

Science
Research
Innovation
STATISTICS



Rise



Openness



Synergy



Stability

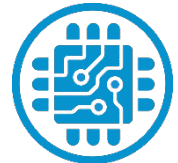
Targeting



Applicability



Timeliness



II International Statistical Forum
Tashkent, October 2-4, 2024

Section 2 "Statistical Education. Challenges and Priorities"
October 3, 2024

*Concept of a Digital Environment for the
Development of Statistical Literacy and
Statistical Education in the CIS*

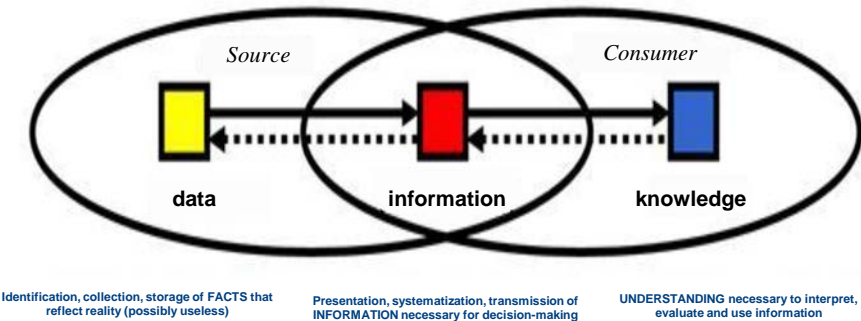
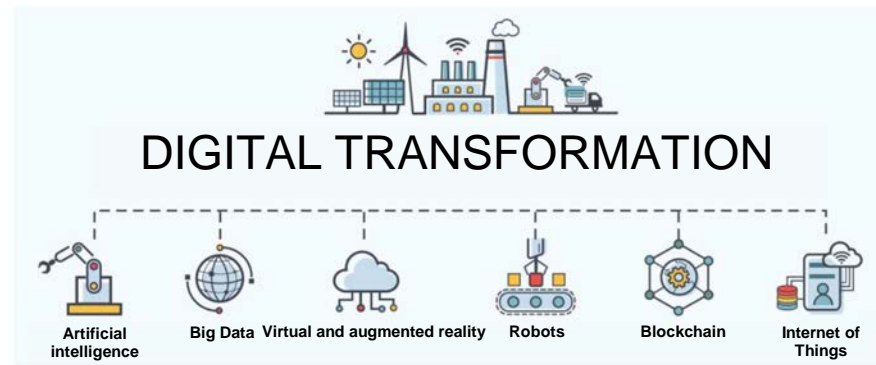
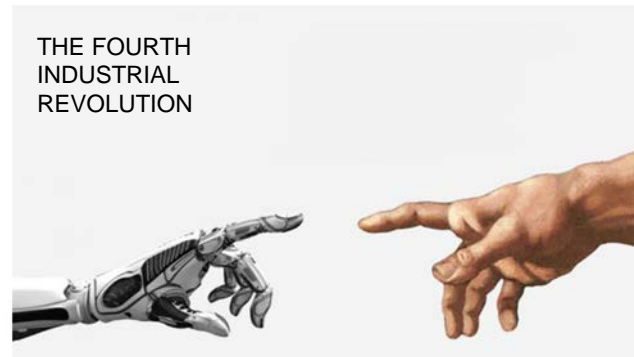
Professor **Khoroshilov
Alexander Vladievich**,
Chief Expert on scientific and educational
consulting of the Research Institute of Statistics of
Rosstat



akhor@list.ru

Strategy for the development of statistical literacy and education

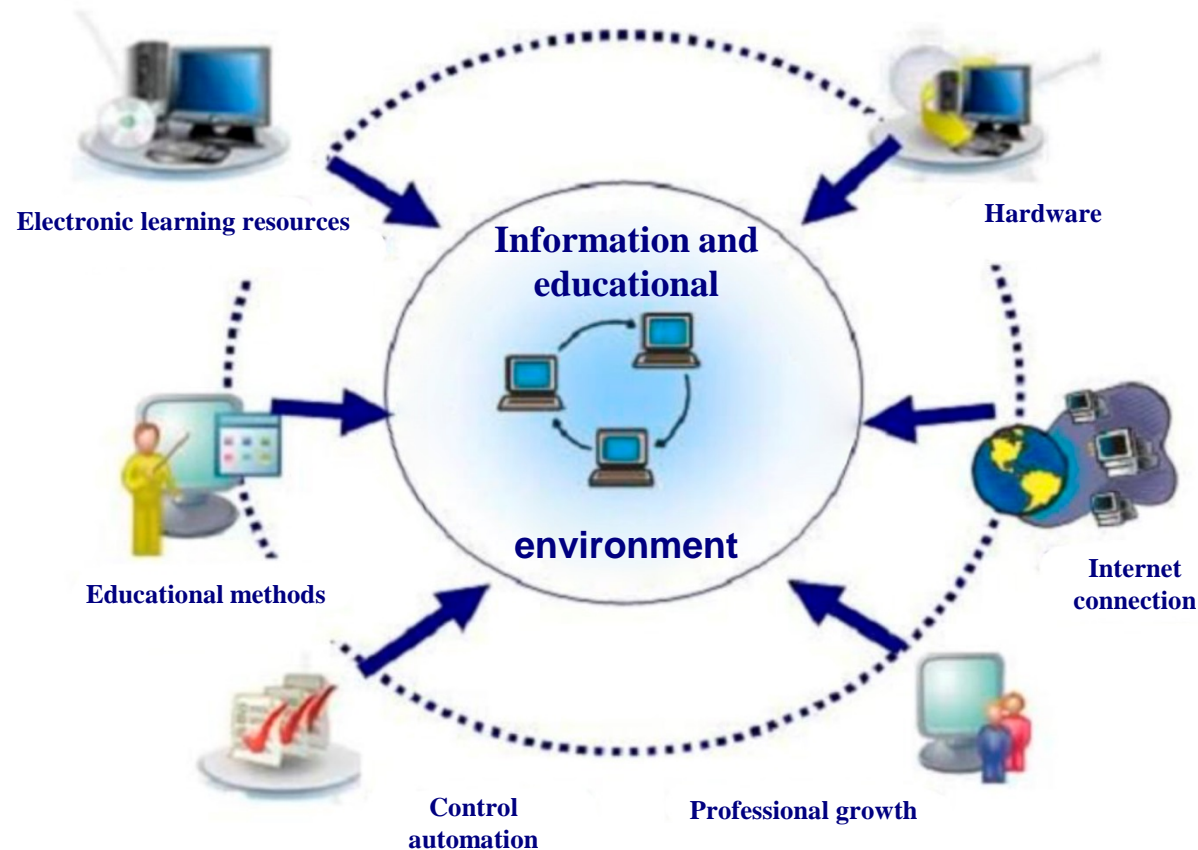
Current environment and context:



- Industry 4.0 involves the transformation of production, economy and social sector based on the widespread use of digital, hybrid and intelligent technologies aimed at the use and processing of large data volumes;
- Digital transformation of all areas of human life;
- Formation of digital society and a new economy based on data, information and knowledge.

Digital information and educational environment for the development of statistical literacy and statistical education

An open set of information systems designed to solve various problems of ensuring the digital transformation of the processes of development of human potential of statistics in the CIS.



Project purpose and objectives

Purpose : Implementation of strategy for the development of statistical literacy and continuous statistical education in an innovative digital information and educational environment

Primary objectives :

- 1). Elaborate strategy for the development of statistical literacy and continuous statistical education for the period up to 2035 according to the general scheme for the development of statistical literacy and education (see the records of the 69th meeting of the Council of the Heads of Statistical Services of the Commonwealth of Independent States (May 29, 2024, Dushanbe));
- 2). Shape an innovative digital information and educational environment for the implementation of the strategy for the development of statistical literacy and continuous statistical education based on a technological platform that provides access to information and educational resources of school, vocational and further education, online training, maintaining a database of regulatory, methodological and educational materials, a knowledge base, as well as support for a portal for the community of statisticians, experts and academic staff of the CIS for communication and exchange of knowledge and experience.



EDUCATIONAL ENVIRONMENT



Prerequisites for the implementation of the Project

Decision of the 69th meeting of the Council of the Heads of Statistical Services of the CIS (On the Arrangement of Work on the Development of Professional Competencies in Statistics Under the Development of CIS Statistics Project);

Initiatives of the UN statistical and regional commissions;

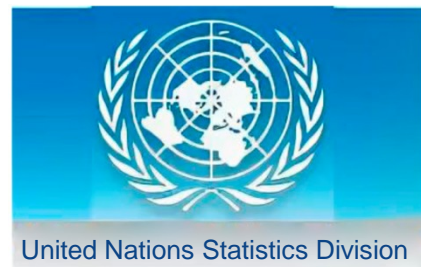
Experience in implementing programs of additional professional education for statisticians using electronic, distance and blended learning technologies aimed at developing professional, digital and social competencies of NSS employees in the CIS countries;

High level of application of digital technologies in staff education, training, retraining and advanced training in the CIS member states;

Extensive positive experience in developing and implementing programs of further vocational education in the field of statistics, including using digital educational technologies, as well as experience in creating and using electronic, distance and blended learning systems for the professional development of specialists in various areas of expertise.

The NSSs of the CIS countries have highly qualified personnel, including those with experience in academic activities;

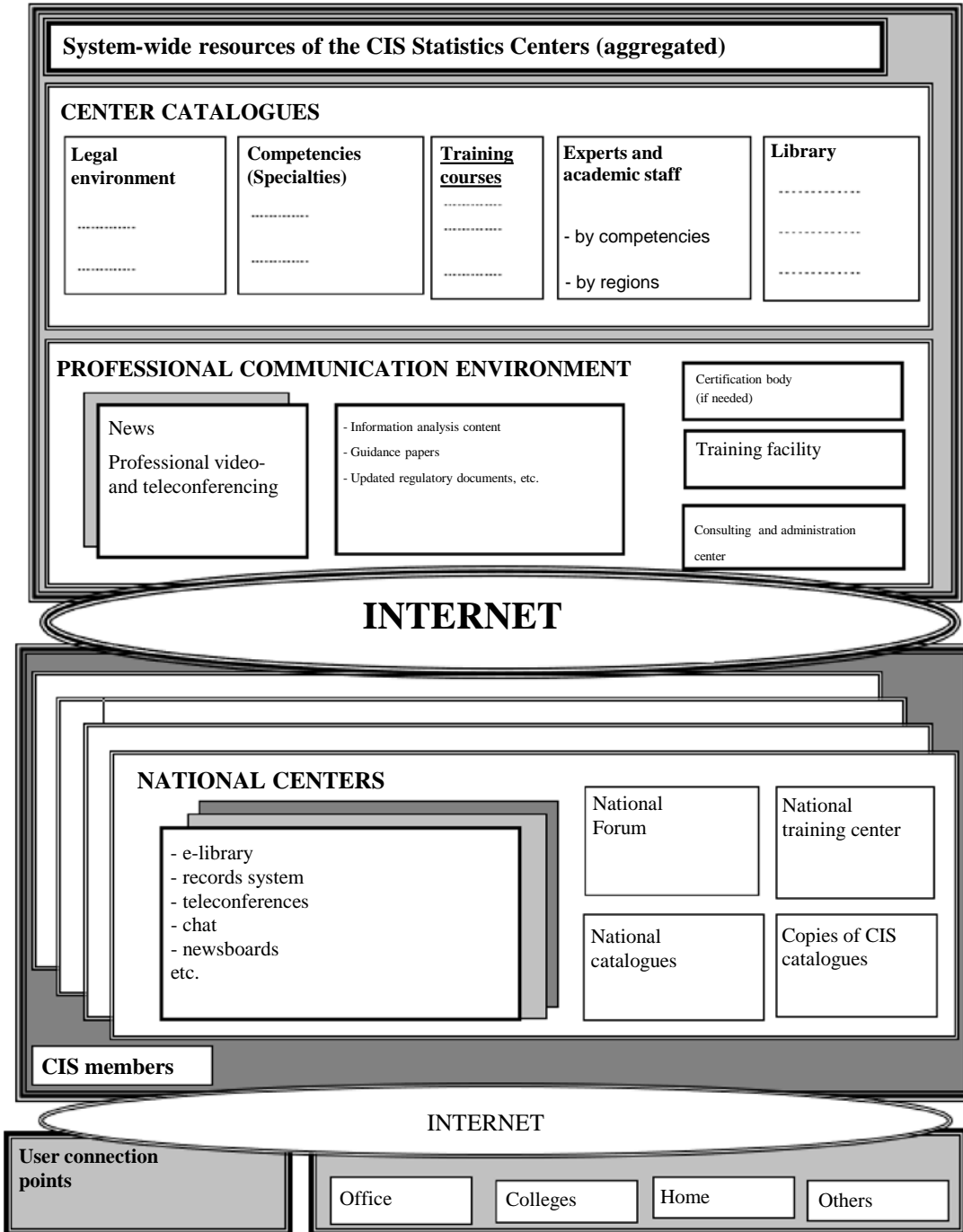
Under the Development of CIS Statistics project, a sub-project on the formation of a community of statisticians, experts and academic staff and talent enhancement is being successfully implemented, with a knowledge management system being developed.



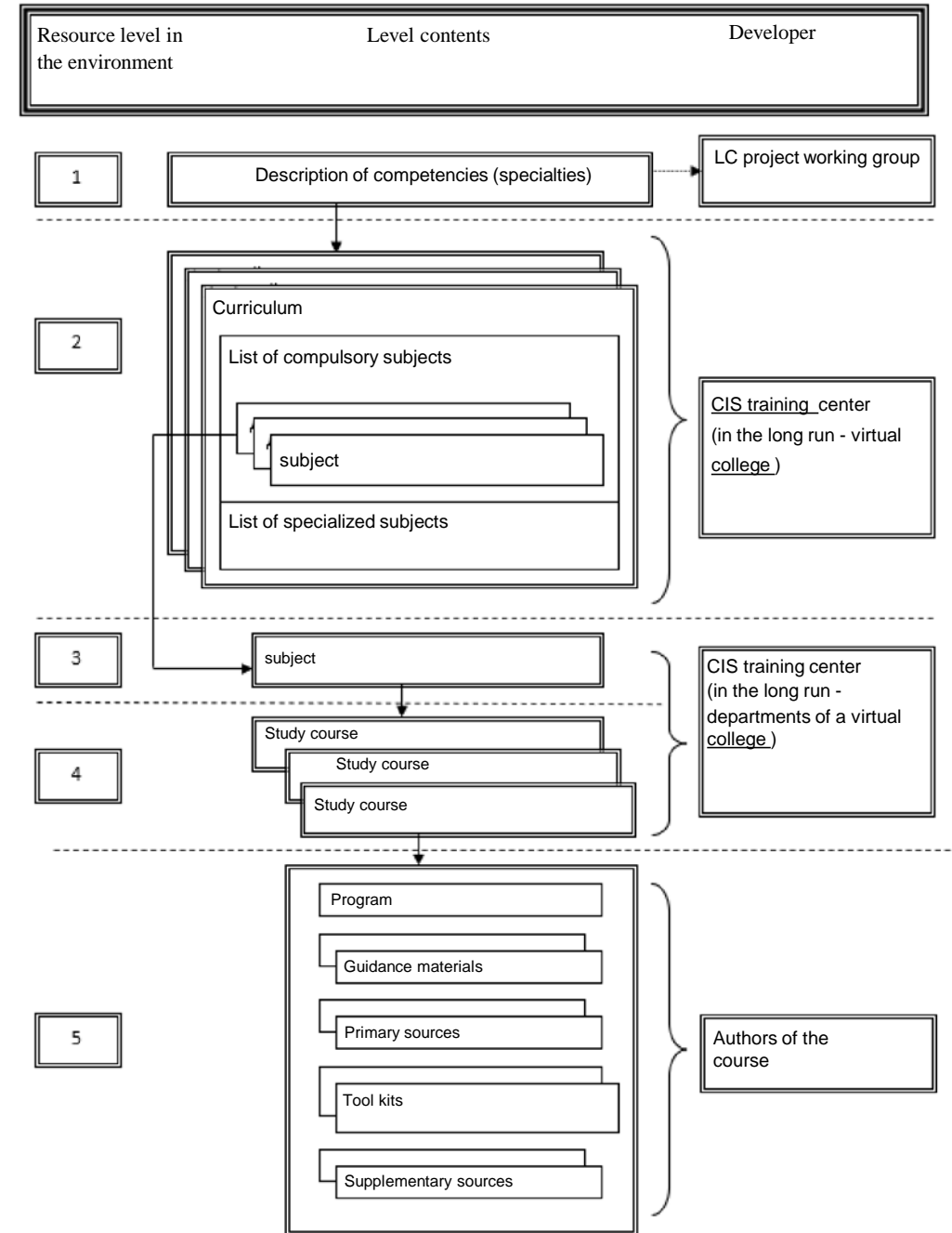
FURTHER VOCATIONAL
EDUCATION



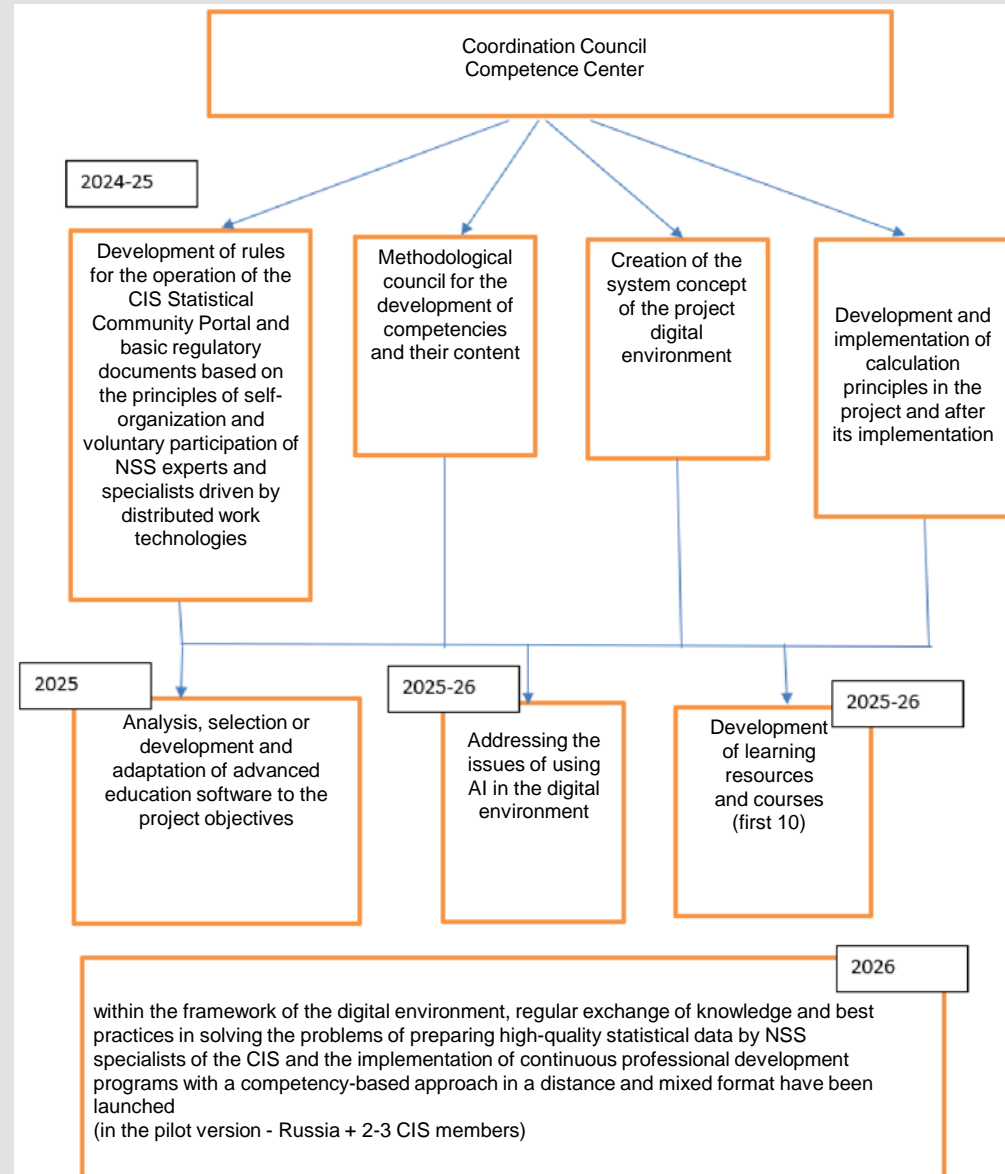
Functional configuration of digital environment



Infological model of educational and methodological support of digital environment



General chart of work organization



No. n/n	Scope of work	2025	2026	2027
1.	Building a strategy for the development of statistical literacy and continuous statistical education for the period up to 2035, including clarification and revision of the general pattern for the development of statistical literacy and education.			
2.	Making technical specifications for the formation of a digital innovative information and educational environment for the implementation of the strategy for the development of statistical literacy and continuous statistical education			
3.	Inspection and analysis of existing education materials, training courses and educational programs on statistics and technology platforms for e-learning			
4.	Adaptation, updating and development of professional training courses (3-5 courses annually) and the formation of open information and educational resources on statistical literacy and education			
5.	Organization and support of training and access to open information and educational resources for the development of statistical literacy			
6.	Development of a framework (model) of statistics competencies			
7.	Analysis of the needs of the CIS NSSs in the development of professional competencies of their staff			
8.	Drafting of recommendations for the CIS NSSs on the development, harmonization and implementation of national standards for the profession of Statistician and educational standards in statistical areas and specialties of various education levels			
9.	Organization of seminars and meetings of community participants in in-person, online and mixed formats to form and support the expert statistical community of the CIS (professional statisticians, experts and academic staff), including formation of thematic expert groups and assignment of their leaders			
10.	Formation, compilation and support of an innovative information and educational environment based on a technology platform that provides access to information and educational resources, knowledge base maintenance and support for a portal for the community of statisticians, experts and academic staff of the CIS for communication and exchange of knowledge and experience			
11.	Purchase of equipment and software for a digital information and educational network (server hardware, equipment and specialized software for preparing content and conducting online courses and online seminars and meetings of the expert community)			

by 2027

- Commissioning of a technology platform that provides access to information and educational resources for school, vocational and further education, online training, maintaining a knowledge base and supporting the Expert Statistical Community;
- Commissioning of the portal of the Community of statisticians, experts and academic staff of the CIS, ensuring their regular interaction to discuss current issues of statistics development and exchange of experience, with a built-in specialized profession-oriented multilingual generative chatbot (GPT), contributing to an increase in the quality of implementation of requests from Community members for access to regulatory and guidance documents, statistical data, scientific and technical documentation, education materials and training courses;
- Final stage of the formation of an innovative digital information and educational environment for the implementation of the strategy for the development of statistical literacy and continuous statistical education based on a technological platform that provides access to information and educational resources of school, vocational and further education, online training, maintaining a knowledge base and supporting the portal of the CIS Expert Statistical Community for communication and exchange of knowledge and experience;
- Implementation of online training for not less than 200 employees of the CIS NSSs per year on a regular basis;
- Development and organization of training courses at the request of the CIS NSSs in distance and mixed formats;
- Providing access to information and educational resources and MOOCs on statistics for the population, students and teaching staff of educational institutions of the CIS;
- Purchase of equipment and software necessary for the formation and maintenance of an innovative information and educational environment.

Project development prospects: Creation of a virtual university – the Interstate CIS Institute for Economics and Statistics

Socially beneficial results of the Project

Satisfying the requirements of the adult population and students of educational institutions of various levels, public and private structures of the CIS countries in the development of statistical literacy and statistical education (A strategy for the development of statistical literacy and continuous statistical education for the period up to 2035 has been developed and adopted, with the aim of satisfying the needs of the population and students of educational institutions of various levels, representatives of government bodies, public and private structures of the CIS countries in the development of their statistical literacy, and of NSS staff – in the development of their professional competencies; The population, students of educational institutions, representatives of government bodies and public administration, public and private sectors of the CIS economies have got free access to information and educational resources containing electronic educational materials and online courses on the development of statistical literacy; Information and educational resources have been created and filled with electronic educational materials and online courses on the development of statistical literacy, to which various user categories (citizens, students of educational institutions, representatives of government bodies and public administration, public and private sectors of the CIS economies) have free access);

Improving professional knowledge and competencies of the CIS NSS staff as a condition for ensuring data quality in accordance with modern requirements for official statistics in the context of digital society (A framework structure (model) of statistician competencies meeting the requirements of the data economy has been developed; For the CIS NSS, recommendations have been prepared concerning the development, harmonization and implementation of national standards for the profession of Statistician and educational standards in statistical areas and specialties at various levels of education; Based on the results of the analysis of the needs of the CIS NSS in the development of professional competencies of their employees, online training courses for the development of professional competencies of CIS NSS employees have been developed, adapted and/or updated; Online training has been organized at the workplaces of the CIS NSS employees to ensure professional competencies that meet the requirements of the data economy and the current needs of the CIS NSS, which will become real “learning organizations”);

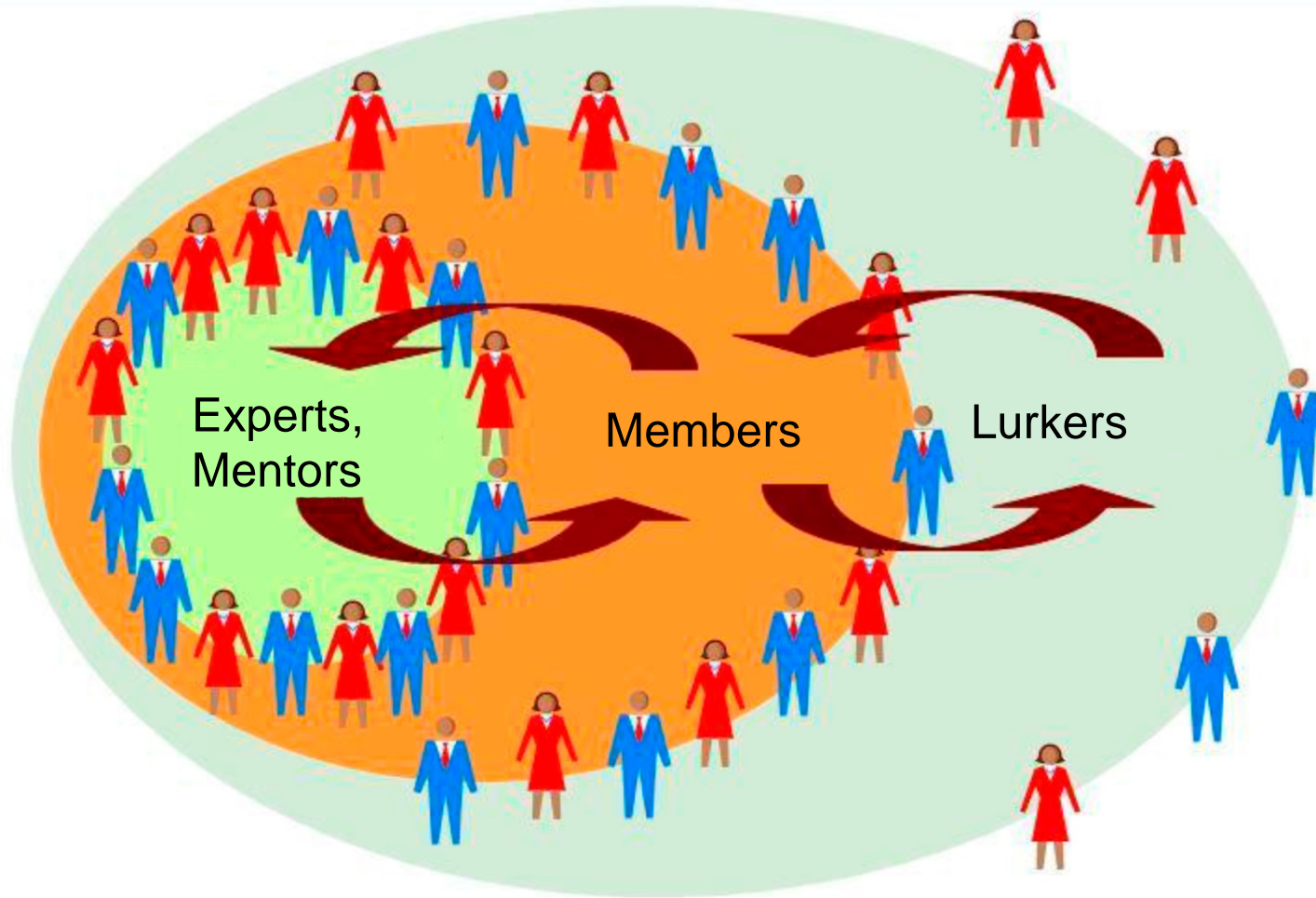
Increasing the level of cooperation among specialists, experts and academic staff of the CIS in the field of statistics to solve urgent problems of statistics development in the CIS (A statistical virtual practical community of the CIS has been formed).

CIS expert statistical community as a virtual Community of Practice

Virtual community is a group of people who communicate and collaborate using computer networking tools.

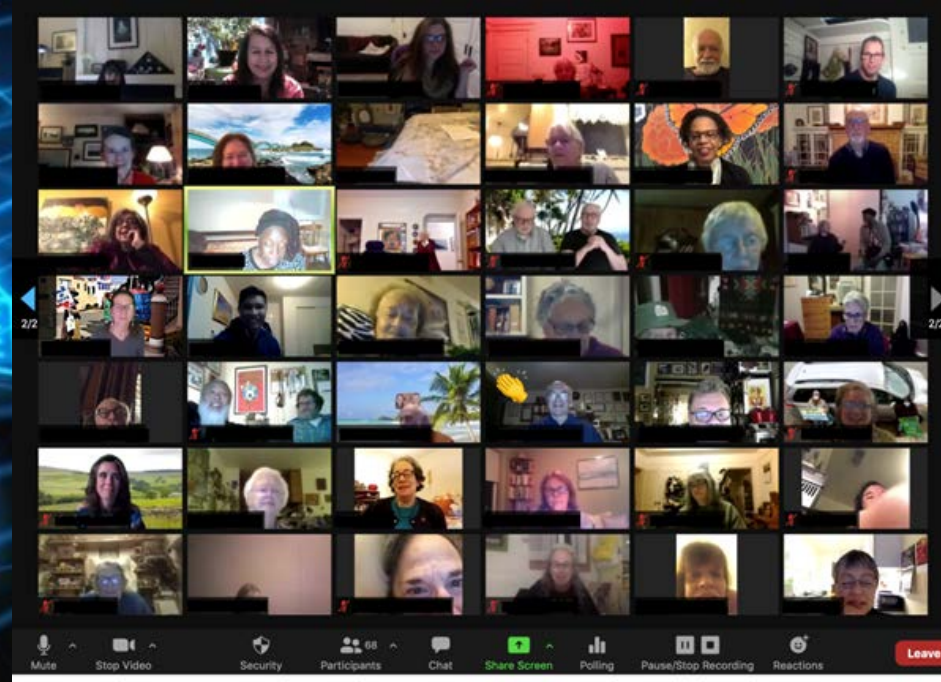


06.05.2020



STATISTICIANS

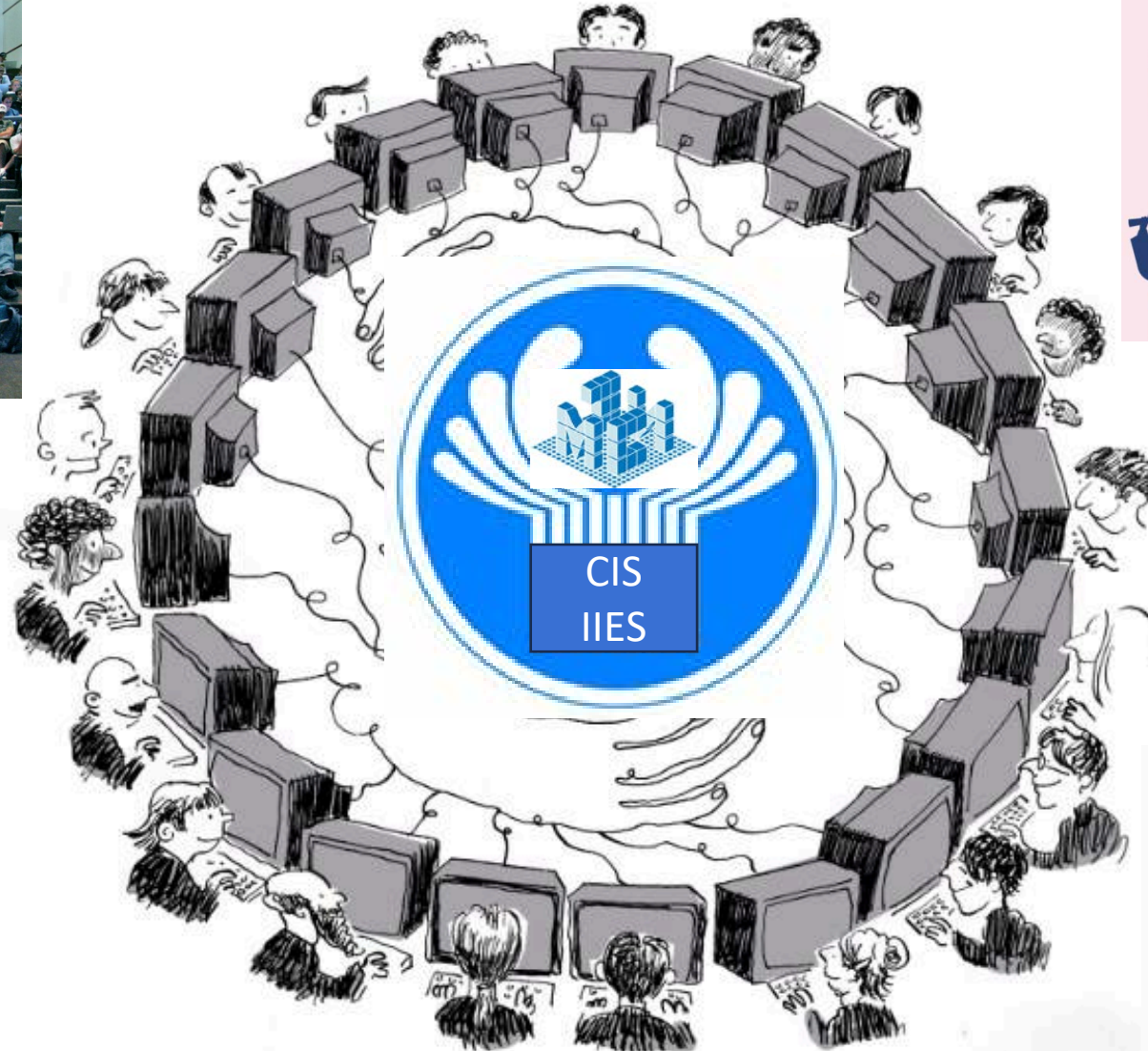
(statistical virtual community of practice of the CIS)
EXPERT COMMUNITY



EXPERT COMMUNITY PORTAL:

- **Regular professional communication (exchange of experience , knowledge and practice);**
- **Research workshops, master classes, discussions;**
- **Access to regulatory and methodological documentation, statistical data, consultations, training courses using a specialized professionally oriented multilingual generative chatbot (GPT)**

Interstate CIS Institute for Economics and Statistics (virtual university)



The system-forming element of the global mechanism for the development of human potential in CIS statistics



Rise

Openness

Synergy

Stability

Targeting

Applicability

Timeliness



Thank you for your attention!
I welcome everyone to
cooperate in the formation of
the Digital Environment for
the development of statistical
literacy and statistical
education in the CIS

**Wishing everyone health,
good luck and prosperity,**

Best regards,

Professor A.V. Khoroshilov, Research Institute of Statistics
of Rosstat,

akhor@List.ru

