The Role of Retraining Technologies of Personnel in Ensuring Financial Stability of Transport and Industrial Companies

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Abstract

The industry-based companies with state participation operating in the Russian Federation are significant producers of economic growth and core economic entities identifying the Russian labor market growth.

In terms of risky business environment, the mechanism for implementing personnel development strategy at transport and industrial companies with state participation in the capital assets, which are based on an innovative personnel training and retraining system, determines the vector of ensuring their financial stability.

Considering the latter, the risk management of transport and industrial companies’ personnel development is directly related to the strategy for the intangible assets formation.

It also ensures institutionalization of promising systems of human capital management.

Keywords: Training and retraining of personnel, intangible assets, human capital, financial stability, transport and industrial companies.

JEL Classification Codes: J01, J24, G30, M12, M41, L00.

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1. Introduction

Economic imbalances require correction of management methods for the transport and industrial complex companies’ stability in the part of increasing functionality of management systems of risks of the intangible assets cost reduction, since the increasing speed of making professional managerial decisions does not provide enough time to carry out expert analysis of risk management systems in human resources policy.

Modern labor market, growing under the influence of geopolitical risks and network effects, demonstrates some high level of uncertainty. On the one hand, it requires introduction of new tools and methods for human resources management, but, on the other, it stipulates the significance of the corporate entities’ intangible assets system development with an emphasis on the gains of human capital as a key competencies holder (Rodionova et al., 2015; Giannakopoulou et al., 2016; Thalassinos et al., 2011; 2013).

In order to manage effectively the company's intangible assets, first, the human resources, it is necessary to measure the risks of staff quality. However, this is what most major industry-based companies have not learnt to do themselves. In this regard, large corporations require forming a new model of cooperation with industry-based universities. Most employers of the Russian industry-based corporations do not keep analytical records in human resources management; hence, they do not keep records of staff competencies survey and analytics.

Meanwhile, in order to be financially stable in terms of highly competitive environment, it is important for transport and industrial complex companies to use effectively all their available human potential based on improving the system of risk management and human resources policy. Currently, external sources of economic agents’ financial stability are limited, and the transport and industrial complex companies should seek new ways of growth based on resource control.

2. Literature Review

The analysis of scientific papers on a selected topic has shown the multidimensionality of the subject under research. The main impact devoted to the topic was made by Becker(1991), Goldin (2016), Heckman (2000), Schultz (1971), Krasniqi (2016), Lukyanova (2010) and Andreeva (2014; 2017). At the same time, the issues related to the modeling of tools for the companies’ intangible assets development, including human resources, has not been sufficiently explored, which has allowed determining the vector of scientific search expanding for this study purposes and tasks.
3. **Object and subject of the research**

The object of the research is the system of training and retraining of transport and industrial complex companies’ personnel. The subject of the research is a multilevel system of information, network, financial and organizational contractions, arising in the course of personnel training and retraining with the purpose to ensure financial stability of industry-based Russian companies.

4. **Theoretical and methodological basis of the research**

Theoretical and methodological basis of the research was the theory of human resources management, post-industrial economy development concepts devoted to the human capital study, theory of corporate finance and financial crisisology. The methodology of work is based on the principles of dialectical approach, general methods of scientific knowledge; analytical, empirical, and statistical research, synthesis of theoretical and practical material (Tsamis and Liapis, 2014).

Impact of the global crisis, defaults, falling exchange rates and instability in world markets and stock exchanges open new investment trends aimed at searching non-standard tools for the development of large companies’ human capital and intangible assets. These new financial tools for the tangible and intangible assets value growth management are required to control transport and industrial complex corporations’ financial stability and to level risks of their development in terms of economic uncertainty (Carstina et al., 2015).

The Russian economy has completed an adaptation to new conditions and challenges it faced, and started growing. The key indicators of both the Gross Domestic Product and the volume of industrial production, cargo turnover, export and import are also increasing. In general, dynamics are positive in spite of having different rates (Kuzmin, 2017). The experts state confidently that the Russian economy has entered a growth phase. This is occurring against a background of an unprecedented low inflation. The 2% rate of inflation is more and more consistent with those frameworks that are typical for the developed countries economy (Medvedev, 2017).

Improvement of specialists’ knowledge and competencies development management systems has allowed the Russian industry-based companies showing record dynamics in the World Bank’s “Doing Business” rating. Over the past 5 years, Russia has advanced in it by more than 80 levels. Experts evaluated simplification or acceleration of many procedures being important at the new project start and maintenance. The Russian Federation moved up from 124th level to the 40th in this rating. In total, 190 countries are evaluated in Doing Business (Panov, 2017). Foreign direct investment (FDI) in the Russian Federation reached $14 billion at the first half of 2017. After risks reduced the economy started recovering gradually,
economic growth was recorded. A study by Ernst & Young’s specialists has shown that the number of investment projects in Russia implemented this year has reached the highest level of all times (Panov, 2017).

The World Bank’s analysts believe that Russia “requires structural reforms to improve long-term growth” of the country's economy. The experts attributed “low oil prices and possible negative consequences of the sanctions expansion” to the economic risks (The World Bank, 2017). Positive changes in the national economy are the result of the anti-crisis work of the government and large companies, targeted support of key industries, and moderate budget policy. The main approach is the system of risk management, creation of an effective cost structure, implementation of development priorities, and provision of specialists’ high-quality training.

Reforming labor market institutions is an important additional element in the personnel competencies development. Currently, the system of corporate management actualizes the issue of the formation of the system to manage personnel development, associated with additional competencies establishment. Transition to a new model of labor market is related with digital economy, providing new tools for staff assessing, taking into account the concept of the “knowledge-driven economy”.

The research of Lukyanova (2010) from the Higher School of Economics “Return from Education: What a Meta-analysis Shows” demonstrates an interesting trend. After comparing the data of annual monitoring of economic situation, health, and other statistical studies, the author calculated the “bonus for knowledge”. In 1990, on the eve of market reforms, one year of study at the university, provided it is completed, meant an average wage increase by 4.2%. In 1998, the bonus for education grew by 1.6 times to 7%. The author notes that the Russian allowance for knowledge reached its peak of 8% in 2003-2004. According to international standards, this is a high return on education; it corresponds to average estimates for OECD countries (Lukyanova, 2010).

In order to ensure financial stability, the transport and industrial complex companies require improving the human resources policy system, developing the personnel quality and competencies in order to increase the share of the market presence on the basis of upgrading quality of services and staff competencies. It is important to use the tools forming new knowledge and competences of personnel in the sphere of new financial technologies while developing programs of stability regulation of the Russian companies (Andreeva and Andreeva, 2014). It is difficult to achieve a stable position in the modern market if not to learn using rationally the human reserves and take into account the risks of personnel development (Vovchenko, 2017). Reduction of number of employees needs to be carried out with assessment of the importance of employees for the organization and reduction of number of staff of less valuable divisions. A directive method “from each division on 10 percent reduction”
shouldn’t be implemented as some key departments which make the maximum profit, on the contrary, need to be expanded even during a crisis.

Elaboration of support systems for adopting managerial decisions as a part of personnel development projects is acquiring particular importance in the system of managing financial stability of transport and industrial complex companies. This is conditioned by its specificity as a production factor due to existence of a wide range of diverse interdisciplinary criteria influencing final effectiveness of human capital development.

Complexity in modeling metrics and assessments of personnel development risks consists in the need to integrate qualitative and quantitative indicators characterizing human capital and the company’s capital whose level of development reduces operational risks of the transport and industrial complex enterprises. Also an adjusted process of reputation management plays an important role in providing stability in the Russian companies (Andreeva, 2017).

The system of intangible assets is the main producer of domestic economy intensive growth if the intangible assets configuration is relevant to the established specificity of business processes of large industry-based companies. In terms of this, decision-making on personnel development risks management should be conducted in the context of evaluation of the whole set of business processes as a part of companies’ sustainable development long-term projects implementation.

This actualizes the problem of reliable risks assessment with the purpose to model a financial stability management system retaining its functionality over a long period and ensuring a positive financial result. Existing methods of analysis and management of risks related with reduction of the companies’ financial stability are mainly based on the use of probability structures. The probabilistic approach uses statistical data on previously implemented projects.

However, due to importance of the projects in the sphere of development of the transport and industrial complex companies’ personnel and intangible assets, the methods for identifying human resources management risks, based on assessments of specific methods, tools, systems of stimulation, and institutional constraints of the Russian labor market are required. The foregoing circumstances determine the relevance of the selected research topic and point to the need for the development of functional tools and technological support for the adoption of managerial decisions in risk management in the system of specialists’ training and retraining at the transport and industrial complex companies.

The cost of the operating business of the transport and industrial complex companies considers not only tangible assets, but also the so-called “intangible capital”.
However, it is because of “intangibility” that the assessment of its influence on the Russian industry-based companies’ financial stability can be treated in a rather broad sense. The concept of “goodwill” ("the value of a good company name") reflects only a part of the company’s intangible assets value. The enterprise also has other intangible assets; valuable licenses, patents, client base, employees, and relationship with contractors. The value of a good name is the quality of services, brand awareness of the industry-based corporation, consumers’ loyalty, and established business reputation as well as the personnel’s high qualification.

In practice, when selling a business, economic agents of industry-based markets tend to overestimate the impact of their available intangible assets on the company’s value. In fact, the cost of goodwill should be economically justified and measurable when assessing industry-based corporations’ financial stability. A trademark has no value, if it does not allow winning in a competitive struggle and making a profit much higher than the industry average.

Large companies’ intangible assets will not be valuable if the tools aimed at its growth do not constantly support this value. For public companies, the target for managing the business value is a difference between the stock capitalization and cost of net assets. To evaluate closed companies, specialists use the excess profit method and a relatively new method of the owner's discretionary income multiplier. Companies with a turnover of up to 100 million rubles a year use these methods. However, larger industry-based companies should use them in combination with other methods (Fernandez and Bilan, 2013; Nulla and Koumparoulis, 2013).

The essence of the excess profit method consists in determining a part of the company’s net profit exceeding the industry average profitability of current and non-current assets and its capitalization (i.e. multiplying it by a certain coefficient). This coefficient arises from the risk/return to investment ratio and varies from 1 to 3. Herewith the difference between the value obtained by this method and the value of tangible assets is considered as the confirmed value of the corporate structure’s goodwill. The Russian Federation Tax Code runs “… Intangible assets are the acquired and (or) created by the taxpayer results of intellectual activity and other objects of intellectual property (exclusive rights for them) used in the production of goods (performance of works, provision of services) or for the company’s management needs during long time (over 12 months)” (The Russian Federation Tax Code, 2017).

In the Decision of the Heads of CIS States Council “On Interstate program of innovation cooperation of CIS member states for the period up to 2020”, the definition is the following “… Investment in intangible assets is acquisition of patents, licenses, rights to use land plots and other environmental facilities, copyrights, trademarks, brand names, software products, etc.” (Consultant Plus,
Intangible assets are becoming increasingly important in ensuring competitiveness, while their importance is growing with increasing business scale: volume, structure, and quality of intangible assets are crucial for large corporations. This, in its turn, requires modeling not only systems of accounting (GARANT, 2017), but also management and financial records.

For large companies investment in intangible assets should be balanced with an investment program for tangible assets; the discrepancy between volume and quality of intangible and tangible assets and development requirements inevitably leads to a decrease in economic efficiency and loss of management quality. Essentially, such investments are directed at scientific, research, and other innovative activities, resulting in inventions, effective models, new technologies, and programs. The corporation can acquire the above objects to ensure financial stability. In this case, duly documented exclusive property rights for the acquired objects serve as intangible assets.

Existence of intangible assets is directed at expansion of the material and technical base of the enterprises, increasing processibility of the output goods and quality of the services provided. Investment in intangible assets is a long run capital spending, the profit from which is directly related to the positive impact of intangible assets on the final product. It is worth mentioning that in case of the expected outcome a positive effect from such investment will be visible over a period of several years and, with due returns, will be able to yield in hundreds of percent. The following intangible assets are considered to be the most widespread among all existing (Figure 1):

- exclusive right for an invention, effective model and pattern;
- exclusive right to use programs and databases;
- exclusive right to use the trademark and brand name, product, and service brand;
- right to use land;
- right for a new biological object;
- goodwill.

In Russian practice, goodwill can be the most attractive object of investment, since at its high rates the value of an enterprise can be several times higher than the value of all its assets combined. Investing in the intangible assets development is a priority for large companies, as they have sufficient organizational capacities in the part of the volume of investment programs in the development of management systems of operational risks and human capital, as well as employees with a high level of competencies. Development of intangible assets creates the opportunity for large transport and industrial complex companies, as market operators, to restructure their individual businesses when reaching the “aging” phase of the life cycle and their transfer to the intensive growth stage.
Human capital is also included in the intangible assets structure. This becomes the most obvious if the personnel’s skills, intellect, and knowledge represented in large corporations as a base of competencies are considered as such capital. The problem of investing in the human capital development appeared simultaneously with emergence of the very notion of “human capital”, which sprang up more than 50 years ago as a set of investments in a person, improving his ability to work. It included education and professional skills. Later this concept acquired a wider meaning. However, in our opinion, it is the above points that are of interest to a potential investor who wants to receive return on investment. The following areas can be identified among the main features of corporate investment in the human capital development:

- amount of profit and other dividends directly depend on the employee's working capacity;
- investment in personnel training and retraining;

Figure 1. Types of Investment in Human Capital

From this point on – compiled by the authors based on the research materials.
human capital is subject to wear, however it has the property of accumulation and augmenting, while an increase in the human capital profitability is observed only in the process of its accumulation (through retraining and production experience);

- only the contributions that are economically justified can be admitted as investment in the large companies’ human capital.

Areas of investment in human capital form the pool of investment projects, which, in their turn, are determined by human capital as a factor of production (Figure 2). Industry-based companies regulate the level of specialists’ competencies development by different training techniques, ranging from simple courses on advance training to sending a particular employee to get a higher education. As to the higher education, today there are many programs on providing promising graduates with grants for further studies at universities, after which they undertake to work for a certain company. Large corporations use additional privileges and benefits to attract and retain talented specialists. To a greater or lesser extent, these benefits are alike: free meals, long vacation, free work schedule, compensations and bonuses, fancy office interiors, and entertainment, limited only in size, profitability, and investment industry-base of the corporation.

**Figure 2. Structure of Investment in Human Capital**

Financial and non-financial tools and incentives are aimed at making employees happy and effective. Investment in additional convenience at the workplace to the extent, in which it allows the company’s employees realizing, is required for the
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perspectives of improving the loyalty of employees, who were retrained in the universities and at the production site.

However, according to analysts, employers often allocate such compensations to special tools, forming “golden cells” for key employees (Protasov, 2017). Institutional changes in the Russian market are dynamic, so good developers of information products in the industry and transport sector are in high demand. High dynamics of the company's growth causes the staff a feeling of their own effectiveness and does not require additional retaining factors. Inert specialists can be met rarely in a modern high-tech corporation. However, as the industry-based company develops, the number of people not very motivated to create extraordinary projects is growing.

In the Silicon Valley, this phenomenon is called “Resting and Vesting”⁶; the companies hiring hard-to-get experts in promising areas pay them high salary and besides as additional holding mechanism they give them stock options with deferred acquisition of the company's share without requiring their efficiency.

Educated and talented specialists come to industry-based companies and create new technologies, which cannot be quickly developed by the companies themselves. Only deferred demand for these technologies is formed as a part of an industry-based corporation. Thus, it turns out that investment in the company’s intangible assets development becomes ineffective. If specialists having a high level of knowledge and competencies, do not have an opportunity to improve new developments, and the corporation itself does not introduce new approaches to business establishment, in this case the human resources policy financial tools allowing retaining talented specialists in managing staff turnover risks are required. Financial incentives and creative atmosphere in the team can “keep” talented developers in their workplace. Bonuses and a well-developed system of allowances for the acquisition, for example, of the corporation’s shares or bonds can be used as financial incentives.

Thus, the corporation’s management should appreciate the investment attractiveness of their company’s securities (shares and bonds). At the same time, the risk of such an incentive model is that with such tools the large companies’ personnel can be oriented to special privileges. Therefore, there may be risks of low personnel’s motivation aimed at creating new and high-quality products and services. Complex investment programs for the intangible assets and human capital development are the prerogative of primarily large companies, since those possess sufficient organizational and financial capabilities in terms of the volume of investment programs for the development of human capital, intellectual and intangible assets, especially in the context of economic growth slowdown.

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⁶Working period when employees almost do nothing in a workplace, but due to their professional qualities do receive big salaries and bonuses.
To run financial stability the managers of industry-based companies must master not only the knowledge management system in corporate universities, but also effective self-training technologies allowing introducing a set of innovative managerial tools and technologies. In conditions of resource constraints for the intangible assets value growth the informational and network model of corporate education serves as the basis of a new anti-crisis model for the large corporations’ development. This model sidelines the classical universal educational services received at the industry-based universities.

Digital technologies in training in conditions of limited material and time resources become the main tools for the employees’ professional retraining. In terms of digital economy, the industry-based companies’ personnel information and network competencies are considered an important element of the business strategy aimed at developing a knowledge management system for large companies allowing them developing new niches in the innovative market of goods and services. In this context, information and technological start-ups commence playing an important role in the system of business education and training programs for corporate universities. These start-ups require the specialists to have additional skills and competencies for mastering new formats for obtaining professional information in the process of training.

Creation of new industry-based companies, in which the amount of remuneration for labor is determined by market conditions, has increased the demand from employers for the specialists having a high level of knowledge and competencies. Knowledge holders being able to develop and market innovative products and quality services provide their companies with additional revenues and financial stability. Modern concept of intangible assets development is based on the following factors; digital economy, knowledge-based economy, information society, specialists retraining, professional competencies, and favorable business environment (Figure 3). In terms of the long-run perspectives of the large industry-based companies’ development, the personnel’s knowledge and competencies as well as intellectual control systems for the tangible and intangible assets flow ensure largely their financial sustainability.

Human capital determines the level of large company’s personnel competitiveness. The effective organizational structure of the industry-based corporations depends on the quality of the personnel development strategy, objectives of the specialists’ training and retraining system. Using these criteria, managers aim to improve the enterprise’s efficiency and strengthen its position in the market. To manage personnel development risks, it is important to get rid of the duplication of employees’ functions that exists when implementing the linear control model. The matrix management model allows combining two types of employees’ duties division; by functions and by projects. With this model, the functional manager supervises the operation and, if necessary, corrects the employee’s work.
Two difficulties can appear in this project. First, optimization should be reasonable in order to keep key personnel. To do this, it is possible to move a part of the project team to the functional divisions and the remaining employees can be assigned the management of new projects. The project manager must constantly monitor the proper prioritization of the team, which must fulfill the tasks of the direct supervisor.

Investment in human capital development requires modeling of an investment program with all its inherent components; the purpose of investment, reflecting the targeted economic effect, investment payback period, its efficiency, level of the project’s total profitability, list of investment projects included in the investment program and their divisibility and investment sources and tools.

In this case, a number of restraining factors limit the specialists’ career prospects; wages, comfortable working conditions and good relations with colleagues. For many specialists, a set of these factors can be enough to feel rather satisfied with the work. Only a part of large industrial companies’ workers is trying to change these financial and non-financial incentives for another employment vector in the labor market, related with creative activity and self-development. Hiring specialists with high innovative potential, large companies must create comfortable working conditions for them and give concurrent privileges to reduce the risks of their intellectual potential development. However, in order not to create tools for incorrect motivation for the specialist himself in choosing his place of work, these privileges...
should not be a decisive argument when choosing a workplace. Risks in personnel management arise because even if the companies’ specialists have high level of knowledge and competencies, nevertheless they do not create new products and technologies. In this case, the company’s employees lose gradually the skills of innovative activity and professional qualification.

A personnel development strategy is required to form the company’s sustainable model of growth. This strategy shall allow creating the opportunity for the monetization of specialists’ knowledge, skills, and competencies, that are important to be constantly developed based on personnel retraining. The problem can be solved as follows; to establish the priority of resource distribution mainly for projects. After moving to the matrix management model, the company's staff will be reduced mainly by eliminating duplicate functions and unnecessary management levels. For example, at the expense of deputy directors of departments, whose area of responsibility in a modern large company is rather vague. With a matrix model, the department director can go deeper into the business processes that he manages.

Representatives of the middle level, heads of departments get more independence in their work. In this regard, mid-level personnel can become more mobile in decision-making. This will be facilitated by bringing to the uniform format the employees’ job descriptions with clear definition of responsibility areas in them, and optimization of some administrative positions; couriers, secretaries, and drivers. Some of these functions can be outsourced. According to analysts, these measures can reduce the company's expenses on personnel.

5. Conclusion

In accordance with the modern management theory postulates, today human capital is the most important factor of financial stability and competitiveness of the transport and industrial complex companies, directly affecting their competitive power. Such approach increases popularity of this investment direction on the part of the largest industry-based companies’ owners, however it is adjacent to certain risks and emerging difficulties.

Major problems of investing in transport and industrial complex industries are the difficulties with the analytical calculation of such contributions on effectiveness and the ratio of risk and profitability. Largely, they are related with peculiarities distinguishing the described method of investing funds from other, more popular investment opportunities.

At the same time, investing in human resources, the company must be sure that these funds only create the basis for the formation of human capital. Similar investment is not just a contribution of additional resources. To increase the value of intangible assets, this investment must be supported by work and efforts aimed at the
employee’s self-development. Meanwhile, such capital formation does not occur without investor’s direct participation.

New technologies for personnel development determine the need to change the approach to applicants. To ensure the implementation of the competency approach in the selection of personnel, in addition to professional skills, the candidate must be able to work in a team, show initiative and take responsibility. In spite of the fact that people who are used to working exclusively in conditions of strict hierarchy are diligent, they are often passive and lack initiative.

The program and target scheme for the large industry companies’ personnel development involves formation of a different approach; when questions arise, the employee should contact a colleague who has the required information. This relieves line managers and accelerates the speed of response and decision, as well as significantly increases the personal responsibility of each employee at all levels. It is important that in this case the industry-based corporations’ employees feel themselves not just the doers, but full members of the team with their own area of responsibility, directly influencing the company’s sustainable development.

In sustainable business development in order for workers and specialists to be interested in labor productivity rise, it is important to provide them partially with ownership of the rise in labor productivity achieved by their efforts. Thus, the company’s financial stability depends on the quality level of intangible assets management, the strategy of the company’s human capital development, and employees and specialists’ new knowledge and competencies.

To manage the companies’ financial stability in conditions of risk restrictions, the transport and industrial complex companies should manage costs more carefully. In terms of resource savings, the companies are faced the challenge of cutting expenses on staff as the largest cost item. In this regard, saving staff costs, to ensure financial stability, the Russian companies shall plan this process in such a way to assess the competencies of personnel and retain the key employees, highlighting the contribution of each employee to the company’s development. For this purpose, the company’s management should identify the key divisions producing financial flows. It is the efficiency of divisions, working with providing services, suppliers and client capital, that financial stability and competitiveness of the company depend on.

Personnel working to ensure the company’s growth cannot be dismissed. It is obvious, that management of the process of cutting staff costs involves also saving the costs on the formation of social package to ensure employees’ loyalty, which usually includes a voluntary medical insurance policy, costs on specialists’ training and retraining, incentive payments and various benefits to employees. Even partial reduction of social package leads to demotivation and resignation of employees.
important for business. It should not be forgotten that for many specialists having a low salary the availability of medical insurance is an important social and economic factor forming their loyalty to the company.

References:


