Innovation in the Czech Statistical Office

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Statistics can be characterized by various adjectives – they must be relevant, accurate, available on time and within the announced deadline, coherent, comparable, accessible and understandable. When creating them, statistical institutions must adhere to principles such as professional independence, impartiality, objectivity, reliability, and must ensure compliance with statistical confidentiality. In a period when available resources are getting smaller and smaller, the institution must be very efficient in managing both financial and human resources.

Terms such as scientific approach, use of new methods and tools often appear in this context. On the other hand, the number of users highly values the stability of outputs, long time series.

Some of the requirements mentioned above seem to be mutually exclusive – timeliness vs. accuracy, stability vs. modernity, relevance vs. efficiency of operation. In fact, we need to find the right balance between quality attributes. The way to preserve good practice from the past and not be outdated is innovation and change (every innovation is simultaneously a change, even a qualitative one - not every change, even a qualitative one, is an innovation).

The management of the CZSO supports positive changes in all aspects.

As part of its 2022-2026 strategy, the CZSO defined 5 strategic objectives:

1. Improving the relevance and availability of official statistics to users
2. Reducing the administrative burden on respondents
3. Increasing the prestige and respect of the CZSO
4. Modernising the operation of the CZSO
5. Becoming a recommended employer

To support the implementation of improvements, the CZSO established a Change Management Policy. This publicly available document lays down the sources of change, an overview of roles in the change management system, change management principles, channels for submitting change proposals and for communicating change. An integral part of the change management system is the support of the active approach of employees and their motivation (e.g. in the form of extraordinary or performance bonuses) in the course of initiation and implementation of changes. The Change Management Policy is reviewed at least once a year.

When preparing to the Peer review of the Czech Statistical Office we have prepared an overview of activities that can be considered as change, progress, good practice – for the purpose of the presentation we want to demonstrate how they contribute to strategic objectives listed above. We can observe an improvement in different areas:

Redesign of the Statistical Information System (SIS)
→ 2. Reducing the administrative burden on respondents
→ 4. Modernising the operation of the CZSO

- Completion in 2015 - benefits (an opportunity to unify, systematize, and make automatic most of the processes).
- Strong tools to support our activities (corresponding with GSBPM model) and became a standard part of everyday work.
- An integral part of it is the meta-information system, which covers the entire process from data collection to dissemination

Mandate for Data Collection and Access to Data

→ 2. Reducing the administrative burden on respondents

- Regulation (EC) No 223/2009 on European statistics in compliance with the Resolution of the Government No 1135 of 14 December 2016, ministries (departments) are obliged to negotiate with the CZSO births, changes, and discontinuation of administrative data sources and to cooperate on ensuring access to them.
- Creation of an organisational structure and capacities for work with administrative data sources
- app. 100 administrative data sources, different purposes

eGovernment in the Czech Republic

→ 2. Reducing the administrative burden on respondents

→ 3. Increasing the prestige and respect of the CZSO

- The CZSO actively participates in development of eGovernment:
- building of Basic registers of public administration
- automated data exchange among departments (ministries), a common data pool
- The system of current statistical registers linked to the system of basic state registers

Statistical activities

→ 1. Improving the relevance and availability of official statistics to users

- Scanner data project, development of a machine learning application, web scraping.
- Improvement of timeliness of key outputs (especially start of a flash GDP estimate at T+30)
- Rebranding of international trade statistics: since 2020, the CZSO has changed the terminology and the manner, in which data are presented.
- Tourism statistics develops web scraping methods for the purposes of register quality improvements.
- New indicators and breakdowns improving relevance of outputs and satisfying new user needs (e.g. regionalisation of the Tourism Satellite Account, project aimed at the Agenda 2030 and SDGs, implementation of a regular 5-year survey on energy consumption in households, a satellite account of public sector, pension entitlements)

Census 2021

→ 3. Increasing the prestige and respect of the CZSO

- A combination of register-based information accompanied by a questionnaire survey - use of administrative data sources to the greatest extent possible
- Covid-19: State of emergency declared by the government of the Czech republic – March 2020
- Main milestones – no changes, but:
    o Greater emphasis on online collection (46 days instead of the original 14)
    o Fieldworks – significantly reduced
    o Organisation – virtual mode – internal and external meetings (MS Teams)online,
- Electronic forms: 4 296 880 (85 % inhabitants)
- Printed forms: 811 794 (88 % via P.O.Box)

Information Technology – new approach

→ 4. Modernising the operation of the CZSO

- Ten Principles of the Statistical Information System (SIS)
- Creation of the necessary IT infrastructure for the increasing demands of administrative data sources, big data;
- Implementation of the IT quality index;
- Board of architects

Dissemination and Communication

→ 1. Improving the relevance and availability of official statistics to users

→ 3. Increasing the prestige and respect of the CZSO

- Establishing the Safe Centre for providing microdata for research and scientific purposes;
- Development of statistical literacy projects;
- Development of external communication – media, social media, magazines/journals, projects, infographics
- Data opening - the CZSO has become one of the most active institutions in the Czech Republic (2nd place)
- New tools for data dissemination – under preparation:
- New presentation of the CZSO on the Internet (webpages) – new structure, new technology (headless technology) based on Liferay;
- DataStat – a new version of the "Public database" with the new philosophy
- GIS presentation – starting with census data
- New products based on users´ needs
  - Czechia in Figures (only in Czech) - https://www.statistikaamy.cz/cesko-v-cislech#obsah
  - "About the complicated in a simple way or Don't be afraid of statistics, it doesn't bite" – in Czech only (in Czech it reads: "*O složitém jednoduše aneb Nebojte se statistiky, nekouše*") https://www.czso.cz/csu/czso/o-slozitem-jednoduse-aneb-nebojte-se-statistiky-nekouse
  - Weekly number of deaths (only in Czech) - https://www.czso.cz/csu/czso/obypz_cr
  - Comparison of Regions (only in Czech) - https://www.czso.cz/csu/czso/porovnani-kraju
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Human resources

→ 5. Becoming a recommended employer

→ 4. Modernising the operation of the CZSO

- Improving the educational structure of employees
- Human Resources Policy
- Adaptation procedure
- On boarding guide for a new employee
- Training of managers, HR department employees
- Employee satisfaction survey
- Home-office
- Activities to support communication – internal Newsletter, intranet redesign, beach volleyball tournament
- Children's group Staťáček

Quality

→ 3. Increasing the prestige and respect of the CZSO

→ 4. Modernising the operation of the CZSO

- Year 2018 - a turning point in the field of quality management in the CZSO
- New top management of CZSO - great deal of emphasis was once again placed on quality management
- 2018 – Governmental project regarding quality management Introduction of a strategic management system

Cost Effectiveness:

→ 4. Modernising the operation of the CZSO

- Introduction of a strategic management system

- Prioritisation and determination of projects for priority funding
- Computerisation of financial and human resource management processes
- Implementation of the adaptation process
- Energy-saving renovation project of the administrative building of the CZSO in Prague

As regards future development, the CZSO identified 13 priority tasks for 2023 and all of them mapped to the strategic goals:

1. To modernise the statistical information system (SIS 5.0 programme)
Link to the CZSO's strategic objectives:
→ To improve the relevance and accessibility of official statistics to users
→ To reduce the administrative burden on respondents
→ To increase the prestige and respect of the CZSO
→ To modernise the operation of the CZSO

2. To complete the implementation of the development of the Basic Register of Legal and Natural Persons and its editing agenda information system
Link to the CZSO's strategic objective:
→ To increase the prestige and respect of the CZSO

3. To ensure preparation for the revision of the European standard classification of productive economic activities (NACE)
Link to the CZSO's strategic objectives:
→ To improve the relevance and accessibility of official statistics to users
→ To increase the prestige and respect of the CZSO
→ To modernise the operation of the CZSO

4. To expand the areas of use of scanner data for creating statistics
Link to the CZSO's strategic objectives:
→ To improve the relevance and accessibility of official statistics to users
→ To reduce the administrative burden on respondents
→ To modernise the operation of the CZSO

5. To modernise the system of business and environmental statistics
Link to the CZSO's strategic objectives:
→ To improve the relevance and accessibility of official statistics to users
→ To reduce the administrative burden on respondents
→ To modernise the operation of the CZSO

6. To prepare a system of integrated annual demographic and census statistics
Link to the CZSO's strategic objectives:
→ To reduce the administrative burden on respondents
→ To increase the prestige and respect of the CZSO
→ To modernise the operation of the CZSO

7. To innovate data collection for field surveys in households
Link to the CZSO's strategic objective
→ To modernise the operation of the CZSO

8. To modernise structural wage statistics
Link to the CZSO's strategic objectives:
→ To reduce the administrative burden on respondents
→ To increase the prestige and respect of the CZSO

→ To modernise the operation of the CZSO

9. To ensure the implementation of a peer review of the National Statistical System
Link to the CZSO's strategic objectives:
→ To increase the prestige and respect of the CZSO
→ To improve the relevance and accessibility of official statistics to users

10. To complete the development of IT infrastructure and management, including the introduction of quality measurement
Link to the CZSO's strategic objectives:
→ To improve the relevance and accessibility of official statistics to users
→ To modernise the operation of the CZSO
→ To become an employer that is recommended

11. To complete the implementation of energy-saving projects of the reconstruction of office buildings of the CZSO
Link to the CZSO's strategic objective
→ To modernise the operation of the CZSO

12. To prepare and bring the Records Service into compliance with DEPO Act (Further Electronisation of Public Authorities' Procedures) and other related laws and regulations
Link to the CZSO's strategic objective:
→ To modernise the operation of the CZSO

13. To implement the electronisation of selected support processes
Link to the CZSO's strategic objectives:
→ To modernise the operation of the CZSO
→ To become an employer that is recommended

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