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**TRAINING PROGRAMS FOR STATISTICIANS:  
REQUIREMENTS OF CURRENT LABOUR MARKET**

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Fast changes, which have taken place in the labour market recently, influence requirements of employers. Undoubtedly, they need to satisfy their demand and impose appropriate claims to market. Since the USSR time many specialities have changed. Nobody doubts that Ukrainian economics does not need so many planners as it has been earlier.

Unfortunately, our public educational system is reacting slowly and some specialists do not have opportunities to work according to their specialty training. Moreover, it is getting more evident that labour market imposes more requirements on qualified staff, whereas the education system fails to prepare specialists with sufficient skills. Undoubtedly, the educational system must prepare specialists on demand; otherwise, they will need to master different or additional skills to work and earn.

The system of personnel training must take into account demands in labour market and meet the global quality criteria. Modern information society is characterized by active dissemination of new technologies, development of competition in education sphere and increasing role of information.

It is necessary to mention that some main principles the system of training must act on:

- radical transformations and renewal of higher education as the system that is flexibility, taking into account consumers' interests;
- continuous adaptation of curriculum to future needs and improvement of adequacy in higher education with social and economic prospects;

- increased attention to setting up training programs of specialists in a new sphere of technology and management.

Deficit in funding from the state budget causes destruction of material and technical base of educational institutions, decline in social status of teachers and scientists, irreversible loss of scientific schools and decreases a number of innovative activities. Survival of institutions, adaptation to new conditions and training demands of the modern labour market are the object of study of some authors [1].

The system of personnel training needs fundamental changes. Modern economics requires specialists who are ready to work in conditions of competition and innovative economy. Therefore, educational system must look forward to the future rather than stay in the past.

The purpose of the paper is to discuss the current situation with the training for statisticians in Ukraine and acute problems in this sphere.

Good quality economic and social data in Ukraine and its regions is necessary for democratizing state administration and improving decision making process. State Statistics Service of Ukraine is the authorized central body in the field of state statistics. It is widely known that in the Soviet time the training programs for statisticians were focused on the system of state statistics. And today this system of training has not changed considerably. However, heads of the department of statistics have noticed qualitative degradation of training of statisticians nowadays [2]. Moreover, prospects of statistical training are being discussed and investigated as well [3].

Today it is impossible to consider the economic processes in isolation from more general processes (environmental, political, social, etc.) and it is necessary to take into account numerous direct and indirect links. This causes the necessity to use a systems approach which involves the study of the economy as a whole and provides an opportunity to consider many direct and indirect links such as interaction between individual structural parts; it also identifies the role of each in the overall process of economic functioning and, on the contrary, traces the impact of total system on its individual components.

A necessary basis for this is the use of statistical analysis in economic processes based on the principles of a systems approach which creates conditions for optimizing of structural parts of the economic system and the economy as a whole. Therefore, the use of a systems analysis in statistical research is a necessary condition for management decisions at different levels.

In this regard, for its economic development modern society needs professional analysts, statisticians, experts, advisors and consultants who are able to:

- collect statistical information (both for social and economical development) at the macro-, meso- and micro levels, to organize and classify it;
- develop and apply methods of processing, grouping and analysis of economic information;
- creatively use the information and results of the analysis, to make analysis-based generalization and conclusions, to justify management decisions;
- evaluate the effects of taken decisions in real time;
- effectively use informational resources and the latest achievements in computer technology.

The process of constructing the statistical provisioning management (SPM) includes the following components:

- defining management categories, modern problems and tasks for development;
- determining the SPM, its goals and tasks, distributions used in a process of the SPM;
- constructing the system of indicators for management;
- defining the factors which cause the development of management categories, the information users;
- constructing statistical tools of the SPM, the informational and methodical support of the SPM;
- performing statistical research in management;
- elaborating proposition for justification and supporting management decisions based on statistical research [4].

While in the past the statisticians' training was primarily set up according to governmental needs, nowadays the private sector dictates the requirements to graduates. Thus, if market has already demanded analysts and related positions in recent years, the necessity of training programs for these specialists is obvious.

It should be noted that a slight transformation of the "Major" title has recently taken place i.e. "Economic Statistics" has been changed into "Applied Statistics". Nevertheless, the change of the title is not sufficient to be in line with the requirements in the job market – more time is still needed to implement relevant alterations to training programs of statisticians in Ukraine.

However, even though the appearance of new "Major" title did not change the approach to training programs for statisticians drastically in higher institutions, it already causes problems understanding a new "Major" title and future demands in the Ukrainian job market.

Usually applicants to Ukrainian institutions of higher education have general idea of what such Majors as Finance and Credit, Accounting and Audit etc are about. However, the essence of a Major in Applied Statistics and especially the graduates' job prospects are largely unclear to the applicants and their parents that firstly, can affect their children's choice and, secondly, they realize that for successful career prospects the specialization should be on demand in a job market.

Slowly the training for statisticians is being transformed into preparation of specialists of statistical provisioning of management at different levels. Nowadays actually there exists some difficulty in training statisticians for governmental needs (as earlier) and specialists for private sector because they have different purposes.

Graduates from higher institutions with their knowledge find themselves at the job market and their perspectives on work crucially depend on demand for such specialists. While openings for accountants and specialists in finance etc. are usual for job websites, the statisticians per se are only demanded by the system of state statistics.

We have investigated the demand for statisticians on some Ukrainian websites offering job. We have also taken the ratings of the websites into account [5].

It should be noted that the position of an “economist in state statistics” is not popular and at the beginning of May it was found only once on the website [www.rabota.ua](http://www.rabota.ua). The stated requirements were completed higher education in the field of statistics, applied statistics and other economic directions, experience, knowledge of Ukrainian language and excellent computer skills. The employee’s duties included collecting and processing statistical reports.

However, employers often demand such specialists as: “information analyst”, “financial analyst”, “market analyst”, “analyst” etc. Requirements to the applicants for these positions are closely related to the skills which graduates with a Major in Applied Statistics must have i.e. applying statistical methods to processing financial and economical information, monitoring and analysis of governmental bodies including enterprises and financial institutions, analysis of their performance etc.

Investigated websites have demonstrated many job offers for different analysts. For instance, [www.work.ua](http://www.work.ua) showed 88 positions for analysts and economists, financial analysts, marketing analysts, quality analysts, sales analysts and so on.

The website [www.rabota.ua](http://www.rabota.ua) has offered 112 positions for analysts, research analysts, marketing analysts, merchandise analysts, data analysts, sales forecast analysts, analysts of consolidated information, media analysts etc.

The website [www.jobs.ua](http://www.jobs.ua) has suggested 61 positions for analysts and economists. These are economists and mathematicians, business analysts and so on.

It should be noted that requirements of employers for these jobs were fairly similar. It is necessary to consider it in detail.

Employers stress their need in specialists who are able to:

- collect and process data, to analyze data and prepare reports for management;
- work with large volumes of information;
- think analytically and have practical problem-solving skills;
- analyze the effectiveness of measures;
- monitor competitors and market analysis, predict sales;
- operate MS Office at a high level;
- know English at a high level, both written and spoken;

- lead analysis and interpret forecast results;
- process data using various software and programming languages;
- find sources of data and use them appropriately and so on.

Requirements for educational programs of such employees include such subjects as statistics, probability theory and mathematical statistics, mathematics and economics. Sometimes employers might also demand analysts with higher technical education.

Unfortunately, modern training system of statisticians is not ready to prepare the specialists who are able to satisfy the requirements of the labour market. And graduates have skills to work in state statistics only. However, the state statistics is undergoing transformations and does not need many young specialists. That is why many graduate statisticians are forced to master additional skills or work in another area not related to statistics.

Thereby, today there is an urgent need to review the curriculum of training programs for statisticians in accordance with the requirements of the labour market. Such approach has started to be implemented in some universities only while the decision is required at the national level. Thus, modern statistician should have a good mathematical background as well as excellent computer skills, learn programming languages for processing large amounts of information as well as accounting and statistical preparation and acquire fundamental economical and analytical training [2]. Moreover, good knowledge of English is necessary to master computer programs and work with large flows of information in English. According to job offers at the Ukrainian job market some foreign companies are interested in analysts; they require good skills in spoken and written English. Besides, the companies demand applicants to be able to work in a team, be responsible and resistant to stress. That requires a good psychological training.

By looking at the requirements of the American employers to statisticians and analysts we can see that the most in-demand career skills are abilities to conduct statistical modeling and to deal with statistical packages; these are the skills that modern training programs for statisticians in Ukraine must provide.

To summarize, on the one hand, we would like to emphasize the necessity to improve the role of statisticians and their image as civil servants, and, on the other hand, to highlight the importance of adequate changes in statistical education according to the requirements of modern labour market in Ukraine, as well as to use international experience for this purpose.

## References

1. Куценко В.І., Гаращук О.В. Перспективи розвитку системи підготовки кадрів: пошук альтернативи. [Електронний ресурс]. – Режим доступу: <http://www.economy.nauka.com.ua/?op=1&z=476>

2. Ковтун Н. Система підготовки спеціалістів – статистиків в сучасних умовах// Вісник Київського національного університету імені Тараса Шевченка. – 2011. - Вип. 129. – С. 5-7.

3. Сидорова А.В., Зименко Н.И. Перспективы подготовки экономистов-статистиков в Донецком национальном университете// Економічний вісник Донбасу. – 2007. – №2. - С.124-125.

4. Головач А.В., Захожай В.Б., Головач Н.А. Статистичне забезпечення управління економікою: прикладна статистика: Навч.посібн. – К.: КНЕУ, 2005. – 333 с.

5. Bigmir.net: рейтинг. Рейтинг по групі "Робота" [Електронний ресурс]. – Режим доступу: <http://top.bigmir.net/show/work/>

6. Український сайт для пошуку роботи [Електронний ресурс]. – Режим доступу: <http://www.work.ua/>

7. Портал rabota.ua [Електронний ресурс]. – Режим доступу: <http://rabota.ua/>

8. Сайт по трудоустройству в Україні Jobs.ua [Електронний ресурс]. – Режим доступу: <http://www.jobs.ua/>

9. Международный кадровый портал HeadHunter [Електронний ресурс]. – Режим доступу: <http://hh.ua/>

10. Online career site Monster [Electronic resource]. Available at:  
<http://www.monster.com/>