

# **‘ELECTRONIC BUSINESS’: THE EXPERIENCE OF RUSSIAN-SWEDISH PROGRAM FOR VOCATIONAL RETRAINING**

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*The features of the Swedish model of additional vocational training, its basic characteristics and application possibilities in the Russian education system are analyzed on the example of a vocational retraining program «Electronic business». The features of the joint Russian-Swedish program of vocational retraining as an example of the successful decision of continuous education problems of development of formation are considered.*

## **Introduction**

Nowadays our country faces the objectives of conversion of the economy to the trajectory of steady innovative growth which brings up to date the problem of quality vocational training of qualified personnel. In an information-developed society there is no need prove that a deep professional knowledge of the personnel becomes the key strategic factor of business development, its competitiveness. Making demands on modern manufacture can be satisfied only by constant growth of personnel skill level, forced training of researchers, and implementators of new engineering and technologies. The high-skilled personnel is the factor which provides the necessary level of labor productivity.

At the same time, the contemporary educational system collides with the rank of various problems concerning its lagging in labor market requirements, competitiveness decrease of graduates and investment appeal of the education system itself. Training experts does not correspond to requirements of employers in content, in number of learners, in immediacy of reformations in professional competence requirements. Frequently the students' knowledge being acquired at lower division course loses its urgency by the university graduation. Formerly much attention used to be paid to study of theoretical fundamentals and abstract theorems, fundamental concepts making the basis of knowledge in various directions. Today, however, it is necessary to provide the awareness in information mastering being oriented to its further practical use in professional activity and taking into account the requirements of employers who form the labor market and order for the experts. The system of education should be aimed at the formation of a flexible person possessing certain key competences who is capable to adapt successfully in information society with constantly dynamic environment. One of the perspective directions in solving this problem is the creation of a system with continuous education focused on the employers' requirements and advancing development of a person [1.2].

Supplementary vocational training (SVT) plays an important role in improvement and updating the skill level of experts in accordance with competence characteristics and educational standards changing. SVT is a significant element of the whole system of continuous vocational training [3].

Programs implementation in the SVT environment mainly depends on efficient partnership of the state sector, business and educational institutions. The necessity of such a social partnership is caused by many factors among which the insufficiency of collaboration of these sectors is considerably obvious. Hence the educational sector endures lack of links with business and the labor market; there are no coordinated actions among educational institutions of SVT (because of business rivals); thus some duplication of educational programs take place; there is no analysis of the labor market demands that leads to the low degree of teaching and weak competition of curriculums. In turn, business realizes its needs in qualified employees not in full; the mechanisms of interaction of SVT institutions with business companies are absent; there is not enough constructive experience of collaboration of educational institutions with business firms in practice work organization (training directly on the workplace). Educational structures not always analyze the labor market and business requirements by elaborating curriculums.

Similar problems take place in many states who find the solution of these problems in development of national systems of SVT. Among the European countries Sweden takes a special

position in development of supplementary vocational training. It has elaborated and implemented its own model of SVT based on representation of continuous education, its advancing character and close interaction with employers by financial support of the government and adaptation of SVT system to the labor market requirements. Competitiveness of Swedish SVT programs is strengthened by their practical orientation, the combination of training on the job and theory knowledge, flexible system of modern education in quickly changing conditions of the labor market.

The pilot project of SVT development launched by the Swedish government in 1996-2001 has become a part of the state educational system since 2002. The Swedish National agency on supplementary vocational training ([www.ky.se](http://www.ky.se)) coordinates the system SVT development. The programs are realized by various SVT establishments where Folk University (Public University) in Uppsala ([www.folkuniversitet.se](http://www.folkuniversitet.se)) and the Center of vocational supplementary education in Goteborg ([www.kyakademien.se](http://www.kyakademien.se)) are distinguished.

Development and popularity of SVT system in Sweden are caused by several factors. The most significant factors are:

- combination of theory knowledge and continuous training on the job;
- possibility of vocational scholarship in short terms for those who wish to obtain new skills in a special field of activity;
- increasing the number of projects in modern fields of economy, in hi-tech environment that demands an operative improvement of professional skills;
- flexibility of vocational training system in the dynamic environment of labor market.

The duration of Sweden vocational training ranges between one and three years; training on the job occupies one third of the whole study. The accent in curriculum is made on the practical courses combined with deep theory knowledge.

The Swedish model of SVT is based on the following principles [4]:

- establishment of interaction mechanism between the state sector, educational institutions and business sector;
- cooperation of vocational training educational institutions and the companies acting on the labor market, by working out of curricula, organization of conferences and researches, carrying out the educational process and an estimation of education quality;
- making curricula in accordance with the requirements of the companies working on the local market;
- invitation of expert instructors of business companies, their participation in training estimation as well as in managing the curriculum through creation of the Supervisory board or Council of curriculum of SVT;
- training on the job: training students to obtain skills for solving problems in practical daily activity at the enterprise;
- combination of knowledge and skills in different subjects working under the single study project;
- constant monitoring of training quality and assessment of graduates.

It should be noted that training on the job makes up approximately 25-35 % of all learning time and is defined as integrated training which includes training itself and training on the workplace, uniting the theory and practice. It is profitable for both students and employers: the employer receives a qualified employee trained for the given workplace thereby builds up the personnel reserve for the future development of the company, and the student receives the job. Meanwhile the expenses for training on the job are paid by employers.

The projects realized by students in the company allow solving a specific problem of the company, ensures so-called 'joined up' ways of working, and develops the corresponding experience of students. Project activity is based on step-by-step project elaboration and provides for consultations with the trainer and the company manager. The report and presentation of the results allow supervising and estimating the efficiency of educational projects.

Selection of teaching staff is carried out by means of personal and office contacts, with the help of announcements on competitive basis, after thorough studying resumes of the candidates. When a teacher is chosen there are some attributes to observe: an appropriate education, enough experience of teaching activity with adults, a corresponding operational experience in business, good social skills, and proficient command of English.

The estimation and monitoring of SVT programs in Sweden include an estimation of instructors and educational process by students, an estimation of students' progress, an estimation of educational process by the Supervisory board.

The success of Swedish model of SVT can be defined by the whole set of factors among which we shall allocate an active and constant interaction educational institutions with business; the integrated training on the job; project management in teaching organization; attraction of practitioners owning modern techniques of adults' training; integration of subjects; including of the trainings in programs, dilating competence learners (skills of business communication, ability of teamwork, self-confidence training, time management); permanent monitoring and constructive dialogue with trainers, learners and companies. Competitiveness of programs increases use of modern equipment and an information technology in training process that, on the one hand, extends the target audience, and, on the other hand, allows organizing effectively the educational process involving skilled experts.

Formulating briefly the principal feature of the Swedish model, which is now widespread in the countries of the European Union it should be noted the effective solution of vocational training problem and staff retraining according to the business demand. In the core of the Swedish program of retraining there is a principle of correspondence with economy demands and the market; the curricula are coordinated with the business representatives who are the customers and 'consumers' of educational product; the problem approach «from knowledge to skills» is the bases of training.

The reasons which made Sweden apply a new model of vocational training and retraining is transition of the society to a new economic model, and the society of 'knowledge prevalence' calls for persistent learning. The modern economic model lays high claim to the experts therefore there should be a close interrelation between the received knowledge and the acquirements; the expert should keep mobility and be able to use the gained knowledge in practice.

Studying the Swedish experience has shown that this SVT model can find an effective application in Russia. Today general tendencies on the labor market of Sweden and Russia are similar: demographic recession leads to reduction of young specialists and prevalence of the age group on the labor market; volatile character of supply and the list of majors: these changes are caused by technical innovations and consequently the society requires more number of qualified professionals. However Russia has its own features. Thus Russian employers are not interested in the expenses for training on the job; the regional authorities, as a rule, not only avoid financing and managing SVT, but also are not responsible for co-training with business representatives, for practice training of educational institutions (the exception may be just a few regions like the Republic of Tatarstan).

Since 2008 the Swedish model of vocational training and retraining has been promoted in 22 regions of the Russian Federation. In 2011 the joint Russian-Swedish program of vocational retraining «Electronic business» was developed by National Research Tomsk State University and launched in Tomsk.

The target of the program is to study electronic commerce, planning system and management of inner and extra resources of enterprise, adoption and development of practical skills of building, advancement and management of electronic business.

The program problems are caused by necessity of knowledge acquisition and practical skills in following directions:

- use of existing decisions of electronic business as instruments of strategic development of the existing enterprise;

- business-idea processing and turning it into an attractive product or service for electronic business sector;
- consulting services in the field of electronic business;
- application of marketing fundamentals and marketing strategy of sales in uniform system of electronic trade;
- project management directed at the development of electronic business for the existing companies;
- start-up companies advancement in the field of electronic business.

The creation of joint program has taken some additional arrangements for adaptation of the Swedish model to the Russian SVT system, including training teachers and experts of Tomsk state university in Sweden, carrying out of marketing researches, the coordination of the curricula, creation of business council of the program, acquaintance of the Swedish partners with the business community of Tomsk, etc.

The program urgency is determined by actuality of the electronic business which is affecting almost all society and gaining ground due to information technology usage in business sphere. Studying this new sector is of great importance for realization of prospects and optimal strategy of modern business development, for successful management of projects and electronic commerce.

Conducted marketing research in the course of program elaboration has shown that in Tomsk there are more than hundred enterprises positioning as the enterprises in the field of electronic commerce. Tomsk electronic business represents the most perspective direction for development. The possibility of proper modeling of a «fresh start» enterprise as well as the development of already existing enterprise by means of innovative technologies promotes strengthening of Tomsk business positions in Siberian region.

The development of electronic commerce in Tomsk encourage to maintain the expansion of electronic business of both new and already existing companies focused on further improvement. Training experts of international level in the field of electronic commerce assists the development of the small-scale innovative enterprises of our city and allows young, initiative people to project and create competitive enterprises.

The developed program of vocational retraining «Electronic business» takes into account the basic characteristics of the Swedish SVT model. It is constructed on the modular basis and directed at formation of the following competences:

1) in management activity:

- capability to control an electronic enterprise;
- skills to develop the strategy of enterprise architecture, to plan control processes of life-cycle of the IT infrastructure of the enterprise and to organize their execution;
- skills to use modern methods of management realization of production for the solutions of strategic problems;
- ability to launch programs of organizational development and changes and provide their realization;
- skills to design Internet-projects and manage them;
- management the research and design-implementation groups;
- skills to use modern technologies for Internet projects promotion;

2) in analytical activity:

- preparation of analytical material for Internet projects estimation and elaboration of strategy making for project realization;
- ability to use quantitative and qualitative methods for carrying out researches and management of Internet projects;
- mastering methods of economic analysis of behavior of economic agents and the markets in global environment;

3) in cultural sphere:

- ability to develop the common cultural and professional level and master new research methods independently;
- ability to acquire and use new knowledge and skills independently;
- ability to make organizational-administrative decisions and to estimate their consequences;
- skills to use the English language in the professional business dialogue;
- ability to creative adaptation to concrete conditions of carried out tasks by innovative decisions;
- mastering skills of business public communications.

In the course of training the learners should see the electronic commerce from the viewpoint of business development, and not only as a way of technological modernization of the enterprise. The electronic business helps to create the conditions for development of long-term potential and maintenance of competitiveness of the enterprise in the future.

At the end of the course the learners will be able to work as developers of electronic trade for enterprises, consultants or advisers on electronic commerce, experts for business preparation and development in the international market of electronic commerce, projects directors in the Internet, and Internet-marketers.

The distinctive features of the joint program of vocational retraining «Electronic business» are:

- the modular structure of the program, possibility of open curricula: learners can independently build an individual educational trajectory taking into account their requirements and level attainment;
- competence approach taken as the principle by program designing;
- performance of complex (prevailing) educational tasks demanding practical application of knowledge and skills, gained in the course of study of logically combined disciplines (modules);
- performance of final qualifying works in the format of applied projects;
- application of technologies of electronic training, electronic educational resources, modern systems of technological support of training process providing comfortable conditions for learners and instructors;
- use of active methods of training (business games, projects, case-studies, portfolios, etc.);
- teaching by specially trained staff (completed training course, having certificates) and skilled experts – business representatives.

One of the advantages of the program is its availability. To provide comfortable conditions for audience we use information and communication technologies including modern systems of technological support in training: webinars in system Adobe Webinar, video conferencing, electronic environment.

Thanks to electronic environment of training (SDE ‘Electronic University’) learners can attend virtual lectures and seminars conducted by instructors.

Training is available in any comfortable place: a learner needs only an access to the Internet and a web camera. In the course of training the audience watches lectures, can communicate directly with the instructor, get consultations and the curator’s support, participate in interactive seminars and trainings, create and defend projects, perform practical works, solve problems and cases. The exchange of experience and knowledge is carried out due to regular dialogues between the instructor and other learners. Educational and methodical complexes for the program are presented in the form of electronic educational resources which contain the electronic manual and test module. Teaching material can be provided via the Internet.

Use of distance educational technologies allows people with different purposes to join this program. For example, the people who aim to improve their professional skills, who want to fulfill themselves in a new field of activity, businessmen, owners of the companies, experts tending to be trained on the job, to raise the social status, those who live far from the regional centers in the territory of the Russian Federation and beyond its borders, and disabled people.

The major element of educational program of vocational retraining in the field of electronic business is practice training at the enterprise. In the course of training the audience gains the experience and skills for collecting practical material, abilities to estimate critically and analyze the existing management system in the organizations of various patterns of ownership and organizational forms. The program stipulates obligatory practice training on basis of Folk University (Uppsala, Sweden) for carrying out modern analyses in the field of electronic commerce and acquisition of practical skills.

For project support the Council of program was established which involved the representatives of Tomsk business who had taken part in creation and development of the program, organizing practice training at the enterprises of real sector of Tomsk region economy for program learners.

The basic functions of the Council of program are the analysis and confirmation of the curriculum, preparation of guidelines on improvement of educational programs and educational process taking into account the opinion of employers, enterprises partners, learners, instructors, practice consultants and project activity advisers and other interested parties, the quality analysis of standard and methodical documentation, teaching, educational process and technological support, providing qualitative implementation of educational programs, decision-making on introduction of necessary changes according to the results of quality estimation, preparation of proposals on improvement of monitoring system, participation in defense of final qualifying works of the audience.

In summer 2012 the first group of learners on the program «Electronic business» successfully completed the training. Besides practice training at Tomsk enterprises of electronic business, the learners of the program accomplished the practice training in Geteborg (Sweden) which is engaged in online shop sales.

The graduates of the program received two diplomas: vocational retraining at National research Tomsk state university and Swedish vocational training.

The basic result of the program is vocational training of experts in the field of electronic business on the basis of modern knowledge, openness of the knowledge, experts' mobility, their adaptability to labor market requirements and independence. The long-term result is emergence of new business, new workplaces on the labor market in Tomsk region. In the issue several projects in the field of electronic trade have already been realized: an Internet shop of accessories for Apple production has been developed which is successfully functioning at present; an application for online game has been designed, etc.

Thanks to the program training the graduates have created an Internet company providing online PR-consulting services. It has concluded an agreement with the Swedish company which has invited the learners to practice training. It concerns working out the program of the Swedish Internet shop advancement on the Russian market. Now the group of developers is engaged in adaptation of the site content to Russian reality, adjusts deliveries of the goods from Sweden to Russia and is responsible for the plan elaboration for enhancement of Swedish goods on the Russian market.

The program of vocational retraining «Electronic business» developed at Tomsk state university has a great potential for development of small and medium sized businesses. It is based on fundamental knowledge of instructors of National Research Tomsk State University and professional achievements of the experts of large business companies, on the experience of instructors of Folk University (Uppsala, Sweden) and the Swedish experts in the field of electronic commerce. The program is to assist the purposeful and always prepared to changes modern specialists to open their own business. It becomes a conductor into the world of open possibilities supporting the initiative and creative people, who are opened to new trends and actively involved in system of continuous education.

This program is the example not only an international network connectivity (Swedish colleagues work with Tomsk students with the aid of webinars), but also a close cooperation with business community interested in competent graduates. The program affords ground for initiative, creativity and entrepreneurship. Thus, experts' training of international level in the field of

electronic business promotes the development of small-scale innovative enterprises in Russia, permits young initiative people to project and create competitive business independently. The stability of gained and prospective results of the program is provided by the approach system to programs of supplementary vocational training, their directivity at up-to-the-minute technology and training techniques as well as the modern level of development of innovative environment.

#### Bibliography

1. Project of state program of the Russian Federation 'Education development' for 2013-2020 [e-text]. URL: <http://xn--80abucjiibhv9a.xn>
2. A.L. Kolomenskaya. About the project of concept of continuous vocational training [e-text]. URL: [http://2020strategy.ru/data/2011/06/14/1212917753/Kolomenskaya%20AL\\_31052011.pdf](http://2020strategy.ru/data/2011/06/14/1212917753/Kolomenskaya%20AL_31052011.pdf)
3. L.M. Spencer, M.S. Sine. Competences on the job. M.: HIPPO, 2005. 371 p.
4. Seminar 'Russian-Swedish project of supplementary education on called-for specialties on the labor market of Tomsk region' [e-text]. Режим доступа: <http://edu.tsu.ru/news/4141.html>

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