

# Review of results of tests carried out to improve the quality of population and housing census

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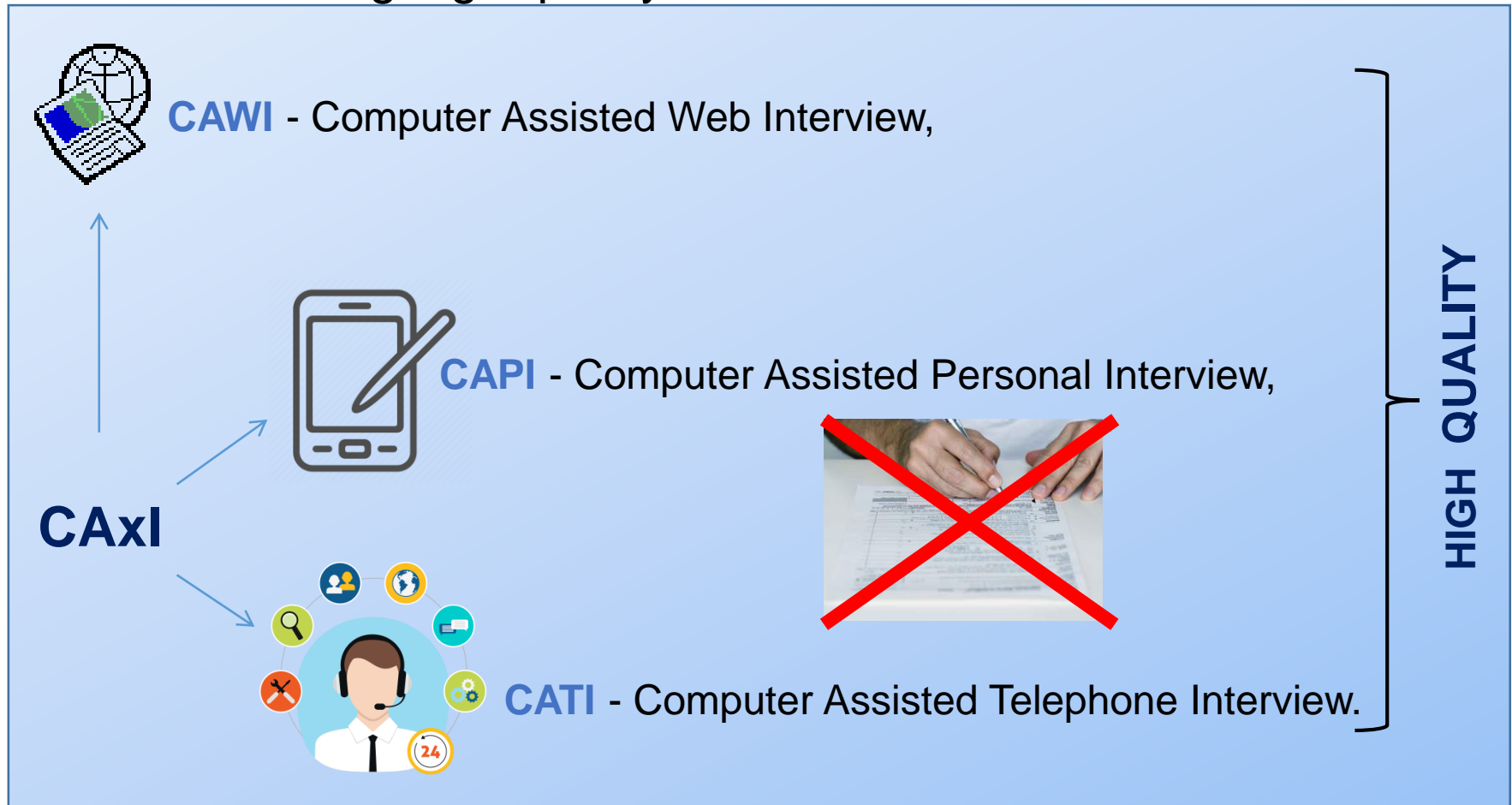
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# The main issues

- Optimization of the data collection methods and tools used,
- Amount of forces and funds (including financial ones) both from the part of census executors from the side of official statistics as well as entities obliged to provide census data,
- Friendliness of the applied solutions for users,
- Communication and technological efficiency of designed IT applications,
- Safety of collected and processed census data,
- Optimization of deadlines for the implementation of individual stages of collecting data from respondents,
- Completeness and quality of the census results,
- Optimization, transparency and efficiency of the popularization message targeted at census entities

# The Aim

Maximum simplification of the method of census implementation while maintaining high quality of obtained results



# Identification of change areas

- Methodology of building tools for collecting data with CAxI channels - matching surveys to the data collection mode.
- The influence of data collection methods - mixed techniques of interview implementation on the response indicators for key variables and the quality of input data.
- Methods of measuring the phenomenon of the influence of data collection methods on the quality of input data and methods of mitigating the undesirable impact of data collection modes.
- Quality framework for multi-channel data collection.
- Data collection management system.
- New solutions for collecting data using new techniques resulting from the development of ICT.

# Methodology of building tools for collecting data

Methodology of building tools for collecting data with CAxI channels - matching surveys to the data collection mode.

- Implementation of the census using CAxI methods assumes the possibility of:
  - to independently fill in the census form by the respondent,
  - tips given by the census enumerator during the telephone interview,
  - hints and explanations provided by the census enumerator during the direct interview.

# Methodology of building tools for collecting data

Several main aspects to look out for when creating an e-form for the census

- way of formulating questions in the e-form.
- length of the e-form
- blocks of questions
- order of questions
- filtering questions
- hints, explanations and dictionaries
- functionality.

# The influence of data collection methods

The influence of data collection methods - mixed techniques of interview implementation on the response indicators for key variables and the quality of input data.

- The data collection mode affects:
  - quality of input data
  - the cost of data collection
  - organization of data collection
  - e-form design
  - the level of data collection stability
- A compromise between the quality of collected data and the costs of data collection is necessary.

# The influence of data collection methods on the quality

Methods of measuring the phenomenon of the influence of data collection methods on the quality of input data and methods of mitigating the undesirable impact of data collection modes.

- The assessment of the impact of data collection methods on the quality of input data is made:
  - taking into account the standard method determined in the Quality Framework;
  - with establishing a reference point for comparisons;
  - with determining the correction methods of errors.
- The methods of measuring the impact of data collection modes on their quality should be measurable



# The influence of data collection methods on the quality

When developing methods to mitigate the undesirable impact of data collection modes, it is first necessary to review all factors that can be eliminated regardless of the data collection mode. These are:

- communicativeness of the e-form;
- efficiency of the mobile application (e-form);
- attributes of the ICT environment in which data collection takes place.

# Quality framework

## Quality framework for multi-channel data collection.

- The Quality Framework for multi-channel data collection should provide a standard method for assessing the quality of data collected by various channels and especially take into account the following aspects of quality:
  - accuracy,
  - timeliness,
  - the cost of collecting data,
  - the burden on respondents.

# Management system

## Data collection management system.

- The purpose of the multichannel data collection management system is:
  - collecting data with the desired quality, within the set time and budget available
  - ensuring high efficiency of data collection processes
  - orientation for respondents' needs
  - focus on challenges, including innovation in data collection.

# New solutions for collecting data using new techniques resulting from the development of ICT

When planning an organization, it is important to take into account:

- sequence of activities and their duration,
- assigning activities to performers in a way that does not raise any doubts,
- defined personal and material resources,
- strengthening the competences of people planned to be involved at every stage of the established organization.

# New organizational solutions (1/2)

Determining the probability of effectiveness and the scope of methods

Profiling of respondents for pre-assignment to the channel

Acquiring data

Inventory of actions that can be performed by own forces and the scope of outsourcing

Designing the IT Census System (ICS)

The order of activation of data collection channels

## New organizational solutions (2/2)



Internet access points - for respondents

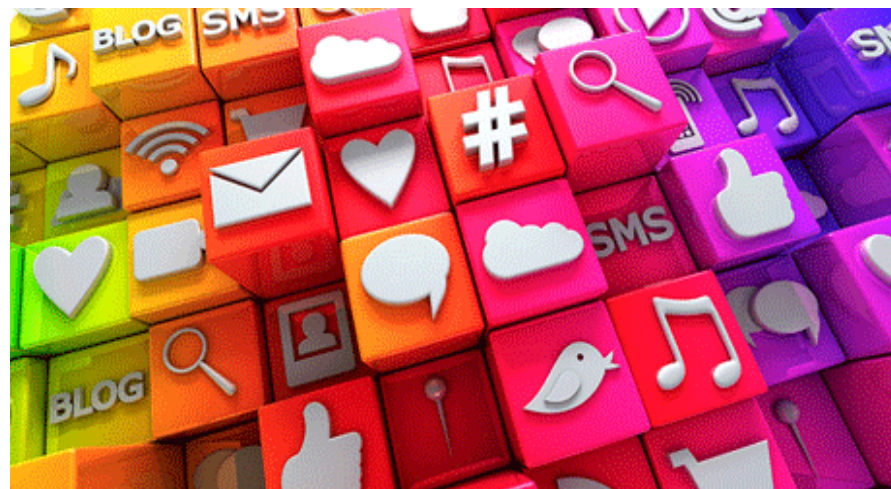
Designing management, monitoring, control and reporting activities

Environment of data collection – promotion

Anticipation of activities accompanying the collection of data resulting from the needs of respondents

# Conclusion

Modern technologies  
versus the quality of the  
census



Need for the creation of  
patterns and models that  
can be used to develop the  
quality of censuses now  
and in the future

***Thank you for your attention***

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