



Monitoring Quality in the production process model

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Monitoring Quality in the production process model

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Background.

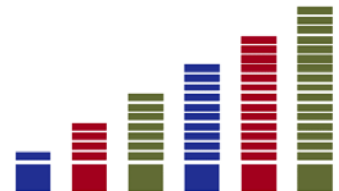
Starting point: Quality Guidelines INE of Spain

Tool: GSBPM adaptation to INE of Spain.

Target: The GSBPM quality management layer

Process: To implement process evaluation

Lessons learned.



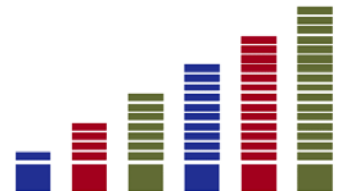
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Background.

- INE is working to streamline and make the production process efficient
- a first step is to know how the work is done now.
- INE is strongly committed to quality.
- IME project
- But we lack a comprehensive and systematic over-arching framework to address different dimensions of quality.



GSBPM



Starting point: Quality Guidelines (Last version 1 June 2015)

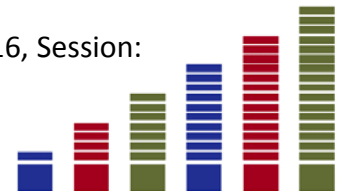
Main criteria used in INE to ensure adequate quality levels:

- ESS Code of Practice.
- Relationship with users:
 - Reduction of statistical burden
 - Confidentiality, Dissemination and Data revision policy
 - Provision of services of INE

Tools

- Quality management system:
 - Structure : Quality Unit and Quality Committee
 - Instruments and methods
- Production process model : GSBPM INE standard*.

* Process metadata development and implementation under the GSBPM v5.0 at statistics Spain. Q2016, Session: 24 - Metadata Systems, Paper number: 106. David Salgado, Ana I. Sánchez-Luengo (2016).



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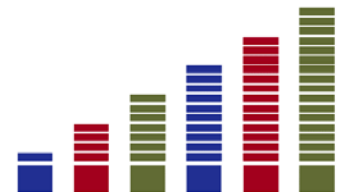
Target:

To re-arrange and amend our current quality guidelines, following the GSBPM structure.

The methods and tools to be (preferably) used, the appropriated standards, and the indicators to evaluate the quality of the process used in each phase would be described.

“Quality Management is present throughout the GSBPM. Indeed, the entire GSBPM can be viewed as a framework for the quality management lifecycle”*.

*Generic Statistical Business Process Model GSBPM (Version 5.0), December 2013, UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE, STATISTICAL DIVISION).



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Implement Process evaluation: Quality indicators and GSBPM phases

Purpose: to document process quality

213

Total number of indicators obtained* for our GSBPM version.

Purpose : to implement the collection of process quality indicators

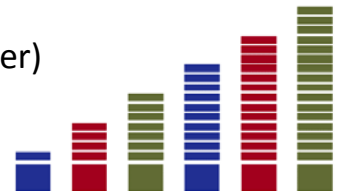
Indicators presented in the Quality Committee 2015 :

already calculated: 12 (PQI + estimated cost)

2nd phase: 13, (from them 5 in charge of production units).

3rd phase: 91 indicators (future).

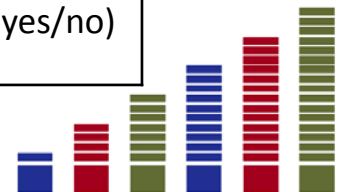
*Quality Indicators for the Generic Statistical Business Process Model (GSBPM) (working paper)
UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE, STATISTICAL DIVISION (2015),



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Third stage indicators in the 3.2 task:

3.2. Build or enhance process components	Extent to which process components are using corporate tools	%
	Has new developed (ad hoc) software been tested and documented?	(yes/no)
	Have the test results been taken into account in the final implementation and documented in a report?	(yes/no)
	Has the coding procedure been tested?	(yes/no)
	Have the test results been taken into account in the implementation of the final procedure?	(yes/no)
	Has the editing and imputation procedure been tested?	(yes/no)
	Have the test results been taken into account in the implementation of the final procedure?	(yes/no)



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8 Phase: collecting every quality aspect of the process

Quality unit:

8.1.1. Gather reports of implementation of previous action plans.

Annual report (INE's web)

8.1.2. Gather quality metadata.

IME(ESMS) (INE's web), ESQRS, Data Collection reports

8.2.2. Analyse quality indicators.

Barometer evolution

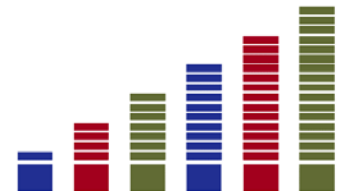
Production Unit:

8.2.1. Identify process errors.

8.3.1. Develop an improvement action plan.

National Statistical Plan(4 years) , Annual Plans(INE's web)

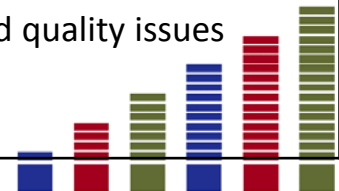
8.3.3. Monitor the implementation of the action plan.



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Third stage indicators in Phase 8

Phase 8	8.1 Gather evaluation inputs	Ratio of the number of quality indicators collected for the different phases and sub-phases to the total number of indicators including cost and timelines.
	8.2. Conduct evaluation	<p>Trends on quality indicators (improvement/ worsening) for recurring processes</p> <p>.....</p> <p>Percentage of Quality dimensions that were not possible to asses and why.</p> <p>.....</p> <p>If an evaluation report has been produced and on which basis</p>
	8.3. Agree an action plan	<p>Ratio of the number of actionable quality issues to the total number of quality issues</p> <p>.....</p> <p>Ratio of the number of quality issues to take action for divided by the number of all actionable quality issues</p> <p>.....</p> <p>Completion rate of the action plan: the number of successfully improved quality issues divided by the total number of quality issues planned to be fixed</p>



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Lessons learned:

A strong commitment of top management is needed:

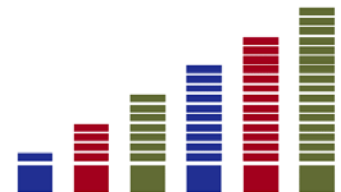
The process is burdensome for producer units.

It imply a change in their method of work.

The project leader has to keep in touch with producer units:
to provide them assistance , encouragement, and to monitor the process).

Cross-functional units: Quality, Dissemination, Data collection,
Sampling:

should help preparing templates of the phases that
are closely related to them.



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Thank you for your attention!

