REGIONÁLNÍ ROZVOJ MEZI TEORIÍ A PRAXÍ

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EDITORIAL

Papers in this monothematic issue are focused on management and development of human capital in different contexts of regional development. The main aim of the issue is to describe different point of view in theory and practice of regional development in international context. Papers are based on the results of internal grant projects from The College of Regional Development and Banking Institute, AMBIS, a.s., Intercultural Management - the phenomenon of the early 21st century (IGA_Z4_01_2016) and the cooperation with universities in Russia Moscow Polytechnic University; University of Technology, Korolev.
The themes are human resources in regional development, in organisations and enterprises with relationship to regional labour market, approaches of management to human capital, changes in educational structure in regions, in relation to technology changes in fourth industrial revolution. The regional aspect is becoming from Central Europe as Czech Republic and Eastern Europe as Russia and Romania.

Mikhail Abrashkin, Victoria Barkovskaya and Bogdan-Nicolae Mucea in paper "Economic mechanism of innovative development of high-tech engineering at the country region level" describe the impact of high-tech engineering on the development of the region's economy and its innovative potential, which gives an undoubted increase in its competitiveness. Introduce tools for regional support of high-tech engineering enterprises and a model of the organizational and economic mechanism of innovative development of the industry at the regional level. It was proved that the innovative development of high-tech engineering affects the improvement of the competitiveness of the region.

Anna E. Gorokhova and Vladimir D. Sekerin in paper "**Influence of the innovative environment on efficiency of the russian industrial enterprises"** describe value of the innovative environment as factor of success of the Russian industrial enterprises activity. Components of the innovative environment are the innovative capacity of the industrial enterprises and innovative climate. The directions of the state impact on formation of innovative climate are investigated: creation of innovative infrastructure, improvement of institutes of legal character, institutes of financial character.

Jana Marie Šafránková and Martin Šikýř I paper "**Principles of people management in public administration" describe** evidence as performance of any organization, who depends on people working in the organization and define main principles of managing people in public administration that allow any organization in public organization to achieve expected performance of the organization through achieving desired abilities, motivation and results of people working in the organization.

Vladimir D. Sekerin and Ludmila E. Gorlevskaya in paper "**Marketingnet as a new marketing concept in a digital economy"** describe media environment and new technologies in marketing field. The key trends of their transformation at the present stage of development are revealed. Authors propose recommendations for marketing activities improvement, which make it possible to increase the efficiency of companies' business results. It covers a justification of creation of a new marketing concept - MarketingNet which helps to meet modern challenges of the market.

Michaela Tureckiová in paper **“**Competencies and roles of managers in regional education” deals with the determination of types and contents of competencies and roles of managers in regional education based of a survey among the students of Master´s degree study programme in Educational Management in the period 2017-2018, she determinse more precisely which partial competencies a headmaster needs for a competent performance of his/her work position and tis connected with the possibility to target more precisely the professional development of this group of employees in regional education for specify more precise selection criteria for educational managers and also to enable their further career development also outside of the sector of regional education.

ECONOMIC MECHANISM OF INNOVATIVE DEVELOPMENT OF HIGH-TECH ENGINEERING AT THE COUNTRY REGION LEVEL

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Keywords:
High-tech engineering, innovation, innovative development, industry.

Abstract:
The article presents a study to assess the impact of high-tech engineering on the development of the region's economy and its innovative potential, which gives an undoubted increase in its competitiveness. Based on the analysis of literary sources, a theoretical justification was given for increasing the regional competitiveness of the economy. Tools for regional support of high-tech engineering enterprises and a model of the organizational and economic mechanism of innovative development of the industry at the regional level were proposed. It was proved that the innovative development of high-tech engineering affects the improvement of the competitiveness of the region.

Introduction

High technology engineering is one of the main areas of national economy. It makes it possible to provide various sectors of the economy with production equipment, and, first of all, enterprises of the innovation type and related to the manufacturing industries (Veselovskiy et al., 2019). This industry determines the state of the production and innovation potential of the domestic economy and affects the material and material intensity of the GDP of a product, labour productivity, industrial safety and the country's defence capability. High-tech engineering is a driver for the innovative development of regions and other sectors of the national economy. The development and improvement of its competitiveness affects the growth of the competitive advantages of a region (Brocas, 2003). Therefore, the main objective of the work was to develop a model of the organizational and economic mechanism for the innovative development of high-tech engineering at the regional level. On the basis of this goal, the tasks of substantiating the influence of this industry on other sectors of the region and areas of increasing regional competitiveness and developing the innovation component of the region were also solved.

The authors of this article also analysed a large amount of information about management of high-tech engineering and innovative development, methods of forming competitive advantages of regional territories. General approaches to the development of high-tech mechanical engineering are reflected in the collective monograph "Sovershenstvovanie mekhanizmov povysheniia innovatsionnoi aktivnosti promyshlennykh predpriiatii" (Veselovskiy et al., 2017), as well as in the collective monograph "Innovatsionno-tekhnologicheskaya transformatsiya promyshlennosti v regionakh Rossii kak instrument dostizheniya strategicheskikh tseley na puti stanovleniya tsifrovoy ekonomiki" (Veselovskiy et al., 2019). M. Abrashkin and V. Barkovskaya took part. Final works were prepared under the guidance of the authors of the articles. The solution of the tasks set in the investigation was carried out using the methods of analysis and synthesis of information as well as logical statistical analysis and graphical interpretation of the results.

1. Evaluation of state support for the development of high-tech engineering

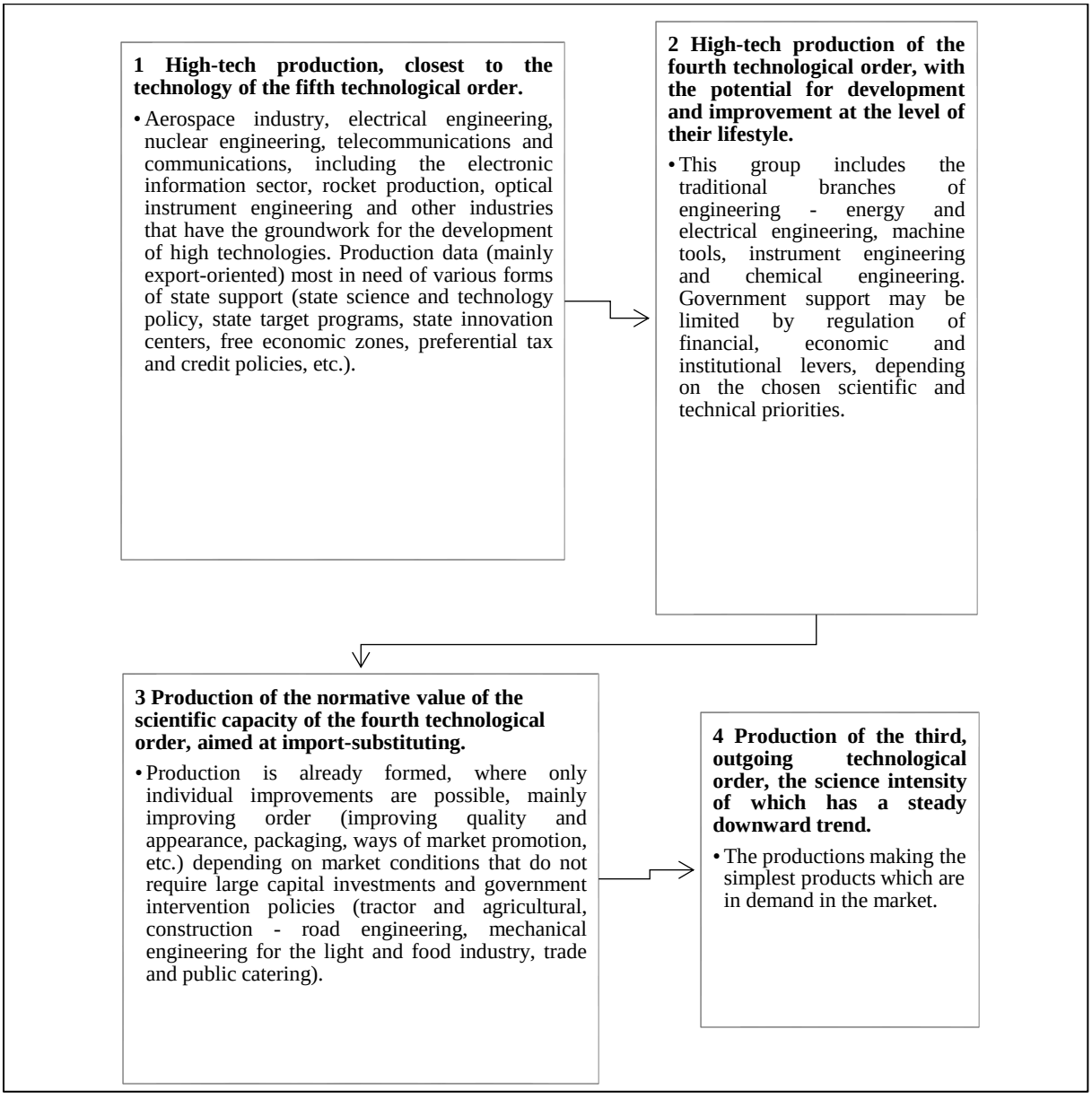
For a long time, there has been a tendency of continuous development of innovation processes and innovation activity in general. Recently, in the field of innovative technologies, the greatest attention has been paid to the study of issues of science engineering. The problem of insufficient attention on the part of state authorities regarding the high-tech engineering enterprises is most acute. Nevertheless, I would like to point that there are still some reserves that give impetus to their priority development (Costa & Dierickx, 2005). These should include Russia's own energy and raw materials base, a developed communication infrastructure, and research, production, and personnel potential formed during the period of the USSR economy. The reserve for increasing the efficiency and development of high-tech engineering enterprises is also the improvement of the regulatory framework by changing federal and regional legislation, fiscal and customs regulations.

Federal authorities require, mainly, financial support and tax preferences. The US experience in implementing the Empowerment Zones program has convincingly proved that it is necessary to support not poverty, but regions that are in decline (Chatterji, Glaeser, & Kerr, 2014). Tax cuts can act as an impetus for development, since "a temporary tax cut will allow for a higher level of tax collection in the future due to business growth" (Chatterji, Glaeser, & Kerr, 2014). However, two important points need to be taken into account when supporting business and subsidizing them: "the quality of business support programs" and "limiting opportunities to participate in programs of friends or close people to the creators of laws on this support" (Lerner, 2013), otherwise will count on the low efficiency of these budget allocations. According to the author, the degree of state support should be determined on the basis of their orientations and the compliance of enterprises with technological structures.

The experience of certain countries shows that in the current conditions of globalization and the development of the world economy it is possible to transfer a number of engineering industries to third world countries. Due to the high probability of loss of national economic sovereignty, this experience in Russia is of little use. It can be concluded that the object of state support should be a set of enterprises of the machine-building complex, which covers all sectors and sub-sectors. When identifying the priorities of this state support for any particular industries, it is advisable to build on the needs of the innovative development of the country's economy as a whole (Veselovskiy et al., 2017). On a national scale, priority levels of machine-building enterprises can be distinguished, depending on the competitiveness and knowledge-intensiveness of the products produced. The most appropriate option seems to support the production, presented in Figure 1, where priority is given to high-tech industries of the highest technological structures.

An important role in the support of high-tech engineering should be assigned to regional authorities. Taking into account the fact of "spatial effects of innovation spill overs" and the spread of "specialization and diversification of the economy" to neighbouring territories (Li Ting & Fu Wenying, 2015), support and strengthening of the development of spatial regional economic relations are needed.

Figure 1: *Priorities of state support for high-tech engineering enterprises*



Source: authors

Despite the fact that some scientists see innovations and negative trends associated, for example, with a possible reduction in employment (Dachs, Hud, Koehler, & Peters, 2016), the author still believes that there are more advantages. And the decrease in employment of the population is a temporary phenomenon, since the effect of innovation leads in the future to the creation of new enterprises and, accordingly, new jobs. Also, when pursuing a regional policy

to support high-tech engineering, it is necessary to focus on their "competitive advantages, which increase their competitiveness and contribute to their development" (Dachs et al, 2016).

Taking into account the existing reserves of high-tech engineering for the formation of "growth poles" of regional economies, the author divided the regions into two groups, offering tools to increase their competitiveness.

The first group of regions includes the disclosure of reserves that are associated with the general state of the machine-building complex: the growth of GRP due to the development of high-tech engineering and its increasing share in the regional structure, the growth of the economic security of the region in the manufacturing sector, increasing the capacity of the market for engineering products and strengthening competitive advantages of high-tech engineering (Schmidt, 2008). The second group of regions includes the disclosure of reserves that are not related to the current state of the machine-building complex, but at the same time determine the potential of its development as "growth poles": improving the efficiency of the commodity, financial and labour markets in the region with machine-building specialization, increasing innovation and entrepreneurial activity, increasing socio-economic potential, accelerating the adaptation of the region to changes in its internal and external environment.

2. Organizational and economic mechanism of innovation development of the science intensive engineering industry

The author suggests the following tools for the development of high-tech machine building, which increase the competitiveness of the region in the medium and long term:

- designing in the region high-tech machine-building complexes, the centres of which are regional supporting machine-building enterprises, and connecting enterprises are manufacturers of components attracted to the created infrastructural industrial parks, and enterprises - inno-generators;
- selection of a group of knowledge-intensive machine-building enterprises in the region with the aim of priority regional support for their development (based on the calculation of the group weighted average figure proposed in the work);
- attraction of world manufacturers of component parts of the final high-tech machine-building products to the infrastructure industrial parks for close cooperation with the core enterprises of the region and non-regional consumers (due to the "points of growth" of the regional economic policy).

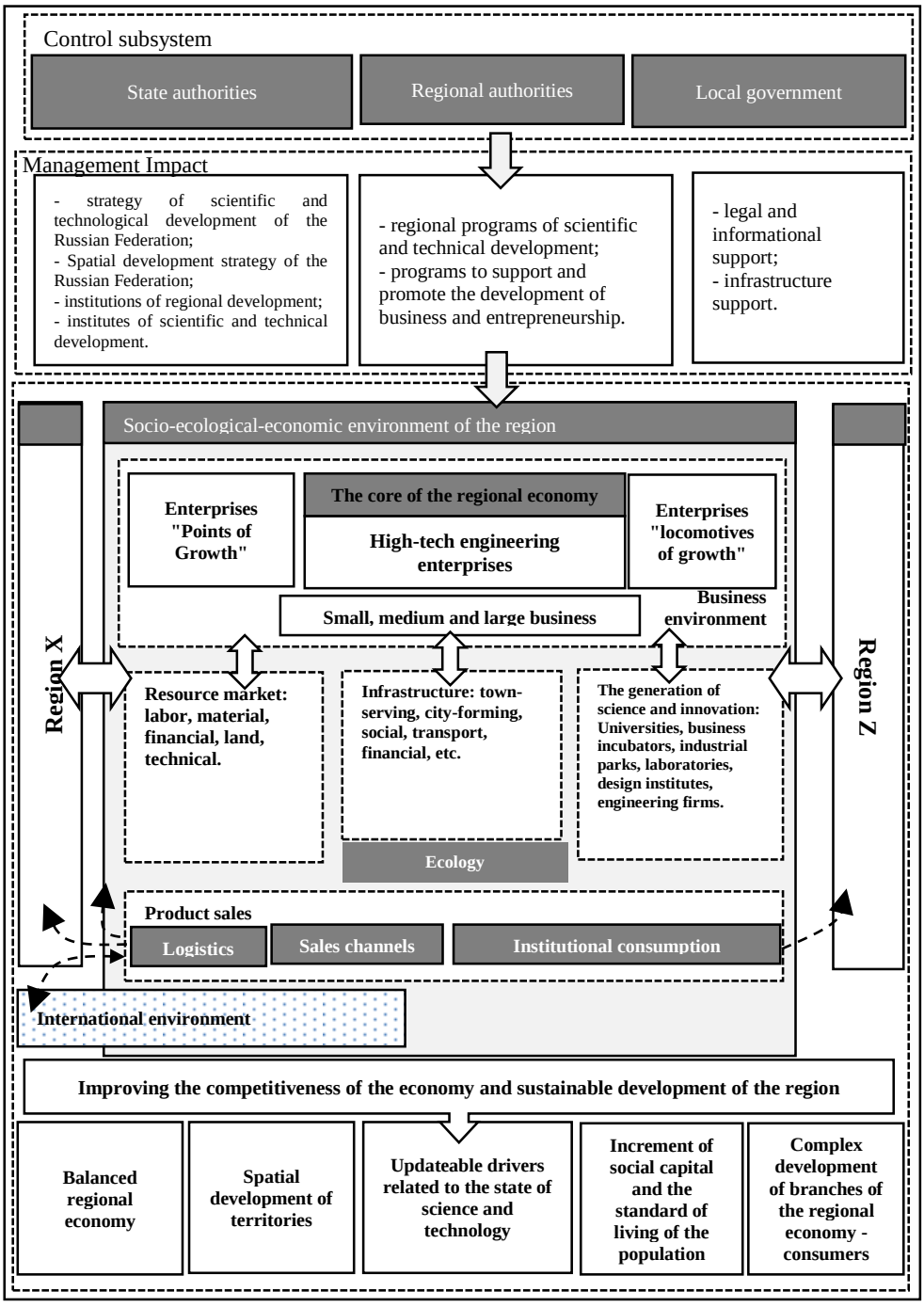
The findings fit organically into the model of the organizational-economic mechanism for the regional development of high-tech engineering (Figure 2), which was obtained on the basis of the Multi-element model of technology-based growth model (Tassey, 2016).

Since an important condition for building a model is the requirement of "forming open business models for developing innovations" (Weiblen, 2014), and the need to take into account the needs of organizations to acquire new and unfamiliar technologies outside the organization (Janney & Dess, 2004), the author included external international space.

Along with the proposed tools, improvement of regional economic policy is necessary. The list of tools for its implementation and implementation may include measures to support high-tech engineering, aimed at increasing the competitiveness of the region. The list of such tools is very large, but the degree of applicability is limited by the possibilities of budget support. As practice shows, the most effective measures are concessional loans to priority machine-building

industries, increasing demand for their products, changing technical regulations for high-tech products and the regulatory framework for its production, the creation of machine-tool enterprises in the region with mechanical engineering and strengthening the mechanisms of public-private partnership in regions with a high reserve of high-tech engineering, including in the development and implementation of innovations . In general, increasing the competitive advantages of high-tech engineering in the long term will contribute to strengthening the innovation and infrastructure components of the development of the region and its business environment.

Figure 2: *Mechanisms of regional development of high-tech engineering*



Source: authors

3. The impact of high-tech enterprises of machine-building on the innovative level of development of the region and its economy as a whole (confirmation of the hypothesis)

This investigation is aimed at assessing the impact of high-tech engineering on the regional economy, as well as the development of an appropriate mechanism for the development of these industries in the conditions of the formation of a new technological order. The work is based on the methods of theoretical and empirical knowledge. The factual base of the research was built on the basis of free access information resources.

As a result of collecting and analysing information on the activities of knowledge-intensive engineering enterprises, it was possible to confirm hypotheses about their high impact on the regional economy and industrial sector, regardless of the sectoral specialization of the region. It is necessary to form an appropriate policy at the state level and the level of the subjects of the Russian Federation. The high reliability of the results obtained is based on the works of such scientists as Kh. R. Lashuen, J. Lenrer, T. Veblen, and others. The main feature of the investigation is the rethinking of the accumulated theoretical base and the practice of assessing the impact of high-tech engineering on regional economic growth, highlighting this sector as a driver and accelerating the development of other enterprises and economic growth. The investigation meets the criterion of reliability. Separate research provisions formed the basis of the monograph and were discussed with university scientists and business representatives in Russia's largest space science city, Korolev.

Conclusion

Currently, there is a need for reorientation of approaches to regional management of high-tech machine building due to the improvement of their forms and on the basis of the formation of self-organized and self-regulating structures of the organization to counteract the touristic effects of the environment and crisis states of the economy. The main findings from the investigation:

1. High-tech engineering is a driver for the development of the regional economy, its "growth pole".
2. The mobilization of hidden reserves to improve the competitiveness of a region is associated with the formation of competitive advantages of science-intensive machine building, and the identification of such reserves is the basis for the further development of a strategy for managing regional competitiveness.
3. Bodies of state and regional authorities in the model of scientific and technological development and economic growth require a revision of tools to support the development of high-tech engineering, depending on the priorities of the output of new technological structures.

The measures proposed by the author and the organizational and economic mechanism will help build an effective regional policy to support science-intensive engineering, enhance the materialization of scientific and technological progress, master the new technological order, and increase the investment climate for doing business.

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INFLUENCE OF THE INNOVATIVE ENVIRONMENT ON EFFICIENCY OF THE RUSSIAN INDUSTRIAL ENTERPRISES

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Keywords:
Innovative environment, efficiency of the industrial enterprises, innovative climate, innovative infrastructure

Abstract:
In article value of the innovative environment as factor of success of the Russian industrial enterprises activity is considered. Components of the innovative environment are the innovative capacity of the industrial enterprises and innovative climate. The directions of the state impact on formation of innovative climate are investigated: creation of innovative infrastructure, improvement of institutes of legal character, institutes of financial character. Influence on efficiency of the industrial enterprises of one of social character institutes – consumer loyalty is shown.

Introduction

Serious problem of modern Russian economy is the lack of innovative qualities and mechanisms without which decision it is impossible to pass to innovative economy. Questions of innovations commercialization efficiency are one of priority for innovative development in all world community. In modern conditions commercialization of innovations promoted achievement by many developed countries of the leading positions in the international market of the knowledge-intensive production, she acted as the main condition of successful introduction of innovative activity results in practice of the companies. (Sekerin, 2012)

For to optimize process of removal of innovations on the market in each of the developed countries own environment of commercialization was created (or the innovative environment as that). All developed countries differ from each other in a set of various institutional conditions, including political, economic, social and other factors, however the mechanisms of formation of the environment used by these countries were developed on the basis of universal experience therefore have the minimum distinctions. (Lyasnikov, Dudin, Sekerin, Veselovsky, & Aleksakhina, 2014)

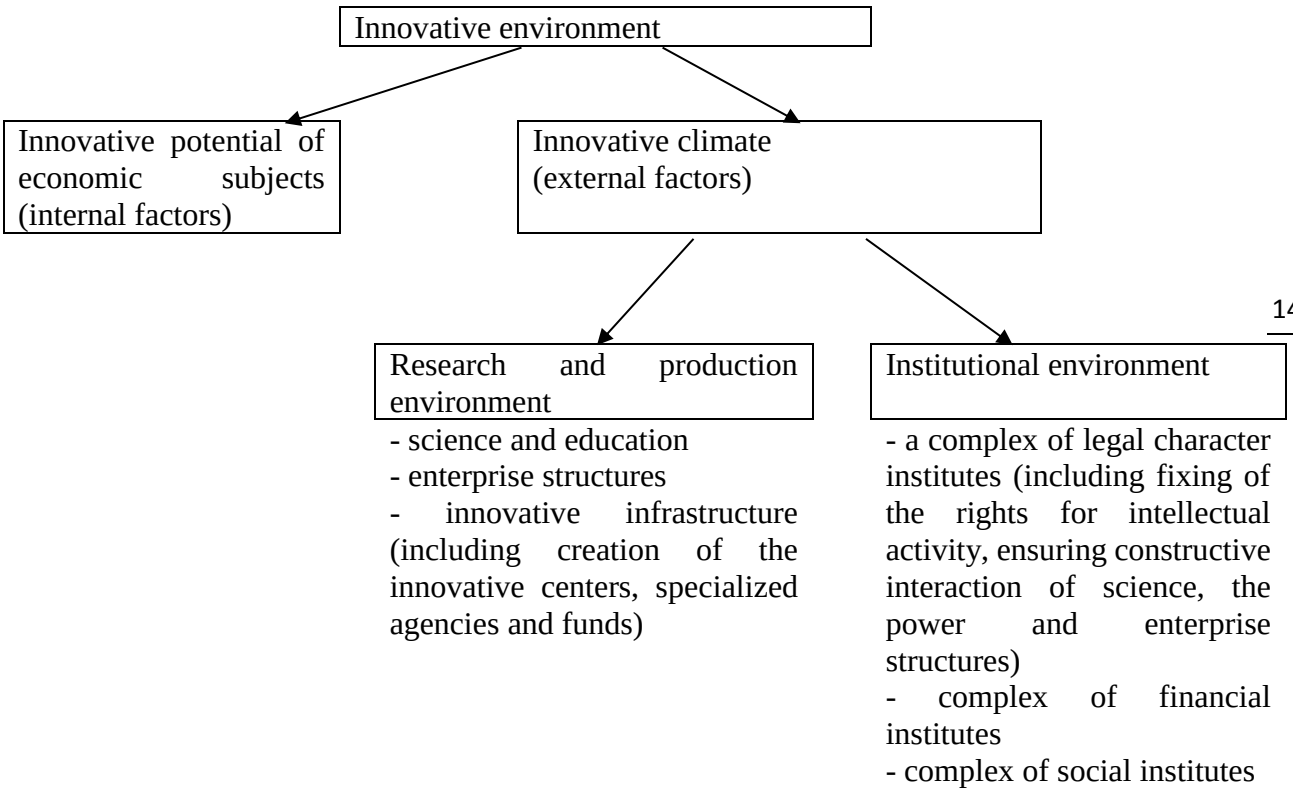
In Russia the innovative environment promoting emergence and commercialization of innovative ideas isn't created yet. Therefore its formation is a significant factor of increase of efficiency of the Russian industrial enterprises.

1. Content of the concept "innovative environment"

There is a set of different approaches to definition of the contents of the term "innovative environment". Many scientists share opinion that the innovative environment reflects a measure of readiness to solve problems in the direction of achievement of the set innovative object, i.e. a measure of readiness for implementation of the innovative project or program of innovative transformations and, therefore, to introduction of innovations.

Other definition of the innovative environment allows to estimate it as set of different types of resources, including the material and production, financial, scientific and technical, intellectual and other resources necessary for implementation of innovative activity. Also understand set of all social and economic subsystems providing access to various resources and giving this or that support of participants of innovative activity as the innovative environment. The making concepts the innovative environment are reflected in figure 1.

Figure 1: *The making elements of the innovative environment*



Source: authors

2. Mechanisms of formation of the innovative environment

Formation of the innovative environment in the country has to be considered by the state as the major task promoting economic growth on the basis of introduction of research, scientific and technical activity results and developmental development.

Public authorities the actions can directly influence formation of the innovative environment in various ways. The most priority are the following mechanisms now:

- formation and development of innovative infrastructure;

- improvement of institutes of legal character;
- development of institutes of financial character.

We will consider them in more detail. As one of mechanisms of innovations commercialization environment formation in economically developed countries the infrastructure providing meaning creation of special organizational structures – the centers, agencies and funds intended acts:

- • for rendering financial, marketing, legal, personnel, information services and the other help to developers;
- • for formation of favourable conditions of implementation of innovative activity and, as a result, commercialization of innovations;
- • for coordination of innovative activity, etc.

The innovative infrastructure can be classified by a range of services which is rendered being its part of the company (structure) – financial, material, information, personnel and expert and consulting (table 1).

Table 1: *Main areas of innovative infrastructure*

Infrastructure area	Characteristic of infrastructure
1. Financial	It consists of various investment, budgetary, venture funds, and also insurance funds and other financial institutions
2. Information	It is formed by various information, analytical and statistical centers (organizations), and also databases and knowledge, and the centers of access to them
3. Production and technological (or material)	It is presented by the centers of a transfer of technologies, science and technology parks, business incubators, research institutes, the national research centers, etc.
4. Personnel	Consists of the highest educational institutions, and also recruitment and recruiting agencies
5. Consulting and consulting	It is formed by consulting agencies, the centers of independent examination, etc.

Source: authors

As the second mechanism improvement of institutes of legal character which has to be directed acts:

- on stimulation and encouragement of development of process of commercialization and innovative activity;
- on assistance of involvement of talented people in innovative activity;
- on differentiation of interests (as which, first of all, understand a functioning framework) all participants of process of commercialization;
- on establishment of an order of coordination of activity of participants;
- on establishment of an order of fixing of the rights for intellectual property;
- on introduction of an order, ways and norms of interaction of the state, science and subjects of business;
- on establishment of standards of innovative production (quality, safety of use, compliance to environmental standards), etc.

In Russia innovative activity is regulated by the fourth part of the Civil Code. That is why it is necessary to build system legislative and the regulations stimulating innovative activity of economic subjects.

The third mechanism of effective commercialization of innovations includes various methods of financial character, such as the state support and stimulation of innovative activity. It is expedient to classify now in use methods and instruments of stimulation in economically developed countries the next way:

- on character of means – tax and natural preferences; financial incentives;
- on objects – stimulation of activity of small and medium-sized companies, contract scientific researches; support of researchers who generate scientific results.

The main forms of support and stimulation of innovative activity which developed in world practice are reflected in table 2.

Table 2: *Measures of the state stimulation of innovative activity in the world*

Measures of support and stimulation	Country of application
1. Direct financing – subsidies, loans and loans, including on favorable terms without payment of percent and the gratuitous, reaching 50% for a covering of expenses of creation of innovations.	Great Britain, Germany, Denmark, India, People's Republic of China, Norway, USA, France, Sweden
2. Target grants and grants for research development.	Japan, Great Britain, People's Republic of China, USA, Austria, Germany, France, Greece, India, Ireland, Norway, Spain, Poland
3. Decrease in the state taxes for individual inventors, representation of tax privileges to them, and also granting delays or liberation from payment.	Great Britain, Germany, Greece, India, Ireland, Spain, People's Republic of China, Norway, Poland, USA, France, Austria, Japan
4. Permission civil servant who are to the staff of the state research institutes to participate in commercial activities for introduction of scientific development – to work part-time, to hold shares, to participate in management of the companies.	Great Britain, People's Republic of China, Greece, Denmark, France, Austria
5. Simplification of the taxation for the enterprises operating in the innovative sphere including an exception of the taxation of costs of research and development, the preferential taxation of universities.	USA, Great Britain, India, People's Republic of China, Japan
6. Providing (legislative) protection of intellectual property and copyright, and also creation of special infrastructure for their support and economic insurance.	Great Britain, Germany, Denmark, India, People's Republic of China, Norway, USA, France, Sweden
7. Creation and support of a network of scientific parks, business incubators and zones of technological development.	USA, Japan, Germany, Denmark, India, People's Republic of China, Sweden

8. Information and methodical support of participants of innovative activity, in the form of creation of the information resources explaining an order of receiving grants, creations of special databanks of the patented inventions, etc.	USA, Great Britain, the People's Republic of China, Germany, the EU, Sweden
9. Stimulation of patenting of the developed innovations.	USA, Germany, France, Sweden

Source: authors

In addition, as one of the most important instruments of stimulation and support of innovative activity in economically developed countries the state contracts signed with various companies for carrying out research activity act. These contracts promote careful coordination of all main conditions of the organization, carrying out and receiving result – since dates of performance and finishing with necessary costs of their execution, thus the customer guarantees acquisition of future results of work with their the subsequent removal on the market

3. Influence of institutes of social character on efficiency of the industrial enterprises

Lack of the favorable environment stimulating creation of innovative ideas of products and development of innovative processes is a fundamental problem at implementation of effective innovations in the industry. An important condition at implementation of innovative activity of the industrial enterprises is existence of a complex of material, infrastructure, intellectual, personnel, financial, information and other types of the resources acting as base for creation of innovative ideas and implementation of innovative projects.

Institutes of social character have impact on efficiency of commercialization of innovations in the industry also. As one of them consumer loyalty acts. Achievement and strengthening of consumer loyalty is at the same time a main goal of the concept of marketing of relationship (Sekerin, Nizhegorodcev, & Gorokhova, 2013). Consumer loyalty is one of components of the institutional environment of innovative climate. In our opinion, it is necessary to understand the level of usefulness as innovative climate available research and production and institutional (first of all, social and economic) conditions to which it is possible to refer consumer loyalty for formation and development of innovative climate. (Dudin, Lyasnikov, Veselovsky, Sekerin, & Aleksakhina, 2014)

4. Role of the industrial enterprise in formation of the innovative environment

The industrial enterprise for improvement of the innovative potential needs to develop the internal and external innovative environment. Existence of the developed innovative environment provides to the enterprise of opportunity for creation and a conclusion of innovations to the market. Formation and development of the innovative environment implies process of interaction and interdependent development of all its components. Creation of the atmosphere of trust, interrelation and interdependence between consumers, the personnel and innovators provides conditions for creation of favourable innovative climate. It is possible to carry out effective formation of the innovative environment of the enterprise in the presence of the purposeful efforts supporting innovative climate of the industrial enterprise, developing systems of interaction between innovative personnel structure of the enterprise and its consumers. (Sekerin, Nizhegorodcev, & Gorokhova, 2013)

Introduction of the program of consumer loyalty allows not only to conduct monitoring of degree of satisfaction of consumers, but, developing system of feedback, to gain information on improvement of functioning and developments of the enterprise, ensuring its convenience to consumers and satisfaction of their needs Lyasnikov, Dudin, Sekerin, Veselovsky, & Aleksakhina, 2014.

Conclusion

Thus, for effective commercialization of innovations at the industrial enterprises it is required to create the developed different complex of mechanisms. Thus the integral condition of formation and development of the effective innovative environment is participation of the state. Researches of foreign experience prove existence of potential of measures of state regulation of innovative activity in respect of its balance both owing to direct state participation, and as a result of actions of indirect support and development of innovative infrastructure.

However success of commercialization of innovations is determined not only the innovative environment, but also and actions of the companies. In modern conditions of fierce competition effective realization of innovative production is possible only as a result of activization by the organizations of the available internal potential in a combination to the developed external opportunities. Introduction of innovations on the market the developed industrial companies carry out on the basis of the debugged mechanisms considering and using all features, both the organizations, and innovations as those.

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MARKETINGNET AS A NEW MARKETING CONCEPT IN A DIGITAL ECONOMY

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Keywords:
Marketing, internet of things, media environment, new digital technologies

Abstract:
The article refers to consumer, media environment and new technologies in marketing field. The key trends of their transformation at the present stage of development are revealed. Authors propose recommendations for marketing activities improvement, which make it possible to increase the efficiency of companies' business results. It covers a justification of creation of a new marketing concept - MarketingNet which helps to meet modern challenges of the market. The authors have disclosed background, essence, features and principles of the proposed concept.

Introduction

Marketing activity is characterized by continuous dynamic development, which requires simultaneous improvement of methodological approaches, new technologies, methods and procedures. Modern marketing needs not only new forms of interaction with contact audiences, but also to update intra-marketing activities in general.

1. Modern stage of media and consumer transformation

In the modern economy, media have a significant impact on the production, distribution, exchange and consumption of goods. Media channels are involved in shaping and stimulating demand, affecting the volume of production and characteristics of goods produced. With the use of media, key segments of the audience have a brand image, a desire to own and use, and additional value is strengthened in the mind regarding products of analogs and substitutes. Communication shapes the situation and the culture of consumption of goods.

Advanced technologies, highly qualified personnel and effective communication are the growth areas of any business. Success in the market is achieved by companies offering new business models. Their development is facilitated by the joint creation of additional value with other agents in order to meet the identified or created needs. Thanks to the development of information and communication technologies, the process of improving business efficiency continues by reducing the time for providing goods and the number of intermediaries in logistics chains. In addition, data is the new currency of the market. There is a close attention of its agents to the technology of data collection, processing, analysis and storage. This is reflected in the actions of the business, regulations and regulations adopted worldwide, as well as the public reaction.

The set of media channels in action generates a media environment. Media development, their high level of technical penetration and use of media channels by the population continues to increase the value of the media environment in the global economy. Through the media, information wars are conducted at different levels, attempts are made to influence the course of significant events. Media channels play a crucial role in the dissemination of messages, the reaction rate of the audience, the accuracy of transmission, and the perception of the directional communication impact.

A media environment is a place in which multiple communication processes take place through media channels that directly or indirectly involve market actors in communication. The media environment emphasizes the heterogeneity of the environment of the market agents, the ongoing interaction. It reflects the multiplicity and nonlinearity of the processes.

The media environment has two main functions - communicative and cultural. The communicative function is dominant and, depending on the tasks of communication, can be subdivided into an entertaining, propaganda, educational component. The cultural function of the media environment broadcasts the level of development of society, its foundations and traditions. It has a significant impact on its development. Many sociologists note that dependence on media is as significant as interpersonal relationships. Indeed, according to research conducted, the dependence of the population on the Internet, smartphones, television is no less than on traditional interpersonal relationships. For example, 24% of the population of the Russian Federation agree with the statement that it is easier for them to express their feelings when communicating with people on the Internet than in person, and the proportion among young people is even higher - 38%. In addition, a high proportion of the population, which the Internet helps to establish relationships with people who have a similar point of view - 36% of the total population and 54% among young people (Mediascope Russia 2017).

The modern media environment has such characteristics as interactivity, instrumentality (the ability to customize communication for individual segments of the audience), simulability, multimedia and multi-screen. They allow you to make the transition from mass to personalization, turning mass channels into media technological communication channels.

In relation to the media environment, each market agent forms its own media behavior. Depending on the goals and the chosen strategy of media conduct, active, moderate and passive positions can be taken in relation to the creation and broadcasting of content, the direction of its impact, and the search and consumption of content. Agents can delineate a range of relevant media channels for monitoring and managing communication. The Internet environment sometimes provides a low level of control over communication and necessitates a quick reaction of agents.

In modern society, the media environment has an impact on decision making. Some of its changes accelerate, change or postpone certain decisions. Each agent, regardless of its value of its assets, can have a significant impact. The idea or the so-called creative component occupy a dominant position. Deep non-standard messages, resonant events can get popular in minutes. The speed of distribution of such content in the Internet using social media is high — social networks, bloggers, vloggers, etc. These processes take place at the level of individuals, legal entities, the state and may entail moral and material losses.
The media environment like any living organism is constantly changing. Media channels, broadcasting formats, coding, methods of interaction, market institutions are changing. Among the trends that occur at the present time can be identified:

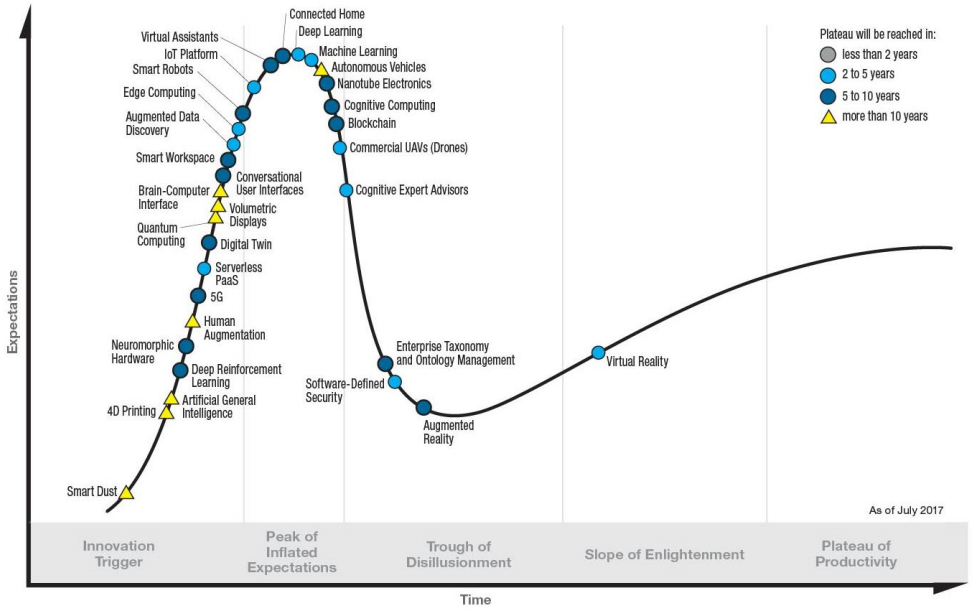
- fragmentation of media channels seeking to work with their narrower audience;
- introduction of technologies that allow to increase the speed of data processing, store large arrays, involve, form of reproduction and distribution of content
- integration of the communication impact system, ensuring a holistic, consistent experience of brand communication with individual consumers.

All this affects marketing approaches, the development of marketing strategies and plans. Fragmentation of media channels, as well as the use of modern technologies allows for highly targeted communication, aiming for one-on-one personalized communication with the consumer.

2. New technologies as a driver of marketing changes

The development of technologies has a direct impact on the media environment. The main ones are presented in Fig. 1. Most of them have an impact on the development of marketing.

Figure 1: *Gartner Hype Cycle for Emerging Technologies, 2017*



Source: Gartner (2017)

In marketing, the development of technologies allows for more accurate communication management, operational research, engaging the consumer, and building relationships with target segments at a new level. For example, the introduction of the tested 5G will lead to the dominance of video and non-standard features in communication, requiring high speeds and a stable connection. International and domestic experience in the use of key technological developments in marketing is of interest for a separate study. It is important to note that despite the uncertainty in the development of technology, the market is actively developing, there are transactions for the absorption of technology companies in the field of marketing, there are specialized units, and the demand for specialists significantly exceeds supply. Machine services for the automatic translation of texts, recognition of images, speech, audio materials are being developed. The social network Facebook in its work uses face recognition technology in photos and videos. The turning point in marketing will be the introduction of technologies capable of influencing the organs of human perception (smell, taste, touch).

The data allows you to make a personal appeal to a wide range of recipients. These were the first to be started and successfully used by banks with a large amount of data about users. It has not yet become customary and positively perceived treatment by name and suggestions when calling, messages, in letters. Search engines, information gathering services are attempting to create individual information packages for consumers.

Technologies allow the use of predictive models that analyze not only the behavior of an individual market entity, but also its environment. Accounting for the actions of the environment allows you to understand the motives of the agents and make predictions.

New formats of communications use machine learning, can choose the most appropriate time and place for advertising. An example in this direction could be the Google-run AdSense advertising service (Google Adsense, 2018).

Due to the high economic importance and activity of the business in the direction of data, new legislative acts and updates of current editions appear. A recent event that pushed companies around the world to update their policies and user agreements was the law on the protection of personal data in the European Union. It entered into force on May 25, 2018. and aims to protect the personal data of residents and EU citizens around the world (EU GDPR 2018).

An important direction of improving marketing activity is the formation of a single media space. Consumers expect a consistent experience with brands, wherever they are involved in communication, timely addressing actual needs. Technologies help in planning integrated communication, segmenting marketing communication audiences, developing new media sales models, etc.

Digital technologies create the conditions for the integration of communication impact. The first significant communication planning models based on cross-media efficiency already exist. However, actual cross-media reporting and an independent cross-communications meter are not yet available on the market. Actual indicators, as before, exist for individual media, and cross-media are a calculated value, depending on the opinions of individual experts and is not a market standard.

Despite significant achievements in the virtual environment, without considering the real physical environment, the enormous potential for increasing the effectiveness of marketing remains untapped. In order to form a single space, models are being tested that allow for factorial aggregation of existing user data, probabilistic aggregation from different devices based on machine learning. Significant steps have been taken in combining the physical and the virtual environment. At the same time, to identify about half of the audience, even by socio-demographic basis, is in many cases still impossible.

The media environment has a tremendous impact on the economic activities of all market participants. Being primarily influenced by the development of technology, it is continuously transforming. Based on the analysis, it was revealed the need to update the methodological basis of marketing, which operates in the current state of the media environment, using an integrated approach not only in planning, but also monitoring the results of cross-media communications. Analysis, communication planning and monitoring of the target audience should be carried out considering not only the behavior of the agents themselves, but also their environment. In fact, the more stable and operational communication links in an ecosystem, the more levels a model can analyze with a high degree of reliability of results and the

complexity of assessment factors, the more effective it is through the agent making more informed decisions. The transformation of the media environment is aimed at the consumer receiving quality personalized communication.

3. The justification of creation MarketingNet concept

The question of the feasibility of separating a new direction of marketing in companies is due to several reasons, including:

1. The rapid development of information and communication technologies that affect all spheres of human activity. The combination of telephone networks, computer network systems, and Internet networks has changed the environment for the functioning of economic agents at all levels. It has enabled the communication process and its management at a fundamentally new level.
2. Significant improvement of the technical characteristics of networks - increasing the distance of information transfer, increasing the volume and quality of the collected, processed, transmitted information, increasing the speed of exchange, the possibility of geolocation and personification of processes, new data storage capabilities.
3. Changing the form of social interactions and interpersonal relationships. Media consumption has shifted towards a wide range of electronics that accompany a person around the clock - mobile phones, personal computers, robots, various kinds of wearable gadgets, etc. are actively used.
4. The development of modern business models based on such areas as e-commerce, open innovation, co-production and consumption platforms, the creation of an infrastructure of "smart" systems challenges existing marketing approaches, market regulation measures, etc.
5. The high degree of turbulence of the environment constantly changes the conditions of functioning of market entities. It contributes to the need to reduce development time and innovation.
6. The need to increase the annual marketing budget and reduce the effectiveness of marketing investments. Traditional tools are becoming obsolete and no longer bring past results. Annual media inflation, the need to increase the salaries of the most important employees require a change in the existing approaches and algorithms of work.
7. The need to improve the competitiveness of enterprises, increasing the level of commercialization of innovations, reducing the time to implement them, etc.

All this leads to the need for real-time marketing at a more personalized level, anticipating the needs of the audience, understanding their deep essence, and not superficial motives.

In this regard, the formation of a new direction of marketing that would meet the current challenges of the market is relevant. It is designed to develop an understanding of marketing, its concepts, modern strategies, forms, types, tools.

These areas include new types of marketing related to network technologies that deal with individual components of marketing activities, being primarily a way to interact with the audience or distribution channels. In foreign and domestic literature provides a variety of definitions of marketing areas related to network technologies: Online marketing, Internet marketing, Digital marketing, Mobile marketing, Electronic marketing (e-marketing), Virtual marketing, Social Media Marketing etc.

These concepts are united by the availability of information and communication technologies, the existence of two-way communication with consumers, the implementation of promotion or sales.

Smart systems that are actively penetrating the modern economy, such as smart home, smart enterprises, smart city, smart government, Internet of Things and Internet of People require new approaches and marketing methods based on networks – MarketingNet.

4. MarketingNet as a key marketing concept in a digital economy

The key difference of MarketingNet is the presence of multilateral permanent network connections at the "Internet of Everything" level, human participation only in non-standard processes, openness of information, the company's relationship not only with consumers and business partners, but also with universities, society, the active participation of environmental agents in co-production. It is characterized by the versatility and integrity of marketing activities, which is based on networking.

MarketingNet is actively associated with various marketing areas and includes digital marketing, SMM, mobile marketing, uses corporate information systems (CIS), neuromarketing, sensors, artificial intelligence, interactive reports (dashboards), and others. It has: targeting; joint development (co-creation); personalization; portability; crowdsourcing; sharing economy (shared economy), when it is more convenient to pay for access than to own; such testing methods and technologies as trial marketing modeling (STM), virtual reality (VR), augmented reality (AR); convenience; automatic price regulation and automatic price setting; possibility of use from any location; ability to connect to all sorts of networks.

The definition of the term MarketingNet is presented by the authors as follows: MarketingNet is a marketing concept that uses interactive network communications as the basis for managing the marketing activities of an enterprise, implementing models of real-life scenarios on a personal level.

The basic principles of MarketingNet include:

- The principle of network orientation and interactivity. It consists in the formation of permanent integrated communication networks within the company and the external environment. In networks, the boundaries of individual economic agents are erased. The relationship between individual systems, programs, physical phenomena is multifaceted. Information collected from individual network nodes is systematized, converted into a form convenient for analysis, stored, transmitted to meet various kinds of needs continuously in real time.
- The principle of meeting the prospective deep-seated needs of consumers. It is crucial to understand the complex of interrelated needs, their development, and the characteristics of the consumption infrastructure. Information on usage and emerging changes is monitored constantly. Control over the elements of the system takes place at the local and remote levels. It is supposed to eliminate possible problems in advance together with the participants in the creation of value chains. For example, as the printer operates, the control system not only checks its technical condition, but also transmits information on the number of inks remaining in the cartridge to the production and distribution channels, so that the owner can change the cartridge in the most convenient way at the right time.

- The principle of innovation. The functioning of networks implies not only maintaining work efficiency at the highest possible level, but also striving for continuous improvement of models, work algorithms, joint development, production, and promotion of innovative products. Regulating the openness of individual developments of the company over time and actively attracting them from the outside can significantly improve the results of innovation, reduce the duration of their implementation, and generally improve the management of projects, processes and companies.
- The principle of complexity implies a systematic approach to understanding and studying interrelated and interdependent market actions. He directs marketers to the realization of all market activities as a holistic integral mechanism that requires effective integrated marketing management at different levels.
- The principle of profitability and market orientation. Profitability indicates an organization's desire to carry out a profitable activity, the level of which is predicted and regulated on different planning horizons. Market orientation means the implementation of activities aimed at the commercialization of ideas, goods, services, technologies.
- The principle of nonlinearity, which means that the sequence and duration of the stages of each individual marketing process may vary and overlap. Processes have a multi-level structure and a wide network of feedbacks.

Companies following advanced development strategies and MarketingNet principles will be able to gain a significant competitive advantage. Managing actions MarketingNet are aimed at the formation, regulation, optimization of networks, as well as their development in order to build new markets and strengthen the company's position in existing markets. Networks of things are numerous and are represented by a wide range of physical objects that can operate and exchange information. They intersect with networks of people and data, generating various kinds of processes. Data management processes allows you to implement a model of real-life scenarios on a personal level.

The implementation of MarketingNet in an enterprise involves the involvement of such specialists as a network manager, marketing technology coordinator, and a data science specialist. All of them require a high level of interdisciplinary competence of employees, as well as a review of interactions within the structural units and between them.

The concept of MarketingNet proposed in this article reflects the modern market approach to the economic activities of companies. Communication networks imply not only interaction with contact audiences, intra-company marketing activities, but also form the basis of managerial influences.

Despite the fact that some elements of MarketingNet are already applied to companies in one way or another, there are a number of problems that require further development:

- analysis of marketing terms associated with interactive network technologies and the definition of their relationships;
- the formation of a methodological base MarketingNet;
- the study of issues of security, confidentiality, trust, ethics, etc.;
- improving the performance of data transmission in networks;
- improving the reliability of data, which consists in eliminating unplanned delays between network nodes, contributing to the maintenance of smooth operation in real time.

The theoretical substantiation of the MarketingNet concept and its further development are important both for the development of the market itself and for increasing the competitiveness of companies. MarketingNet, in turn, develops current ideas about marketing and contributes to the effectiveness of marketing activities in enterprises.

Conclusion

The theoretical substantiation of the MarketingNet concept and its further development are important both for the development of the market itself and for increasing the competitiveness of companies. MarketingNet, in turn, develops current ideas about marketing and contributes to the effectiveness of marketing activities in enterprises.

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PRINCIPLES OF PEOPLE MANAGEMENT IN PUBLIC ADMINISTRATION

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Keywords:
People management, organizational performance, public administration

Abstract:
There is considerable evidence that performance of any organization depends on people working in the organization. Based on summarizing the concept of the relationship between people management and organizational performance, the goal of the paper is to define main principles of managing people in public administration that allow any organization in public organization to achieve expected performance of the organization through achieving desired abilities, motivation and results of people working in the organization. Achieving the goal of the paper is based on the analysis of available scientific literature on people management and authors' knowledge, experience and research results.

Introduction

The fundamental results of the research on the relationship between people management and organizational performance confirm that people (for their abilities and motivation to work) represent a critical source of any organization and many researchers demonstrate the positive impact of various people management practices on various organizational performance indicators (Paauwe & Boselie, 2005). There is considerable evidence that organizational performance depends primarily on abilities, motivation and results of people working in the organization. If organizations apply appropriate people management practices, they can positively influence organizational performance through positive influence of people abilities, motivation and results (Armstrong & Taylor, 2015). In this context as appropriate are considered people management practices in job design, people selection, performance management, people compensation or people training.

The goal of the paper is to define main principles of managing people in public administration that allow any organization in public organization to achieve expected performance of the organization through achieving desired abilities, motivation and results of people working in the organization.

Achieving the goal of the paper is based on the analysis of available scientific literature on people management and authors' knowledge, experience and research results.

1. People and organizational performance

People are usually valued as the most important source of any organization. Each organization also needs other resources (material, finance or information) but quality people are indispensable to achieve excellent organizational performance (Kucharčíková, Tokarčíková, & Ďurišová, 2015). Abilities (knowledge, skills and abilities to perform agreed work), motivation

(willingness to perform agreed work) and results (quantity, quality, timeliness of actual work) of people determine operating and financial results of the organization.

Any organization that wants to achieve excellent organizational performance must ensure that people woring in the organization achieve desired performance and aply efficiently their abilities and motivation to achieve expected results of the organization (Fedorova, 2016). In other words, the organization must pay particular attention to effective people management.

2. Fundamentals of people management

People management refers practices related to management and leadership of people working in the organization. These include such practices as job design, people selection, performance management, people compensation or people training (Koubek, 2015). People management determines organizational performance and enables an organization to achieve expected performance through achieving desired abilities, motivation and results of people working in the organization (Armstrong & Taylor, 2015). Effective people management differentiates successful organizations from unsuccessful organizations.

There is no doubt that organizations who want to achieve expected organizational performance must pay attention to management and leadership of people because their abilities, motivation and results determine organizational performance (Guest, 2011). Organizations need optimal system of people management based on proven practices that will enable them to attract, employ and develop enough quality people and to achieve expected organizational performance by achieving desired performance of people working in the organization (Grenčíková & Špánková, 2016). Among proven practices in people management that demonstrably enable organizations to influence abilities, motivation and results of people working in the organization belong practices in job design, people selection, performance management, people compensation and people training.

3. People management in public administration

All above mentioned facts about the relatonship between people management and organizational performance can be also applied to organizations in public administration and their managers that seek to achieve desired results of public administration, especially required level of public services. To succeed, organizations in public administration must be competent employers responsible for people management in public administration, which means to apply proven practices related in people management to job design, employee selection, performance management, employee compensation or employee training that will allow them to achieve expected performance through achieving desired abilities, motivation and results of people working in the organization.

3.1 Job design

Job design is the process of defining main tasks and grouping them together to form needed jobs in the organization. The result of forming jobs is the organizational structure. Job designe is realized in accordance with organizational strategy and is based on forecast of labour demand. In view of optimal people management, it is important to design jobs that will satisfy the needs both an organization and people. The organization should design motivating jobs, i.e. complex, various, significant and autonomous jobs using regular feedback.

A complex job is integrated and meaningful, with visible output. A various job makes possible to do various activities and use various practices and so use and develop one's own knowledge, skills and abilities. A significant job gives certain influence on the internal and external surroundings of the organization. An autonomous job makes possible to control one's own work and act relatively independently. Using regular feedback about actual performance and working conditions from workers to managers and from managers to workers enables managers and workers to improve performance and working conditions. Motivating jobs evoke the sensation of usefulness, importance, responsibility, fellowship and make possible to apply and develop abilities and motivation of people.

3.2 People selection

People selection is the process of identifying the probably best candidate who has required abilities and motivation to perform successfully in the job. In view of optimal people management, it is important to pay special attention to personal characteristics of candidates. People working in the organization must be capable and motivated to cooperate and communicate and apply and share their knowledge, skills and abilities to perform necessary work and achieve desired results of the organization.

To assess required personal characteristics of candidates, managers can use various interviews, tests or assessment centres. Competencies and responsibilities of managers in people selection are to conduct the process of assessing candidates and identify the probably best candidate who has required abilities and motivation to perform successfully and contribute to achieving desired results of the organization.

3.3 Performance management

Performance management refers to management and leadership of people working in the organization to achieve desired results. The process of performance management has usually three repeating stages through which managers ensure that abilities, motivation and results of workers are consistent with expected goals of the organization.

The first stage – performance agreement – includes a written or verbal agreement between a manager and a worker about particular aspects of performance that are relevant to requirements and objectives of the job and the organization. For optimal management and leadership of the worker, it is important to agree also on development of worker's knowledge, skills and abilities necessary for successful performance in his or her job.

The second stage – performance management – means everyday management and leadership of the worker to meet given requirements and achieve expected objectives of his or her job. For optimal management and leadership of the worker, it is important to lead the worker to effective and efficient cooperation and communication and voluntary and mutual sharing and use of knowledge, skills and abilities in the organization.

The third stage – performance appraisal – provides necessary feedback from the manager to the worker and conversely from the worker to the manager through the appraisal interview at the end of the agreed period. The purpose is to appraise performance of the worker, find way to solve eventual problems and agree on performance requirements for the next period. For optimal management and leadership of the worker, it is important to evaluate actual level of his or her knowledge, skills and abilities necessary for successful performance. The process of

performance management is essential for efficient influencing of abilities, motivation and results of people working in the organization.

Competencies and responsibilities of managers in performance management are to define and implement the concept and strategy of performance management in the organization, make performance agreements with workers, manage and lead workers to meet given requirements and achieve expected goals, conduct appraisal interviews and provide feedback to workers about their abilities, motivation and results.

3.4 People compensation

People compensation is the process of offering compensation to people for work done. A modern compensation system includes both monetary compensations (wages and salaries) and non-monetary compensations (benefits like mobile phones, notebooks, cars, flexible hours, home working, housing, insurance, sick leave, medical and dental care, vacation, holidays, leisure activities, training, etc.).

In view of optimal people management, the applied compensation system should be fair and stimulating to attract, employ and keep quality people and motivate them to cooperate and communicate and apply and share their knowledge, skills and abilities in the organization. The fair and stimulating monetary and non-monetary compensations should motivate people to permanent and systematic improvement and development of their abilities, motivation and results.

Competencies and responsibilities of managers in people compensation are to define and implement the concept and strategy of both monetary and non-monetary people compensation in the organization and guarantee fair and stimulating compensation of people working in the organization.

3.5 People training

People training is the process of learning knowledge, skills and abilities that enable people to perform successfully in their jobs and to meet changes in conditions and requirements of their jobs and the organization. The process of people training must be permanent and systematic. In view of optimal people management, it is important to motivate people to permanent and systematic training of their knowledge, skills and abilities.

Workers who have some specific knowledge, skills and abilities should be involved in the process of training as trainers and mentors. It increases the motivation of workers and improves conditions for voluntary and mutual development, sharing and application of knowledge, skills and abilities in the organization.

Competencies and responsibilities of managers in people training are to define and implement the concept and strategy of people training, identify needs and define plans of people training and assess results of people training.

Conclusion

Organizational performance is determined by abilities, motivation and results of people working in the organization. Organizations that want to achieve desired organizational

performance need to apply optimal system of people management based on proven practices in job design, people selection, performance management, people compensation and people training that will enable them to attract, employ and develop enough quality people. This also applies to organizations in public administration. To succeed as employers, organizations in public administration should implement proven practices in people management related to job design, people selection, performance management, people compensation and people training. Effective people management in organization in public administration requires:

- to design motivating jobs (complex, various, significant, autonomous and using regular feedback) that will satisfy the needs both organizations and people;
- to select people paying attention to their personal characteristics, especially to their abilities and motivation to cooperate and communicate;
- to apply performance management that enables to achieve expected performance of organizations by achieving desired performance of people;
- to apply fair and stimulating monetary and non-monetary compensation system that enables to attract, employ, keep and stimulate quality people;
- to apply systematic training of people and involve people with specific knowledge, skills and abilities in the proces of people training as trainers and mentors.

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COMPETENCIES AND ROLES OF MANAGERS IN REGIONAL EDUCATION

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Keywords:
Competency, competence, professional role, headmaster, professional standard/competence model

Abstract:
The paper deals with the determination of types and contents of competencies and roles of managers in regional education. Specifically, it compares the most important roles and competencies of managers in regional education as presented in specialised literature with the results of a survey conducted by the author of this study among the students of Master´s degree study programme in Educational Management in the period 2017-2018. Based on the conducted survey, it is possible to determine more precisely which partial competencies a headmaster needs for a competent performance of his/her work position. That is connected with the possibility to target more precisely the professional development of this group of employees in regional education. The information obtained can also be used as a contribution to the development of a professional standard or of a generally acceptable competence model of a headmaster. That could be used to specify more precise selection criteria for educational managers and also to enable their further career development also outside of the sector of regional education.

Introduction

The objective of the research was to determine which competencies are considered as key/most important competencies by actual and prospective educational managers (especially headmasters in regional education).

The intention is to contribute to the ongoing discourse aiming to define a professional standard/competence model of headmasters in sector of regional education. It has not yet been developed for this group of professionals in the Czech Republic. This creates certain anomaly between the legislative requirement for professional education of educators and the absence of that standard as well as of a career model for the position of school managers (headmaster).

The survey took place in two phases. It focused on the specification of the most important prerequisites (contents or components) for a competent performance of the role of a manager in regional education (chosen post: headmaster). For the two phases of the survey, the research questions (RQ) were as follows:

RQ1: What are the requirements/prerequisites for a competent conduct of a headmaster work position in partial roles of an educational manager?

RQ2: Which components constitute the content of key/significant competencies of a headmaster?

A qualitative research methodology was used for both phases of the survey. The basic techniques used in the survey included different types of discussions. More specifically, it was a modification of a moderation method and the use of focus groups - 1st phase ($n_1 = 42$), and panel discussion - 2nd phase ($n_2 = 22$). Plenary discussions were used in both phases of the survey. In both phases, the respondents were students of the 2nd year of a Master´s degree study programme in Educational Management at the Faculty of Education, Charles University (Prague). At the beginning of both phases of the survey, terminology was harmonised. Given that the respondents have worked with the terms manager's role as well as competence/y (especially as regards a connection between key competencies as learning outcomes and key competencies of managers as well as managerial competencies) during their study as well as at their work, it was only a fine-tuning in accordance with further described models of roles or competencies so that the survey's objective could be attained.

The following premises also became general starting points of the survey:

a) social roles are defined as expected expressions of conduct in certain social position (Jandourek, 2007),
b) it is a characteristic feature of a competence that it is manifested in the conduct of its holder (Veteška & Tureckiová, 2008),
c) partial key competencies constitute a prerequisite for a comprehensive competence for performance (Belz & Siegrist, 2018).

It was the intention of the first phase of the survey not only to describe the components of partial roles of a school manager from the perspective of performed activities, but also from the perspective of competencies which the manager possesses. This created a basis for interlinking the concept of roles and the most important (and in this sense key) competencies of a headmaster, or other managers in regional education.

The first phase of the survey took place in the course of the academic year 2017/2018. It focused on the determination of the most important competencies of a school manager in connection with prevailing roles which s/he must handle in the performance of his/her function. Domestically widely accepted model of manager's roles consisting of the roles of a manager, a leader and a process executor (Plamínek & Fišer, 2004) was used as a starting point. The model is described in more detail later in the text. Particular expressions of behaviour which are characteristic for the mastering of partial roles of an educational manager are in the original model presented in the context of enterprises and their managers. The survey involved specification of headmaster's competencies which s/he uses in the mastering of his/her roles.

The second phase of the survey took place in the winter semester of academic year 2018/2019 and focused on the types and components of key competencies of educational managers. The objective of this phase of the survey was to confirm and, if necessary, complement the earlier identified expressions of competency to act/to perform. The phase further examined to what extent the competencies of a school manager are key and/or transversal. To this end, existing competence models could be used. Generic models were used in the survey (Belz & Siegrist, 2015, and an overview of transversal competencies according to Straková, 2008). In the text, there are also references to models created earlier for employees in regional education (Procházka & Binderová, 2011) and headmasters (Lhotková, Trojan & Kitzberger, 2012).

1. Roles of managers and their modification for regional education managers

There are relatively many models of manager's roles and the same applies to models of competencies. The first model of managerial roles developed by H. Mintzberg generally ranks among the most well-known. He defined three basic categories of activities (roles) of a manager. Specifically, these include informational, interpersonal and decision making (for more details see for instance Hroník, 2007 or Pilařová, 2016). The model is still frequently used, also in the context of school management. Nevertheless, the model of J. Plamínek (Plamínek & Fišer, 2004) is most widely used in Czech conditions and the given context. In view of the fact that the model was used in this survey, characteristics of individual roles are presented in greater detail (including the competencies mentioned by the model's author as appropriate for partial roles):

In the role of a leader, the manager "is in charge of a strategic framework, its definition and sale of ideas to the inside of the company in the sense of convincing other staff about the correctness of implementing that framework. This role is connected with the competency to formulate ideas, to analyze and evaluate information, to distinguish personalities, to listen, motivate others" (ibid).

The partial role of a manager (i.e. the one "who does things right") according to Plamínek & Fišer (2004) consists of "achieving strategic objectives and rules set by the leader.... It is the most complicated role in the whole company. The competencies needed again include those to assess ideas, argumentation towards the leader, decision making, ability of principal negotiation, acceptance of ideas, decomposition of strategic objectives, human resource management, definition of tasks, orientations, integration of people, feedback evaluation" (ibid).

The role of a process executor consists of "a transformation of inputs into outputs, the executor achieves objectives and fulfils tasks immediately. The competence in question concerns providing required performance and care for own resources" (idib). By the care for own resources the author means competencies focused on own person (personal competencies) as well as other competencies which allow an individual to handle with competence other types of resources from the organisation's internal and external environment.

Through specific use of the above model for managers in regional education, the above-mentioned roles are interlinked in the performance of activities at the post of a headmaster. S/he is the fundamental representative of the managed organisation, and creator of the school's concept, strategic framework or vision. This means that s/he is at the same time a top manager as well as the one who contributes to the attainment of objectives and fulfilment of tasks. The specificity of the executor's role is further underlined by the fact that the headmaster does not cease to be a teacher and may appear even in a situation when s/he is a "subordinate" within an educational team (Lhotková, Šnýdrová & Tureckiová, 2013).

Also in other types of organisations, a line manager may, within a matrix structure, become a "common" team member for a limited period of time, but usually this does not concern persons in higher and top management. In the case of a headmaster, this may be a long-term and recurring situation. Moreover, as a teacher the headmaster is the executor of a key educational process. The quality of his/her specialist educational as well as of his/her managerial and leader's role are significant for the school. In those roles, s/he cannot be replaced in the school or at least with great difficulties (in big schools, some partial roles can be transferred to other

members of higher management). The care for own people and their development is part of all partial roles of a headmaster. People management competencies are becoming a priority (for more details see Tureckiová 2018).

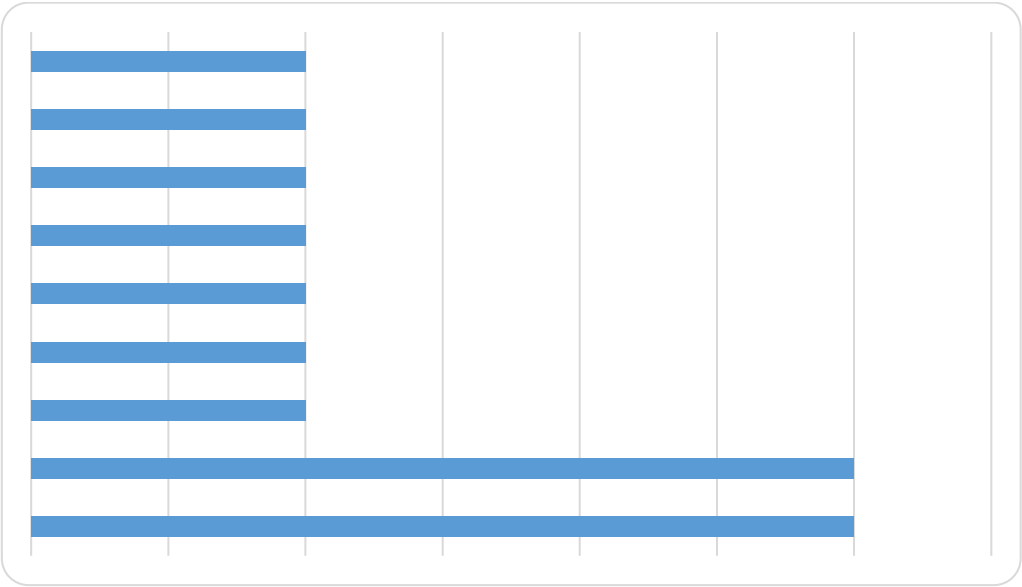
1.1 Requirements for headmaster's competencies in coping with the manager's roles

Respondents in the first phase of the survey were at first divided into five groups depending on the type of school they represented (kindergarden, elementary school, elementary art school, secondary technical school and secondary comprehensive school). Individual groups always included representatives of the given type of school (headmasters and/or other pedagogical staff of public and where possible also private schools). They were complemented by other members of the student group so that the focus groups were balanced in terms of number of members as well as the representation of other stakeholders. Besides adherence to methodological principles, the purpose of the distribution to groups was also to provide for the possibility to distinguish potential specifics in the partial roles of headmasters depending on the type of school and provided education. The only distinction was found in the group from elementary art schools where the respondents for all partial manager's roles and hence also for his/her competencies stated the requirement for a higher development of competencies in artistic disciplines which are taught in the elementary art schools (music, fine arts, dance and drama). They were, nevertheless, mentioning the same types of prerequisites for competencies as the other groups. Subsequently, the groups were merged into preschool, elementary and secondary schools and the decisive partial competencies of school managers were specified according to the chosen model of managerial roles. The respondents further worked in those three groups. The results presented below summarise the outputs from those three groups of respondents.

Based on the model of managerial roles outlined above (in a modification for regional education), the respondents of the survey determined the following competencies corresponding to individual roles:

A) Leader - according to the respondents in the survey, effective mastering of this role involves in particular the ability to set a vision for the school's development and to win the school staff for that vision. It also involves the skill to motivate others to achieve the school's vision and strategic objectives (for more detailed results see Figure 1)

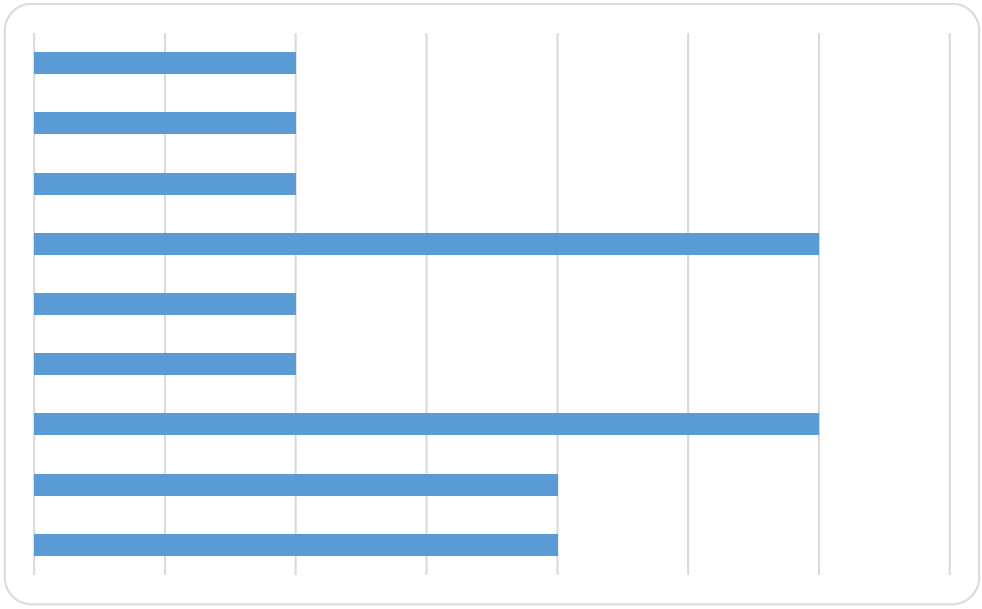
Figure 1: *Competencies of a leader*



Source: author

B) Manager - according to the respondents, a competent performance of this role requires especially a competent performance of managerial functions. A control function was mentioned most frequently together with the ability to delegate tasks and responsibilities to other staff. The ability to motivate appears again, this time not only to achieve a vision and strategic objectives, but also as a basic component of the function of leadership/leading people (see Figure 2 for complete results).

Figure 2: *Competencies of a manager*

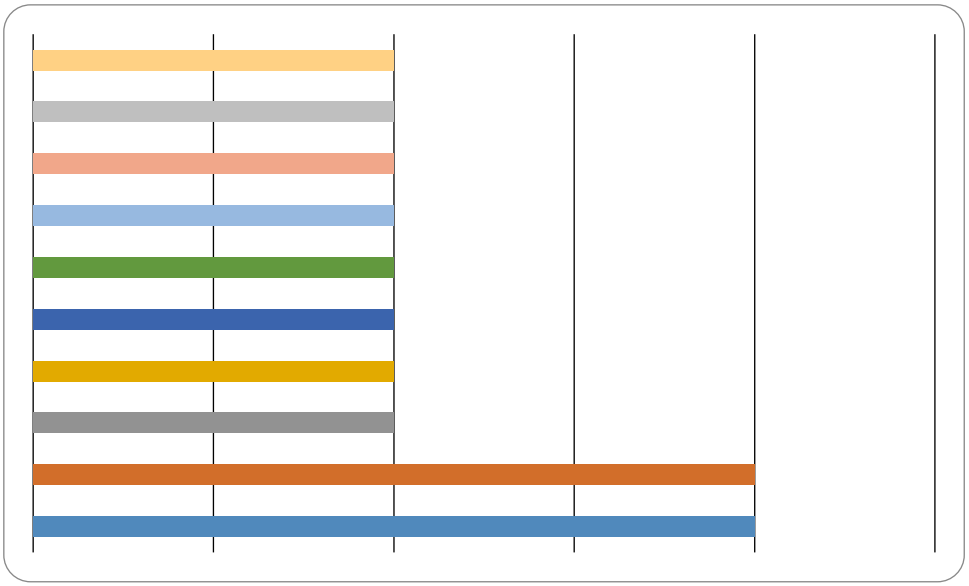


Source: author

C) Process executor - in the respondents' view, the mastering of this role by headmasters involves educational as well as diagnostic competencies which the headmaster employs as a teacher and it includes also management and evaluation of the educational process in the school

and presentation of the school and of the results of the educational process, including the results of individual pupils in public (see Figure 3 for a frequency of partial competencies and their complete list).

Figure 3: *Competencies of a process executor*



Source: author

2. Significant competencies of managers in regional education

Generic models of competencies which are keys for employability of the current labour market were used as a starting point for the second phase of the survey. More specifically, Belz & Siegrist (2015) model of key competencies was used which comprises the following types and components of competencies:

a) social competencies (elsewhere referred to also as soft or interpersonal competencies) – capability of team work and cooperation, capability to face conflicts, communication skills,
b) competencies in relation to oneself (elsewhere referred to also as personal competencies) – ability to handle oneself, self-management, self-reflection, development of one's own values, self-critical thinking, self-development,
c) competencies in the area of methods (in other models referred to also as methodological and conceptual competencies, comprise also general professional competencies) - planned and targeted application of professional knowledge, creativity and innovativeness, structuring and classification of information, conceptual thinking, critical thinking and work with risk (ibid).

Key (generic and/or interdisciplinary) competencies are generally considered as “a transferrable and universally applicable set of knowledge, skills and attitudes which every individual needs for its personal fulfilment and development, for involvement in the society and for a successful employability” (Průcha & Veteška, 2014). Similar definition can be used also for transversal competencies "which enable an individual to act successfully in various social areas and roles" and which include competencies such as “communication, problem solving, drawing of conclusions and argumentation, management, creativity, motivation to learn, team work and ability to learn” (Straková, 2008).

Key and transversal competencies constitute also an important part of competence models (professional standards) of pedagogical staff. Domestic specialist literature, for instance, sometimes distinguishes between personal and professional competencies (Procházka & Binderová, 2011). Personal competencies and some of the professional competencies form a part of key competencies. According to the above authors, individual types of professional competencies of pedagogical staff include: subject related specialist competencies, psycho-didactic competencies, communication, organisational and managerial competencies, diagnostic and intervention competencies, advisory, consultative and (self)reflexion competencies. The personal competencies and "at least a part of the so-called professional competencies are relevant also for the requested performance in the function of a headmaster" (Tureckiová, 2012).

Respondents in the first phase of the survey also mentioned subject related specialist competencies. They are one of the prerequisites for the mastering of the role of an executor of educational process by a headmaster. Also competencies constituting the content of the role of a manager and a leader are mentioned among the groups of competencies in another of the partial competence models of headmasters (Lhotková, Trojan & Kitzberger, 2012). So far, no competence model has been adopted as binding for the development of a professional standard of a manager in regional education (not only headmaster).

2.1 Competencies of educational managers according to the results of the survey

Respondents in the second phase of the survey at first received a list of types of manager's competencies which are mentioned in the basic models described above. Subsequently, they were divided into three groups where they had a task to specify the content of significant competencies of educational managers. The groups were assembled so as to be as homogeneous as possible thus creating an opportunity for comparing different viewpoints. Specifically, there was a group of educational managers and educational staff, a group comprising staff of other educational organisations and a group comprising representatives of other stakeholders.

The basic model with which the groups worked was Belz & Siegrist (2015) model of key competencies. Results of the group work are summarised in Table 1. Individual components of key competencies are not ranked by frequency. Those that were mentioned by all groups are highlighted in bold.

Table 1: *Key competencies of educational managers*

Social competencies	Competencies in relation to oneself	Competencies in the area of methods and conceptual competencies
Empathy	Systematic nature	Development of strategy
Communicativeness	Time management	Support for the education of employees
Ability to fulfil assignment	Self-management	Education/qualification
Ability to listen	Ability to cope with stress	Self-development
Leading of discussion	Reliability	Crisis management
Creation of positive environment	Fairness	Anchoring of the organisation in its environment

Equal approach	Decisiveness	Management of the education process
Checking and evaluation of teachers	Sound judgement	Securing of the working environment
Cooperation with schools	Set example to others	Creation and development of internal regulations and guidelines
Leading of a group	Thoroughness	Delegation
	Ability to represent and present in public	**Control**
	Creativity/proactiveness	Development of the organisation
	Assertiveness	Knowledge of new trends
	Ability to motivate	Selection of employees
	Self-reflexion	Planning
	Self-confidence	
	Purposefulness	

Source: author

Conclusion

The model of partial roles of managers (Plamínek & Fišer, 2004) was used in order to find an answer to the first research question (*RQ1: What are the requirements/prerequisites for a competent conduct of a headmaster work position in partial roles of an educational manager?*). Respondents in the survey agreed that they know the model well and consider it as suitable also for school managers. Based on the results of the first phase of the survey, it can be stated that in view of the complexity of a headmaster's work in school, and the scope of his/her competencies and responsibilities, a more detailed separation and differentiation of the content of his/her roles is more difficult than in the case of managers of other types of work organisations.

The following characteristics of individual roles can be specified for a headmaster: In the role of a leader, s/he is primarily a creator and executor of the organisation's vision and at the same time the person who motivates himself/herself and his/her colleagues to development. S/he delegates to his/her colleagues a number of tasks and responsibilities which are connected with the attainment of the objectives of the education process. In the role of a manager, headmaster ensures primarily the functioning of the organisation by mastering managerial functions of which the control function is considered the most important. For the role of process executor the respondents mentioned the requirement of professional development (pedagogical as well as managerial). However, care for one's own well-being (care for oneself and one's own resources) was not mentioned in the survey. Subsequent plenary discussion showed that the respondents see the role of the leader as a decisive one. This probably results from a link between the role of a manager and a leader where leader is the one "who shows the direction in which we wish to go" (vision). It is interesting that also for the role of process executor the respondents mentioned that it is "the means to achieve the objectives of the leader".

Basic overview of the types of significant competencies of a headmaster can be obtained already from the above partial roles of managers in regional education. In general such competencies can be divided to key (interdisciplinary and/or transversal) and professional (general and specific vocational, for headmasters there are competencies of a teacher).

The answer to the second research question (*RQ2: Which components constitute the content of key/significant competencies of a headmaster?*) was specified in the second phase of the survey. Here, the respondents used the model of key competencies (Belz & Siegrist, 2015). In the overview of individual constituent components of competencies key for employability, the respondents stated that:

Social competency of a manager in regional education lies especially in developed communication competencies, and in competencies connected with the management of people and organisations. As the most important social competence the respondents mentioned "equal approach" which involves equal treatment of school employees as well as "application of an equal approach to the education possibilities of all pupils, while taking into account their specific needs".

In the respondents' view, competencies in relation to one's own person are connected in particular with partial components of self-concept and self-management and with the use of emotional intelligence of school managers.

Conceptual competencies and competencies in the area of methods are dominated by competencies connected with the development of a strategy and with strategic management of educational organisation, with the development of the school and its staff and with the mastering of managerial functions. Also respondents in the second phase of the survey see the competencies connected with the manager's control function as the most important ones.

In accordance with the objective of the survey, the findings gained in the examination of the headmasters' roles and competencies may be used to develop and evaluate a professional standard/competence model of a manager in regional education. They will also be used to develop the content of the education of students in the study programme of Andragogy and Educational Management at the Faculty of Education, Charles University (Prague) and in further education of managers in regional education.

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