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THE USE OF PRIVATE START-UPS IN HIGHER EDUCATION

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ABSTRACT

Nowadays, education faces the problems that do not favor its further development. Modern conditions of educational system reformation lead to the growth of requirements to the level of specialists' professional training. The main purpose of the research is to increase the quality and speed of learning through all the means that become available by virtue of digital environment. For this purpose, the experiment was conducted that involved 400 students. The participants of the experimental group were to distribute and fulfil project tasks. As a form of the students' practical training, the work with startups has a range of specific features and advantages. First of all, it implies students' involvement into a real project the results of which will depend on the quality of their training, their motivation, willingness to immerse into the field that is researched as deeply as possible, as well as on their interest to the subject of a project. The result of the project was an extensive work that included drafting a business plan. 60% of students used online startups as an assistance for planning the work, whereas 40% made it by themselves. It was discovered that 50% of students developed interesting business plans and widely described the ways of their usage, whereas 9% of students prepared the reports on the basis of their work and spoke at scientific-practical conferences. Besides, an experiment was carried out among the teachers. In order to check their non-standard ideas, 92 CVs of the workers who founded innovative startups, mainly in IT field, were gathered. In order to form a representative sample, we randomly selected entrepreneurs from the short-lists that were based on the search requests in Professionali.ru Web. The research showed that during training in the field of business management, a future founder can acquire enough skills in a form of explicit knowledge in a certain field. However, he will have to increase its level in order to transform his startup into a business project.

Keywords: Business Planning in Education, Startups, Viable Business Model, Entrepreneur-Innovator.

INTRODUCTION

In order to stay in contact with modern society, to follow or pace or to be in advance, those ones who decided to initiate their own startup, must become successful and be open for the challenges from their business partners (Olokundun et al., 2018). The paradigm of the state monopolization of the education services market became obsolete. There is a need for the new ideas of the users who are interested in optimization of the learning process (Singh, 2014). Private business projects that do not require seed funding from their developers (startups), fundamentally change the situation in the modern market of education services, because they require nothing from a creator of idea but to attract more partners. Educational startup projects in the developed foreign countries are more widely spread than in Russia (Blank & Dorf, 2017).

The realization of startups requires understanding of a market need. Its identification is one of the most difficult elements for entrepreneur. You may have a perfect idea, but you need to get acquainted with educational space, to speak to teachers and try to clear up the situation. Then, you will need to demonstrate the skills in order to create a solution and see whether other people will approve it (Olokundun et al., 2018).

Public education is strongly regulated, that is why it doesn't function under normal market conditions. Every entrepreneur who enters this space must be able and ready to help the new-comers (Fornell & Larcker, 1981). If everything you have is a passion for profit, your business will not be very successful. That is why, the main task of the article is to provide examples and methods of a successful realization and formation of a clear strategy of organizing startups in higher education.

The data of the international recruiting web-site *"Staff.com"* that coordinates interaction between employers and employees from 27 countries, show that during 2004-2018, 13 startup companies were created. By the end of 2018, they became the most famous ones in the world of startups (mainly, Internet-companies). Their estimated market value is billions of US dollars (Anderson & Gerbing, 1988).

According to statistics, 70% of startups go out of business during the first year, whereas 40% of the remaining 30% do not "*live up*" to their second birthday (Katre & Salipante, 2012). According to analysis results of startups that went out of business during 2010-2018 (according to CB Insights company), various Internet-startups are the first to go out of business. They are followed by mobile technologies and telecommunications (Aernoudt, 2004; Akhmetshin et al., 2018).

The development and functioning of startups in Russia are greatly influenced by the state. Since 2010, the Ministry of Economic Development has been realizing the program of stimulating venture investments into small enterprises in the scientific-technical field (Beliakov & Zazdravnykh, 2017). Within this program, more than 20 state-private venture funds were created in various regions. In a year, they were taken over by the Russian venture company that was created by the Ministry. The main state institutions that provide assistance for startups include the following: The Agency of Strategic Initiatives, Skolkovo innovation center, The Fund of Internet Initiatives Development. The Russian venture company plays the role of the head of funds and positions itself as a partner of private institutions in their formation and management. But, at the same time, it doesn't forget about its own investment fund (Turner & Mulholland, 2018). Big incubators are organized in universities (e.g., at the Higher School of Economics, Financial University, Moscow State University and under the Government of the

Russian Federation). Technology parks and innovation centers are founded as parts of the ambitious projects such as Skolkovo or Innopolis (Krauzova, 2013).

Research showed that Russian funds are focused upon startups in the field of information technologies. They are followed by industrial technologies, whereas biotechnologies occupy the third place. The main reasons for such choice include a wide Internet audience, cost effective infrastructure of project support and investors' interest in a quick return on the funds that were invested (Armitage et al., 1999).

In relation to the modern methods of estimation of startups' value, we can unequivocally state that they become more and more conscious and adapted to the real conditions of modern business. For example, the evaluation method of the value of Internet-companies with due regard to the number of users (Wilson et al., 2007) is the most relevant and appropriate for IT-startups. However, during the initial stage of a startup, the users are only beginning to emerge. Thus, there is a lack of information to make such evaluation (Armitage et al., 1999).

Let us estimate the investment sources of startup projects. As of the 1st of January, 2017, a bit more than 10% of funding of all startup projects were associated with business accelerators (Armitage et al., 1999). Startup accelerators help young firms during the earliest stage of their development. The activity of accelerators is similar to that of business angels, though accelerators do not always take their share. First of all, they carry out educational function. A typical accelerator forms training groups of several startup-teams and teaches them during 3-6 months, helps them to bring the product to the market, to verify business-model, provides with necessary contacts and introduces to the investors. As of the end of 2017, one fourth part of all the projects in the Russian Federation was funded by virtue of business angels. One fifth part was formed by the projects that were funded on the basis of grants. This funding option for a young project implies participation in specialized competitions that are held by venture funds, state and local authorities, big companies, universities, etc. The winners are granted a certain amount of money on a return-free basis. Or, the funds can be provided on interest-free basis (Palchikov, 2013).

The investment of startups by venture funds and corporate investors has nearly the same share in the financial support of startup-projects. This process implies applying to a fund with a business plan that is formed in a classic manner. Funding is possible only in case if a fund or investor displays its/his interest in the project (Palchikov, 2013). A characteristic feature of this way of funding is participation of organizations in business. This implies the creation of a joint legal body (Wirsing et al., 2002).

As of the end of 2018, the statistical data on the investment costs is as following: nearly 70% of startuppers develop their project either with their own funds or with the funds that were obtained from relatives and friends (up to 5000 USD). At the same time, 25% of projects are funded by business angels' investments (up to 50000 USD), 19% are supported by the Russian and foreign grants (up to 150000 USD), 15%-by venture funds (up to 500000 USD) and corporate investors (up to 1000.000 USD), 26% are funded by the development institutes and publicly owned funds (up to 3000000 USD) and business accelerators (over 3000000 USD) (Nikitina, 2018).

Identification of funding sources for a startup project is a difficult and many-sided process. First of all, successful development of a startup requires optimization of the structure of its funding sources, especially, at the initial stage. Besides, there are several problems that impede the development of this market. The main purpose is to solve these problems. Usually, innovative products are oriented towards a local market. In this case, the state needs to be an

active consumer of innovative products itself. It should ensure the demand for them and serve as an example for other participants of the domestic market.

METHODOLOGY

A new approach to the additional education is important for innovation policy. The identification of a possible trajectory of the improvement of competencies, the content of innovative entrepreneurs' further training are also relevant in terms of the realization of certain provisions of the national innovation policy. Let us refer to the fundamental characteristics (work experience and education) as initial basic conditions for the creator of innovative startup and characterize them in terms of knowledge management (Korshunov & Gaponova, 2016). In this relation, education is, first of all, a transfer of explicit knowledge. So, it must be close to the future field of innovative activity as much as possible. That is why, the field of high technology startups is mainly prevailed by specialists who are trained in the field of technical or natural sciences. At first glance, this premise seems to be rather obvious (Roshchin & Rudakov, 2014).

The students who study by higher education programs of the Russian Federation are divided into three main groups: bachelor's degree course, specialist's program and master's degree course. According to our estimate that is based on the demographic data of the Russian Statistics, the number of students who study by bachelor's and specialists' degree courses, will decrease during 2019-2024, whereas the number of master's degree students will increase. The all-Russian survey that was conducted by the Fund *"Public Opinion"* showed that half of the Russians (53%) stated that only few universities provided a good, qualitative technical education (73% of highly educated citizens share this opinion), whereas 23% of respondents stated that there were no such universities at all. Every fifth respondent (22%) was sure that there were a lot of good universities in Russia; the same number of citizens were not sure with the answer to the question of the education quality. It is interesting to note that the resources of their region were evaluated by the Russians in a more optimistic way: 32% of respondents stated that there were a lot of universities in their region that provided good education, whereas 44% said that the number of such universities was small.

According to the data that were provided by the local statistical authorities, as of the 1st of January, 2017, there were 77367 subjects of small and middle business in Kazan who carried out their activity. 45954 of them are represented by small and micro-enterprises, 189–middle business, 31224–private entrepreneurs.

During the last few years, a lot of informational resources have been created in higher education of Kazan region (Merzon & Ibatullin, 2017). These educational platforms help young entrepreneurs to know about the bases of founding a company, about the instruments that they will need and the events where they can gather a team. We researched the condition of small innovative enterprises in Kazan that were aimed at education. A lot of existing small innovative enterprises were created as a result of participation of Kazan State University of Architecture and Engineering in the program *"Start"* that was held as a part of the competition *"Fifty best innovative ideas for the Republic of Tatarstan"*, in the programs of the Investment-Venture Fund of the Republic of Tatarstan, of the Foundation for Small Business Support in the Science and Technology Sphere (Bortnik Fund) that are aimed at supporting innovative enterprises. Scientific and technical projects that were realized by our scholars of higher education institutions were honored with a range of prestigious awards. They served both as a prize and motivation for further success. The total number of applicants who presented their projects for the competitions *"Russian Startup Tour"* (2014), *"Rules of Growth"* for the best innovative idea, *"Brainbox"* and

Bortnik Fund was 270. It was identified that there were 80 small enterprises that were registered in Kazan. 18 of them are represented by university teachers, whereas 20 subjects of innovative activity are at their seed stage.

Thus, according to the results of questioning, more that 60% of innovations are created in universities of Kazan (150 projects). Individual projects represent only 6% of the overall amount of startup projects. The reason is that in comparison to small innovative enterprises that have opportunities to independently create and commercialize innovations, individual startups face a range of problems during the realization of innovative ideas. These problems include the absence of financial resources for the realization of the project; impossibility to implement certain projects due to the lack of resources; the lack of experience in organizing business in this economic field; inability to resist to competitors (big innovative enterprises) due to the limited funding.

In the experts' opinion of *"Growth Technologies"* agency, there is a tendency towards a rapid growth of online-segment of language services market. It became one of the most developed startups because the very model of its usage is changing. On the one hand, the audience became more sophisticated in relation to the quality of services and teachers' competencies. On the other hand, it tries to optimize the expenses while preserving the quality of services. Only five years ago, the most active members of the adult audience of language schools were the groups of professionals with relatively high rate of income (do Paço et al., 2011).

Nowadays, the consumer group of these services is more diverse and covers the categories of people with lower education and income level. This also favors the growth of demand for online-learning which, according to the average check amount, turns out to be cheaper and gradually outpaces the offline-learning. Traditional language schools have to adapt standard education programs to the requirements of the new audience segments, whereas the audience itself often needs cyclic and short-term courses that develop special skills (e.g., mastering of the professional vocabulary, business correspondence skills, speaking skills, etc.) (Ibatullin & Anisimova, 2017). The survey of the university students showed that more and more of them were not satisfied with the results of attending traditional language courses. That is why, we can state that the teaching level has decreased and caused the problems with adaptation of standard education programs to the new requirements of the audience (Rubin et al., 2015).

Nowadays, private companies and big universities offer thousands of online-courses in applied specialties. Driven by the desire to acquire new knowledge in the shortest terms and being within the limits of working schedule, 10% of the Russians who seek further training, choose webinars and Skype-workshops. An average check amount for education in this segment is 15000 RUB a year. Students use remote technologies in order to master higher education program. In this case, the check amount goes up to 42600 RUB a year.

The market of private school education is rapidly growing: it is expected that within five years its volume will rise up to 41 billion RUB a year. Characteristically, 59% of parents accept that their child will receive education online. Online education is mainly used by the Russian pupils to prepare for the main state exam and uniform state exam. In 2016, this segment accounted for 3.6 billion RUB (Blank & Dorf, 2017; Kurilova et al., 2018).

The Russians demonstrate great interest to studying foreign languages. The proportion of the language education market audience within the age group 25-64 is 2% of the total population or is more than 1 million of persons. 89% of them study English. It is expected that by the year 2021, the volume of the Russian language education market will increase up to 24.6 billion RUB, whereas its online share that now equals 7% or 2.2 billion RUB will increase up to 10.7%

(Olokundun et al., 2018). In 2017-2018, the expenses of the Russians for online-tutors and web-courses stopped at 4.600 RUB a month. Online-learning market is full of business courses and technologies, whereas the programs that are aimed at developing creative skills are absent. As a new startup in this environment, Talentsy company entered the market with a unique product.

This is a platform for creative development that combines online-courses of makeup design, knitting, handiwork, styling, clothes design, drawing and many other creative fields. The creators of Talentsy organized a special department the task of which is to search and select the authors. They are involved into creation of a content that is absent in other Internet resources. A social survey was conducted to research the attitude towards online-courses (Figure 1). It was carried out among university students (Kazan Federal University, Ural Federal University). 60% of them mentioned Talentsy (Row 3), 35% use American resources (Row 2), whereas the remaining 5% (Row 1) do not use any courses. The percentage was formed out of the students who expressed their willingness to participate in the survey, mainly female respondents. Startups are mainly popular among young people aged between 18-20 years. They are actively striving to find their own niche in labor market or to create it by themselves in case if it is still absent. The popularity of startups abroad grows during escalation of financial problems, because this is the time when availability of working places for university graduates significantly decreases (Winkler et al., 2018). Trying to find a way to earn money and to obtain new professional skills, students have to create their own business that, according to their expectations, will be able to transform into a stable income. The practice of startups helps them to define interesting and perspective directions of further development, including searching for a job.

Despite of the leading positions of the USA and China in e-learning field, experts define Eastern Europe as a most rapidly growing region. The main driver here is Russia (Voisey et al., 2013). We represented a sample of startups from our experiment in a form of online resources that were used by the students of Kazan University. In general, 400 students took part in the research (280 female and 120 male students aged between 18-22 years old) (Figure 1).

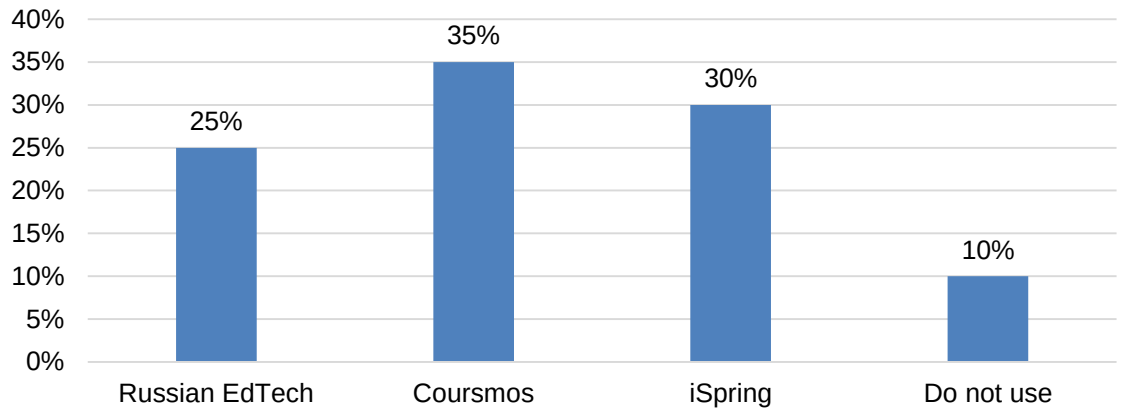

FIGURE 1
THE USE OF ONLINE STARTUPS

35% of Kazan University students used the Russian Coursmos. iSpring was chosen by 30% of students, and, finally, EdTech was used only by 25% of them. Only 10% of respondents didn't use any online startups. The results point to a great significance of the domestic startups.

Nowadays, there is a rather obvious connection between the people in Russia who are involved in venture investment and somehow represent the state or semi-public innovative structures.

The number of successful companies that were blown from a scratch allows to evaluate the development level of business space in various countries. Though it is evident that the majority of startups that we estimated in 1 billion of USD are situated in America, some successful companies work in Russia as well.

RESULTS

An interesting feature of the students' learning during the creation of a startup is their interest to technological process. Organization of production in newly created startups is critically important for the survival of a project. An ideal scenario implies that one of the founders is the developer of a new technology and involved in this task by himself at the initial stages. That is why, an adequate approach and introduction of certain startups into students' learning increase their progress and stimulate them to apply their knowledge and skills. Despite of a small number of women who expressed their willingness to participate in the survey, we found out that many of them do not use the resources of studying foreign languages as their direct specialties, despite of a great amount of various projects that exist today. This causes a problem for young entrepreneurs because they don't have an appropriate incentive and the audience to focus their idea. A lot of people have good ideas. But only a few of them express their willingness to try themselves and to realize them.

The programs of state funding of good ideas in education field are also important. They allow to launch business project at minimum expense. In order to identify and realize complex rating of the Russian perspective startups, to present them to the field-specific and non-specific Russian and foreign investors, a uniform startup expertise system was created in 2012 under the auspices of The Russian Venture Company LLC. The project was named *"Russian Startup Rating"*. Its main organizers are: *"GreenfieldProject"* company, *"Digital October"* center, *"The Center of Innovation Commercialization"*, *"Future Biotech"* company, *"API Moscow"* center, *"The Russian Venture Company"*.

A fresh idea, a thought through, grounded report, potential relevance of a startup will ensure its acceptance and further realization of idea. Nowadays, Russian authorities try to build the growing e-learning segment into domestic education system. The state wants to give universities an opportunity to regard online courses as a part of their formal program. Besides, the initial experimental program of blended learning is worth mentioning. As early as in 2016, the National Research University Higher School of Economics became a web partner of a range of Russian universities. This partnership allows them to use online courses of HSE in order to realize their own education programs. Now, HSE makes the next step and offers its universities-partners to teach the lecturers to work with such courses in blended learning format. This project is an example of borrowing the technologies and progressive and qualitative education from the leading universities.

In order to make such blended learning more effective, HSE organized a summer school. 24 teachers and 12 universities from Russia and CIS countries became its participants. During five days, they were taught the methods of seminars, practices and projects by the authors of online courses in HSE. Each of them is a leading expert in his subject field. Ural State University of Economics regarded this as an opportunity to tap into learning which is significant for them both in professional terms and for their image.

In terms of the functioning spheres, the following startups can be distinguished: ICT, biotechnologies, energy efficiency, nanotechnologies, other industrial technologies, services, etc. Of course, this is not an exhaustive list of remarkable and promising projects in the market (Table 1). The leader is Lingualeo, one of the perspective Internet services for studying English through play. This project became the winner of various ratings and startup-competitions. In 2012, Lingualeo attracted 3000000 USD investments from Runa Capital. *"Netology-group"* holding occupies the second position. In 2014, it obtained 2200000 USD from InVenture Partners and joined together with the center of school online-education *"Foxford"*. *"Netology"* brand combines several products: two-month courses on marketing, project management, design and programming, semi-annual programs of professional retraining, corporate training and library of video-courses. The company always preferred to motivate its users with money, and followed the model of paid content subscription. GeekBrains is the third leader. It is the most popular educational resource for programmers in Runet. Its audience is more than 640000 people and continues to grow. The company makes money of fee-based courses on various fields of programming, including game and mobile application development.

Adjustable volumes of materials that depend on a student's training level, modern and timely submission of information and availability are the key characteristics of our three promising projects. Most of these skills can be acquired through learning in Internet in the comfort of your house. Dozens of professions will pass into oblivion even at the moment when classic education institutes still teach specialists in these fields. Thus, new and current generations will be able to stay competitive only through continuous learning which is successfully ensured by this online sphere of startups.

Table 1
PERSPECTIVE INTERNET SERVICES

Name	Income	Number of users
Lingualeo	3000000 USD in 2012 3800000 USD in 2014	16000000
"Netology-Group" holding	2.200.000 USD in 2014	2100000
GeekBrains	500000 RUB in 2014	640000

Students are constantly online. Thus, in order to train them, teachers must adequately navigate in their environment. The employers are interested in the students who are ready to work from a start. This requires the ability to work with new technologies. Thus, speeding of the processes of creation and functioning of startups as significant elements of the Russian national innovative system necessitates institutional clarification of startup-companies' status and its fixation in Russian legislation. Besides, there is a need to solve the above-mentioned organizational, information, investment, marketing and other problems. Education sector is ready for competition. After a while, we see a huge amount of opportunities for teaching the skills in the field of exact sciences. In Russia, the segments of traditional and online-education almost do not intersect. That is why, it faces the problem of training the specialists in the emerging professions and, consequently, the problem of the general economic competitiveness in order to cope such a global challenge.

DISCUSSION

As the brightest example of US business statistics, the main part of economy rests upon promotion of small business. 543000 new startups are launched each month. 60% of the

Americans view the USA as a country that favors entrepreneurship. According to the data of the leading US entrepreneurship school Babson College, in 2014, 14.4 million of citizens were self-employed. This accounts for 6.6% of the total labor force (Mulholland, 2018). Women become the founders of startups only in 8% of case. In most cases, new business is launched by men. The majority of entrepreneurs are young: 54% of the total number is formed by the people aged between 20-34 years old.

Another example is Germany with its Code University. This is the German university for programmers. This is not an ordinary university, but university-innovation, in fact, a great startup idea (Turner & Mulholland, 2018). It offers three bachelor's programs: *"Software Engineering"*, *"Interaction Design"*,*"Product Management"*. The main characteristic of the knowledge that is taught is not its scientific character, but its practicability and opportunity to realize it. The founder of the university is Thomas Bachem. He was an ordinary economist. This project made him millionaire when he was under 30.

While studying in university, he created a video-portal, online-game and a web-site that helped to draft a CV according to the latest requirements and to post it to the Web (Rubin et al., 2015). The main teaching method is a group project work, involving enterprises, startups and public organizations. The classes are in English. *"Competence profile"* is drafted for each student that rates his skills by the scale from *"0"* (*"the skill is absent"*) to *"8"* (*"a sound grasp"*). This helps a student to trace his progress. Mentors help students to choose the focus of their learning and to develop their own learning scenario. Learning process is similar to a game: level by level, the students learn certain portions of knowledge that they lack and that will be of great demand in future (in the organizers' opinion). The abilities to think in a creative and critical manner, to work in a team, to effectively communicate are also included in this *"set"* (Schlaegel & Koenig, 2014).

The case of China is different. Speaking of the policy in a communist state, we can see the tendency towards gradual implementing of the Western standard in education. First of all, this enhances the students' independence (Wu, 2017). After more than thirty years, we see the same state-owned, but rather independent educational organizations. For example, recently, the Chinese authorities launched a new funding program for 42 universities. Its aim is to improve the positions of these universities in international ratings. Educational startups still face challenges. In 2015, only 5% of them started to make profits. Hundreds of other startups had to go out of business.

However, according to iResearch data, it is expected that by the year 2018, online education market in China will account for 30 billion of USD. This is almost twice more that in 2015 (Beliakov & Zazdravhych, 2017). For example, in 2018, such projects attracted nearly 137000000 USD of investments, whereas in 2017, the amount of investments was already 1 billion of USD.

Such giants as Tencent and Alibaba, following world trends, hurried to integrate their services with the existing platforms that offer video-courses as well as with the investments to educational startups. During the last twenty years, the government actively used television for broadcasting agricultural programs to the audience of many millions in order to close the gaps in the basic education in remote regions of the country (Voisey et al., 2013). Nowadays, those Chinese who due to certain reasons were not able to get into a college or university, use mass open online-courses. In China, these are not simple courses, they include the notion of remote learning in general.

The Chinese startup Guokr is also worth mentioning. It was launched as an online community for exchanging with scientific works. But, in 2013, after shifting to online-course form, it appeared in the list of portal that offered courses for Coursera, edX and some other platforms. Recently, big Chinese companies started to discuss the need for establishing clear rules and requirements for startups in educational field. It is especially important in case of a project that is funded by the government. Many startups are not methodically elaborated, whereas the system of the points or certificates do not reflect the real learning results (Singh, 2014).

EcoRise youth innovations include launching of EdCo that becomes more and more popular. Gina LaMotte is its CEO and founder. She is a social entrepreneur who is interested in discovering the power and potential of the young people as leaders, innovators and seers (Winkler et al., 2018). Prior to EcoRise, LaMotte spent ten years working with innovative educational programs that provided services to young people in Brazil, India, Nepal, Guatemala, Harlem, New York and Taos, New Mexico (Singer et al., 2015). In 2004, she moved to Austin, Texas, and developed the first summer and after-school program in *"Title One"* secondary school. She also organized a program of the youth cultural exchange in Rio de Janeiro (Brazil) and was a coordinator and consultant at the World Youth Summit.

Currently, the market volume of EdTech is 165 billion USD. It is expected that it will increase more than by 5% each year. One of the most rapidly growing regional markets in online-education is Western Europe with Russia as its leader. In experts' opinion, the average annual growth of the Russian online education will be 20%. According to the recent data, in 2017, the volume of the Russian education market was 1.8 trillion RUB. At the same time, the share of the online-technologies is 1.1% (20.7 billion RUB). Within the next five years, it is expected to reach 2.6%, or 53.3 billion RUB. As practice shows, only a small part of the students' startups finally manages to attract an investor. Depending on the location, the first investor can be a state program of entrepreneurship support and development (Canada), a municipal program of innovation development in a region (Spain), various innovation and student funds (the USA), venture funds (Germany, France). Their investments are usually small and aimed rather at stimulating the creation of new ideas than to provide a real assistance in promotion of a startup. They imply support in the creation of a prototype of the final product and favor the selection of viable students' startups. They account for nearly 30% of the total amount of projects that are developed in university. Only a few of them will manage to go through all the stages of entering the market and searching for serious investments that will help them to become a successful business.

CONCLUSION

New tendencies and approaches to using the startups significantly influence and change education system. In fact, traditional lectures and practice forms are not needed any more. Sometimes, studying in university was accompanied by negative emotions that the students felt after lectures. The offered program complexes allow to solve such problems as insufficient knowledge base or practical aspects. The use of a complex of startups by a teacher will significantly improve educational process. If he is not interested in being perceived, he must stimulate students to create new good ideas by themselves.

Strengthening efforts that are aimed at complex solution of the above-mentioned problems on the part of all participants of organization processes, ensuring necessary conditions for functioning and regulating the activity of startups will favor the achievement of a strategic

aim of the realization of innovative model of supporting a competitive, stable and safe development of economy in the Russian regions. Within the program of the public-private partnership, with the support of the Ministry of Economic Development of the Russian Federation, the Fund accumulated the Kazan budget funds to establish the first Closed Shareholding Investment Fund *"Regional Venture Investment Fund"* to support small enterprises in the scientific-technical field.

During the last few years, a lot of informational resources and educational platforms were created to support entrepreneurs. They allow to know about the bases of founding a company, about the instruments they will need and the events where they can gather a team.

At the same time, the problem of attracting the investments for startups is still relevant. Due to this, the creation of mechanisms for attracting private investments to innovative enterprises and projects is necessary. In our view, electronic platform can become one of these instruments. It will serve as an instrument of informational support for innovative startups and as a way of attracting new investors.

Creation of electronic platforms that ensure interaction between startups and investors will provide wide opportunities for effective presentation of innovative projects, for a comfortable and effective communication between all the categories of market participants and for informational-analytical support for small business.

REFERENCES

Aernoudt, R. (2004). Incubators: tool for entrepreneurship? *Small Business Economics, 23*(2), 127-135.

Akhmetshin, E.M., Kovalenko, K.E., Mueller, J.E., Khakimov, A.K., Yumashev, A.V., & Khairullina, A.D. (2018). Freelancing as a type of entrepreneurship: advantages, disadvantages and development prospects. *Journal of Entrepreneurship Education, 21*(2S), 1-10.

Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411-423.

Armitage, C.J., Armitage, C.J., Conner, M., Loach, J., & Willetts, D. (1999). Different perceptions of control: Applying an extended theory of planned behavior to legal and illegal drug use. *Basic and Applied Social Psychology, 21*(4), 301-316.

Beliakov, V.G., & Zazdravnykh, Y.A. (2017). Professional experience and education of the founders of the Russian innovative startups in terms of knowledge management. *Innovatsii, 3*(221).

Blank, S., & Dorf, B. (2017). *Startup: Founder's handbook*. Alpina Publisher.

do Paço, A.M.F., Ferreira, J.M., Raposo, M., Rodrigues, R.G., & Dinis, A. (2011). Behaviours and entrepreneurial intention: Empirical findings about secondary students. *Journal of International Entrepreneurship, 9*(1), 20-38.

Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Ibatullin, R.R., & Anisimova, E.S. (2017). Construction of individual educational trajectory of students based on e-learning. *Paper Presented at the Application of Information and Communication Technologies, AICT 2016-Conference Proceedings*,

Katre, A., & Salipante, P. (2012). Start-up social ventures: Blending fine-grained behaviors from two institutions for entrepreneurial success. *Entrepreneurship*: *Theory and Practice*, *36*(5), 967-994.

Korshunov, I.A., & Gaponova, O.S. (2016). *Organizational management of enterprises at the intimal development stages*. Moscow: RIOR, INFRA-M, 342.

Krauzova, Y. (2013). To be a clever guy is not enough for success. *Business Journal*, *6*(207).

Kurilova, A., & Stepanova, D., & Topornin, N. (2018). Learning strategies for future entrepreneurs: New methodology of stock market development assessment. *Journal of Entrepreneurship Education, 21*(2S), 1-13.

Merzon, E.E., & Ibatullin, R.R. (2017). Architecture of smart learning courses in higher education. *Paper Presented at the Application of Information and Communication Technologies, AICT 20106-Conference Proceedings*.

Nikitina, N. (2018). *The problems of entrepreneurship education in the era of the development of digital technologies*. Litres.

Olokundun, M., Moses, C.L., Iyiola, O., Ibidunni, S., Ogbari, M., Peter, F., & Borishade, T. (2018). The effect of non traditional teaching methods in entrepreneurship education on students' entrepreneurial interest and business startups: A data article. *Data in Brief, 19*, 16-20.

Palchikov, A.N. (2013). Higher education reform in the Russian Federation. *Scientific Journal of ITMO University "Economy and Environmental Management"*.

Roshchin, S.Y., & Rudakov, V.N. (2014). Combining study and work by the students of the Russian universities. *Education Issues*, *2*, 152-179.

Rubin, T.H., Aas, T.H., & Stead, A. (2015). Knowledge flow in technological business incubators: Evidence from Australia and Israel. *Technovation, 41*, 11-24.

Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: A meta–analytic test and integration of competing models. *Entrepreneurship Theory and Practice, 38*(2), 291-332.

Singer, S., Amorós, J.E., & Moska, D. (2015). Global entrepreneurship monitor-2014 global report. *Global Entrepreneurship Monitor*.

Singh, S.K. (2014). High performing startups in education sector in India: an exploratory study. *Indian Journal of Industrial Relations*, *50*(2), 293-304.

Turner, J.J., & Mulholland, G. (2018). *International enterprise education: Perspectives on theory and practice*. Routledge.

Voisey, P., Jones, P., & Thomas, B. (2013). The pre-incubator: A longitudinal study of 10 years of university pre-incubation in Wales. *Industry and Higher Education, 27*(5), 349-363.

Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice, 31*(3), 387-406.

Winkler, C., Saltzman, E., & Yang, S. (2018). Improvement of practice in entrepreneurship education through action research: The case of co-working at a non-residential college. *Entrepreneurship Education and Pedagogy*, *1*(2), 139-165.

Wirsing, B., Traude, A., Steffens, J., Sheen, M., Löffler, B., De Lapparent, D., & Alonso-Gonzalez, J.L. (2002). Becoming an entrepreneur for a trial period: the pre-incubation experience. *The International Journal of Entrepreneurship and Innovation, 3*(4), 265-277.

Wu, H. (2017). New "startups" in a rigid higher education system: China's young elite institutions. *International Higher Education, 91*, 32-34.