

Innovation Management System at the Czech Statistical Office

Egor Sidorov¹, Marek Rojíček², Jaroslav Sixta³, Petra Kuncová⁴

¹Director of the Office of the President, Czech Statistical Office, Czech Republic

² President, Czech Statistical Office, Czech Republic

³ Vice-President, Czech Statistical Office, Czech Republic

⁴ Director of Information Services Department, Czech Statistical Office, Czech Republic

Abstract

Innovation is essential in today's fast-changing world. This of course also applies to national statistical offices. The management of the Czech Statistical Office places great emphasis on innovation. As part of the project on the introduction of quality management into the CZSO, among other things, activities were carried out leading to the creation of basic documents for the innovation management system - Innovation Policy and related internal regulations. The presentation will deal with the innovation management system in the Czech Statistical Office from the point of view of its organization, mining and identifying change ideas and their subsequent implementation. Special attention in the presentation will be devoted to ensuring support and active approach of employees and their motivation during the initiation and implementation of changes.

Keywords: innovation, management, system, changes, motivation

1. Introduction

Environment in which the NSI's operate is changing dynamically. These changes require appropriate and rapid responses. Permanent positive changes (innovations) are the key to improvement, progress and success of any organization. In order to support positive changes the Czech Statistical Office (CZSO) has a change management system in place, an integral part of which is to promote a proactive approach and motivate employees in initiating and implementing innovations.

2. Change Management System of the CZSO

The CZSO has a change management policy in place that stipulates main sources of positive changes, general change management principles, possible channels for submitting innovation proposals and communication principles. The aim of the Policy is to provide an organizational framework for the innovation agenda in the Office and to provide a clear signal to employees that changes are supported by the top management.

The "change" within the Policy is a process of overcoming the difference between the current (undesirable) state and the future (desirable) state. Innovation in this context is a change leading to the introduction of a new or significantly improved output, process, or new

organizational principle in terms of procedures, organization of work or external relations. In other words, innovation is a positive change.

Change management is a process of identifying, implementing, completing, evaluating and sustaining a change. Change management system in this respect is a set of interrelated managerial and organizational arrangements that provide for planning, management, implementation and evaluation of innovation ideas.

Change management is in its core similar to project management in terms of its content, objectives and technical aspects, and therefore to a great extent refers to the general rules for project management activities with a special attention focused to initiation of changes and their continuous and consequent communication. In addition to the standard project management system that enables co-existence of routine and innovation agenda and multidisciplinary cooperation, the change management system also makes use of such roles as the *change initiator* (an internal stakeholder who proposes a change to the appropriate authority) and the *authority* (that receives change proposals and decides about their implementation). Usually this authority is, depending on the scope of the proposed change and the division of labour, either a line manager or an existing advisory body to the President of the CZSO. The authority provides feedback to the initiator if the proposal will be accepted for action, deferred to a later date, or abandoned. It determines the specific way of addressing the proposal, e.g. in the form of a project, (internal) grant, creation of a working group, etc. and decides on the setting of specific project roles and any other necessary conditions for the implementation of the change.

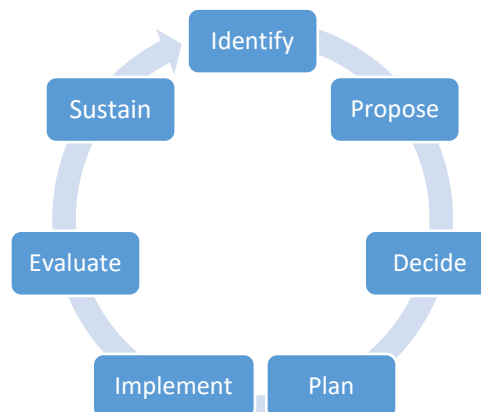
Implicit commitment by the top management to support innovation is the very existence of the Strategic Plan of the CZSO, stipulating the following objectives: 1. Improving the relevance and availability of official statistics to users; 2. Reducing the administrative burden on respondents; 3. Increasing the prestige and respect of the CZSO; 4. Modernising the operation of the CZSO; and 5. Becoming a recommended employer. One of the strategies identified in the document and directly related to innovation agenda is to actively present success stories and develop key competencies in areas where the good results are shown, choosing a rational approach to combining innovation and conservatism. It also includes developing reciprocal cooperation with the state administration, academia and professional scientific societies, both in the field of statistics promotion and in the area of professional training and human resources.

3. Change Management and Innovation Cycles

3.1 Change Management Generic Cycle

The change process itself can be broken down into several basic stages (see Graph 1), that are in line with the PDCA innovation cycle described in the ISO (2019).

Graph 1 Change management cycle of the CZSO



Identified change proposals are submitted by the initiator to the authority that decides whether to implement (or postpone or reject) the change proposal. After that the planning phase takes place. The general content of this phase covers description of the output of the change and its quality requirements and determination of responsibility for the implementation of the change. Responsibility can either be within the scope of the CZSO's organizational units, in this case usually relevant line manager becomes responsible for the project, or in case of a major change that requires a more complex division of labour, an appropriate project structure can be established. In parallel with this resource requirements (financial, personnel, technical, etc.), potential risks, benefits and impacts are identified in a greater detail. Also stakeholders are identified, including strategies of managing relationships and communicating with them.

After the planning phase the change implementation and ongoing evaluation of the implementation process, and consequent evaluation of the change and its closure/termination takes place. The new state is generally sustained by embedding the change into the organization's workflows, management systems, structure and/or technology in use. Further evaluation of the success of the change and its ongoing performance serve as input for further changes to be adapted.

One can define long, medium and short-term innovation cycles (see Graph 2).

Graph 2 Innovation cycles and the CZSO



3.2 Long-Term Innovation Cycle: Strategic Planning

The Strategic Plan of the CZSO defines the mission, vision, and strategic objectives of the CZSO within a 5-year time horizon. It covers technological changes reflecting the life cycles of the technological platforms applied in the Office, and is able to cover relevant economic, social, environmental and political trends.

A draft Strategic plan of the CZSO is elaborated by combining top-down and bottom up approaches covering ideas and visions of the Management Board as well as subordinated employees providing suggestions and comments. The summary proposal for changes to the Strategic Plan of the CZSO is adopted by the Management Board headed by the President.

An important part of the strategic planning is the strategic analysis of all external and internal factors that shape the Office activities or which the Office itself can anticipate and get prepared to. Strategic analysis is a less formalized process usually making use of the tacit knowledge of managing employees. Its overall results form an introductory part of the Strategic Plan that provide a short context and essence of the Office strategic activities.

The approved Strategic plan of the CZSO is communicated towards all employees (mainly via the intranet and the internal newsletter) and other stakeholders and the general public (mainly via the Internet, and official CZSO magazine).

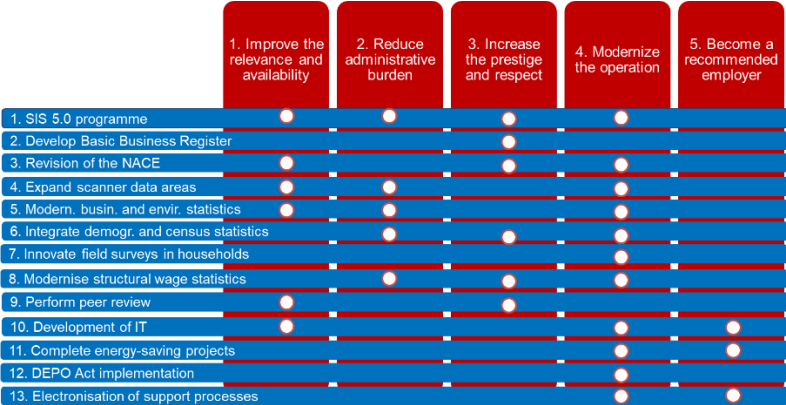
3.3 Medium-Term Innovation Cycle: Annual Implementation Plans and Priority Tasks

The Strategic Plan of the CZSO is implemented by means of a system of Annual implementation plans, which directly follow and are compatible with the Strategy. The Annual

Implementation Plan includes the following interconnected documents containing the perspectives of innovation, customers, processes, and finance: 1. Priority Tasks; 2. Work Program; 3. Budget and Medium-term Outlook (both including investment action plans); and 4. Systematization of Service and Work Positions.

The majority of innovation agenda of the Office is concentrated within the so-called Priority Tasks. This is a plan of innovation activities that the CZSO management considers to be extremely important for the implementation of the CZSO’s Strategic Plan in the given year. The Priority Tasks directly follow up strategic objectives (see Graph 3). Activities under the priority tasks also contain measurable objectives. The progress of the priority tasks fulfilment is monitored and evaluated by the top management.

Graph 3 Strategic goals vs priority tasks of the CZSO in 2023



Preparation and approving of the Priority Tasks of the CZSO for the following year is similar to the procedure of strategic planning. Progress of fulfilment of Priority Tasks of the CZSO is monitored at least quarterly in the framework of relevant reports to the Management Board. Implementation success stories are communicated towards stakeholders and the general public (mainly through the annual report, official CZSO magazine and the internal newsletter).

3.4 Short-Term Innovation Cycle: Minor Innovations

In addition to Priority Tasks smaller-scale innovation activities can be performed (e.g., not all innovations have such an extensive scale to be incorporated among Priority Tasks of the Office; in such cases these initiatives are performed at the level of single departments or units, where they can be efficiently addressed). Usually such minor changes are rather a part of the above mentioned Work Program reflecting the rest of statistical production activities of the Office, that have a more routine character. The Work Program primarily reflects the European

Statistical Program and the relevant annual program of surveys with the reporting duty, voluntary surveys and other outputs produced from administrative data sources. These are usually managed at the lower-level units or divisions considering availability of resources and ability to manage, implement and sustain changes. Minor innovations may be supported by the so-called internal grants. These also refer to general project management principles and what is important, may use the so-called target rewards as motivation tools.

4. Sources of Change

Processes explicitly focused on active tracking of external and internal issues and trends and innovation idea mining concerning core statistical production process are concentrated within evaluation phase of the statistical production cycle followed by the needs specification phase where concrete innovation ideas are provided for consideration. Evaluation phase is based on the collection of input information on the overall performance from the core processes both automatically (from information systems) and manually (surveys, feedback records of external (e.g. external methodical audits) and internal users and other identified stakeholders including employee proposals). It also includes internal management reporting and subsequent internal and external quality reporting followed by identification and prioritization, or suggestions for improvement and changes.

These processes are also related to other supporting or management processes such as strategic planning, quality management, employee evaluation, employee satisfaction survey, training, bilateral and multilateral cooperation, legislation and non-legislative materials development and commenting procedure, internal audit, risk management, external controls and reviews that are also part of compliance management procedures. One can distinguish between external and internal stimuli, that can motivate positive changes. External stimuli cover developments in the external environment, e.g. political and social changes, technological changes or changes in the subject matter knowledge. On the other hand, since the CZSO is a public administration body, they may be pushed by a decision of an external national (e.g. Ministry of Finance, Civil Service Section of the Ministry of the Interior of the Czech Republic) or supranational authorities (e.g. European Statistical System Committee, statistical divisions of the UN, OECD, IMF, etc.). Changes from internal initiatives originate within the CZSO pushed by its employees or subcontractors based on their experience and reflections. Changes from internal stimuli may overlap to some extent with changes triggered in response to developments in the external environment.

Proposals for changes may emerge spontaneously, in a „bottom-up“ manner, by employee initiatives, in a „top-down“ manner, under the responsibility of the relevant managers, or within

the institutionalized change management system of the organization, through a combination of top-down and bottom-up approaches.

A variety of communication channels for proposing changes is in place. A staff member may make suggestions for changes on an ongoing basis through communication with an immediate superior or senior staff member. Standard channels of internal communication are in place, i.e. working meetings, negotiations, draft internal regulations comment procedures, or other meetings arising from internal regulations or approved procedures. The employee may also submit and discuss proposals for changes with the evaluator within regular employee evaluation procedure. This enables managers to mine the unique knowledge and abilities of the staff. Furthermore, a staff member may submit suggestions for changes anonymously in the context of the regular employee satisfaction survey. In this case the Management Board decides on the specific course of action. If the above channels are not appropriate, the employee may submit a proposal for change via the innovation box on the Intranet or via special email address directly to the President's Office. In this case, the Management Board also decides on a specific course of action.

5. Motivation and Communication

An integral part of the change management system is the support of the proactive approach of employees and their motivation in the course of initiation and implementation of changes. Along with the fact, that the Management Board and senior staff actively encourage staff suggestions and initiatives to improve the functioning of the CZSO, a specific set of appropriate monetary motivation tools is in place to support these activities. Special rewards at the CZSO are paid primarily for extraordinary activities including participation in the implementation of projects financed from European funds, work on Eurostat grants as well as internal grants. Extraordinary rewards are also paid for sharing knowledge, e.g. lecturing, or active communication of the office's innovation success stories in the form of articles in the office's magazines. Continuous innovation efforts can influence the extent of personal bonuses that can be granted, e.g. within the employee annual of extraordinary assessment process.

Available non-monetary motivation tools include personal or public praise, e.g. presenting success stories in the internal newsletter for CZSO employees and in the CZSO magazine for general public. It may also take form of provision of training opportunities, e.g. employees may be granted possibilities of foreign education or training programs, valuable educational courses in the professional field including IT, managerial education, etc. Such special training also helps to identify and develop internal leaders that have an ability to push and pull innovation projects. Public praise is also promoted through presentation of results through participation in

conferences (participation is normally requires holding active presentation), or taking part in bilateral or multilateral visits abroad including technical assistance or praising the staff's approach to positive change in within managerial feedback or formal assessment.

As one can see, change communication is essential for the understanding of changes by CZSO staff and their subsequent implementation. Communication activities are therefore generally focused on the supporting awareness of:

- the opportunity to make suggestions for change and therefore participate in the extensive improvement of the organization/office's activities and functioning;
- the mechanism for submitting proposals for change, to whom/to what authority to submit the proposal for change and in what form;
- all staff of the change to be made, explanation of the need for change, its implications, requirements for their cooperation and commitment;
- the process of implementing the change;
- the outcome of the change, and its demonstrable benefits to the work and functioning.

While using all appropriate communication channels (e.g. intranet, minutes, newsletter, workshops, open discussions, social media, etc.) in accordance with the Communication Policy of the CZSO the change management communication adheres to the following principles:

- communicating consistently, frequently, and through multiple channels;
- communicating everything that is known or can be documented, and in the shortest possible timeframe;
- providing space for questions and feedback;
- communicating the objectives and benefits of the change;
- and explaining reasons for the change.

Changes are also communicated externally to relevant stakeholder groups through all available channels. At a minimum, the intent of the change, the process of implementing the change and the evaluation of the change communication is in place. Stakeholders also have the opportunity to comment on the changes.

6. Conclusion

The CZSO change management system, coupled with a supportive organizational culture and collaboration, serves as one of the pillars enabling the long-term development and success of the Office as the main decision-making data provider. By fostering an environment

that encourages creativity, experimentation, and risk-taking, the CZSO manages to keep up with the today's dynamic data production landscape.

At the heart of the change management system lies a robust framework for managing innovation initiatives from ideation to implementation. This framework system provides a structured approach for generating, evaluating, and prioritizing ideas, ensuring that resources are allocated efficiently, and that the most promising concepts are brought to fruition. However, the effectiveness of an innovation management system is not solely determined by processes and tools, it is equally dependent its people and specific organization culture.

Acknowledgment

Part of the information presented was created as part of the project "Implementation of a quality management system in the CZSO", reg. no. CZ.03.4.74/0.0/0.0/15_019/0016015, implemented from the Employment Operational Program.

References

ISO. *ISO 56002 Innovation management - Innovation management system - Guidance*. Geneva: ISO copyright office, 2019.