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Forecasting the Translation Profession Development: Foresight Technology*

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Abstract

The article describes the results of the conducted research based on the foresight technology that is widely used for long-term forecasting, representing a way of building a coherent and balanced image of the future. It was the first Foresight session that was devoted to the translator's profession in Russia. The participants tried to predict the future trends, technologies, possibilities and risks of the translator's profession in the future (up to 2030). The session was not limited to common forecasting: the task was not only to imagine the future of the translation profession but also to suggest the actions needed to achieve positive results, i.e., participants not only designed the future but also considered possible ways of developing and stabilizing the translator's profession.

The analysis of different foresight sessions in the field of education that were held in Russia, European Union, Great Britain, Canada, and the USA are also presented in the article.

Keywords: Foresight technology, Foresight session, Translation profession development, Translator, Statutory regulations.

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Introduction

Globalization, increasing competition, automation of both manual and intellectual work and, as a consequence, job cuts require new professional skills that will enable employees to improve their performance and also acquire related professions while remaining in demand.

Today it is hardly possible to describe any profession without regard to upcoming events that may influence its further development. Therefore, many representatives of the translation profession, which is currently at the intersection of the humanities and technical sciences, express their concern about the prospective changes. It is difficult to prepare translators who are supposed to enter the labor market after 4–6 years of training without preconceiving the working conditions and requirements that will be faced by them in 10–15 years.

One of the ways of forecasting activities and developing an innovative strategy for determining the priorities of scientific and technological development in the world community is the “foresight” technology developed in the middle of the 20th century and abundantly used in present-day business and public administration.

To describe “foresight”, it is common to use the definition given by B. Martin, who views it as:

“The process involved in systematically attempting to look into the longer-term future of science, technology, the economy, environment and society with the aim of identifying the emerging generic technologies and the underpinning areas of strategic research likely to yield the greatest economic and social benefits” (Martin 1995).

The main feature of foresight in comparison with other strategy-making technologies is the fact that this technology is not just a forecast (i.e., a subjective assumption made by one person) but a collective process of constructing and implementing forecasted changes. This technology allows participants to jointly create a future development map for industry, region or country and, based on the results obtained, arrange for actions to achieve the desired future.

Foresight sessions in different countries are one of the key tools for forecasting promising development trends – they are beginning to be actively used in Russia.

Literature review

Today the most remarkable examples of Russian foresight sessions are presented in the field of education (Agency for the strategic initiatives); forecasting of new professions (Atlas of emerging jobs, 2015); economic development of various Russian cities and regions (Ministry for the economic development; Korneva, Grab, Ismajlova, Rakitina 2017; Ministry for the development of the Russian Far East); planning and development of territories (foresight centre); sectoral development (for example, the industries of children’s goods, tourism, wooden house construction, etc.) , development of companies – major players in their markets (banks, energy producers, etc.) (Almazbank).

Foresight sessions are held in the European Union, Great Britain, Canada, and the USA in such priority areas as the development of new abilities, emergence of new professions and job growth; development of urban infrastructure; involvement of the younger generation in the development of countries (youth movement: education, employment); globalization; digitalization; protection and management of natural resources; public health; problems of climate change; improvement of the country’s security system; demography and communities and many others.

Foresight sessions held in these areas allow us to deeply study the existing problems, make definite decisions and form new development concepts.

The translation profession development is influenced by various factors (trends) caused by the Fourth Industrial Revolution. It can be assumed that some of these trends will be common for the development of many other professions. To consider them in relation to the translation profession, we shall analyse the results of foresight sessions held in Russia and other countries to study processes that transform the present-day world and their impact on the world of future professions.

For this purpose, “Competence Foresight 2030” was held in Russia based on the Rapid Foresight method. The discussion involved representatives of traditional companies as well as start-ups in certain industries, educational institutions and volunteers, who simply wanted to think about these problems. Groups of participants (each included more than 20 people) discussed how the future of various industries might look. Invited experts identified the main common trends: (1) our world being transformed by automation and robotics; (2) the increasing speed of change (technologies) and the increasing complexity of management systems associated with globalization; and (3) the increased requirements for environmental friendliness (careful attitude to any used natural resources) (Atlas of emerging jobs 2015).

The Canadian foresight, “Inspired Minds Careers 2030”, was based on the input of not only foresight strategists but close to 50 thought leaders across Canada across a wide range of industries. They started by looking at the macro-trends that are driving change and overlaying those trends against careers that currently exist today. From there, they determined how these careers would evolve through advances in technology, environmental changes, demographic changes and other factors.

During the foresight session, Canadian experts identified the following macro-trends: “Aging and demographic changes», “Climate change and energy”, “Immigration and the Borderless World”, “Digital Technology”, “Personalization” (healthcare), “Security and Stability”, “Scientific and Technical Advancements” (How to predict the jobs of the future 2014).

“The Future of Work” session held in the UK looked ahead to the labor market of 2030. It analysed stable trends that are already shaping the future of UK jobs, and skills, and forecasted the trends that will shape the trends in future. It then plots four anticipated scenarios of what the UK’s work landscape might look like in 2030, and importantly, the skills that will be required under these conditions. The following macro-trends were identified: “Emerging economies are acquiring stronger representation in global production chains”; “Demographic change and migration are changing the face of the workforce”; “Technological developments are slowly dissolving the boundaries between sectors and are changing traditional modes of working”; “Organisational structures in business are evolving and becoming more flexible and more networked” (Störmer E., Patscha C., Prendergas J., Daheim C., Rhisiart M, Glover P., Beck H. 2014)

American experts based on the University of Phoenix Research Institute, using the foresight technology, have tried to highlight key drivers, that will reshape the landscape of work, and identify key work skills needed in the next 10 years: “extreme longevity” (increasing global lifespans change the nature of careers and learning); “rise of smart machines and systems”(workplace automation nudges human workers out of rote, repetitive tasks) ;“computational world” (massive increases in sensors and processing power make the world a programmable system); “new media ecology” (new communication tools require new media literacies beyond text);“superstructured organizations” (social technologies drive new forms of production and value creation); “globally connected world” (increased global interconnectivity puts diversity and adaptability at the center of organizational operations) (Davies A., Fidler D., Gorbis M., 2011).

An analysis of the main macro-trends, obtained as a result of foresight sessions in different countries on similar topics and affecting the world of future professions, has shown that, although the processes transforming professional sectors differ from one another, they also have similar features.

The macro-trends identified in different countries have not been compared, but it can be assumed that they will have differences. This is due to the fact that each country is unique in its own way and has its

geographical, political, cultural, social and economic peculiarities. At the same time, the identified macro-trends will have common features, since today all countries are interconnected by different relations as well.

The importance of the identified macro-trends for the translation profession is to be assessed by its representatives. Many of them are concerned about their future. In the spring of 2017, the International Federation of Translators (Fédération internationale des traducteurs) published the “FIT Position Paper on the Future for Professional Translators”, which expressed concern about the prospective changes in the translation profession. In this document, the Federation notes the importance of the translation profession in the contemporary world and the growing need for translation services. However, despite the increasing demand, the Federation members indicate that the wage rates for translators are so low that it is impossible to talk about the proportionality of their earnings with a high level of their education. In addition, we can currently observe an active introduction of information technologies, without which translators simply cannot work (FIT Position Paper on the Future for Professional Translators).

As we see, the traditional translator’s image and competence are changing and expanding. New technologies and new humanitarian or social formats are coming into the profession. In order to imagine how the macro-trends mentioned above are “refracted” in the translation profession and what possible development trends it may have, in mid-May, 2017, the School of Translation Didactics was the first to conduct a foresight session, “Translator 2030”, the results of which are presented on the School website www.gavrilenko-nn.ru.

Methodology

This foresight session was based on the Rapid Foresight method, which is currently widely used in Russia. Let us briefly consider the specifics of this method, which was developed in September–October, 2010, by the Agency for Strategic Initiatives.

Rapid Foresight method specifics

“The method for rapidly holding foresight-projects, which does not require such significant financing as classical foresight methods and makes it possible to achieve comparable and often better results than even a combination of several techniques from the arsenal of classical foresight methods was named Rapid Foresight (RF)” ([Rapid foresight methodology 2017](#)).

The foresight methodology differs from traditional forecasting, futurology (studying the future) and strategic planning and is not reduced to simple forecasts. Foresight is aimed at creating a common vision of the future and is related not to forecasts of the future but rather to its formation (Project of the Long-Term Forecast of the Scientific and Technological Development of the Russian Federation for the Period up to 2025: 8). Obtaining a meaningful and verified result within this methodology takes days or even hours, unlike many months of research required by other techniques.

Researchers note that a foresight session involves people who influence the project. These people are called stakeholders³. The qualitative composition of stakeholders is in many respects the key to achieving qualitative results during a session. It is important to invite people who have the following three characteristics in common:

- They are foresight experts;
- They are personally interested in the changes (to see problems, not to be satisfied with the existing

³Stakeholder is a person, group or organization that has interest or concern in an organization [<http://www.businessdictionary.com/definition/stakeholder.html>]

situation, to see barriers);

- They are ready to work in a collective format (Rapid foresight methodology 2017)

The key concepts of a foresight session are trends, technologies, formats, probabilities and risks, and regulatory acts.

Trends are processes that may qualitatively change or supplement the content of the future translation profession. Technologies will realize the selected trend in the future. Technologies include inventions and technical innovations. The next stage in discussing technologies, format, allows us to present the forms/formats of interaction. In addition to creating important components of this session, it was necessary to assess the probabilities and risks that may arise when implementing a particular trend. We were faced with the task of designing our current activities in such a way as to increase the probability of desired events and to extinguish unwanted trends. The last component, regulatory act, records the results of a given trend at the official (legislative) level.

The result of a foresight session is a roadmap. This is the space where the analysed object is discussed. It consists of a field for placing trends, three-time horizons and a place for “black swans”, i.e., hard-to-predict and rare events that may have significant consequences for an issue under consideration but, in the opinion of most experts, will not occur. This term was introduced by the American economist Nassim Nicholas Taleb.

The standard version distinguishes three time horizons: (1) the near horizon (for phenomena currently observed by most participants); (2) the medium horizon (for phenomena, the prerequisites for which are already available, but they will happen (as participants assume) in the near future; experts themselves consider them important and breakthrough for today, but they are well aware of the ambiguous conditions for their appearance, so they simultaneously believe and do not believe in them, shifting them, as a result, into the future); and (3) the far horizon (for phenomena, the appearance of which is assumed by participants based on their opinions). The roadmap of this specific foresight session included three periods: the short-term period (from 2017 to 2020); the medium-term period (from 2020 to 2025); and the long-term period (from 2025 to 2030).

The object of the foresight session was the translation profession.

The thematic focus was written (literary and industry-specific), oral (consecutive/simultaneous) and audiovisual translation.

The task of the session was to use foresight technology to organize a discussion that would make it possible to place on the time map the most worthy, important and interesting proposals on the future of translators.

Participants

The following groups of specialists were selected to participate in the foresight session:

- Representatives of professional associations, unions and groups of translators, professional translators and freelancers;
- Representatives of universities, higher schools, and faculties for training translators;
- Representatives of translation agencies and organizations that often use translating services;
- Representatives of translation software companies.

They were selected based on an analysis of groups of people who, to a varying degree, could influence the profession and training of translators. These stakeholders, having different levels of competence, considered possible scenarios for the development of the translation profession.

Data collection

The participants discussed by stages what trends and events were occurring in the translation industry, how the industry was changing, what new technologies were coming into it, and what new

opportunities, threats, and risks were appearing. They put this information on pre-prepared cards and attached them to a roadmap. The discussion was recorded on video. The duration of the video record is 4 hours. There is also a roadmap with the trends, technologies, formats, threats, regulatory acts and black swans created during the discussion.

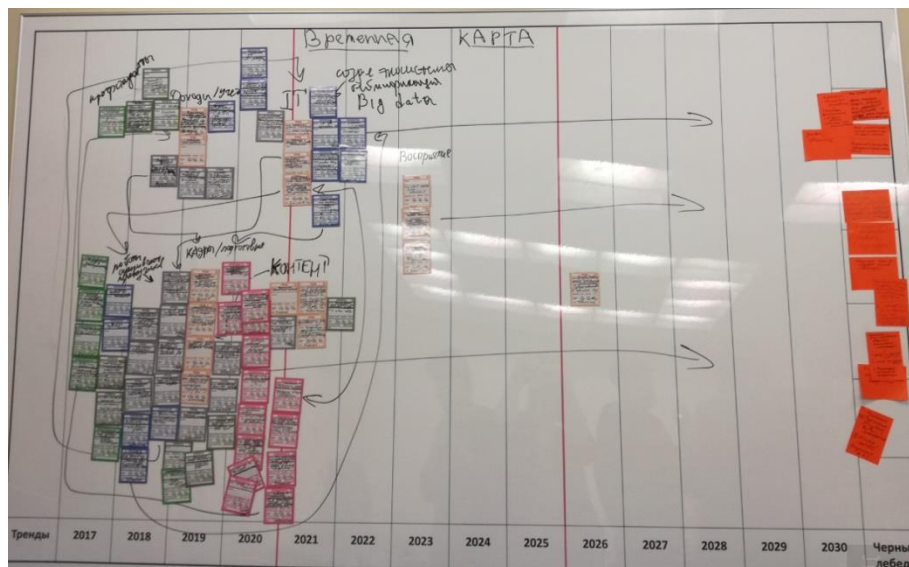


Figure 1. The picture of the roadmap

Data analysis

Having been collected, the data were analysed. The video was viewed several times and the roadmap was analyzed and transferred to the MS Excel digital format. Then, the results of the foresight session were summed up. The results were presented at the International Translation Forum in Ufa (Bashkiria, Russia).

Foresight session results

Trends

The participants identified the following three medium-term macro-trends: (1) the development of technologies, (2) the reduction in human resources and (3) the decline in incomes of translators. These macro-trends interpenetrate and complement each other.

Let us consider the main trends successively highlighted during the foresight session.

The main unanimously recognised trend was “Translation function automation due to the Hi-Tech development”. Within its framework, micro-trends were proposed, which were actively discussed by the participants. These micro-trends included:

- Active introduction of robot-translators and semi-automatic translation systems (Trados, Smartcat, CAT Labs, etc.)
- Introduction and development of machine learning and mass-data processing (Big Data) as well as their application in the translation field.
- Continuous improvement of automated translation algorithms.
- Translation functionality “gamification”.

- Sharply increasing non-textual content: to deal with it, translators will have to acquire new abilities and skills.
- The second important trend, also unanimously identified, was “Reduction in human resources in the translation industry”; in this trend, the participants singled out the following micro-trends:
 - Transfer of translators to related industries.
 - Lagging of the training system behind the market realities.
 - Degradation of the profession, fall in prestige, down-skilling.
 - Blurring of the profession boundaries.
 - Emergence of new specialties in the translation profession.
 - Expanding functionality of translation skills – cultural mediation.
 - An increasing gap between elite translators and other representatives of this profession.
 - Lack of certification, which allows poorly qualified specialists to dump.
 - Temporary deterioration in the quality of teaching staff, lag in training new teachers.
 - Analysing is replaced by searching.
 - Disappearance of large educational structures.

The third important trend of the foresight session was “Steady decline in incomes of translators”. It should be noted that it refers not to the aggregate income, which is increasing, but to the reduced cost of translating services and reduced income from a translated conventional content unit (income divided by the source content amount).

Within this trend, the participants actively discussed the following micro-trends:

- Steadily declining incomes of freelance translators due to the advance of translation companies.
- A large number of poorly trained translators entering the market, willing to work at a lower price.
- Intense dumping on the part of representatives of the translation profession from neighboring countries.
- Increasing share of machine translation.
- Negative impact of CAT-programs on the wage rates of “classical” translators.

As a result of numerous disputes and discussions, the participants highlighted the following secondary micro-trends:

- Decreasing share of text content (medium-term trend).
- Consumers’ mosaic thinking (short-term trend).
- Hybridization of communicative formats and, as a consequence, hybridization of translation activities (medium-term trend).
- Return to the audience’s analytical thinking(long-term trend).

After an active discussion of the trends, the authors conducted a survey of the foresight-session participants. They determined which macro-trends and secondary trends, in their opinion, are the most significant and which are less significant. The obtained results can be represented as diagrams,

in which macro-trends and secondary trends are arranged in order of significance from the most significant to the least significant ones.

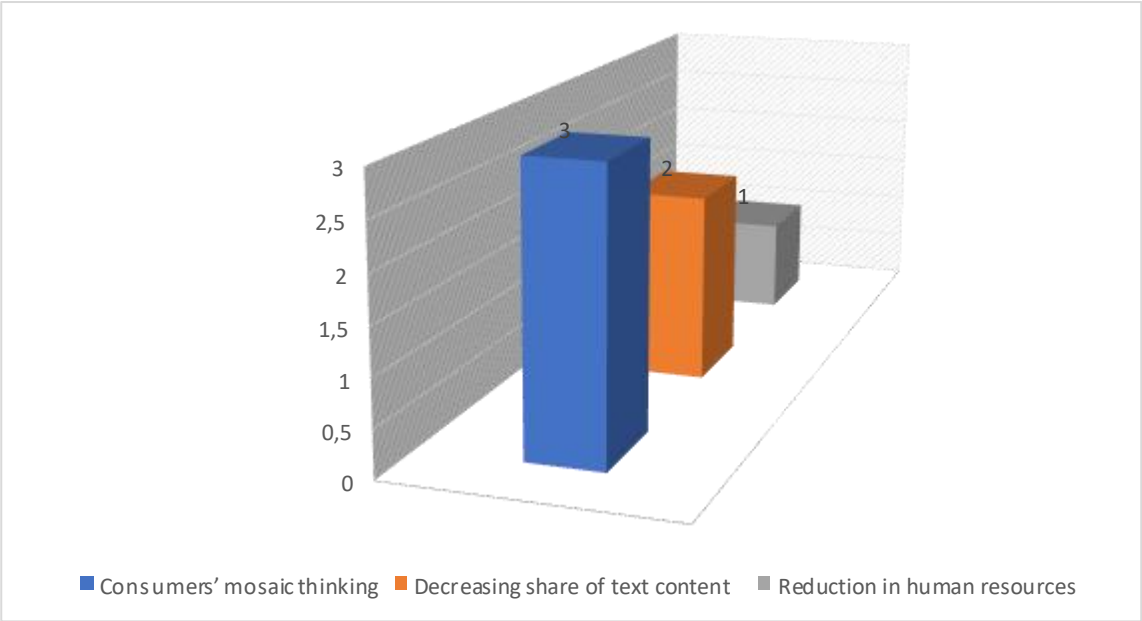


Figure 3. Significance levels of macro-trends

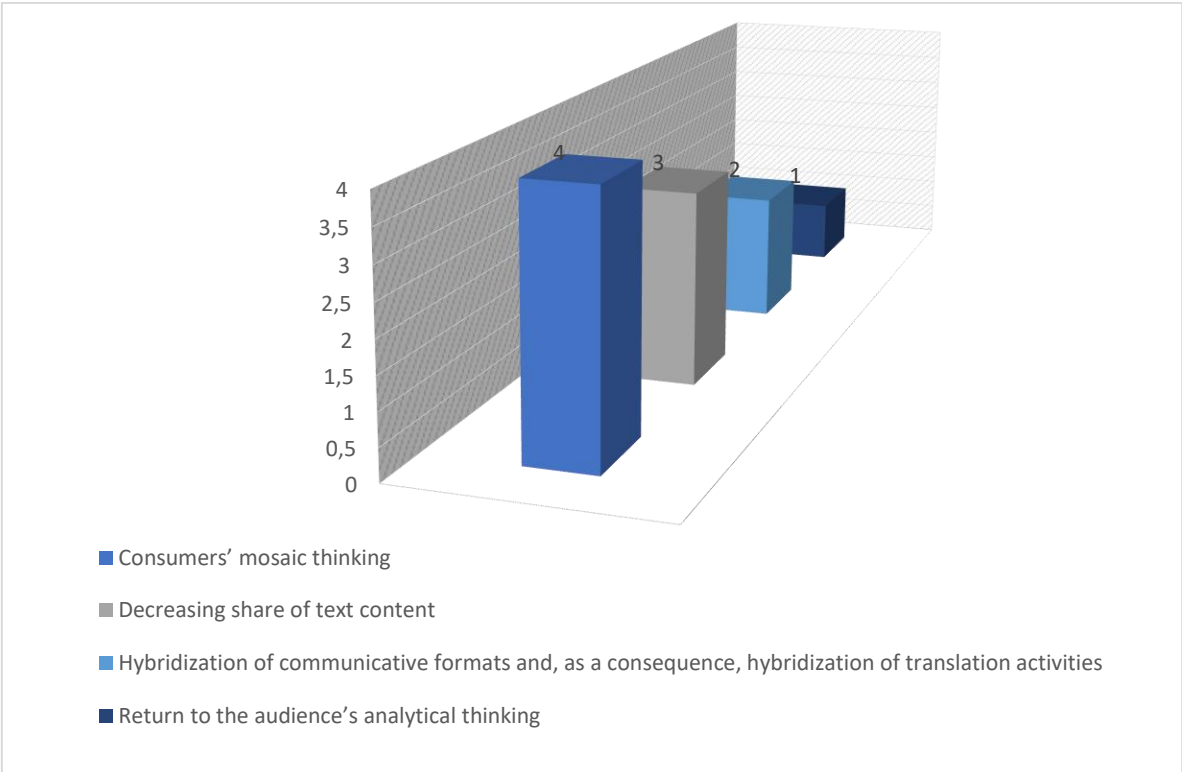


Figure 4. Significance levels of secondary trends

Threats and opportunities

As part of the trend “Translation function automation due to the Hi-Tech development”, the participants actively discussed the following threats:

- Decreasing demand for “human” translation;

- Falling incomes of classical translators;
- Professional degradation: the more the robots can do, the less the translators will be able to;
- Poor training of translators in the face of avalanche-like software development;
- Professional competence of translators begins to be analysed by robots, which leads to the risk of erroneous evaluations;
- Lagging of translators' training in the use of software behind the market needs.

At the same time, several opportunities offered by this trend were noted:

- Emergence of new related/interdisciplinary professions or additional functionality for translators;
- Returning demand for creativity and cognitive skills;
- Need for highly professional translators for training robots.

When discussing the trend "Reduction in human resources in the translation industry", the foresight session experts highlighted the probability of the following threats:

- Lower quality of translations against the background of an avalanche-like translation content;
- Increasing lagging of the personnel training system behind the market realities.
- "Stratification" of the translation industry and widening gap between elite translators and other representatives of the profession;
- Highly qualified translators leaving the industry due to the decline in their incomes.

However, when discussing this trend, the participants also noted some opportunities:

- Increasing demand for highly qualified specialists;
- Opportunities to change a specialty in the translation profession;
- Improvement of professional personnel selection;
- Flexibility and ability to adapt to market demands and possibilities of professional self-realization;
- Creation of a flexible system for retraining and reprofiling translators throughout their professional lives;
- A need to preserve, process and use the accumulated knowledge in the field of translation studies in the profession entailing the appearance of translators-researchers;
- Person-centered training of future translators taking into account their abilities and preferences;
- Increasing role of research/scientific achievements;
- New educational structures smaller in size than classical universities but capable of providing a large amount of knowledge for specific requests of future translators;
- Synergetic dynamics in the educational process of translators, a large number of new interdisciplinary specialties, adjacent to other areas of translation.

Formats, technologies, regulatory acts and black swans

It is important to note that holding such a foresight session represents a new technology that is in a formative stage. In the translation industry, it was done for the first time. The session was not limited to simple forecasting, the task was not only to imagine the future of the translation profession but also

to suggest actions needed to achieve positive results, i.e., participants did not only project the future for translators but also considered the question “How could it be done?”

An analysis of the selected trends allowed the participants to suggest possible ways of developing and stabilizing the translation profession. They can be presented as formats, technologies and regulatory acts (see Table 1).

Table 1 “Translator-2030” foresight session: formats, technologies and regulatory acts

<p>Formats</p> <ul style="list-style-type: none"> • Courses on commercial basis of translation. • Portal of public services for freelance translators. • Portal for the preservation and transfer of research in the field of translation. • Association of translation companies.
<p>Technologies</p> <ul style="list-style-type: none"> • Improving the technology of communication with robots (voice input/output of information, a new level of software, etc.). • Developing criteria for expert evaluations of professional competence of translators. • Expert systems for identifying professional preferences. • Creating online training platforms. • Developing new learning technologies (gamification), using social networks, etc. • Adapted trainings for professional growth. • Developing network interaction on issues of counteracting unfair clients. • Portal with a list of opportunities and pilot routes for learning different types of translation. • Project learning (PB-learning), Life Long Learning.
<p>Regulatory acts</p> <ul style="list-style-type: none"> • A request to the Ministry of Labor to add new translation qualifications to the register of professions. • Creating a single lobbying structure of the translation industry. • Creating certification centers for translators. • Creating a professional translator standard, entering the translation profession into the unified register of professions. • Creating an educational standard for translators on the basis of the professional standard. • Establishing offices for checking finished translations.

The final stage of the foresight session was the discussion of “black swans” (the term was introduced by Nassim Nicholas Taleb, an American economist). A “Black Swan” (TBS) is a hard-to-predict and rare event that can have significant consequences for an issue under consideration.

The participants identified the following “black swans” in the translation profession development:

- Return to the “Iron Curtain”.
- Border closure.
- Removal of sanctions.
- Young generation’s losing analytical reading skills.
- Creation of a single world translation market.
- Sudden and chaotic governmental interference in the work of the industry.
- Introducing censorship on the Internet.
- Internet disconnection.

- Toughening regulation of cash payments (withdrawal from payments off-the-books or refusal to “drain” VAT, resulting in a pay scale increase).
- Russia’s accession to the EU.
- Russian becomes the language of international communication.
- Explosive growth in demand for translations.
- Russian is no longer the language of international communication.

Conclusion

The “Translator-2030” foresight session made it possible to create a “time map” which was discussed by all the participants. This map allows us to predict the further development of the translation industry not “linearly” but rather “spatially”, with the participation of numerous independent representatives of the translation industry.

As a result, we obtained a map of future trends, possible events and technologies in the translation profession. The map will help to be steady in purpose, choosing the possible ways and technologies. Choosing these ways and coordinating them represents the further stages of interaction among participants of the translation industry.

The macro-trends considered above, which, in the opinion of researchers, affect any professional industry, also have an impact on the translation work. It becomes clear that the structure of work tasks is changing in the translation profession as well. Some work tasks become irrelevant and, at the same time, new tasks appear that need to be addressed using a new set of competences, abilities and skills.

Since the described foresight session is a “network planning” procedure, it is assumed that, after its completion, the developed plan will be implemented. Of course, this map will be constantly updated, based on the created “time map”, but this plan will make sense only if it is carried out. Whom by? “By these very decision-making centers, so numerous nowadays, which no more represent hierarchical chains strictly subordinate to the directive management framework but rather are networks with independent and equal nodes in terms of freedom in decision-making” (Kozharinov, 2012).

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