

The assistance of a University graduate's career with using the ecosystem «Career Tech»

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Abstract. Today, universities are increasingly perceived as active participants in the processes of regional development and corporate relations, and the role of the University is not limited to educational activities or science and research jobs. Universities are urged to solve the problem of attracting young people to production in order to ensure the normal reproduction and sustainable development of business, and at the same time provide the opportunity to find the place in society for their graduates, to realize their abilities in present dynamic social-economic conditions. The importance of the problem of effective employment of University graduates is also due to the perception of young people in society as the most socially unstable ("explosive") group. It requires the creation of graduate employment ecosystems, especially in peripheral regions. The ecosystem model proposed in this article, aimed at promoting employment of graduates and creating conditions for their career development, can be used as an information, analytical and infrastructure basis for integrating young people into the labor sphere of life, for expanding the number of stakeholders and harmonizing their interests.

1 Introduction

In current conditions, universities practice an active policy of employment of graduates based on the development of their ecosystem. The University ecosystem is a flexible system with multiple connections that can quickly respond to external and internal changes. The essence of an active policy of employment of University graduates on the basis of the development of its ecosystem is that the University tasks to the graduate of employment at the initial stages of training and offering appropriate assistance using its multifunctional infrastructure, organizational and human resources (the University ecosystem). This approach to employment of graduates allows them to design professional self-determination as a process of forecasting and planning of their career throughout the entire period of training. This process is practically implemented in the goals, tasks, content and means of personal self-realization, and search and find meaning in the chosen professional activity.

Career planning in the active policy of University graduates employment can be perceived as integrative quality of the personality and consider as the readiness of the individual to be a subject of the labour market and professional self-determination in close connection with cognitive, activity, motivational-value and reflective-evaluative components through linking the "want", "must" and "can". In fact, we are talking about individual typological features of the individual, represented by temperament, character, motives, needs, attitudes, value

orientations of the individual; about expectations, claims, ambitions of young people concerning the goals, content, objects, means, working conditions, its restrictions in society and the requirements of the Federal and regional labor markets, requests of specific employers, certain areas of production, trends in society, etc. [1].

The purpose of the article is to reveal the possibilities of a modern University for implementing an active employment policy for its graduates based on the application of its ecosystem.

Research objectives:

- to consider the employment of graduates on the basis on the University ecosystem;
- to offer a model of the University ecosystem for implementing an active employment policy for its graduates;
- to reveal the interaction of the University and the business environment in the proposed model of the University ecosystem to promote employment of graduates.

2 Materials and Methods

Research Background. One of the first researchers to apply the term "Ecosystem" to the economy was Michael Rothschild [2]. This concept was developed by Charles V. Wessner [3], Rucker Schaeffer Paola, Fischer Bruno, Chieroz serjou [4], G. V. Osipov [5] and others.

The position of young people in the domestic labor market in current conditions is analyzed in the papers of Yu. n. Dorozhkin [6], T. I. Zaslavskaya, M. A. Shabanova [7], I. K. Zolotova [8], O. A. Rakovskaya [9], V. I. Chuprov [10-12] et al.

The empirical base of the research is represented by the studies of domestic and foreign scientists, own analytical works of authors.

Approach and Methods of Analysis. The study used methods of analysis, synthesis, comparison, deduction, abstraction, system and dialectical approaches to substantiate the features of the proposed model of ecosystem of planning and developing a University graduate's career.

3 Results and Discussion

The digital transformation of society is changing the content and approaches to higher education and the role of universities in increasing the competitiveness of graduates in the labor market. Currently, there are two basic objectives for the higher education: 1) universities should work to develop students' "skills of the future"; 2) universities should not just train personnel for the labor market, they should cultivate talents for the "knowledge economy".

In 2017, a direct interview method was used to study the popularity of the Siberian state industrial University in Novokuznetsk (SSIU). The 1st-year students of the University took part in interview. The highest satisfaction that influence the choice of University by entrants was noted by respondents, in the following indicators: the availability of distance learning, extracurricular activities, and the presence of additional education. The lowest satisfaction – on the criterion of the guarantee of employment after graduation [13]. Thus, creating an environment that promotes employment and career start for a future young specialist is a serious area of work for SSIU, which require the University to transform its activities. In addition to forming the student's competencies for the digital economy, the University began to create conditions for employment and the formation of the beginning of a graduate's career, which became the second significant function of the University after educational activities. Of course, the University paid attention to the issues of employment of graduates earlier [14,15]. But the proposed ecosystem model makes it possible to expand the number of

stakeholders by using an integrated digital platform, to harmonize the interests of a larger number of stakeholders, ensuring the preservation of a temporary resource.

The designed ecosystem "Career Tech" with the help of computer tools and cloud services creates conditions at the University for early career formation of future applicants and students. The "Career Tech" Ecosystem model of SSIU is shown in figure 1.

Starting at school, prospective applicants have the opportunity to expand their social contacts by interacting with the University in a virtual environment. To do this, SSIU offers them career guidance programs; participation in University events: Olympiads for schoolchildren, scientific conferences, participation in joint projects, courses for passing exam, training for obtaining additional skills, for example, in nano-technologies, robotics, modeling, etc.

This approach allows school-children to get acquainted, actively interact and even move within the University's scientific and educational environment. Having access to communications with the University, pupils of lyceums and secondary schools can virtually attend test lectures, "walk" around the University, see its laboratories and equipment, get acquainted with the major stakeholders of the University and, thus, more consciously choose the University and the direction of training in it. In turn, interacting in a joint eco-environment with secondary educational institutions, SSIU can attract school graduates which have high results to enroll, especially important in the context of increasing regional migration.

After entering the University, the professional interest and motivation of students begin to increase due to offers to participate in scientific and educational projects, cultural and corporate events of the University.

During the "rotation" of students in the "Career Tech" information ecosystem, their best personal qualities are revealed, career guidance is provided, and as a result, the future graduates begin to consciously predict and plan their career. They have the opportunity to form their career by responding to invitations of University employee and employers: 1) to participate in scientific research, scientific publications and subsequent admission to master course and postgraduate programs; 2) to gain new knowledge while studying under additional professional education programs; 3) to participate in the activities of the trade Union Committee, student Council, construction teams, volunteer movement, etc., which contributes to the development of universal competencies, such as leadership, activity, initiative.

The "Student assessment Center" created at SSIU within the ecosystem should implement one of the main functions of managing the employment of graduates and the formation of their early career. The main objective of the "assessment Centre" will be the systematic assessment of growth of educational and professional potential of students; evaluate the effectiveness of forming of project teams, assessment of students, a reasonable estimate of their capacity for science leadership teams (heads of groups, heads of project teams, leaders of volunteer or construction teams), all letters of recommendation to employers, identify of needs for additional education, based not only on the interests of the University, but also individual preferences, ranking and preparation of materials for creation of a database of the characteristics of students which are considered when employers review candidates for employment.

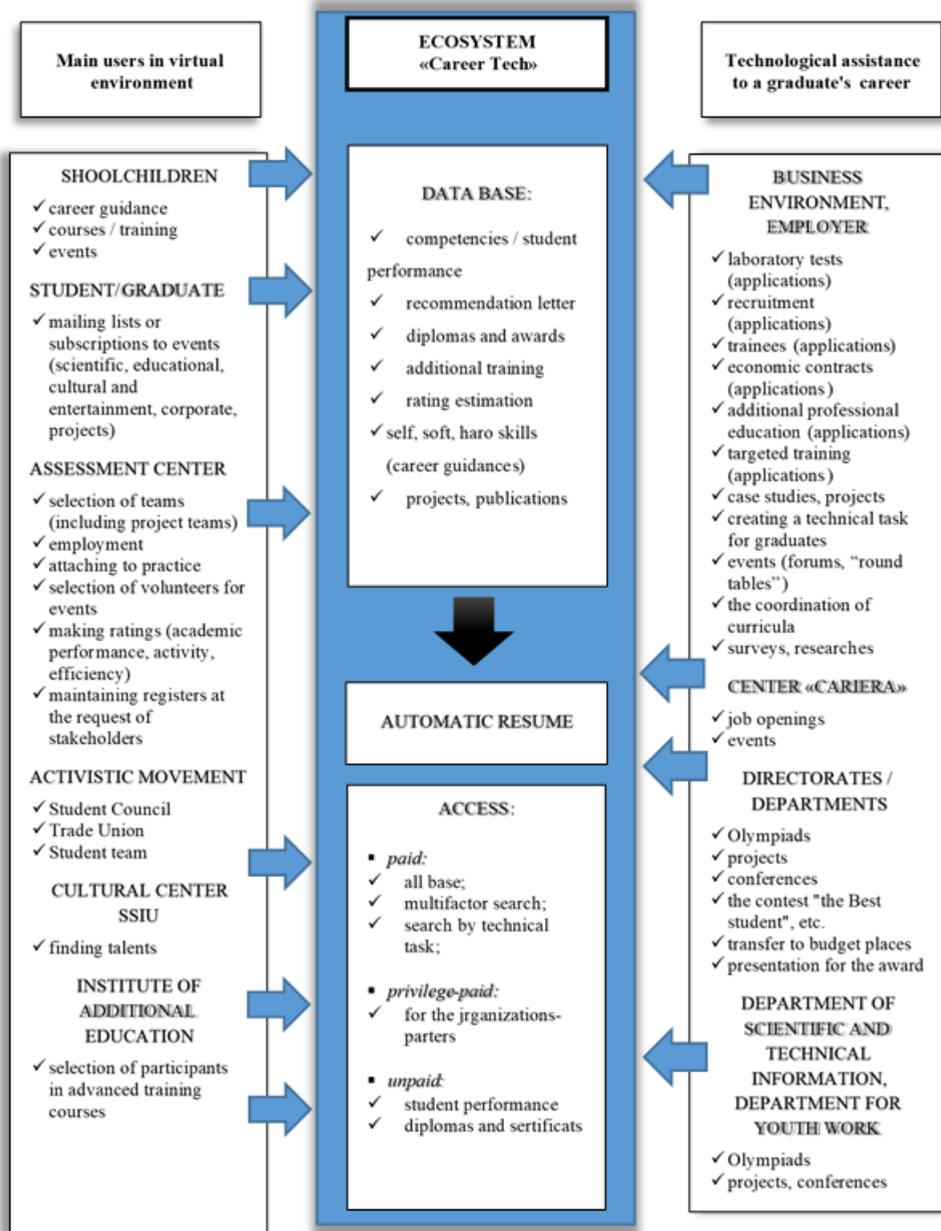


Fig. 1. The proposed model of SSIU ecosystem «Career Tech»

In 2020, major SSIU employers involved in the University ecosystem were interviewed. The study showed that business will be happy to use the y and its departments when applying for laboratory research, recruitment, contracts, etc; 2) ease eco-system because of: 1) the availability of services for distance interaction with the University of use (as a principle of "single window" in state institutions); 3) saving time for official circulation and formalize interaction with the University (faculties); 4) the availability of system information product with the insider information of the University about the generated skills of future young

professionals. Due to this information system the employer can remotely interact with students to attract them to jobs, internships, events and employment.

Also, according to the results of the interview, some problems of the existing system of interaction were identified that restrain the achievement of high employment rates. For example: 1) lack of competence in the legal regulation of interaction between employers and educational organizations. As a result, there is an increase of mismatch in the expectations of employers and graduates during employment; 2) difficulty of interaction between SSIU and employers of medium and small businesses. Traditional interaction techniques exist in the format of "the University - a large organization." Such organizations have long-term plans for the development of production, stable incomes, a large staff, and, accordingly, job opportunity. Medium and small businesses, and especially individual entrepreneurs, have much fewer opportunities and resources, but they also have a deficit of personnel. Within the created SSIU ecosystem, tools and interaction technologies are emerging that provide access for various types of stakeholders.

4 Conclusion

The obtained results have a practical value: application the created ecosystem model "Career Tech" in the University expands the possibilities of attracting best schoolchildren for admission to the University. Also it creates a closed circulation of resources in the ecosystem (human, informational) that increases the efficiency of joint activities, builds mutually beneficial relationships which redistributes the potentials of the "knowledge and skills", increases quality control of training of students, raises the degree of congruence of stakeholder interests.

The created model has significant advantages over the existing ones, primarily focusing on promoting the career of graduates. It is also characterized by the ability to quickly adapt ecosystem elements to a changing institutional environment and scalability – the ability of the ecosystem to narrow and expand.

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