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## Hundredfold HR-activity: the comprehensive HR-management program of the Hungarian Census 2011

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#### **Preliminaries**

Census data provide the most reliable evidence on the current situation and the changes of a society. Therefore census is conducted regularly (every 5-10 years) almost all over the world – to enumerate the number and main characteristics of population and housing. In most countries census is conducted in the traditional way based on personal contact with respondents mainly using paper-and-pencil interviews. Only a minority of countries changed the census method by using administrative data sources at the same time giving up the advantages of direct inquiry, first of all the big variety of information.

Hungary decided for the traditional method of direct personal data collection but on a multimode – PAPI, PASI and CAWI – basis in order to further respondents' cooperation. Everybody and every household had to be contacted and counted to ensure total coverage. But this valuable result needed enormous efforts to organise the census fieldwork procedure.

The human resource conducting the fieldwork was the critical point, the basic condition of efficiency. Nearly 40 thousand interviewers and 10 thousand fieldwork-operators were necessary to fulfil this huge work.

How to provide a staff the number of which had to be almost 50 times higher than the office's full staff? And compared to the regular interviewers, the number of census enumerators should have been hundredfold higher. How to create the most suitable workforce for the occasional but enormously burdensome and responsible work while balancing also budget and operational efficiency? And how to prevent staff fluctuation - that is mainly due to lack of previous experience of candidates? How to ensure the quality of data and the standardisation of data collection, through the human resource? It was really a singular challenge to create and prepare a huge quality staff for the occasion.

The main risk that threatened was the expected **big change of workforce**, the high fluctuation **of interviewers and fieldwork-operators** during the only one month of data collection, typical in occasional jobs with rapid flow. At the time of high unemployment rate in the country we were to face an overwhelming interest for the job. The goal was **to select from the quantity the best quality**: to find the most suitable candidates and support them to come to a responsible decision

whether to undertake the job or not. To do this, they needed sufficient information about the requirements of the work, the necessary knowledge and skills furthermore the expectable daily workload.

A big fluctuation during data-collection could cause several **problems** and risk the final results, mainly data quality. The change of prepared interviewers and fieldwork-operators would have needed **additional recruiting and training efforts** at the time of practical work in the field. As a consequence there could be a risk of **delaying the schedule**. And last but not least the enormous **investment in selection and training could be lost**.

The problem has to be prevented by the means of a thoughtful recruitment and training program with uniform norms aiming the standardisation and quality of data collection and also the minimizing of human resource fluctuation in the course of census.

# I. Selection and training program with many filters – to avoid fluctuation

A comprehensive recruitment and training program constructed by many stages with filtering function was created to select the most appropriate workforce. At all the stages the competency and ability of the potential fieldwork staff was measured and evaluated. The goal was that only the best should pass through all filters. Contrary to the ordinary recruitment practice this time we used a multistage selection procedure with many filters and steps where candidates had to be evaluated and could be confirmed or not to take the job. Also different steps in training helped to keep only those who could and who really wanted to acquire the necessary knowledge.

#### 1. Filter: Basic recruitment requirements

The recruitment of almost 40 thousand interviewers and other 8 thousand fieldwork-operators was the responsibility of the nearly 2 thousand local government's notaries but based on the statistical office's instructions in terms of requirements. The Instruction Manual for the Notary prepared by the statistical office contained a long list of conditions serving as first selection filter, among them: workload capacity, good communication skills, willingness to learn, conflict tolerance, secrecy, availability etc.

#### 2. Filter: Information film about fieldwork

The procedure was also supported by advertising through the media and internet. On the website a short film titled "How to be a census enumerator?" posing as tool of recruitment and selection demonstrated the main features of the work. The film could orient candidates concerning the kind of work and aimed at making the job attractive but also showing its difficulties. Watching the film interested people faced the complexity of fieldwork and the needed personal abilities and competencies. Those who didn't feel them suitable enough could stand off and save further efforts.

#### 3. Filter: Registration form with declaration of responsibilities

Applicants also had to fill in a **standardised registration form** containing some personal information and a **declaration on the acceptance of training requirements**. To take this responsibility for granted was a **determinative step to avoid an eventual later fluctuation**.

Due to the filter-elements in the recruitment and selection procedure there was a slight withdrawal of registration: some people interested in the job changed their mind in right time.

#### 4. Filter: Pre-training and self-evaluation at home

Candidates overcoming the first stages in the procedure of undertaking an interviewer or fieldwork-operator job had the chance to be familiar with the entire work in advance – it means before attending practical training. Registered people got a **self-training set to bring home** containing detailed instruction manual, training films, a feed-back checklist and a testing worksheet.

The **printed training material** covered all the necessary knowledge how to manage the work: in case of interviewers how to find and contact respondents, how to administer the addresses and the interviews, how to complete questionnaires, how to handle non-respond etc.. Fieldwork-operators could find some additional instructions especially for them. The manual contained also templates of practical material like maps, address-card, questionnaire etc.

The training film-series consisted of 6 general census information and 6 special parts of interviewer's work. The former ones provided necessary background knowledge on the history, the importance, the data collection and processing methods, the legal bases and data-protection of census. The latter ones visualised the different duties of interviewer's work to start with handling the address-list and contacting people while offering them 3 multiple choices to answer, followed by information, motivation of respondents and by filling in the questionnaire, ended

with the duties after the interview. The episodes demonstrated also difficult, extraordinary situations and eventual conflicts of fieldwork.

Supplemented to the self-training set a **checklist of 30 feedback questions** helped to understand the topics and to estimate the measure of attainment of information and the level of preparation. Examples to demonstrate the kind of this self-evaluation tool: "Explain why is census important?" "What kind of responding methods you have to offer to the population?" "Which are the tools you have to bring with you to contact respondents?"

After studying the material at home and answering the self-control questions candidates also had to complete a worksheet containing 10 problems to solve. This test aimed at final feedback and evidence of the level of candidate's preparation. Some examples from the questions: "What to do if you find a flat where a dentist is working with his assistance? Do you have to fill in the questionnaires?" "You find a pensioned couple in a flat and a university student as their tenant. How many households do you have to indicate in the questionnaire?"

The 3 ways of preparation at home – studying the instructions and films, self-control checklist and test – provided the **elementary conditions to continue selection procedure** by attending classroom training.

#### 5. Filter: Classroom training

Candidates were allowed to participate in classroom training only after having overcome the different steps of pre-training and self-evaluation. Those who couldn't present the answered self-control questionnaire and the completed test, were excluded from the job. Those who presented incorrect or partly completed documents, were asked to come back later to the training. Therefore participants of classroom training were really prepared and already clear about the details of duties and ready to undertake the job with its difficulties.

Nearly 50 thousand interviewers and fieldwork-operators had to be trained in a short period before census with the assistance of about 400 **census trainers** selected alone from the statistical office's staff. To manage the task we had to set aside the advantages of effective small-group training and tried to form training material and methods to be suitable for a bigger audience of 40-80 people.

The half-day course starting with a **feedback** on the self-evaluation questions and the worksheet problems, gave an overview on census-fieldwork and **focused on the practical issues** mainly the managing of addresses and the questionnaires. Some communication techniques and conflicts of interviewing situation were also covered. The face-to-face training functioned also as

**consultation** to discuss unclear or difficult issues. There was no need to speak about general census information or theoretical background.

Trainers reported only **some participants leaving the classroom** because getting frightened of the workload that they were not aware of while studying the pre-training material at home. Still, it presented a good result compared to former census experiences when a significant number of fieldwork-candidates gave up undertaking the job only at the time of classroom training or after it.

#### 6. Filter: fieldwork, last but most critical stage of fluctuation

In terms of data quality the **most dangerous phase** of census is the short period of data-collection where the efficiency of all former efforts is to be proven. Is the fieldwork-staff really well prepared, ready to face and overcome conflicts? How many meet unexpected problems so that they give up and **escape from the job**? Former census experiences threatened with high probability (5-10 percent) of fluctuation of interviewers and fieldwork-operators during data-collection. And the reasons could be mainly explained by insufficient information and preparation, overestimation or mistaken of personal capacities and skills.

This time due to the new conception of multistage selection procedure of applicants, the built-in quality filters (pre-training at home and self-evaluation), the main part of fluctuation had already occurred prior to the fieldwork saving a lot of needless efforts and resources, thus data-collection could be protected from consequences of changing staff.

At the end, the fluctuation during the fieldwork didn't overstep 1 percent. The main reason of leaving the job at this stage was not the interviewer's withdrawal but special personal reasons why to delay the work (illness, unexpected family affairs), personality problems (insufficient conflict-resistance, unsuccessful performance) or the bad quality of work (layout of questionnaire, exceeding the scheduled time, breaking the instruction rules).

#### II. Comprehensive training program – to further data quality

To prepare a huge occasional workforce consisting of about 50 thousand mostly newcomers – was a big challenge considering the final goal of data quality and reliability. How to provide an efficient training for all of them? How to ensure standardisation of data-collection by the means of training?

While recruitment and employment of interviewers was the responsibility of local self-governments, on the other side training was exclusively the role of the office. It required

hundredfold effort to instruct interviewers and fieldwork-operators all over the country whose number was about hundred times higher than for the regularly surveys employed fieldwork-staff. A comprehensive training program using versatile approaches but uniform norms was established to overcome the challenge.

#### 1. Trainer's training

About 400 trainers had to be prepared to conduct the fieldwork training. **2-days trainer's training courses** based on **uniform scenario** were organised in all regional units. Census experts of the central office presented theoretical and practical information. In addition to the necessary technical knowledge **didactics** to further training skills was also involved in the topic. Most of the census trainers were lack of training experience so they needed instructions how to handle groups, how to motivate audience, how to hold a good presentation.

#### 2. Uniform training material

Data reliability depends much on **standardisation of data-collection**: it means all respondents have to answer same questions and get uniform information on the survey. To ensure this, interviewers had to be given standardised instructions in a unified form by the means of the same training material.

In opposite to former census practice where only a draft agenda presented the framework of interviewer's training, this time we established a scenario very detailed on the minute, elaborated every presentation and supplied text notes to every slide. This uniform training material was obligatory to use by trainers but made their preparation easy and helped to avoid different explanation of census information.

#### 3. Test training

To guarantee the good quality of fieldwork training, trainers had to pass an **audit** where they demonstrated some parts from the presentations.

Test training served as **feed-back on strength and weakness** in theoretical and practical knowledge and as a "**rehearsal**" of the **real training** coming soon. It provided a good opportunity to **exercise** the census material and also presentation and training skills – mainly for those who hadn't have this experience before.

#### 4. Various training methods and learning possibilities

To help interviewers to get acquainted with the rich curriculum at the easiest – led us to develop a big variety of training methods. Different forms should adapt to **different learning attitudes**:

information should be communicated in visual, oral and auditive form satisfying requirements of those who prefer reading, watching or hearing.

In addition to the traditional **printed** Instruction Manual interviewers had the possibility to learn from **training films** covering special parts of work, further with the help of **self-evaluation questions** and the problems to solve in a **test**, finally from the **picturesque**, **expressive slides of trainer's presentations** and the **face-to-face consultation with trainers** during the classroom training.

#### 5. Evaluation of training program

About 30 thousand interviewers and fieldwork-operators were asked after the census to answer a feed-back questionnaire about their experiences. Training was one of the evaluated issues among others (like organisation, access to information, connections, working conditions, earnings) and it resulted as **one of the most positive experiences**. Participants were very satisfied with the methods, the variety and the organisation of training.

#### Summary

Once in a decade the technical and organising burden for national statistical offices using traditional personal questionnaire survey method for population and housing census is hundredfold. Compared to the Hungarian Statistical Offices' staff number (slightly over one thousand), a group of nearly 50 thousand participants worked for the census 6 weeks. The 40 thousand census-interviewers was one hundred times higher than the regularly employed survey-interviewers. It was a singular challenge to **create and prepare a huge staff for the occasion, and minimising the fluctuation** typical in occasional jobs with rapid flow.

The human resource conducting the fieldwork seemed to be the critical point, the basic condition of efficiency. How to provide such a huge staff? How to create the most suitable workforce for the occasional but enormously burdensome and responsible work while balancing also budget and operational efficiency? And how to prevent staff fluctuation that is mainly due to lack of previous experience of candidates? How to ensure the quality of data and the standardisation of data collection, through the human resource?

A comprehensive recruitment and training program constructed by many stages with filtering function and quality elements was created to select and keep the most appropriate workforce. At all the stages competency and ability of applicants was measured. A multistage selection procedure was used with many filters and steps (uniform selection requirements, information on the expectable workload, registration form with declaration of acceptance the requirements) where candidates could be confirmed to take the job or not. Also different steps in training (pre-training at home, self-evaluation and test, classroom training) helped to keep only those who could and who really wanted to acquire the necessary knowledge.

Due to the conception of multistage selection and training the main part of fluctuation had already occurred prior to the fieldwork saving a lot of needless efforts and resources. At the end data-collection could be protected from consequences of changing staff first of all the deterioration of data-quality, but also additional recruiting and training efforts, delaying the schedule and loosing the enormous investment in selection and training.

Another big challenge was to provide an **efficient training** for the huge staff and to ensure standardisation of data-collection by the means of training. A **comprehensive program using versatile approaches but uniform norms** was established to overcome the challenge. Trainer's training for the mostly inexperienced trainers, uniform and detailed developed training material, test training exercise and various training tools to satisfy different learning attitudes - all these contributed to the motivation of fieldwork and trainers staff and to achieve the main goal of standardised data-collection and data reliability.