Role of management of industrial enterprises in formation of labor migration trend in region

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Abstract. In the article it is justified, that one of the options to solve the problem of increase of a labor migration trend of young population of a small mono-city or of a highly specialized city is integration of a talent management concept into a management system of its basic industrial enterprise. The body of evidence for this justification was composed by the results of the research of essence of notion ‘talent’ and its management features, as well as conclusions obtained in the course of survey of pupils of eleventh grades of schools in Nizhny Tagil, as well as of students of technical schools and universities of this city. The following provisions have been determined as specific recommendations to reduce the migration outflow of young people: the concept of talent management at an industrial enterprise has not only corporate, but also territorial effectiveness in solving the socio-demographic problems of the city; it is necessary to minimize not so much labor as educational migration of the young population, since it has a transformational nature and a stable form of appearance; talent management programs shall be adapted to conditions of functioning of highly specialized cities.

1. Introduction
This article will focus on industrial enterprises of mono-cities, activities of which have a significant impact on a socio-economic situation of a territory of their localization and on living standards. One of pressing problems for such cities, due to their niche specialization, is susceptibility to a depression of economic activity and outflow of the young working-age population, which is caused by appealing qualities of metropolitan cities and by the presence of unpleasant factors related to an adverse economic situation at an enterprise, brought on by low marketability of products, deterioration of equipment, high production costs, as well as by the absence of possibility to evolve and increase a professional skills set. In turn, the negative labor migration of youth leads to deficiency of qualified specialists, which inhibits entering a level of stable development and independent solving of problems in the field by the economy of mono-cities. Therefore, this problem shall be solved on an urgent basis, without downgrading of the role of the industrial enterprises themselves.

2. Level of knowledge
At this time there are different approaches to retain the youth in a native city. In conditions of mono-cities, it is possible to stop the migration outflow of young population by engaging the industrial enterprises, possibly by developing and implementing ‘talent management’ programs that are aimed
not only at providing intellectual and competence development of a staff composition, but also at its retention, which will be a result of interesting and entry-level job.

The term ‘talent management’ was firstly applied by D Watkins in 1998. Then it was used for creation of a whole personnel management system, that received worldwide recognition and formed a new trend in management in 2004. Such authors like E Farndale, F Stills, Sh Maurice, J Trevor explain the talent management as human capital assets management [1, 2], which academic economists like A Smith [3], W Petty [4], J Mill [5], A Marshall [6], J-B Say, L Walras, V Pareto, I Fisher, E Denison and others began to study very long ago. Modern understanding of this definition has an institutionalized set of knowledge, health and culture assets of an individual. That means, that the talent itself is understood as a set of characteristics inherent in a potential of a worker to bring high results [7]. Herewith a talent management system itself is focused on increasing productivity of personnel; on arranging a remuneration system taking into account a level of knowledge and skills of workers; integration of a reward system, taking into account contribute of each employee into a concluding result of the enterprise’s functioning; on retention of employees at their work places, and etc. [8]. According to E Michael, H Handfield-Jones, B Axelrod, the talent management is an activity aimed at engagement of employees into an innovative process, formation of creative incentives and development of creative potential of the employees [9]. It is obvious that all the above authors consider the talent management only as a source for solving problems of a certain enterprise, at which respective personnel management programs will be launched and ‘perspect’ personnel will be trained.

We think, that, under modern business conditions of mono-cities, this management concept may obtain a distinctly different meaning, and a scale of its result may have a territorial level of solving economic and demographic problems related to the young population outflow. For this, responsible executives of an industrial business shall consider each person aged 17-20 as a ‘potential’ talent capable of changing a current trend of economic development of mono-city by applying their knowledge and skills in production practice. The personal knowledge shall have two sources of formation: university and production, herewith each of them complements the other one and thus makes the competence formation process constant. That is why the enterprises shall be provided with an operating enterprise-university-enterprise cooperation system; extended portfolio of tools for development and increase of effectiveness/productivity of staff composition; developed career planning system which will be able to provide clear and transparent understanding of a future career and development plan of each worker; increased flexibility of control over a motivational package of employees referenced to the ‘pool of talents’ to increase a level of their engagement and, respectively, to retain within an organization.

3. Research methods and results

The mono-cities loose mainly the youth aged 16–35, for which a project of life is bound to a study and to a job. Causes for such a downward dynamic are the absence of qualified education in small cities and inability to fulfill a demand for a decently paid job. Besides, traditional occupations of citizens of mono-cities in Russia are railway employees, steelworkers, workers of other industrial enterprises not attracting the youth. For example, in Nizhny Tagil, only 17.3% of respondents plan to stay after finishing 11th grade, meanwhile 79.8% of respondents are sure that they will live in a major population city, but not in their native city (730 pupils in total have been quizzed). Such intentions prove reduction in a ratio of persons entering ‘local’ universities, confirming, that the youth ‘leakage’ trend has a constant form of development, which started from 2013, see figure 1.
To reveal main factors influencing on educational migration of the youth, 100 students of technical schools and 100 students of universities have been quizzed. In the first place, the respondents noted the absence of promising positions, as well as the absence of growth and development prospects that can only be obtained in large cities with a diversified economy, which makes it possible to find jobs in successful large companies (100% of respondents), see table 1.

Table 1. Factors of young population migration from Nizhny Tagil

| Young population migration factors | Students of technical schools, % | Students of universities, % |
|-----------------------------------|---------------------------------|-----------------------------|
| total number of students willing to leave | 33                              | 46.2                        |
| Nizhny Tagil                      |                                 |                             |
| no perspective positions (jobs)   | 100                             | 100                         |
| low wages at enterprises          | 87                              | 87                          |
| lack of leisure and recreation centers, as well as low level of safety | 54                              | 52                          |
| lack of educational facilities (or absence of state-funded places) | 45                              | 54                          |

This factor is also confirmed by the all-Russian and international trend associated with the fact that one third of respondents worldwide and 37% in Russia choose this criterion as the primary advantage of employers. In addition, 98% of respondents said that the ability to work under the guidance of more experienced colleagues and mentors is an important factor in the professional development of any novice specialist.

In second place, the surveyed respondents noted low wages, which are higher in metropolitan cities than in peripheral cities (87% of respondents) and differ significantly from the quality of education received at universities, see table 1.

The third factor established by the students is lack of leisure and recreation centers, as well as low safety level due to social tension in local community (53% of respondents). That is why the nearest city enticing the youth is Yekaterinburg, social culture of which goes back to the time of Peter the Great and is associated with formation of a mining and metallurgical center, that is in modern language a cluster in the middle Urals with a favorable intersection of trade routes and a wealth of
natural resources contributing to formation of the mining industry. The location of 39 higher education establishments in Yekaterinburg, many of which occupy high places in the Russian ranking of universities in terms of the quality of educational services and the prestige of studying at them, is also of particular importance. In turn, this serves as the basis for young people to move in and enter them, thereby independently solving the problem of Nizhny Tagil related to the lack of educational facilities or the lack of budget places.

Thus, the above factors serve as a basis for formation of the youth migration educational trend. In order to determine its stability, results of answers of students of leading Ural universities in Yekaterinburg are given: ‘Where do you dream to work?’, see figure 2.

![Figure 2. Answers for the question: ‘Where do you dream to work?’](image)

The results of the survey demonstrate unwillingness of the students to return home, but willingness to stay and find a job in a city of study (50% of respondents) or move to another city (14% of respondents), or migrate to another country (9% of respondents quizzed). Only 5% of respondents quizzed want to return home in Nizhny Tagil. The presented answers confirm stability of the youth migration trend and transformation of its educational form into the labor one.

4. Solutions and conclusions

The above presented factors defined as the basis for the educational migration, as a result, are the primary factors of the youth labor migration. That is why they shall be minimized by city-forming enterprises in order to retain the youth of working age in highly specialized cities.

The main industrial enterprises of Nizhny Tagil are: JSC ‘Research and production corporation ‘UralVagonZavod’, with the staff number of 29,800 persons (as of 01.01.19), and JSC EVRAZ NTMK, with the staff number of 19,900 persons (as of 01.01.19), jointly provide employment for more than 20% of working-age population of the city. They have possibilities to master new technologies, successively develop models of transport and special machines and implement them in batch manufacturing, master production of wide range of civil products and manufacture exclusive military products in the Russian Federation. All this points at the fact that these enterprises have high potential to influence on youth migration flows by developing ‘enterprise-university-youth-enterprise’ cooperation networking program oriented at formation of attractive space for education, creativity and work, and by taking the following management steps.

First of all, these enterprises shall put the management accent on education. To do this, special programs of cooperation with leading specialized universities, which consists in ‘targeted training of specialists’ is needed. These programs will also allow ‘growing’ engineering personnel at the enterprises based on consistent formation of skills from simple to more complex, from mastering a working profession to a technician, engineer and leading engineer. A comprehensive context of these programs shall provide active participation of the industrial enterprises in studying at industrial sites with engagement of specialists from production, inclusion of students into corporate norms of
organizing production and productive relations, participation of students in solving actual production tasks. In this case, an economic result is minimization of expenses for adaptation of young specialists at new workplaces.

Secondly, it is necessary to put the management accent on investments into the human capital assets, a bearer of which is not only the employed youth, but also future, potential personnel, that are university students. In the first case it is necessary to provide constant improvement of qualification and perform professional retraining of employees based on an individual approach to training of young specialists at sites in a form of mentoring. In the second case the industrial enterprise in cooperation with universities-partners shall perform tours in order to familiarize the youth with activities of the enterprise and improve the image of technical personnel. In addition, the students will be interested in engineering projects contests, the supervisors of which shall be both university professors and technical professionals of the enterprise itself. Moreover, the city-forming enterprise has a potential to organize summer specialized educational sessions uniting the students from universities and the specialists from enterprises-partners.

Thirdly, the management accent of these enterprises shall relate to an employee incentive program, which shall combine financial and non-financial incentives in the field of improvement of professional and novel skills, which will provide attraction and retention of qualified personnel, increase interest of the working youth in job performance. That is why the financial incentive shall take into account and be aimed at novel activation of the employed youth. The non-financial incentive shall be related to participation of the enterprise in preparation and improvement of qualification of teaching staff, participating in implementation of the programs presented above, as well as in creation and development of material and technical facilities to implement a new format of dual education system.

Based on this triad of actions, the youth migration outflow will decrease by implementation of modern talent management concept, adapted to conditions of business practices of a certain city, in a form of through trajectory and modern engineering and technical education. In terms of its contents, it shall have three stages of influence on formation of a working individual: first of all it shall begin in attitudinal events in schools/technical schools conducted by heads of industrial enterprises, and then move on to the educational level at universities, organized jointly with the basic business of the territory, and then give way to corporate ‘field’ events aimed at developing and retaining the youth at industrial enterprises of a highly specialized city. Only in this case the ‘talent’ management concept will obtain not only endogenous, but also exogenous social and economic result.

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