Challenges and Discoveries in Developing Quality Indicators for the GSBPM

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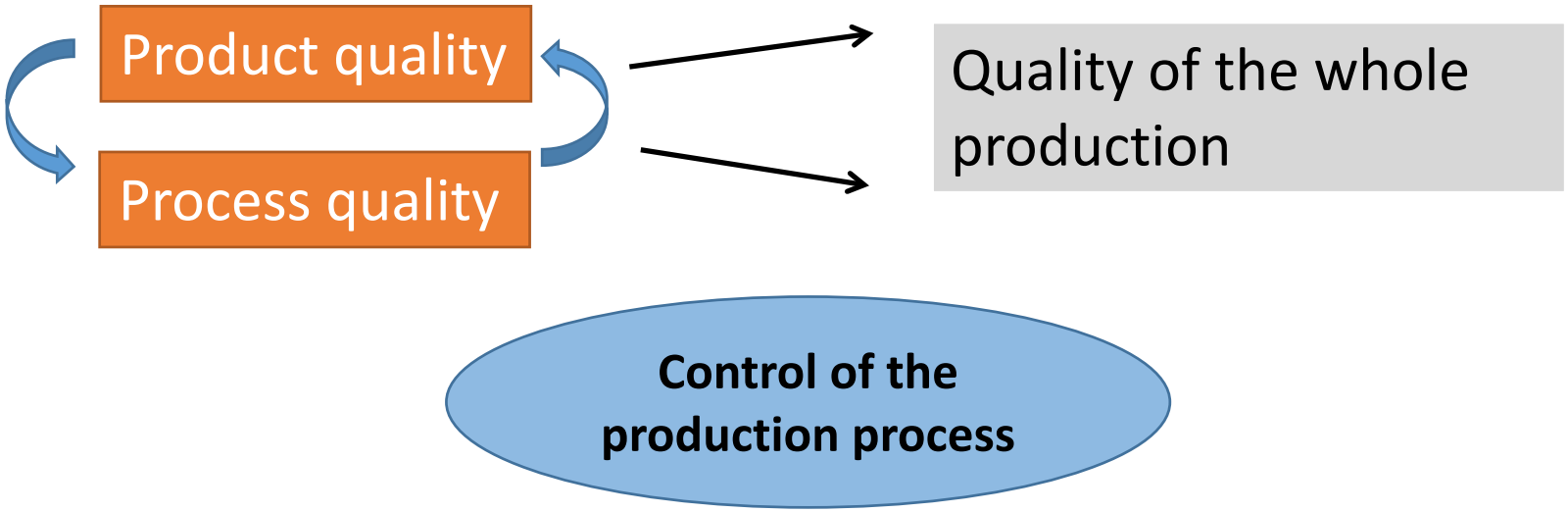
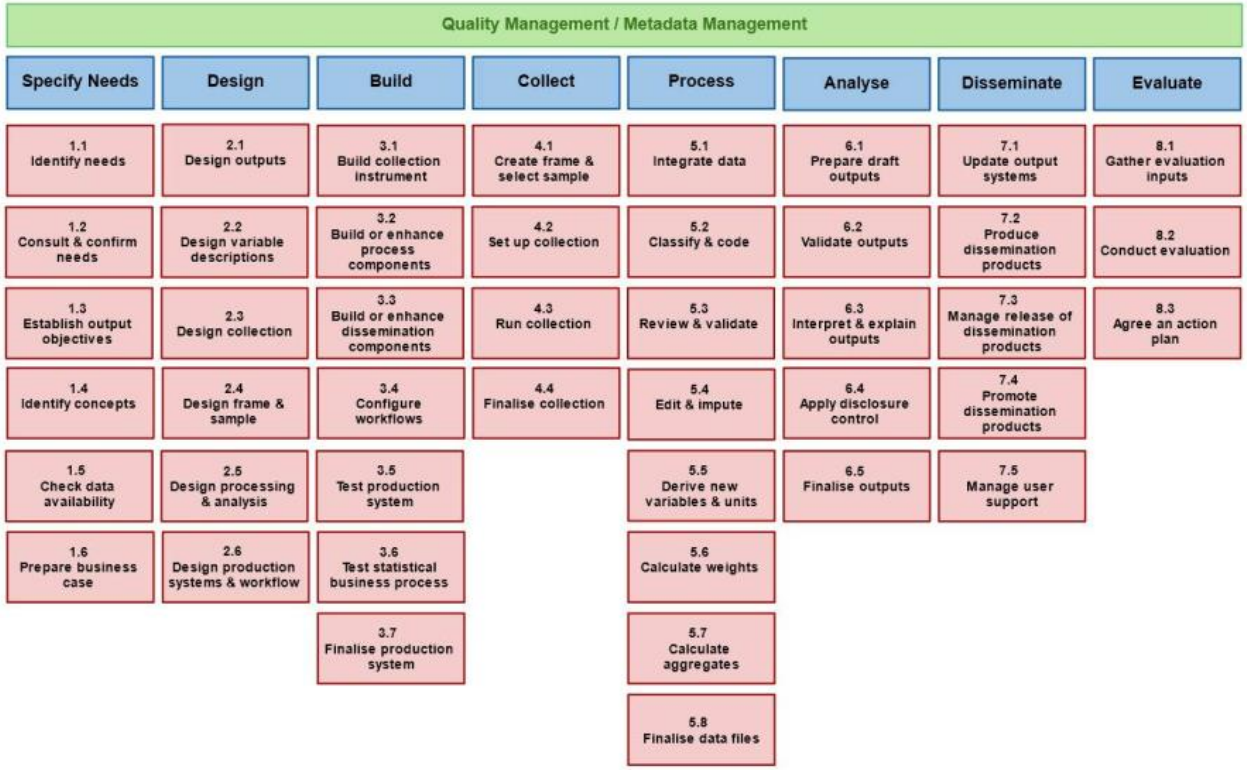
Quality Management Concept in GSBPM



The concept of quality is not only described as product or output quality, but in a broader sense it is described as the quality of the whole production process.

Quality Management Concept in GSBPM



Quality management

Metadata management

Data management

Process management

Quality Management Concept in GSBPM

Quality management

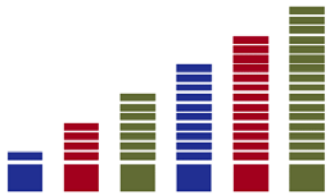
The main goal of quality management within the statistical business process is to understand and manage the quality of the statistical products.

In order to improve product quality, quality management should be present throughout the statistical business process.

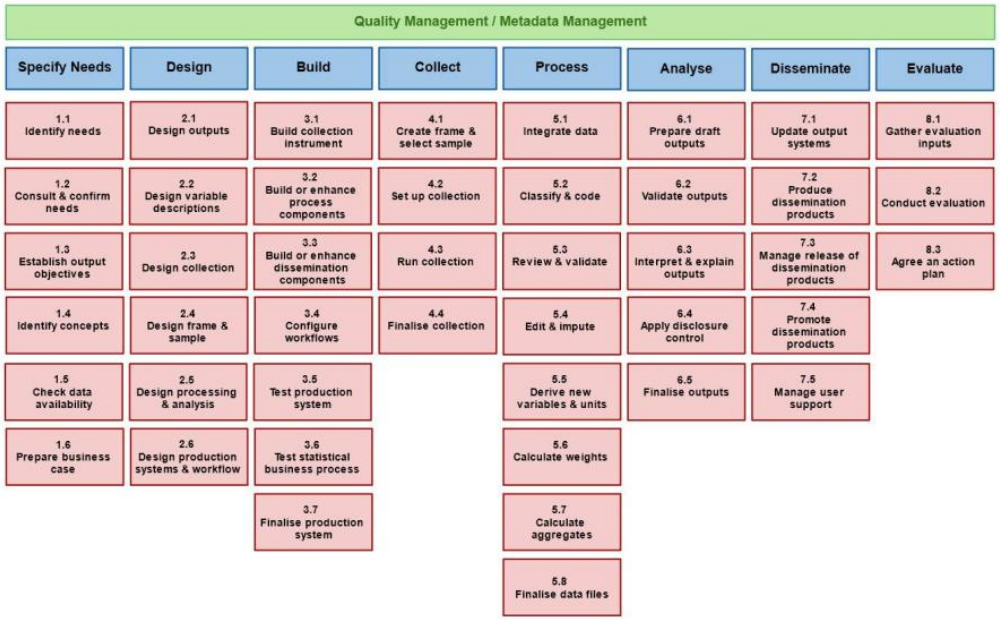
Need to have proper measures → Quality indicators

Developing Quality Indicators for GSBPM

- ✓ The development of QIs for the GSBPM phases and sub-processes was one of the priorities of the UNECE Modernisation Committee on Standards.
- ✓ This exercise was carried out by a Working Group set up in 2014.
- ✓ Statistics Canada, Italy and Turkey, as well as representatives from Eurostat
- ✓ The first version of the QIs was presented and discussed at the Workshop of the Modernisation Committee on Standards: International Collaboration for Standards-Based Modernisation Meeting which took place in Geneva in May 2015.



Quality Management Concept in GSBPM



VI. Overarching Processes Quality Management

Indicators were prepared only for direct surveys

QIs were mapped to each phase (Phases 1 to 8) and sub-process of the GSBPM. QIs were also attached to the current overarching process of quality management.

Developing Quality Indicators for GSBPM

Potential users and stakeholders were consulted on the GSBPM QIs via

i) a group work session during the Standards-Based Modernisation Workshop,

ii) an open consultation on the UNECE website.

The wider consultation was launched on the UNECE website from August to October 2015 and was aimed to obtain feedback from the community of potential users. The questions posed and the answers received are available on the UNECE website (http://www1.unece.org/stat/platform/display/QI/Quality+Indicators+Home).

Types and Levels of the Indicators

Quantitative indicators

Qualitative indicators

- ✓ Relevant
- ✓ Conveying meaningful information
- ✓ Reliable

Types and Levels of the Indicators

- Generic indicators were proposed in order to reflect the nature of the GSBMP itself.
- No formulas were indicated but explanations and reference to the related quality dimension were provided.
- Quantitative indicators were used whenever possible.
- Qualitative indicators were expressed in the form of yes/no or high/medium/low degree indicators.
- The formulation “extent to which …” has often been used. This can be applied as a percentage, a number or a qualitative description, depending on the situation at the NSO and the feasibility of implementing the indicator.
- Defining a target or expected level left to the NSOs.

Challenges, Types and Levels of the Indicators

Categorizing the indicators such as:

i) key indicators;

ii) user-oriented versus producer oriented;

iii) qualitative indicators versus quantitative indicators;

iv) process versus product indicators.

is left to the users to categorize the indicators for their own use.

Coherence with Other Frameworks

There exist already many different frameworks for assessing and monitoring quality of products and processes.

- UN National Quality Assurance Framework (NQAF)
- European Statistics Code of Practice
- ESS Single Integrated Metadata Structure (SIMS)
- National quality assurance frameworks (e.g. Statistics Canada Quality Guidelines)

The NQAF dimensions were taken as reference for relating QIs to the corresponding quality dimension but mapping to the ES CoP was indicated only in case of discrepancies. The working group also categorized as key indicators the ESS Quality and Performance Indicators (ESS QPI, 2014).

Benefits and Uses

QIs for the GSBPM provide;

- a standard framework and common terminology.
- a process-oriented approach to quality management.

Since these indicators are generic, they can be modified by the users according to their own needs.

Building the indicators into the GSBPM gives a sense of what to measure and when to measure it in the statistical production process.

Future Developments

Categorization of the indicators in terms of their level (survey, family of surveys, whole NSO) and their intended consumer (internal versus data user).

Aligning the QIS with commonly used performance indicators.

Expanding the scope of indicators to include administrative and other types of undesigned or “big” data.

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Thank you!