

Reshaping management of the household surveys in the Hungarian Central Statistical Office

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Abstract

In the 1990s and 2000s, the enumerators involved in the implementation of population surveys were employed directly by the Hungarian Central Statistical Office (HCSO) in a form of assignment contracts. This form of legal relationship, which is basically for temporary employment, despite its many advantages, could hardly fit to the existing Hungarian legislation as most of the enumerators were permanently (and not temporary) collecting data for the HCSO. Therefore HCSO established Statek Ltd. in 2013 for the employment of the enumerators working regularly in these surveys.

Statek Ltd. is a company in 100% ownership of the Hungarian state. Ownership rights over the company are exercised by the President of the HCSO on the basis of the statutory mandate stipulated by the law on official statistics. Due to this Act on statistics, the HCSO might perform its public functions related to data collection, data processing and data dissemination by Statek Ltd. Although the establishment of the Statek Ltd. legalized the employment status of the enumerators, the direct professional control of them remained in the office. So for many years the paradoxical situation occurred that the management's rights and the employer's rights of the enumerators were not within the same organization.

In February 2018 the HCSO dissolved this contradiction by outsourcing the direct management of the enumerators into the Statek Ltd. At the same time the workflows were also cleaned and elaborated, as Statek Ltd. has become responsible for conducting the surveys, while the professional supervision and control remained in the HCSO. The elaboration of a new statistical business process model has also provided opportunities for handling a number of other so far unsolved problems.

As part of the organizational restructuring, HCSO and Statek have signed a cooperation agreement to define the division of the tasks and the responsibility framework. This is not a classic Service Level Agreement but a kind of contract that provides a pilot for the HCSO to develop a service-oriented operational framework for its entire organization in the next few years.

In this framework the HCSO intends to switch the implementation of the tasks and the workflow from an order-based approach to an approach that is based on partnership, cooperation and joint responsibility. We expect that this kind of approach enables us to perform a more efficient task management with better quality and to have the ability of a more effective risk management.



Enhanced quality management put into practice has already resulted in more effective control of fieldwork (warning of underperformance, abolishment of fraud).

Our presentation is going to describe the reasons and necessity of the above mentioned organizational change and the main direction and detailed tools of the pilot agreement.

Introduction

Based on the experiences of the past years the directorate of the Hungarian Central Statistical Office (HCSO) recognized that while the demand on statistical data, the used data sources, the processing of data, the used methodologies and IT infrastructures had been quickly changing, the structure of the HCSO and the roles of the units had not been changed for a long time. So in 2017, after a long preparatory phase, an organizational improvement program took place in the HCSO. The reorganization necessarily affected the units responsible for conducting household surveys. However this restructuring of the area was not the first such process, since the reshaping of the household survey area had already started in 2013.

The presentation and the paper will introduce the main changes, the new structure of responsibilities and will highlight what the main reasons behind the multiple reorganizations were. The presentation will also present the experiences of the new operational framework, and what the basis of the new cooperation is.

Household surveys in the HCSO

Traditionally there are five regular, large-scale household surveys conducted by the HCSO:

- Labour survey: The Labour Survey is the largest continuous data collection of the Central Statistical Office aiming at providing comparative data about the country's labour market situation along with employment and unemployment rates. (For more information: http://www.ksh.hu/emef#text_en)
- Household Budget Survey
- Survey on Income and Living Conditions (SILC): Survey on Income and Living Conditions (SILC) of Hungarian households is a yearly survey conducted by the Hungarian Central Statistical Office aiming to gather information about the living standards of the population. (For more information: <http://www.ksh.hu/eusilc>)
- Travel habits of residents: The Travel habits of residents is a quarterly survey which aims at providing data about the travel habits of the households, serving as the core of developing tourism indicators.
- Survey of information and communication technology (ICT) usage in households and by individuals: The survey aims at collecting data once a year related to ICT usage by the Hungarian population.

The mentioned surveys are voluntary data collections conducted by enumerators. Each survey is large-scale survey, with a field work around of 10 thousand randomly selected households contacted by interviewers. The only exception is the Household Budget Survey, which has a sample size of two thousand households per month.

For some historical reasons, two obligatory business type data collections are linked to the household survey field, namely the Consumer price survey and the Agricultural market supply and price survey. The main reason of this marriage is that the data on consumer prices are collected by enumerators as well.

GSBPM in HCSO's life

It is a continuous effort within the HCSO to gear our business processes to the Generic Statistical Business Process Model (GSBPM). As an example of this effort, the HCSO adopted the GSBPM for its own processes and work and this is called Hungarian Generic Business Process Modell (HGSBPM). This shows that the organization has already been expected to adjust the used methods and responsibilities to the model, although previously in general this rather only appeared in the quality management, as the office attempted to measure the efficiency of the organization and to control the quality of the produced data through the steps of the HGSBPM.

The Office has moved forward from this practice by reorganizing its whole structure in 2017. The reorganization was based on the HGSBPM as the new structure, the new units and the responsibilities were defined along the process phases and sub-processes described by the HGSBPM. The other principle of the reorganization was that the similar data collections (same statistical field, same subject) should be supervised and conducted within the same unit/department. Through these two principles the main goal of the organization improvement (defined by the directorate of the Office) can be fulfilled, as general standards can be defined and put into use at the same statistical fields.

As the topic of the presentation is not the introduction of the Organization Improvement which took place in the HCSO, but to present the transition of the household survey field, it is necessary to clarify what process phases and sub-processes belongs to the field.

Independently from the institutional structure, the tasks done by the field responsible for the execution of the household data collections in the HCSO were the activities belonging to the Collection process phase 4.2 – Set up collection, 4.3 – Run collection , 4.4 – Finalize collection sub-processes and to the Processing phase 5.2 – Classify and code and 5.3 – Review and validate sub-processes. As mentioned before, the Hungarian model used by the Office has some differences and changes on sub-process level, thus not all the activities can directly be matched at this level, but traditionally, the following activities belongs to the execution field of the household surveys by the GSBPM's sub-processes:

- 4.2 – Set up collection:
 - Recruiting enumerators
 - defining enumeration districts and creating the work-plan for enumerators
 - Managing enumeration devices (deliverance, registration, resumption) and expedition of the printed papers
 - Education of the enumerators
- 4.3
 - Direct guidance of the enumerators and monitoring their performance
 - Manual data entry (Household Budget Survey and where necessary)
- 4.4
 - Supervision of the enumerators work (by contacting respondents)
 - Certificate of completion, payment of the enumerators
- 5.2 and 5.3:
 - Data preparation and validation (classifying, coding, micro-validation)

The past

Prior to the Organization Development, the above mentioned task and activities were realized by multiple units. The former structure of the office (primarily the units responsible for the execution of the data collections) was decentralized with the main organizational principle being territorial (geographical). Back then the Office had eight regional departments, with county level sections. We could find the employees responsible for the execution of the household surveys, the so called coordinators (as generally we refer to them in the Office) within these sections/units. Their duty was to handle all the problems and tasks occurring during field work of the data collections and they were also responsible for all the data preparation tasks linked to the household surveys. So during this period, in the assigned territory (enumeration districts) one person was responsible for the execution of the data collection, the eligible performance of the enumerator, the quality management of the collection, the quality of the collected data and for the credibility of the data.

This was not a clear practice, because the execution and the controlling activities were not separated, which could easily lead to some contradictions, since the coordinator staff who was responsible for the recruitment and the quality control, had no interests in making hard quality checks. The practice could also easily lead to individual interlacements, since the coordinators and the enumerators had frequent relationships, with less direct control. Besides these problems, it was difficult to implement standards in the everyday work or when it was possible it was harder to monitor the proper usage of the standards.

These detected deficiencies does not mean, that in that period there were no strict quality management in the field. This previous practice had many advantages, but the main deficiency was that it was harder to guarantee the detachment of the activities referring to the sub-processes and it was harder to make an accurate picture of the quality of the work done by the enumerators.

At that time the status of enumerators was not reassuringly cleared. Since the enumerators involved in the implementation of household surveys were employed directly by the Hungarian Central Statistical Office (HCSO) in a form of assignment contracts. This form of legal relationship, which is basically for temporary employment, despite its many advantages, could hardly fit into the existing Hungarian legislation as most of the enumerators were permanently (and not temporarily) collecting data for the HCSO. By 2013 it was clear, that the legal situation of the interviewers had to be settled. This decision was the first step of the reshaping of the household survey's management.

2013-2017

In 2013 HCSO established Statek Ltd. which is a company in 100% ownership of the Hungarian state. Ownership rights over the company are exercised by the President of the HCSO on the basis of the statutory mandate stipulated by the law on official statistics. Due to this Act on statistics, the HCSO has the right to perform its public functions related to data collection, data processing and data dissemination by Statek Ltd.

The main goal of establishing Statek Ltd. was to settle the above mentioned legal situation and it was also important that the new legal state of the enumerators guaranteed a wider employer rights for the new organization. In the frame of the new legal options measuring the overall efficiency of the enumerators became more manageable, because from that time the enumerators had only one contract which included all the tasks they were hired for. Besides this the financing of the field became more transparent.

Although this step solved many problems, it was not yet perfect. The direct professional control of the enumerators remained in the HCSO. This generated the paradoxical situation that the organization that holds the employer right did not have direct effect on the amount of work given to the enumerators, and due to the lack of coordinator staff (which was in the HCSO) there was no direct channel where the employer instruction or other information could be communicated. Because of these problems the company could not fill the synthetic role it could have and after several years the company slowly lost its employer role and became a 'pay-office'.

In this period, the coordinator staff's working frame and tasks remained the same as it had been earlier. Still, there were no separated roles for organizing and coordinating and for controlling the enumerators work. The organization of the units responsible for conducting the field work of the data collections was the same either.

Reorganization in two steps:

First step:

The HCSO institutional structure had been reshaped in 2017, as mentioned earlier. The necessarily had a great effect on the household survey conduction field as well, since a new centralized unit took shape as the Household Surveys Data Collection Department (HSDCD) formed. The department is now responsible for all the activities linked to the execution of the household surveys on country level. So the previous regional units had been split, and the employees working in these units underwent a profile cleaning.

The profile cleaning not only meant that the colleagues who were involved mostly in the conduction of the household surveys were chosen but the duties were also divided on the basis of the HGSBPM's sub-processes. The newly formed HSDCD has two units:

The Data Collection Organising and Coordinating Unit with the duty to recruit (in case of HCSO employment, the recruitment and selections is also the department's task), educate, supervise the field work along with monitoring and evaluating the process of enumerators.

Data Preparation and Validation Unit with the duty to validate the questionnaires, micro-validate, record data if necessary, code the text fields, as well as to control the data providing of the enumerators' network and the quality assurance of the admissions.

The restructuring had two main positive effects: on the one hand, with the execution of household surveys being in one hand, standards could be introduced, dissolving regional differences. On the other hand, the earlier practice was eliminated, thus strictly dividing the supervision of the data collection's organization and execution from the quality control. In reality, this meant that the people who were in direct contact with the enumerators no longer had quality control duties, as these were transferred to an independent individuals. By this, quality control became objective which had a positive effect on the quality of the data as well.

This phase of the institutional development however did not solve the Statek Ltd.'s situation, since the coordinator's role still belonged to the Office and the company still lacked the so-called middle leaders' level which would have ensured the company's effective operation.

Second step

In order to find a solution to the before mentioned deficiency within the Statek, in February 2018, the directorate of the HCSO decided to transfer a part of the Data Collection Organising and Coordinating Unit, employees with organizational duties within the HCSO, to the Statek Ltd. To prevent previously existing unsolved organizational problems from being transferred as well, the operational framework was also modernized within the company.

As a part of this process, the scope of organizational responsibilities were reshaped and new so-called organizing offices were established, during which the following factors were taken into consideration:

- County borders were not taken into consideration.
- During creating territorial borders of the offices, the enumerator's residence was the point of reference.
- Assuming that the personal meeting of the organizer and the enumerator is necessary, we established that the way from the office to the enumerator's home should be no longer than 1,5 hours.
- Based on professional appraisal, we determined that one organizer is able coordinate the work of 10-15 enumerators.

The optimal scope of enumerators assigned to one organizational office was determined based on these, through which the towns belonging to these offices were also defined.

For the functionality of the system post outsourcing, it was necessary to reconsider the scope of responsibilities and to divide the duties previously done partly by the Data Collection Organising and Coordinating Section, partly by the Statek between the two organizations.

In this new division, the Statek's duties became the following:

- organizing surveys, creating enumeration districts, making the annual schedule of duties of the enumerators;
- recruiting and selecting the enumerators, ensuring their necessary capacity ;
- taking care of the employers duties connected to enumerators;
- improving the questioning abilities, communication and professional ethics of the enumerators, developing, monitoring and documenting their preparedness;
- organizing professional and use -of - equipment trainings;
- distributing and registering papers, instruction manuals and promotional materials among the enumerators;
- equipping enumerators with mobile tools, replacing these and handling "errors" on primary level;
- conducting surveys at the appointed address/ venue;
- Conducting surveys within the given deadline;
- preparing the completion sheets.

The Data Collection Organising and Coordinating Unit was assigned a quality assuring and monitoring function within this new cooperation, thus four duties were defined:

- training the enumerators professional use of equipment and educating them (preparing and developing standard training materials, controlling the enumerators' preparedness, counter checking , etc.);
- systematic monitoring function (checking via phone, emails and on-site, improving methods, sharing experience;
- informing data providers (call center, informing circuit clerks);
- monitoring surveys (maintaining the monitoring system of the enumerators' performances, analyzing and valuing aggregated data, giving feedback to the departments and the Statek.

There were no changes in the duties of the other unit.

Cooperation Agreement

As part of the organizational restructuring in early 2018 HCSO and Statek have signed a cooperation agreement to define the division of the tasks and the responsibility framework. This agreement is not a classical Service Level Agreement but a kind of contract that can be used as a pilot project for the HCSO to develop its service-oriented operational framework for its entire organization for the next few years.

Service Oriented Organization (SOO)

At the beginning of 2017 HCSO launched a major organizational improvement program. One important topic of this program is to improve the level of services between the different departments of the Office, to strengthen the customer oriented and service based approach, and to improve both quality and efficiency. In order to ensure a balanced and continuously high level of service quality the Service Level Agreement (SLA) methodology was developed as it has been well-known and applied worldwide by a lot of organizations. According to the approach of the SLA methodology HCSO set up its own model which was named Service-based Organizational Operation or Service Oriented Organization (SOO). The current operation of the Office is quite far from this new kind of cooperation method, or at least we have no experience of doing it well. At the same time we definitely hope this approach could be suitable for a quality-based management system, applicable to both in the cases of internal and external services.

The main expectation of the SOO model is to replace the traditionally formed and used instruction-based operation in the Office by a collaborative, service-oriented approach. With the SOO's methodology we try to exploit all the advantages of the classical SLA methodology without using one of its main elements, the fee payment (since it is typically an inter-service agreement).

The advantages:

- cooperation
- transparency – needs, tasks, deadlines, responsibilities
- consistently high level of service
- efficiency

In addition, the SOO method can be expected to provide reliable and standard facts to measure the performance of the different organizational units, which can be used in our performance evaluation system.

Risk:

At the moment, we still do not have enough experience in how to define realistic and sufficiently detailed objectives for each tasks.

The elements of the agreement

The agreement is signed between the organizational units (departments) of the HCSO, and for the pilot project, the HCSO's relevant departments have an agreement with the STATEK. This is a task-based agreement, so the items of the agreements are the tasks where an organizational unit delivers a specific outcome to the order of another organizational unit. The agreement is signed by the heads the departments concerned.

The agreement covers the following elements.

Input and output

The added value required to perform the task is defined as input, whether it is a document, an information, or a guidance. In each case the department placing the order is responsible for providing the input. In exceptional cases, providing input is only optional (when the orderer has already made it available for the service provider for another task and this is clearly stated in the agreement).

Output is a product or service that results from the completion of a certain task. Output is the responsibility of the service provider. Practically: if there is no output, the task is definitely not fulfilled.

Indicators

For each task we define a goal measured by an indicator and a quantified target value. In the optimal cases the target value of the indicator is quantifiable but in certain cases we may also have to use logical type indicators so that we can examine if the task is completed or not (yes/no). For the definition of the indicators we take into account the recommendations of the indicator methodologies (SMART, QQTTP). It is particularly important for us is to find indicators which are available from our management systems.

Deadline and working time

In the agreement not only deadlines are specified but also the time periods that needed to complete the work. Perhaps the latter one is more important, although specifying certain deadlines is generally unavoidable. Defining time periods in the agreement is important, because with this knowledge we are able to re-plan the set of the tasks easily, thereby preventing the harmful effects of a possible delay. Another important advantage of using time periods is that each service item can be considered on its own, so a delay of a single service provider does not result in a negative judgement on the other service providers. In this system the service providers are motivated to carry out their duties under all circumstances in a right quality and according to their own commitment.

Conditions

Conditions can be used both to fine-tune the details of the inputs and to include into the agreement all of those external circumstances which can influence the performance of the task. Ex-post evaluating whether the tasks are completed or not or to what extent, e.g. due to unfavorable external conditions might also be taken into account. A kind of ex-ante evaluation can be a useful support for the management to look at those conditions that are independent from the service provider and therefore could risk the full implementation of a task.

Contribution to a higher quality

The SOO model builds on a number of general principles that provide a guarantee for a higher level management approach. These are:

- cooperation,
- transparency,
- shared responsibility,
- clarity,
- 'all in sight' viewpoint.

On the basis of these principles certain management tools that necessarily lead to more efficient and better performance. These are:

- quick response,
- successful risk management,
- better capacity management,
- more informed decision-making.

Results so far

We have not had enough experience to judge the results in detail and in a reliable manner, but some statements can be already made.

- A kind of result, in itself, is that we got positive feedback from the actors right as we started.
- The SOO agreement provides the actors with a more free hand as it does not define the details of the implementation but only specifies the goal to be achieved. There is a wide range of freedom of the service provider how to achieve its goal.
- Since the conclusion of the SOO agreement the keeping of the deadlines of the household surveys has been spectacularly increasing. But a more detailed analysis is needed to determine whether the main reason behind it is the SOO agreement or simply the redistribution of the roles in the office and the connected budgetary constraints.

Beside these results we see a real risk that the agreement does not contain sanctions about what happens if the performance is not in accordance with the expectations. As this is only a pilot phase, we have the chance to evaluate what extent the SOO's other features together (transparency, more efficient management tools, feeling of shared responsibility) can support the implementation of tasks at an expected level and how they can support the handling of occurring threats.

Conclusion

The current operation of the Hungarian Central Statistical Office is quite far from a kind of service oriented operation, but we do expect that such an operation can be introduced and disseminated. We do hope that the SOO approach can create a partnership attitude in which all the actors can work at the best level of their abilities for achieving common objectives. We also believe that we are going into the right direction, but we still have a lot of work to do (including sensitization and knowledge enhancement of the stakeholders) to be able to work well, efficiently and naturally under an SOO agreement.