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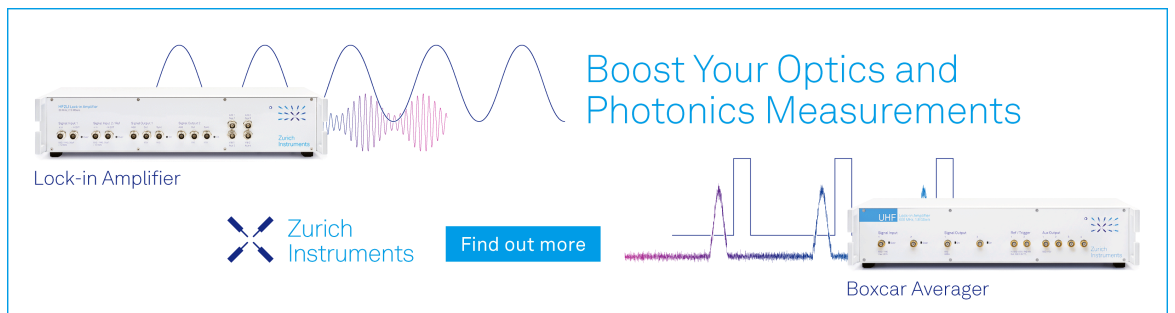


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Corporate Governance of Industry-Specific Education

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Abstract. The article proposes the use of new theories and approaches in the formation of interaction within the model of relations «corporation - transport universities». The main provisions of theories of resource exchange, aimed at achieving sustainability of the organization are analyzed; the problems of formation and implementation of the theory of resource exchange in the management of industry-specific education and universities are highlighted. The features of interaction between universities and enterprises of the railway industry in modern conditions are considered, the problems of inadequacy of resource exchange are identified. The ways of solving the selected problems in the direction of overcoming opportunistic behavior, the development of joint educational programs of higher education that provide high-quality training of managers and specialists with relevant competencies, the formation of professional standards for managers and specialists in the transport industry. An organizational mechanism for coordinating the efforts of participants in the interaction, the introduction of a relational contract aimed at long-term trusted cooperation is proposed.

INTRODUCTION

In recent years, a significant amount of research has been devoted to the issues of effective in-ternal corporate governance. Considering a corporation, we mean its definition as a large association created for the purpose of economic activity in a certain area of the market and aimed at increasing efficiency through the rational use of resources. If at the initial stage scientific approaches to management of organizations were associated with the formation of various busi-ness processes within companies, manifested in the flow of material, information and communication, financial and other resources, now the set of directions of managerial impacts fundamentally expanded [1]. Today, the priority of corporate development can be considered sustainable development based on competitive advantages, which makes it possible to adapt to the constant-ly changing conditions of the external environment. The presence and exchange of resources at the level of corporate interactions makes it possible to form these advantages.

MATERIALS AND METHODS

The theory of corporate governance put forward by C. Hill and T. Jones considers finding a balance in coordinating the elements of the activities of the corporation's stakeholders [2]. Next, we will consider intracorporate interaction based on a mutually beneficial exchange of resources between individuals and departments.

The diverse activities of corporations require different approaches to the management of its structural elements (divisions) in accordance with their goals, objectives and performance indicators. This is how the presence of various organizations, to some extent dependent on it, in the structure of the corporation, determines the formation of modern approaches to their management. The attraction of attention to this topic is caused by the complexity of establishing equal beneficial relationships between remote subjects (objects) of long-term activity. Among such

organizations, one should single out industry-specific universities, which are widespread in the Russian Federation to meet the needs of certain areas of activity in qualified specialists.

The process of managing affiliated organizations within corporations has significant features [3], since they are not included in the processes of current economic activity. From the side of the parent organization, the management process is controlled by a certain dedicated body that implements the role of the focal point. Often, affiliated organizations have only an indirect impact on the overall performance of the corporation, and their resulting performance indicators are difficult to account for. The literature describes the idea of assessing the results of the functioning of a dependent organization by determining the stability of the system. This criterion of a managed company reflects its ability to implement quantitative and qualitative performance indicators when the operating conditions change.

Let us consider the management of industry-specific education using the example of the rail-way transport industry. Functioning in a market environment requires the development of mechanisms for their interaction. The type of interaction between a corporation and a university can be classified as cooperative, since many actions for training personnel for structural divisions of the industry are carried out by both parties, in particular, the formation of the composition of applicants for admission to the university, the organization of internships, the joint implementation of research work, the distribution of students, etc. Interaction management consists in the distribution of functions between specific participants in the processes, the integration of efforts in functional blocks, while the main responsibility for the quality of training of young specialists lies with the university. In the literary sources, there was no description of the interaction in the environment of the «university and industry enterprises» to improve the efficiency of the industry through the formation of the quality of specialists.

The purpose of creating industry-specific educational institutions was to train interspecific personnel. It is difficult to assess the effectiveness of the work of an educational institution. In connection with the specifics of the activities carried out, performance indicators are the quality of training, the assessment of graduates by employers, which are subjective. Nevertheless, the development of clear criteria for assessment helps to achieve the desired results. If young professionals do not have the necessary competencies for the job, additional costs have to be incurred. A preliminary comparison of the costs of participation in the educational process and the costs of adaptation of young specialists shows the feasibility of the first option. Thus, it is possible to quantify the effectiveness of timely managerial influence in the process of studying at a university in comparison with the additional costs of the corporation associated with a long adaptation period of young specialists in the formation of professional, corporate, and behavioral competencies.

For this specific type of interaction the authors [4-6] propose to determine the stability of the organization on the basis of the rationality of the exchange of a complex of resources. In practice, accounting and analysis of the limited composition of resources is used. Organizational, informational, intellectual, social and other resources initiated by qualified personnel are not used in practice. At the same time, the accumulation and updating of these resources makes it possible to form the organizational, intellectual, informational, social capital of the corporation. It is through its use that significant results are expected to be obtained. Interaction management should be based on a development strategy, the selection of qualified personnel to manage the processes, more accurate methods of accounting exchange of resources, determining the frequency of audits and inspections, depending on the results of monitoring the degree of risk of deterioration to a critical level of manifestation of difficult to correct changes. It is required to take into account the factors affecting performance in the course of current activities.

Modern organizational theory is largely based on ideas formulated in the 60's and 70's within the framework of the organizational-ecological approach, in which the corporation is viewed in the competitive field of interactions and the struggle for resources. The corporate strategy that is being built, the implementation of a system of partnership and the exchange of resources and knowledge allow you to gain access to limited market opportunities, adapt to negative factors of the external environment, and also actively influence market factors, increasing the efficiency of your activities. Thus, the survival and development of a corporation is possible with the implementation of a system of long-term sustainable interactions.

The stage of management theory, which has developed since the 60's of the twentieth century, supports the idea of increasing the effectiveness of an organization based on the use of human potential. The increased role of a person in the internal environment of the company (features of power, management structure, employee motivation, communication, etc.), and in recent years more and more in the external environment (state of the economy, regional characteristics of the market, the level of competition, the relationship of firms among themselves and with the authorities, etc.) is studied. Further identification of a person's capabilities in increasing the efficiency of activities led to the formation of such a management idea as management of meaning [7]. The initial idea is the possibility of providing a common perception for the team of what is happening, realizing the unity of views, smoothing out the

understanding by the team members of what is happening, the management's perception of the actions of employees and the changes that have occurred, motivating employees for actions determined by the strategy. Meaning management involves the creation of a system of meanings shared by employees, the implementation of which is aimed at achieving the set goals.

In terms of our research, it is advisable to form a common mental model among corporation employees so that employees share the perception of the educational development system. By spreading the necessary shared mental model among employees, the organization creates a friendly environment that promotes the free exchange of knowledge. According to B. Pearce, strategic management of meanings involves the creation of systems of meanings shared by a team based on communications, the use of which would contribute to the achievement of the desired goals by the organization.

To model the links between a university and a corporation within the framework of industry-specific education, the developed types of contacts between universities and the structural divisions of OAO «Russian Railways» are considered. On the one hand, each organization has its own specific functions, and on the other hand, there is a common task - high-quality personnel training. Basically, this function is assigned to universities, but there are significant points of contact that cause criticism. The goal of interaction is not only the current satisfaction with the necessary resources, but also an increase in the absorbing capacity of the university, i. e. its comprehensive capabilities (through the organization of laboratories, scientific and educational centers, basic departments, etc.).

One of the areas of corporate governance is the management of dependent organizations (industry-specific universities). The authors drew attention to the specifics of the interaction of corporations with such organizations; we propose to consider industry-specific universities as organizations dependent on corporations. The formation of stable long-term relations between universities and employers is based on the exchange of resources on mutually beneficial terms. The need to study the effectiveness of such links is due to complaints from one side and the other to the volume and quality of the exchanged resources.

Industry-specific universities were formed during the period of the centralized planned economy of our country in order to meet the needs of certain areas of activity in profile specialists, and the state took over the management of such institutions. The transition to the market has changed the conditions for interaction. In the literary sources, there was no description of the interaction in the environment of the «university and industry enterprises» to improve the efficiency of the industry through the formation of effective human capital.

If the mechanism of management of the various elements of the corporation is elaborated, the task is to maintain its sustainable functioning in a changing internal and external environment on the basis of regulatory tools. In recent years, to assess the activities of a large corporation, it is necessary to evaluate the results of the activities of various diverse units, and in the case of joint work, the results of interaction. In this regard, the question arises as to which indicators can be used to assess the results of joint work. Scientists propose to evaluate the effectiveness of interaction on the basis of determining the level of sustainability of the system, i. e. for our case - compliance with all components of training. Moreover, it is advisable to identify any deviations proactively, in the early stages, and not to act reactively, when real complaints about the quality of personnel training for the industry appear. The concept of sustainability reflects the degree of compliance by individuals or organizations (through the interaction of individuals) with the terms of resource exchange.

The key problem in the implementation of approaches based on the exchange of resources is the lack of a general theoretically and methodologically developed theory of resource exchange. Its application is currently limited to individual publications [8, 9] in scientific journals and does not find active targeted support from the business community for using existing developments in the practical activities of enterprises. The lag of theoretical and methodological developments from management practice is also explained by the rapid emergence of new types of material, informational, social, intellectual types of resources, the modeling of exchanges of which re-quires consistent analysis, accounting and formalization.

The development of a general theory of resource exchange and its active implementation in the practical activities of corporations will allow the formation and maintenance of effective interaction of both individuals (in the system of interaction «employee - employer») and between structural divisions of corporations. The widespread use of this theory in practice is also aimed at the fair capitalization of the resources used in the system of exchanges, obtaining a higher result due to the synergetic effect based on the integration of internal interactions and reducing transaction costs when interacting with dissimilar objects.

Thus, the demand for this theory is currently explained by the need to establish mutually beneficial equitable ties between economic actors. Among the reasons that determine the importance of introducing this approach, we also note the change in the role of management in corporations - human resources are becoming so significant that their contribution determines the state of functioning and development potential of the company.

RESULTS AND DISCUSSION

To model connections, let us consider the features of interaction between universities and enterprises of the railway industry, which are based on stable contacts between universities and structural divisions of OAO «Russian Railways»: traction directorates, traffic control, railway stations, track repair, heat and water supply, social sphere, territorial corporate services and many others. If we analyze the state of affairs over the past 10 years across the entire network of transport universities of Russian Railways, then the data are as follows: from 25 to 50% of state-funded students learn according to the target programs of OAO «Russian Railways», and only 35-45% of graduates are assigned to the structural divisions of the road.

To improve the situation in the system of targeted employment and financial investments [10] in the training system, it is necessary to clearly understand that the task of high-quality training of specialists for its successful solution should be communicated to all employees involved in the formation and implementation of this program. At the first stage, it is proposed to assess the quality of resources in the form of a questionnaire, to determine satisfaction with each resource in the areas of interaction, and then with all the resources received. As a consequence, workers must understand their role and weigh the quality of the exchange of resources. Experts should assess the volume, quality, timeliness of receipt and other aspects of resources, which together will make it possible to determine the resource contribution of each of the parties to joint activities.

This management model assumes obtaining a stable result in conditions of sustainability. However, under the influence of external and internal conditions, the system is influenced, the effectiveness of which decreases under the influence of these factors.

Let us dwell on possible problems in connection with the adequacy of resource exchange on the part of Russian Railways and their causes (Table 1).

TABLE 1. Problems with resource exchange on the part of Russian Railways

Interaction type	Identified problem	Cause
Selecting targeted students for training	Low score on the Unified State Exam	None
Completion of practical training	Poor practice, lack of fully formed competencies	Insufficient organizational preparation Lack of material compensation for mentoring
Participation in the development of competencies provided for by the Federal State Educational Standard 3++ and their distribution by discipline	Inconsistency of competencies with disciplines and labor functions	Insufficient involvement in the process of coordination and distribution of competencies
Quality control of education by representatives of enterprises	Lack of an approved standard for assessing the quality of education	Insufficient organizational preparation Lack of formalized assessment of the quality of education
Coordination of the Final qualifying work topics with teachers in all areas of training	Lack of approval regulations	Lack of an approved list of recommended Final qualifying work topics in all areas of preparation
Identification of areas of activity requiring master's training	Lack of an order for the formation of competencies requiring master's training	Lack of approved requirements for the level of training of graduates to correspond to the position held
Conducting training sessions	Insufficient volume of classes with the involvement of representatives of enterprises	Lack of approved teaching materials, teaching and learning aids and test and measurement materials
Reasonable amount of funding	Insufficient funding for personnel training (especially economic and management areas)	Lack of transparency in making decisions on the allocation of targeted funding and distribution by areas of training

TABLE 1. Continued.

Development of basic educational programs for higher education, taking into account the models of professional and corporate competencies of OAO «Russian Railways»	Lack of professional and corporate competencies in the main educational programs of higher education	Insufficient involvement in the development of basic educational programs of higher education
Postgraduate and Master's Degree for Research Institutes	Decrease in the level of professional competence	Lack of approved requirements for the level of training of graduates to correspond to the position held in terms of the inclusion of research competencies and project competencies in the characterization of professions and labor functions
Master's Degree in Management for Technical Specialties	Low interest of graduates of technical specialties in obtaining an education in a master's degree in management	Lack of approved requirements for the level of training of graduates to correspond to the position held in terms of the inclusion of managerial and project competencies in the characterization of professions and labor functions

It should be especially noted that the problems identified in the tables and their causes may have a subjective author's view of the system of corporate relations «corporation - transport universities».

One of the key factors that distorts the assessment of satisfaction with the exchange of re-sources is the manifestation of opportunism in the performance of work. It is necessary to clearly understand that in the case of a low or incorrect assessment of relationships, the level of satisfaction and motivation of employees decreases, therefore, the effectiveness of joint activities also decreases. In the absence of adaptive organizational actions, horizontal connections weaken, the synergistic effect degrades.

It should be noted that the process of integration of educational institutions and industrial structures is intensified by pressure from the state in terms of expanding the participation of employers at all stages of the educational process. The participation of employers in the process of forming the basic educational programs of higher education is a mandatory process. The Federal State Educational Standard 3++ determines the share of employers in the total number of teachers (bachelor's degree, specialty - at least 5-10%, master's degree - at least 7-20%).

As part of solving the problem of incomplete correspondence of competencies to disciplines and labor functions, work should be carried out to develop higher education programs for the railway industry, taking into account the models of professional and corporate competencies of OAO «Russian Railways» (currently there is an order from OAO «Russian Railways» for the development of 4 programs).

An important problem - a low Unified State Exam score - does not directly depend on the university and employers, but is essential for a corporation, since In the course of observations, a strict relationship was revealed between this score and the average grade of a university graduate.

All of the above indicates a high interest of employers in the quality of training. However, the existing forms of cooperation do not provide for the active participation of companies in filling educational programs of fundamental academic training with practical knowledge and skills in the field of modern and advanced technologies, elements of management, corporate culture, and communication skills. Unfortunately, on the part of OAO «Russian Railways», there are no approved requirements for the level of training of graduates to correspond to the position held in terms of the inclusion of managerial, research and design competencies in the characterization of professions and labor functions.

The solution to this problem should be facilitated by the development of joint educational programs of higher education that provide high-quality training for managers and specialists with relevant, in-demand competencies; formation of professional standards for managers and specialists in the transport industry.

Effective management, including exchange processes, is possible only within the framework of an organizational system that has a built and well-developed organizational mechanism for coordinating activities. For an exchange system, the effectiveness of coordination is determined by the presence and quality of exchange institutions. The controllability of resource exchange in a broad sense is influenced by the quality of a formal institution (legal requirements), the development of an informal institution (business culture), and the ability to form an individual exchange system (contract).

It is possible to neutralize or reduce the level of opportunism at the stage of concluding an agreement, when both parties clearly agree on all the points on which they do not trust each other. A relational contract is a set of bidirectional formalized control actions with respect to all elements of resource exchange. The procedure for designing and drawing up a contract is the most important object of management, through which the institution of contracting is created, which entirely determines the boundaries of manageability of resource exchange. A relational contract presupposes long-term cooperation between the parties, their active interaction in the course of achieving common goals. Both counterparties guarantee the fulfillment of such a contract, which means that the implementation of such contractual relations involves the use of tools of cooperation and integration and is impossible without the formation of a relationship of trust.

The groups of parties interested in the activities of the corporation in modern management theory are called stakeholders. Influence groups need to be ranked depending on the degree and level of influence. This approach helps to identify employees (departments) who do not show interest in building a system of corporate interactions. Here it is important to understand why they do not exert the proper influence - because they cannot or because they do not want to. For example, if this is a manager whose work is necessary for a project, but cannot have a significant impact on the financial result, then the work of such an employee only needs control. If their activities can bring better results, but so far this does not happen, it may be necessary to stimulate such an employee. This can be both material encouragement and an increase in authority. The register of stakeholders can be presented in the form of a table (see Table 2).

TABLE 2. Matrix for assessing the level of involvement of corporate employees

Tasks to be solved		Employee type				
		Not informed	Resisting	Neutral	Supportive	Leader
Problem 1	Object 1					
	Object 2					

Analysis of the information in this table allows us to identify the lack of resources and motivation, the manifestation of opportunism in the activities of employees responsible for building corporate interactions, which will allow making informed decisions on the actualization of their potential.

CONCLUSION

The analysis of modern theoretical and methodological approaches to corporate governance made it possible to single out as the basic theories of corporate governance, social management, resource management, as well as organizational and environmental approach. These theories are relatively new and require the formation of a general theory of resource exchange and modeling of exchange processes of corporate interaction.

Building and implementing these processes from a single coordination center for interaction between the parties will enhance the synergistic effect of the corporation's activities, ensure its survival in the market and development in the long term. The solution of the identified problems and the solution of potential tasks of the management system at the level of the functioning of exchange processes will make it possible to build a full-fledged system of management of industry education and interaction «corporation - transport universities» based on mutually beneficial resource exchange.

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