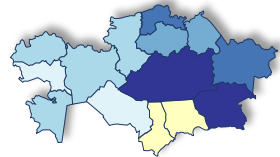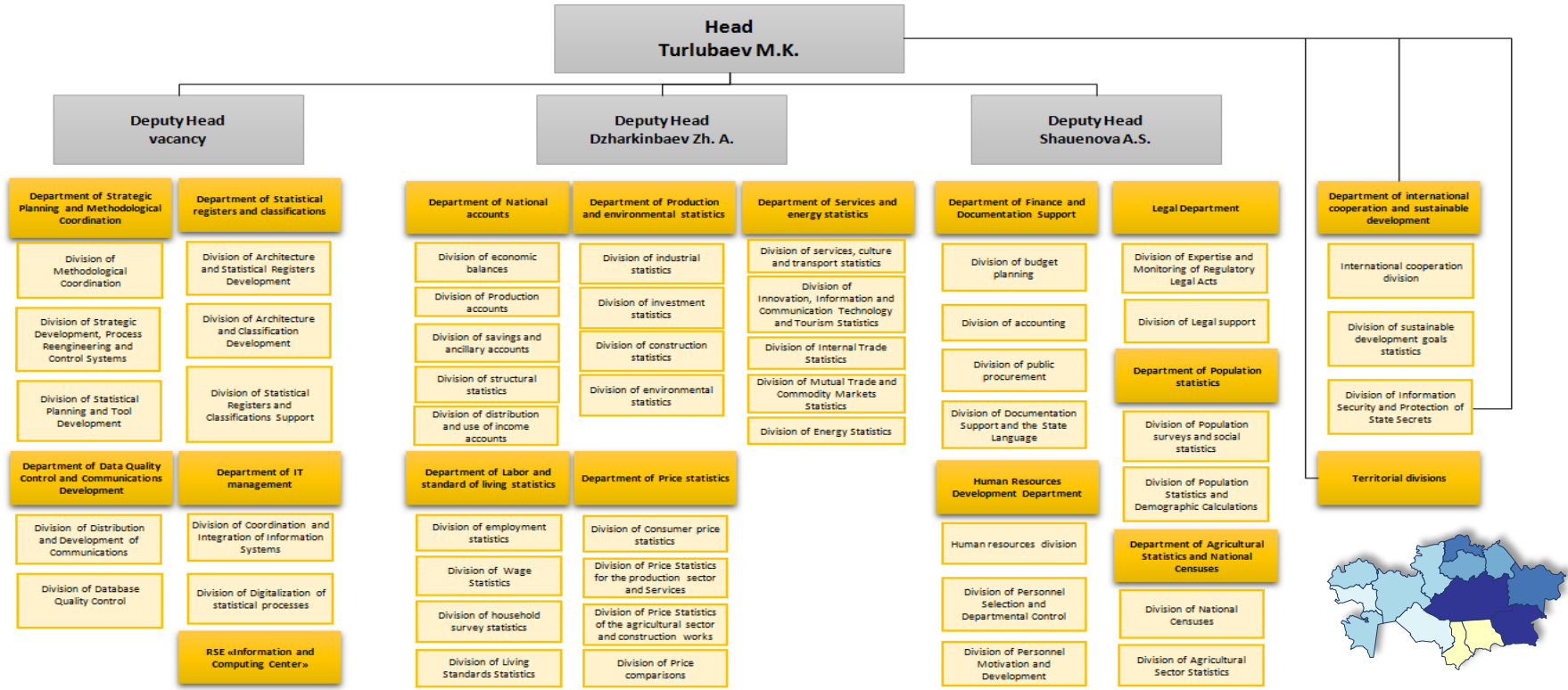**QAZSTAT**

Agency for Strategic planning and reforms
of the Republic of Kazakhstan
Bureau of National statistics

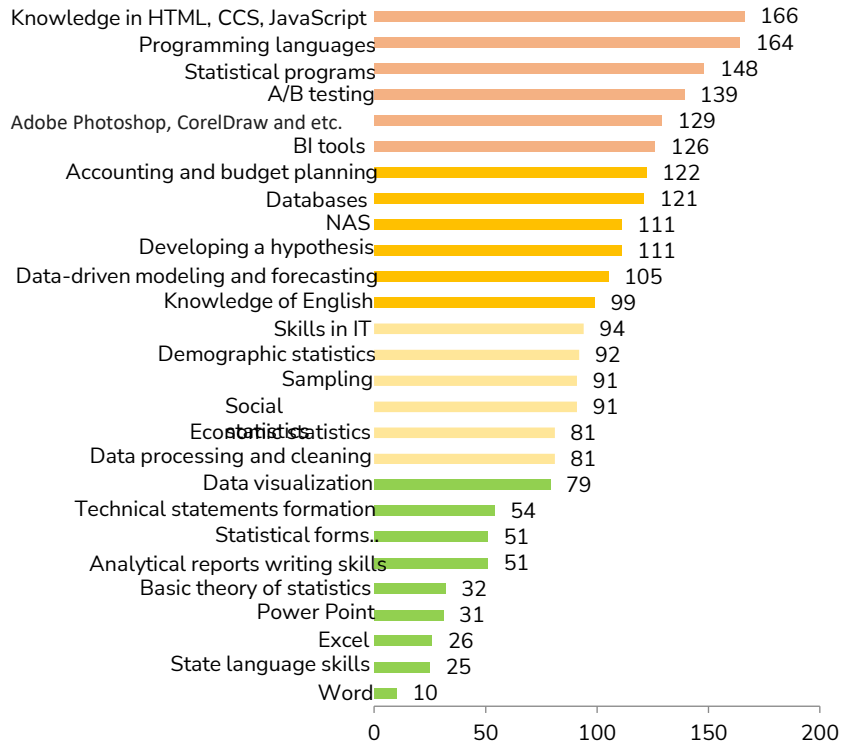# Training and development of personnel potential of Bureau of National statistics

Gulmira Bexautova
Head of HR department

2024

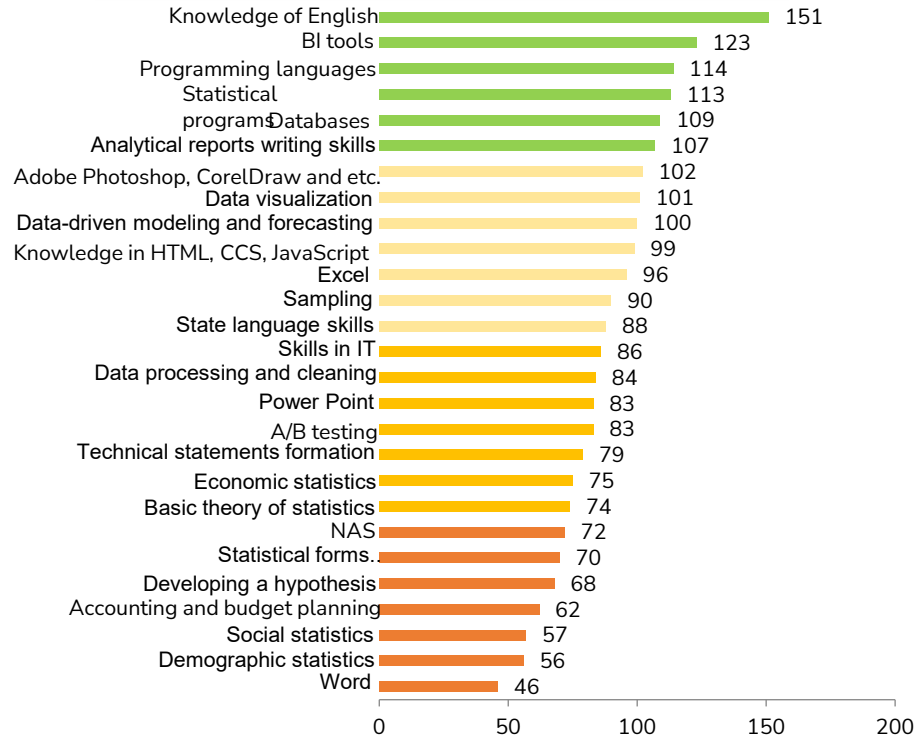# Organizational structure of the Bureau

Total staff number - **2385**

Head
Turlubaev M.K.

Deputy Head
vacancy

Deputy Head
Dzharkinbaev Zh. A.

Deputy Head
Shauenova A.S.

Department of Strategic Planning and Methodological Coordination
- Division of Methodological Coordination
- Division of Strategic Development, Process Reengineering and Control Systems
- Division of Statistical Planning and Tool Development

Department of Statistical registers and classifications
- Division of Architecture and Statistical Registers Development
- Division of Architecture and Classification Development
- Division of Statistical Registers and Classifications Support

Department of Data Quality Control and Communications Development
- Division of Distribution and Development of Communications
- Division of Database Quality Control

Department of IT management
- Division of Coordination and Integration of Information Systems
- Division of Digitalization of statistical processes
- RSE «Information and Computing Center»

Department of National accounts
- Division of economic balances
- Division of Production accounts
- Division of savings and ancillary accounts
- Division of structural statistics
- Division of distribution and use of income accounts

Department of Labor and standard of living statistics
- Division of employment statistics
- Division of Wage Statistics
- Division of household survey statistics
- Division of Living Standards Statistics

Department of Production and environmental statistics
- Division of industrial statistics
- Division of investment statistics
- Division of construction statistics
- Division of environmental statistics

Department of Price statistics
- Division of Consumer price statistics
- Division of Price Statistics for the production sector and Services
- Division of Price Statistics of the agricultural sector and construction works
- Division of Price comparisons

Department of Services and energy statistics
- Division of services, culture and transport statistics
- Division of Innovation, Information and Communication Technology and Tourism Statistics
- Division of Internal Trade Statistics
- Division of Mutual Trade and Commodity Markets Statistics
- Division of Energy Statistics

Department of Finance and Documentation Support
- Division of budget planning
- Division of accounting
- Division of public procurement
- Division of Documentation Support and the State Language

Human Resources Development Department
- Human resources division
- Division of Personnel Selection and Departmental Control
- Division of Personnel Motivation and Development

Legal Department
- Division of Expertise and Monitoring of Regulatory Legal Acts
- Division of Legal support

Department of Population statistics
- Division of Population surveys and social statistics
- Division of Population Statistics and Demographic Calculations

Department of Agricultural Statistics and National Censuses
- Division of National Censuses
- Division of Agricultural Sector Statistics

Department of international cooperation and sustainable development
- International cooperation division
- Division of sustainable development goals statistics
- Division of Information Security and Protection of State Secrets

Territorial divisions

GAP-ANALYSIS

LOW COMPETENCE

Skill	Value
Knowledge in HTML, CCS, JavaScript	166
Programming languages	164
Statistical programs	148
A/B testing	139
Adobe Photoshop, CorelDraw and etc.	129
BI tools	126
Accounting and budget planning	122
Databases	121
NAS	111
Developing a hypothesis	111
Data-driven modeling and forecasting	105
Knowledge of English	99
Skills in IT	94
Demographic statistics	92
Sampling	91
Social statistics	91
Econometric statistics	81
Data processing and cleaning	81
Data visualization	79
Technical statements formation	54
Statistical forms..	51
Analytical reports writing skills	51
Basic theory of statistics	32
Power Point	31
Excel	26
State language skills	25
Word	10

FINDINGS

- **Technical skills** such as **programming, working with statistical programs and databases, working with BI tools**, as well as **knowledge of English** are **the weakest points** among employees

- There is a lack of competence in **working with graphic editors, the ability to conduct A/B testing, modeling and forecasting** based on data, and the **formation of hypotheses**

- A relatively small number of employees indicated low competence on **theoretical topics in statistics**

- The largest number of employees rated their competence as **"high"** in working with **office programs, the basics of statistical theory and knowledge of the state language**

GAP-ANALYSIS

HIGH NEEDS

Topic	Value
Knowledge of English	151
BI tools	123
Programming languages	114
Statistical programs	113
Databases	109
Analytical reports writing skills	107
Adobe Photoshop, CorelDraw and etc.	102
Data visualization	101
Data-driven modeling and forecasting	100
Knowledge in HTML, CCS, JavaScript	99
Excel	96
Sampling	90
State language skills	88
Skills in IT	86
Data processing and cleaning	84
Power Point	83
A/B testing	83
Technical statements formation	79
Economic statistics	75
Basic theory of statistics	74
NAS	72
Statistical forms.	70
Developing a hypothesis	68
Accounting and budget planning	62
Social statistics	57
Demographic statistics	56
Word	46

FINDINGS

- **Programming and visualization skills using BI tools, working with statistical programs and databases,** as well as **knowledge of English** are the most popular topics to study among employees

- The interest in training on **writing analytical reports** was noted, despite the fact that there is an average level of competence in this area

- There is a need for **Excel training**, despite the fact that employees have sufficient competence in this office program, due to the fact that data processing is carried out in this program

- **Theoretical topics in statistics** are of the least interest in training

DECISIONS. INITIATIVES.

Partners

English language training by C5+ONE program	• 47 employees completed	
Training in the course "Application development in Qlik sense"	• 54 employees completed	
The training plan for 2024	• 44 employees completed the open source courses based on the Training Plan for 2024	
Conducting intersectional seminars	• In-depth study of the methodology for collecting statistical indicators for all industries	
Formation of a Competence Center based on the Bureau	• Constant improvement of staff skills through systematic training (long life learning)	

C5+ONE (Opening Networks Through English) Program

datanomix astana hub

⚠ The practice of **sustainable development** of employee competencies will be continued on an **ongoing basis**

IMPROVING THE LITERACY **OF CIVIL SERVANTS, THE GENERAL PUBLIC** IN WORKING WITH DATA **AND** THE DEVELOPMENT OF PROFESSIONAL COMPETENCIES OF **EMPLOYEES**

The program is focused on:

- ✓ work with published data and interpretation;
- ✓ working with information sources;
- ✓ methodological issues in the main branches of statistics;
- ✓ data quality standards and the use of alternative sources of information
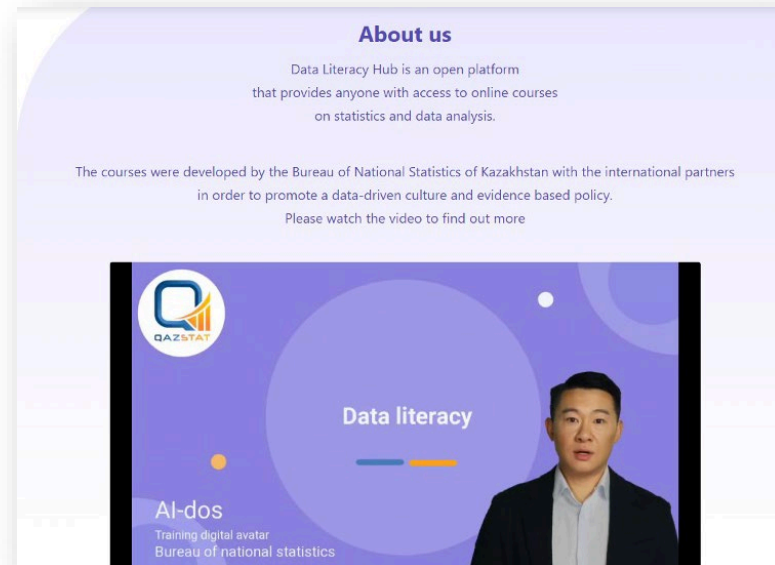
The Data Literacy program allows you to better **understand statistics**, forms a culture of **decision-making based on data**

THE DATA LITERACY INITIATIVE

Status

- **Published** videos

- **In the production process,** launch before the end of this year

- **Completed** **50** employees

- **Completed** **30** employees

Partners

UNDP

KazNU

Level 1. Introduction to Data and statistics

- Videos on basic knowledge and data interpretation have been published
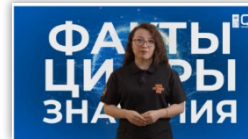
Level 2. Methodology of statistical indicators

- Production of video content on the application of data based on an approved statistical methodology

Level 3. Descriptive data analysis

- From November 2022 to April 2023, training was conducted in data analysis and visualization using the Qlik program

Level 4. Predictive analytics and data management

- From April to July 2023 training in data analytics was provided to solve complex problems based on data

⚠ **The Data Literacy** program aims to strengthen the analytical capacity of **users** and **government officials**

THE DATA LITERACY INITIATIVE

An open learning platform has been created 🔍 dataliteracyhub.stat.gov.kz
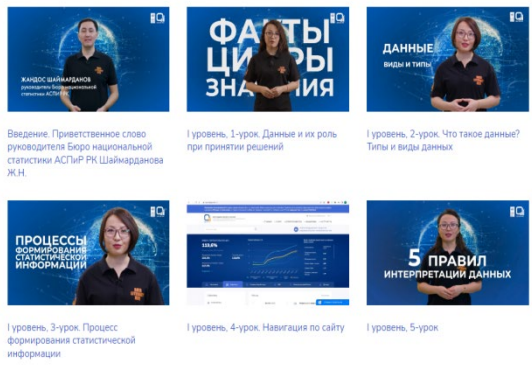
The platform provides access to online courses in the field of statistics and data analysis
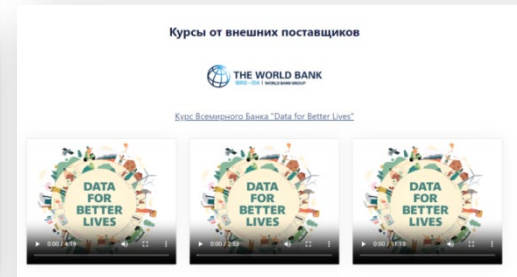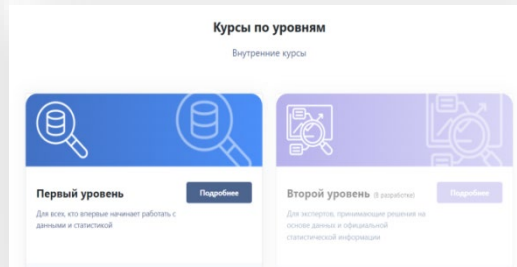
✓ A joint "Modular course for civil servants" has been developed with the World Bank

✓ The modular course was developed in Kazakh and translated into Russian, English, Kyrgyz, Tajik, Uzbek languages

✓ 30 civil servants from Kazakhstan completed the course

✓ It is also planned to train civil servants from Kyrgyzstan, Tajikistan and Uzbekistan, 30 people from each country

INTERACTION WITH UNIVERSITIES

DEVELOPMENT OF HUMAN RESOURCES **in the in the field of statistics and the** INVOLVEMENT **of employees in** RESEARCH ACTIVITIES, **as well as the** POPULARIZATION **of the use of statistical data**

In 2022, 2 memorandums were concluded	• Kazakhstani branch of MSU • AITU	• Developed and adapted the Bureau's practical module into MSU's educational program in the Economics major • 1st place at the International Student Olympiad on Statistics of the CIS Statistical Committee (Kazakhstan branch of MSU) • A course on Project Management was conducted by Bureau's employees
In 2023, 6 memorandums were concluded	• APA under the President of the RK • KazATU • KarU • Narxoz • KIMEP • KazNU	• The undergraduate program "Mathematical Economics, Statistics and Data Analysis" was launched (KarU) • The 1st level of the Bureau's Data Literacy has been introduced into the program of advanced training of civil servants (APA) • Practical internship at Bureau and RSE ICC • Guest lectures
In 2024, a master's program	• Kazakhstani branch of MSU	• Joint Master's degree program "Statistics and Data Management in Modern Economics" was launched

The Bureau is **open to cooperate** with universities and students both in terms of **research** and **internships** and **traineeships**

INTERACTION WITH UNIVERSITIES

Bureau's practical module

Methodology and analysis of statistical indicators

1. OFFICIAL STATISTICS OVERVIEW
2. GDP METHODOLOGY AND ANALYSIS
3. ANALYSIS OF THE DEVELOPMENT OF BASIC ECONOMIC SECTORS
4. INFLATION AND PRICE INDEXES
5. EMPLOYMENT AND WAGES
6. HOUSEHOLD INCOME AND EXPENDITURES
7. DEMOGRAPHICS AND MIGRATION
8. SUSTAINABLE DEVELOPMENT GOALS

9. OUTCOMES - ANALYSIS AND DISCUSSION

Completed - 57 people
Duration - 16 weeks
Course volume - 64 academic hours
(21 lectures - 42 hours, 11 seminars - 22 hours)
Weekly load - 4 academic hours

According to the results of the module, a test was conducted in the form of a test

TO TEACH HOW TO CORRECTLY INTERPRET AND APPLY STATISTICAL INDICATORS

Standard course in statistics	Methodology and analysis of statistical indicators
✓ Considers **statistics** as a branch of **academic knowledge and science**	✓ It is taught by **the staff of the Bureau**, who produce official statistics
✓ It is based on the **theory** and **concepts** of **statistics**	✓ It is based on **real cases** of the formation and application of statistics
✓ Explains the approaches of **descriptive** and **inductive** statistics, statistical **methods**	✓ Clarifies the **sources** and **limitations** of statistical indicators, their **correct interpretation**
✓ Focuses on the **mathematical foundation** of **applied statistics**	✓ Focuses on skills in **applying** and **calculating** derivative indicators

⚠️ University programs are mainly focused on the theory and concepts of statistics as part of science, while the production and practical application of official statistics is not sufficiently disclosed
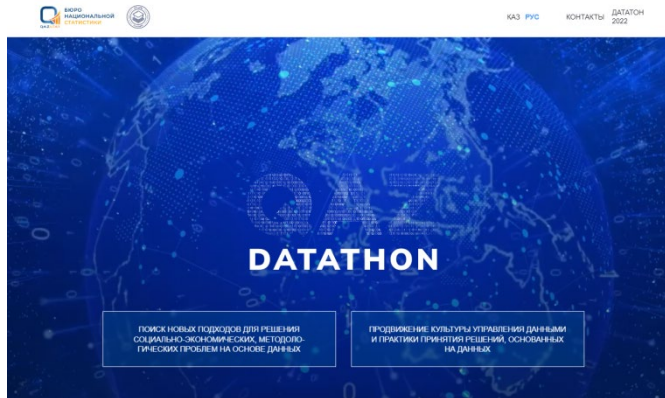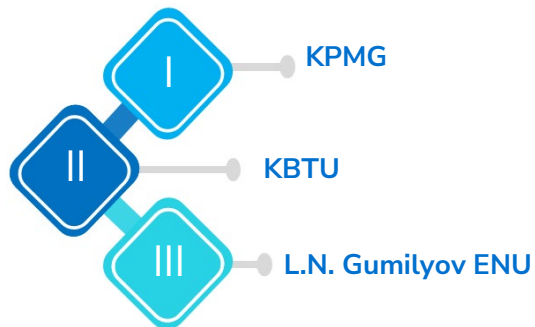
National competition QAZDATATHON

https://datathon.kz/#/2022
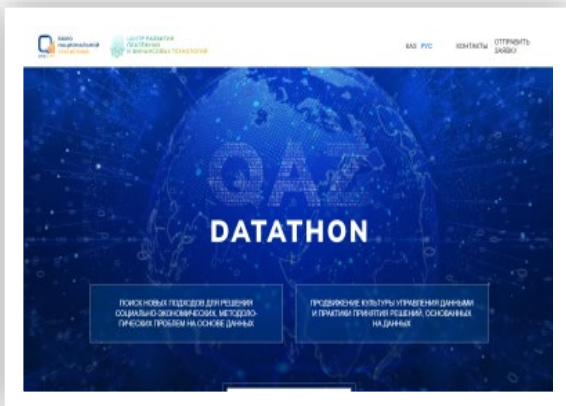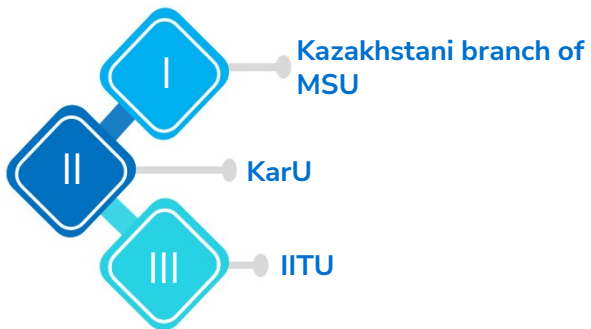
Qazdatathon – *is a competition of data projects in order to find new approaches to solve socio-economic, methodological problems on the basis of data, as well as to promote the culture of data management*
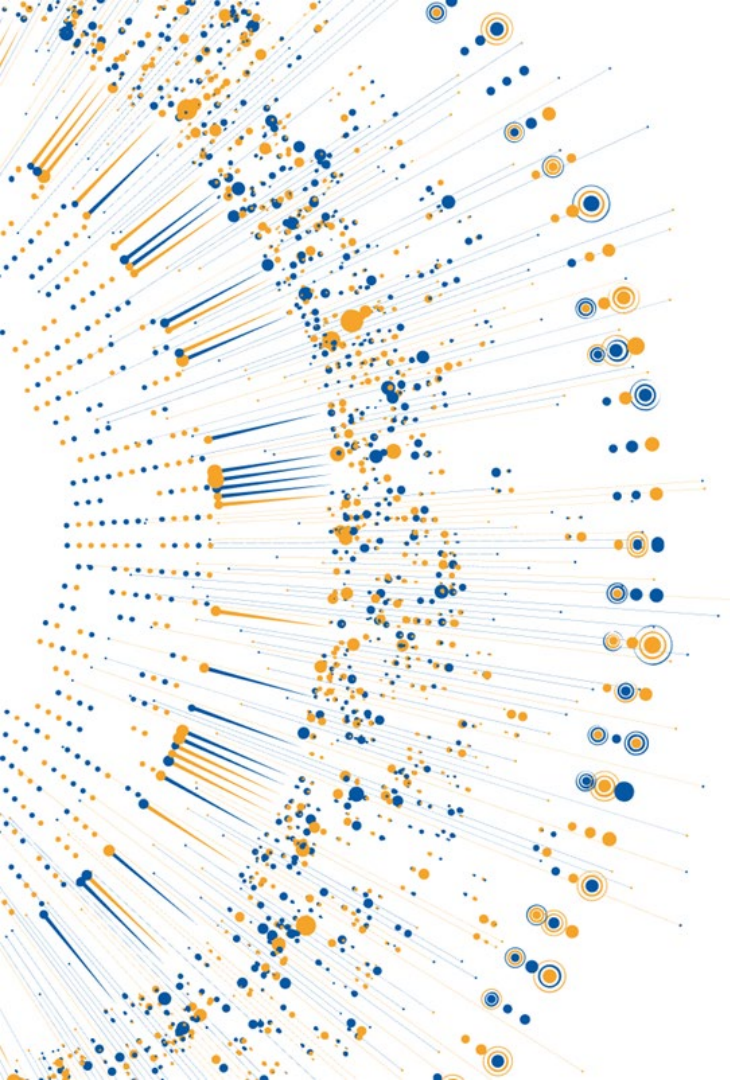
I — **Kazakhstani branch of MSU**

II — **KarU**

III — **IITU**

Winners of the QAZDATATHON 2022

National competition QAZDATATHON

https://datathon.kz/#/

I — KPMG
II — KBTU
III — L.N. Gumilyov ENU

Qazdatathon - *in 2023, the competition was held for a wide range of participants*

Winners of the QAZDATATHON 2023

QAZSTAT

Agency for Strategic planning and reforms
of the Republic of Kazakhstan
Bureau of National statistics

Thank you!

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tel.: +7 7172 749767**

2024