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Transitioning to the New Editing Process at Statistics Sweden

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Background

- Restructure the manuel editing process based on a decision made in 2021 by the mangement of Statistics Sweden (SCB).

- Goal: cost-efficient data collection and decrease respondent burden.

- 'New editing process' divided into: respondent editing and macro editing.

- During this presentation: examples from SCB's surveys Enterprises' ICT Expenditure (FUFI) and Procution Value Index (PVI).
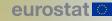
FUFI and PVI

Enterprises' ICT Expenditure (FUFI)

- Annual survey.

- Mostly quantitative variables.

- Primary user: National Accounts on production for GDP.

Production Value Index (PVI)

- Short-term business statistics.

- Monthly survey.

- Only quantitative variables.

- Measure Swedish commerce, and production of goods and services.

- Primary users: The Nationl Institute of Economic Research, the Central Bank of Sweden, and Ministry of Finance.

Methods

Respondent editing

- Trust-based relation between respondent and SCB.

- Implementation of updated prompts in online questionnaires.

- Balance the aim and quality requirements for the statistitcs with a respons burden perspective when desining prompts.

- Macro perspective from the beginning.

Macro editing

- Identifying measurement errors and processing errors.

- Ruled-based editing.

Respondent editing

Inventory of existing prompts

- Purpose: clear picture of all the prompts and how they function.

FUFI survey:

- Existence and purpose.

- Adjustment for uncertainty.

- Relevance.

Respondent editing

Evalutation of existing prompts

Accuracy Test:

$$Accuracy = \frac{Number\ of\ respondent\ that\ adjusted\ their\ value\ after\ triggering\ the\ prompt}{Number\ of\ respondents\ triggering\ the\ prompt}$$

- If a prompt's accuracy exceeds 80 percent, it's considered effective and can be kept.

- From FUFI survey: some prompts had accuracy level at 60-70 percent. Action: adjustment to trigger less frequently.

Respondent editing

Designing prompts

1) Forcing prompts

- These require respondents to provide a value for a specific data point.

2) Forcing prompts with fixed response alternative

- Respondents are required to select an answer from a predetermined list rather than only providing an open-ended response.

- Reducing time of manual editing and makes data analysis simpler.

3) Non-forcing prompts

- Indicate to the respondent that the reported value may be diverging from expectations – but no requirement for the respondent to act.
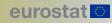
Respondent editing

Designing prompts

Exemple: Forcing prompts with fixed response alternatives

The reported value is at least 30 percent lower than the value reported for the previous month. In order to minimize further communication, please specify the reason for this development:

1. *Decreased demand*

2. *The business is being liquidated*

3. *Parts of the business have been sold*

4. *Other, please specify:*

Example: Non-forcing prompts

In the previous reference period, the enterprise conducted software development. Is it correct that you did not perform any software development in the current reference period? Please validate your response.

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Macro editing

- Tools to identify diverging values.

- Break down into smaller industries.

- Auto-correcting systems.

- Analyze the effects of micro editing.

Macro editing

Number of estimates that have been adjusted with the former editing process, 2021M04-2022M03

Sector	Adjustments above 1%	Adjustments above 5%
Industry	8.6%	3.9%
Service	6.7%	0.8%

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Conclusions

- The manual micro editing has been removed in PVI and FUFI.

- The quality has been maintained.

- Improved efficiency in the macro editing.

- Risk analysis and continual evaluation has been crucial for a successful implementation.

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