

Formation of an Online Support System for University Graduates as a Factor of Implementing the Lifelong Education Concept

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Abstract—The subject of the article is the lifelong education system in Russian universities. The formation and continuous improvement of lifelong learning skills have become an urgent need for modern people. The urgency and focus of this issue are due to the fact that the flow of information and its rate of change are increasing. University graduates perform well during the training period and possess the necessary abilities, but do not have long-term work experience, so they may face outdated knowledge in a short time after applying for a job. In particular, it is worth mentioning the lack of knowledge in the field of ensuring the economic security of economic entities. This is a problem that needs to be considered and dealt with, because it may have an adverse effect on their employment, which in turn affects the education plan and even the image of the university. The purpose of the article is to consider the possibility of developing additional educational systems by integrating the knowledge base into a single field of activity, as well as the possibility of additional educational systems at the university level. The accepted hypothesis is that not only the introduction of new educational programs, but also information support provided to graduates after university graduation is an important

competitive advantage in the higher education market. The article focuses on the study of the possibilities of using distance technologies based on the creation of an information and reference knowledge base. It can support students and university graduates. The conclusion is that the lifelong education method provides a lot of benefits for different categories of users (graduates, professors, mentors, employers, etc.) to use it.

Keywords—additional education system, university graduates, integration, knowledge base

I. INTRODUCTION

Ensuring the economic security is a priority policy of any country. The emergence of new threats to economic security is taking place in the context of the expansion of integration and globalisation processes in macroeconomics and the development of digital technologies affecting all spheres of human life, including education. The active development of the world economy, trade, industrial and financial relations does not stop. Ensuring economic security is becoming a

strategic task at the state level as a whole, since the economic sphere is a fundamental area for the development of a society. Depending on the stability of the foundation (which means the country's economy), the stability of other spheres of public life, such as social, food and others, that affect the level of national security, is ensured. Under such circumstances, it is possible to achieve stable economic growth and to increase the well-being of citizens and the prosperity of the country.

The Decree of the President of the Russian Federation "On the National Security Strategy of the Russian Federation" (section "Ensuring National Security") [1] pays attention to the formation of a system of fundamental and applied scientific research and its state support in the interests of organisational and scientific support for the implementation of strategic national priorities. In this regard, one of the priority tasks is to train personnel for all spheres of the economy. They will identify and eliminate causes and conditions that contribute to the weakening of the economic security.

The solution to this problem can be considered as a continuous training of qualified personnel for the development of the economic security industry. It should be pointed out that at present, there are only a few Russian universities that provide training for certified experts in this field.

In order to ensure the training of specialists in the field of economic security of business entities at all levels: from micro- to macroeconomic, the main types of activities and the corresponding competencies that a specialist in economic security should have were identified. These include: settlement and economic, and design and economic; law enforcement; control and audit; information and analytical; organisational and managerial; research; pedagogical. Consequently, training students in the field of economic security require interdisciplinary knowledge, presupposes in-depth professional training in the field of economics, jurisprudence, banking, financial and tax legislation, knowledge of modern information and communication technologies (ICT) to use them in their professional activities as tools for providing information security. But no specialist is able to be equally good at all skills and abilities of all competences, which requires students to learn and retrain.

Today, emphasis in the development of the education system in the Russian Federation is made towards increasing the quality of educational services due to the fact that educational institutions adapt their structure to conditions that best suit an innovative economy, providing for the development of modern achievements of scientific and technological progress and ensuring the training of qualified personnel using the latest information means as tools for obtaining knowledge by students and graduates on the basis of the system of additional education [2].

Based on the experience of creating a lifelong education system by the leading countries of the world, this industry has become one of the largest industries in the economy, which has left far behind cars, computers and the media and now covers a large share of the population [3].

II. MATERIALS AND METHODS

The sustainable development of higher education is recognised as a primary task of modern universities. There are many obstacles to change, so there is a pressing need to find new ways to implement lifelong education programs, methods and tools. Special attention should be paid to success factors that contribute to the effective integration [4].

The research was carried out in two phases. In the first stage, the research is devoted to understanding the current employers' requirements for experts in the field of economic security, which makes it possible to determine the content of the knowledge base to consult graduates. This stage was based on the study of professional standards in the field of economic security and related to it (risk management, internal control, financial monitoring). The analysis was carried out on the basis of an assessment of vacancies in the direction of economic security, as well as through interviews with heads of services and departments for economic security of economic entities operating in industries, services and banking.

Since the main respondents who participated in the research are middle and senior managers responsible for ensuring the economic security of an economic entity, it was possible to identify and analyse the current needs of the business when hiring workers in this area.

In the second phase, the research aims to find the most effective form of the system, which is to provide remote support for university graduates. They are committed to integrating the knowledge base with the additional education system of the university.

III. RESULTS

One of the solutions to the problem is the creation of a system of remote support for university graduates. It contributes to the continuous development of skills in an independent professional life. Its implementation can be based on the integration of the university's additional education system and knowledge base.

In the process of learning various subjects online and offline, the materials, problems and difficulties accumulated by students may become the basis for the initial formation of this kind of knowledge base. This is very important after the recent incidents with COVID-19 forced teachers and students as well as employers and employees to take advantage of the opportunity of distance learning technology [5].

As an online support system for graduates, the information and reference knowledge base should include all types of content from ordinary text files to multimedia, as well as real-time communication with teachers and consultants.

It seems expedient to create a knowledge base as an information and reference resource and place it on the university website or on its existing section of additional education in the form of an analogue of the FAQ (answers to frequently asked questions). The difference lies in the fact that it contains not only answers, but also recommendations, brief informational explanations, links to full-text sources in the form of hyperlinks with access to the texts themselves. The

basis is university information, other information provided by the best consultants, etc.

IV. DISCUSSION

When starting their professional activities, young people always encounter difficulties and problems. They can turn to social networks or professional groups, Google information, use the Yandex service. However, this idea is being treated like just looking for general advice on the Internet. There are many tips, but how many are really professional? The problem is in the reliability, scientific character, professionalism of the sources and the advice given, in distinguishing populist information from a working professional one. Graduates do not go to the university to find an answer. At best, they turn to individual professors they know. The best solution is the existing knowledge base of the university [6].

The formation and continuous improvement of lifelong learning skills have become an urgent need of modern people [7]. Today, in the knowledge economy, graduates' successful performance and competitiveness in the labor market will not happen outside the framework of the "lifelong learning" paradigm. As noted in the report of The Boston Consulting Group "... it is not enough to gain knowledge or develop skills once, it is necessary to update them regularly" [8]. In order to achieve this goal, a solution that stimulates lifelong learning in the education system with the participation of employers or workers themselves is used.

The quality of information is very important. It will be used in the process of training experts within the framework of university education and with the support of graduates. Unfortunately, since one of the main reasons is the rapid aging of information, this is the most important. Although it has the most important significance. Not many university graduates return to their home universities for retraining or advanced training.

For organisations, the aging time of combat tactical information is 9 days, and the aging time of strategic information is 9 months. Therefore, information security experts must recalculate the funds used to protect information resources every two weeks to ensure operational security, and once a year to ensure strategic security [9]. In the IT field, if the expert does not update knowledge after 6 months, it will be out of date, which will lead to a decline in the quality of work and may lead to an insufficient work.

American economists also drew attention to this process of rapid aging of knowledge. According to them, 5% of theoretical knowledge and 5% of practical knowledge possessed by engineers, doctors, biologists and other expert groups are updated annually [10].

This made it possible to set up a kind of measurement unit for the obsolescence of knowledge - the "half-life of competence". This refers to the time period (from graduation) during which the expert's ability decreases by 50% due to the emergence of new scientific and technological information.

American researchers confirmed the conclusion of French sociologists: the knowledge of graduates in 1940 was out of date in 12 years, the knowledge of graduates in 1960 was out

of date in 8-10 years, and the knowledge of graduates in 1970 – in 4- 5 years.

In modern realities, the foresight of the actions of a competitor and the ability to quickly adapt one's own enterprise to the changing conditions of the competitive environment begins to play a decisive role for successfully running a safe business. The process of making the best management decision depends on the continuous flow of reliable and relevant information and its subsequent analysis and processing [11].

The quality and constant updating of information is essential to the field of training, retraining, and advanced training for economic security experts, because of the speed of constant changes in information, especially changes in regulatory documents and legislative frameworks. Today, the main requirement of employers to Russian universities is the need to overcome the isolation of knowledge acquired by graduates from practice, and, as a consequence, a long period of adaptation of graduates [12].

In fact, the gap between theory and practice has been eliminated by employers themselves, which not only requires time but also a lot of financial resources. Only direct costs of enterprises for such "fine-tuning-adaptation" of graduates range from several tens to several hundred thousand rubles per person per year. In this regard, various models for the implementation of practice-oriented educational programs are gaining great popularity. The proposed system for integrating the knowledge base into the systems of additional education can provide significant help in bridging this gap.

Nowadays, criticism of universities often arouses from people who accuse the quality of taught disciplines lagging behind the requirements of modern business. However, this situation is observed even in the world's leading universities. For example, even many American business schools still teach traditional, outdated business methods, with little attention to new ideas and modern management techniques.

Harvard Business School is an example. Harvard University and other business schools are not exploring new ideas that will spread to American industry after students graduate, but are trying to revive long-term methods and techniques [11].

This means that graduates who should be able to improve their qualifications, get answers to questions and get the latest information quickly, unfortunately do not get the latest information they deserve. Therefore, it would be better if a university resource became such a resource to support graduates.

As an example, the experience of the Higher School of Economics is interesting, where today graduates have access to the university library. The graduate, having passed registration, gets access to the reading rooms of the library, the media library, and electronic information resources. However, unfortunately, access to resources is only allowed within the confines of the library. There is no remote access, which limits the ability of a significant part of graduates working in the regions to use these resources. This is a limiting concept and

should be addressed to be more easily accessed both on and off campus.

An important way of training personnel is the optional learning process [13].

Communication with outstanding specialists increases the level of students' literacy and allows them to decide on their future profession. The knowledge base will improve the quality of training and can be the basis for providing remote access to resources and services, information, sharing knowledge, and joint efforts. Of course, the professors and employees of the university must be ready and interested in this work [14, 15].

The development of such resources can start by creating the foundation of each department, then merge it into a faculty department, and then merge it into a university department. In the future, it is possible to integrate it with additional education systems and create a foundation on the platform of the university's additional education system.

Let's dwell on the main features of the knowledge base.

1. Relevance. Only relevant cases from the employer's actual business. Constant updating.

2. Search. The presence of a search engine, a system of filters and settings that help to carry out various types of search: factual, documentary, bibliographic, analytical. A simple CCM that allows any teacher to manage information. The intuitive interface. Forums, chats for quick communication and getting answers.

3. Training: Possibility of forming curricula and courses based on the actual materials of the Base.

4. Access levels to ensure the safety and maximum use of the resources of the Base. The ability to configure various types of user access and differentiate users according to certain criteria.

5. Protection of information from copying, "fold" and other types of unauthorised use. The presence of clearly written rules and the delineation of rules and responsibilities for working with the resource.

6. Image, loyalty. Formation of a positive image of the university among alumni, employers, potential students, and other stakeholders.

V. CONCLUSION

Therefore, various types of users (graduates, teachers, employers) have advantages in using the knowledge base.

For a graduate, the use of remote access to such a resource will allow them to find relevant information on their requests in professional activities in the form of guaranteed information support; to use distance and face-to-face technologies when passing advanced training and retraining programs, taking into account individual requests.

In the work of a teacher, such a Base can become a kind of "methodological bank" in which cases, practical tasks and problems will be generated based on the requests of graduates

- everything that can become the basis for updating courses and developing new disciplines and educational programs.

Employer representatives can participate in the base and involve them in the training process, not only by inviting them to give public speeches, but also in the stage of defending the final qualifying work. Employers will have the opportunity to contact teachers, students and graduates. The employer is given the opportunity to communicate their requirements to the competencies of graduates directly, participating in discussions, replenishing the "methodological piggy bank" of materials for solving practical situations.

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