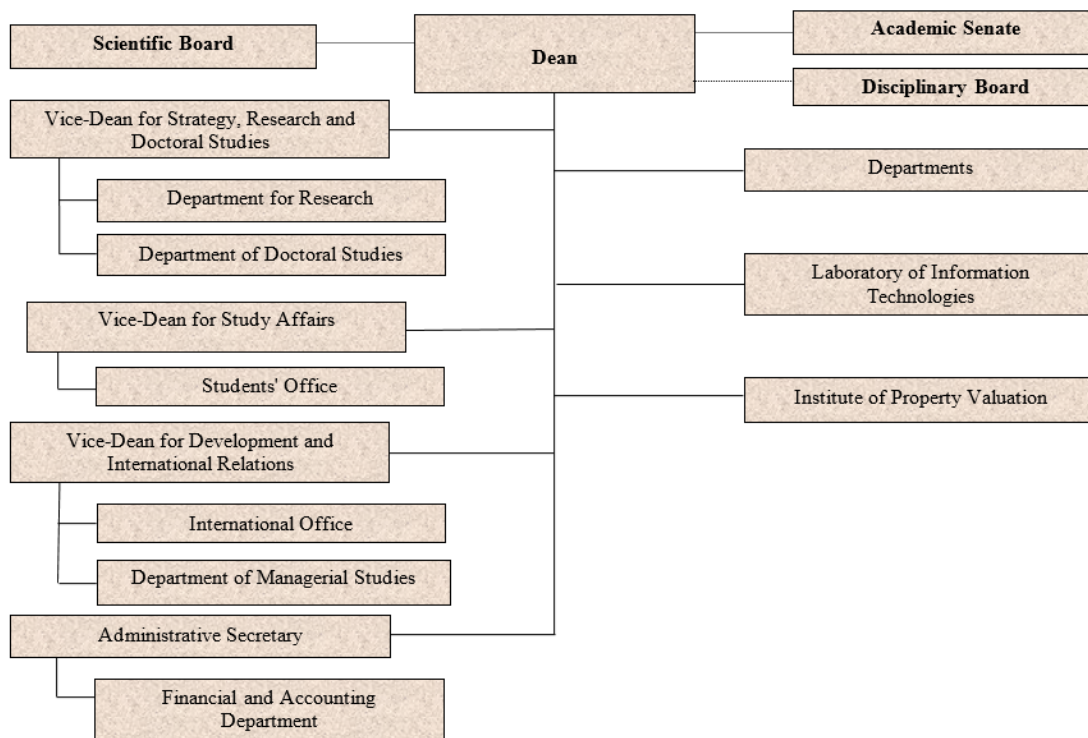
Thus, the organizational structure of “VSAWT” consists of several specialized linear

structures subordinate to the Rector, who has the ability to focus more on operational management as well as functional specialists release him from solving specific issues.

However, the management orders can come from a number of operational services, to one department or one specialist, and therefore may be a problem of mutual coordination of these orders, which creates certain difficulties. Moreover, their ownership for the performance of their duties is reduced, as the responsibility rests with the fact on many specialists.

“Volga State Academy of Water Transport” has a wide network of branches: Perm, Astrakhan, Kazan, Samara branches. Also in the academy there are 5 departments and 27 chairs:

Electromechanical Department. The department offers a range of degree courses at different levels: “Operation of ship power plants”, “Operation of ship electrical equipment and automatic machinery”, “Operation of cargo handling equipment of ports and transport terminals”, “Maintenance of transport radio equipment.” The department includes six chairs.



**Fig. 1.** Faculty of Economics organization chart

Its graduates work at the enterprises of the Ministry of Transport, construction departments, design engineering firms, take up key positions in the coastal shipping enterprises and the shipping companies.

Shipbuilding, hydraulic and environmental engineering Department. The department offers three degree courses: “Shipbuilding”, “Hydraulic Engineering” (specialization “Waterways, ports, water transport facilities and shelf facilities”) and “Environmental

Engineering”. The faculty includes five chairs. The department graduates work in construction and design organizations, in shipbuilding and ship repair plants.

Navigation Department. The department offers a degree course “Navigation” both for sea and river craft. The training involves modern methods and teaching techniques with the use of specialized simulators in full compliance with the requirements of the International Convention of Training, Certification of Sailors and Watch

keeping. The graduates of the department work in Russian and foreign shipping companies, their education meets all international and professional requirements, many of them have become captains of sea and river vessels, the heads of major shipping companies.

**Economics and Management Department.** The department offers three degree courses: “Economics and Management of Transport”, “Organization Management”, “Transportation Organization and Transport Management”. The graduates of the department work in the shipping companies, ports, in analytical, audit, consulting and marketing firms. Many of them are the heads of banks, tax inspection offices as well as key specialists of enterprises.

**Law Department.** The department offers a degree course “Jurisprudence” to meet the needs of transport companies and transport law enforcement agencies. The future lawyers get experience and develop professional skills while they undergo practical training in public prosecutor’s offices, courts, law offices. The departments include four chairs. The department graduates work in transportation companies, law enforcement agencies, state and municipal institutions<sup>9</sup>.

**VŠB – Technical University of Ostrava.** At the head there is the Rector (which has several advisory bodies: the Scientific Council, the rector’s office, administrative council, etc.)<sup>10</sup>.

Senior management (Rector’s Office) under the principle of specialization of organizational substructures is submitted to the rector: vice-rector for international and social affairs; vice-rector for Study Affairs; vice-rector for Science and Research; vice-rector for development and investment construction<sup>11</sup>.

Public higher education institution VŠB – Technical University of Ostrava has the following autonomous academic officers and official bodies: the Academic Senate; the Rector; the Scientific Board or Artistic Board, or the Academic Board at non-university higher education institutions (hereinafter “the Scientific Board of a public higher education institution”); the Disciplinary Committee.

In VŠB each specialized functional substructure is submitted respectively to the senior management (vice-rector), responsible for their

activity: Department of Social Sciences; Department of Languages; Department of Physical Education and Sports; Department of Mathematics and Descriptive Geometry; Department of Teaching Vocational Subjects; Nanotechnology Centre; Centre for Environmental Technology; Energy Research Centre; Technology Transfer; Business Incubator; Project Support Centre; Audiovisual Services; Central Library; Archive; Centre for Information Technology; Centre of Alternative Energy Sources<sup>12</sup>. Also such faculties as: Faculty of Economics which includes (Department of Economics; Department of Management; Department of Marketing and Business; Department of Accounting; Department of Regional and Environmental Economics; Department of Law; Department of European Integration; Department of Economics Journalism; Department of Mathematical Methods in Economics; Department of Business Administration; Department of Public Economics; Department of Finance; Department of Applied Informatics; Department of National Economy; Department of Systems Engineering; Department for Research; International Office; Department of Doctoral Studies) Faculty of Civil Engineering Faculty of Mechanical Engineering Faculty of Electrical Engineering and Computer Science Faculty of Mining and Geology Faculty of Safety Engineering Faculty of Metallurgy and Materials Engineering University Study Programs<sup>13</sup>.

Public higher education institutions may be divided into the following constituent parts: faculties; higher education institution institutes; other units focusing on teaching, research, development, innovation, artistic and other creative activities and units providing information services; specialized units for cultural and sports activities, accommodation and catering (in particular for members of the academic community) and operational units. Faculties have the following autonomous academic officers and official bodies: the Academic Senate of the faculty; the Dean; the Scientific Board of the faculty; the Disciplinary Committee of the faculty. The other officer of the faculty is the Bursar. The academic community of the faculty consists of the academic staff employed and the students enrolled at that faculty.

The above example of the organizational structure of management of Faculty of Economics

VŠB - Technical University of Ostrava (Figure 1)<sup>14</sup> illustrates the subordination of functional substructures, where the functions on specific issues are rested on the specific specialists. Specialists are combined into subdivisions control system of the university and make decisions that are required for the lower specialists or subdivisions.

In the structure of management of Faculty of Economics VŠB - Technical University of Ostrava linear and functional relationships are different. Linear define relationships associated with the adoption and implementation of administrative decisions and the movement of information between line managers, i.e. persons who are fully responsible for the activities of the faculty and / or its business units. Functional connections are connected to some management functions (management unit). Line managers decide all questions of development of their departments, and issue orders binding on the other structural units of the Faculty. Staff officers have limited powers only to plan, recommend, advise and assist, but can not tell other members of the faculty to carry out their orders.

Described management structures of universities have their advantages and disadvantages, to advantages can be included: coherence performers; distinct personal responsibility of managers; highly competent professionals responsible for the implementation of specific functions; exemption the solve some specific issues from line managers; standardization and formalization of the phenomena and processes; avoid duplication and parallels in the performance of administrative functions; reducing the need for broad specialists.

The disadvantages are the high demands on management; the concentration of power in the organization's senior management; excessive interest in achieving the goals and objectives of the "own" units; difficulties in maintaining a constant relationship between the various departments; appearance of excessive centralization of management; long-term decision-making procedure; relative stagnation organizational form, react negatively to changes.

Despite the fact that for the final result of activity in VŠB - Technical University of Ostrava as well as in "VSAWT" is responsible "Rector",

the main task of the organization's leadership is the optimal distribution of functionality among subordinates, in this connection, the manager spends a lot of time on the coordination and decision-making. The use of linear-functional management structure shows that the top management of universities (regardless of the country) has a routine, frequent and rarely changing functionality and tasks. Examples of these management methods are management of small enterprises and companies with mass and serial production type. Thus, if the university has branches abroad, that is working not only in domestic but also in the international market, this structure is useful in connection with the uniformity of performance requirements and the learning process.

However, a significant obstacle to the effective use of the structure of university management is that it can not respond quickly to changes in society and the world, which often lead to a change in the relationship between the functional units. Influence has and a high level of formalization in relationship of management employees, in connection with which the result is to slow the transmission of information and complexity, which leads to a decrease in the speed of decision-making and the need for harmonizing the actions of various functional departments (departments, services, etc.) greatly increases workload of the rector and his deputies (vice-rectors).

At the same time, the heads of internal divisions are available to control devices by their level and consist of functional specialists, artists. However, between the structural units of different levels there is a system of functional relations, which guarantees the unity, specificity and accuracy of the performed work. As the grow of number of functional layers, which form a functional service, the number of such functional relations is growing and at the same time strengthens the role and importance of the performed functions.

## CONCLUSIONS

It can be concluded that the advantages of the described structures of university management are the high efficiency of the units;

centralized control, ensuring the unity of solving the problems of the organization; functional specialization; a high level of knowledge, skills and potential of functional specialists. The disadvantages include the emergence of problems in cross-functional coordination within the university; responsible for general and some specific results only at the highest level; lack of response of all departments to market changes; an increase in the adoption of decisions in connection with the necessity of their approvals.

Thus, to the elements of organizational management structure we assign both individual professionals (managers, professionals) and services or controls, which employ something or that the number of specialists that perform specific responsibilities. Based on the nature of the general objectives of the organization carried out in the management, functioning structure that defines, in each case, the functional staff involved in planning, organizing educational process, management, controlling all the processes in the organization.

The internal structure of the described higher education institutions may have some differences. But since there is no strict requirements to the organizational structure, about the same types and amounts of activity do not guarantee that two different university will still have a similar structure. Because “effective” structure as such does not exist, the issues are resolved to establish a purely individual, with all the features and circumstances of the activity.

## REFERENCES

1. Konina E.V., To the question of formation of lingua-informational approach. *European Social Science Journal*, 2013; **10-1** (37): 220-224
2. Business dictionary. Retrieved 30.10.2014 from [www.businessdictionary.com/definition/organization.html](http://www.businessdictionary.com/definition/organization.html)
3. Business dictionary. Retrieved 30.10.2014 from [www.businessdictionary.com/definition/structured.html](http://www.businessdictionary.com/definition/structured.html)
4. Employee's Rights & Duties. Retrieved 31.10.2014 from [www.ehow.com/m/list\\_6723868\\_employee\\_s-rights-duties.html](http://www.ehow.com/m/list_6723868_employee_s-rights-duties.html)
5. Business dictionary. Retrieved 31.10.2014 from [www.businessdictionary.com/definition/duties-of-employees.html](http://www.businessdictionary.com/definition/duties-of-employees.html)
6. Business dictionary. Retrieved 31.10.2014 from [www.businessdictionary.com/definition/control.html](http://www.businessdictionary.com/definition/control.html)
7. English version. Retrieved 31.10.2014 from [www.vsawt.ru/newsite/English%20version.php](http://www.vsawt.ru/newsite/English%20version.php)
8. VŠB – Technical University of Ostrava. Retrieved 31.10.2014 from [www.vsb.cz/en/about-us/](http://www.vsb.cz/en/about-us/)
9. English version. Retrieved 31.10.2014 from [www.vsawt.ru/newsite/English%20version.php](http://www.vsawt.ru/newsite/English%20version.php)
10. Organizational structure. Retrieved 31.10.2014 from [www.vsb.cz/cs/univerzita/organizacni-struktura/](http://www.vsb.cz/cs/univerzita/organizacni-struktura/)
11. University Management. Retrieved 31.10.2014 from [www.vsb.cz/en/about-us/structure/university-mgmt?](http://www.vsb.cz/en/about-us/structure/university-mgmt?)
12. University workplaces. Retrieved 31.10.2014 from [www.vsb.cz/en/about-us/structure/workplaces/](http://www.vsb.cz/en/about-us/structure/workplaces/)
13. Faculties depts. Workplaces, etc Retrieved 31.10.2014 from [www.vsb.cz/en/faculties/](http://www.vsb.cz/en/faculties/)
14. Chart. Retrieved 31.10.2014 from [www.ekf.vsb.cz/en/structure/chart/](http://www.ekf.vsb.cz/en/structure/chart/)