Industrialization of statistical production by GSBPM

September 2016

Objective

To identify opportunities to **improve the coordination of processes, the optimization of resources (by cost reduction) and the intensive use of sources for DANE's modernization**, based on the GSBPM international standard.

Phases

PHASE 1: Mapping

- Mapping of the GSBPM and the DANE Statistical Production Model (hereinafter, SPM) in order to match processes.
- Diagnosis of the DANE SPM in order to identify the opportunities for modernization.

PHASE 2: Prioritization

- Definition of criteria for the prioritization of opportunities.

- Criteria:
  - ➢ To be applicable for as many general problems as possible.
  - ➢ To make a better cost-benefit ratio.
  - ➢ To impact as many SPM phases as possible.
  - ➢ To require less time for their execution.

- Definition of strategies to be included in the modernization plan.
- Development of the modernization plan .

PHASE 3: Implementation

- Implementation of the modernization plan.

- Carrying out of an Impact Assessment with respect to the plan.

PHASE 1: Mapping

GSBPM

Quality Management / Metadata Management							
Specify Needs	**Design**	**Build**	**Collect**	**Process**	**Analyse**	**Disseminate**	**Evaluate**
1.1 Identify needs	2.1 Design outputs	3.1 Build collection instrument	4.1 Create frame & select sample	5.1 Integrate data	6.1 Prepare draft outputs	7.1 Update output systems	8.1 Gather evaluation inputs
1.2 Consult & confirm needs	2.2 Design variable descriptions	3.2 Build or enhance process components	4.2 Set up collection	5.2 Classify & code	6.2 Validate outputs	7.2 Produce dissemination products	8.2 Conduct evaluation
1.3 Establish output objectives	2.3 Design collection	3.3 Build or enhance dissemination components	4.3 Run collection	5.3 Review & validate	6.3 Interpret & explain outputs	7.3 Manage release of dissemination products	8.3 Agree an action plan
1.4 Identify concepts	2.4 Design frame & sample	3.4 Configure workflows	4.4 Finalise collection	5.4 Edit & impute	6.4 Apply disclosure control	7.4 Promote dissemination products	
1.5 Check data availability	2.5 Design processing & analysis	3.5 Test production system		5.5 Derive new variables & units	6.5 Finalise outputs	7.5 Manage user support	
1.6 Prepare business case	2.6 Design production systems & workflow	3.6 Test statistical business process		5.6 Calculate weights			
				5.7 Calculate aggregates			
				5.8 Finalise data files			

SP

DANE's STATISTICAL PRODUCTION MODEL				
1 **Detection and analysis of requirements**	**2** **Design**	**3** **Statistical Production**	**4** **Analysis**	**5** **Statistical Dissemination**
1.1 Thematic planning	2.1 Thematic design	3.1 Sample selection	4.1 Results analysis	5.1 Integration of data to the query system
1.2. Methodological exploration	2.2. Results design	3.2 Pre-operation for the collection of information	4.2 Consistency analysis	5.2 Delivery of information for dissemination
1.3 Determination of resources	2.3 Statistical design	3.3 Personnel selection and training	4.3 Preparation of the results report	5.3 Implementation of the dissemination and marketing strategies
1.4 Preparation of the technical proposal	2.4 Collection methodologies design	3.4 Operation for the collection of information	4.4 Presentation of results	
	2.5 IT design	3.5 Data processing	4.5 Adjustments and approval of results report	
	2.6 Dissemination design			

NUEVO PAÍS

MPE-DANE vs GSBPM

GSBPM		SPM - DANE
1. Specify needs	⟷	Detection and requeriments analysis
2. Design	⟷	Design
3. Build		
4. Collect	⟷	Build
5. Process		
6. Analyse	⟷	Analyze
7. Disseminate	⟷	Disseminate
8. Evaluate	⟷	Evaluate/Quality control actions
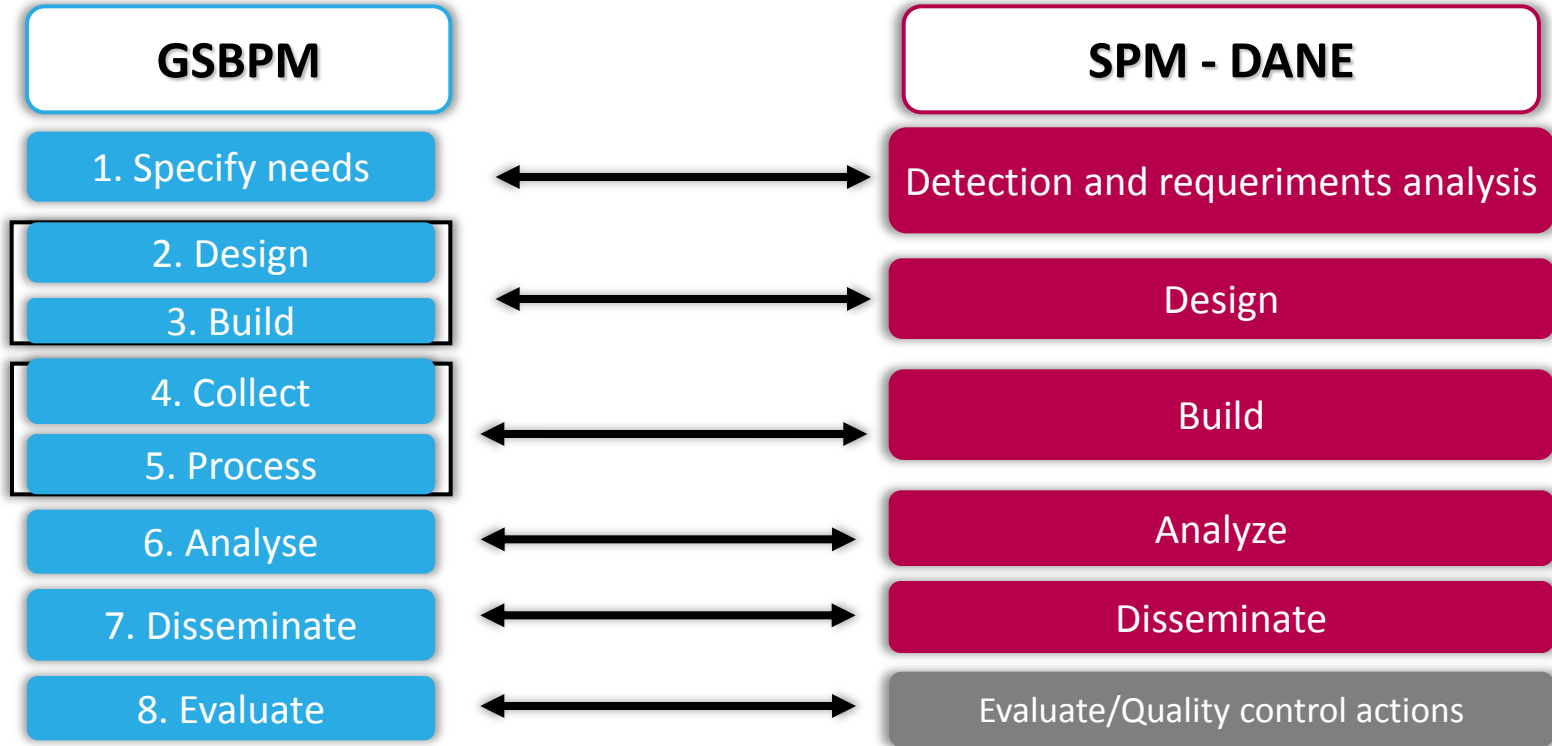
PHASE 2: Prioritization

Methodology

To perform the optimization of resources for selected statistical operations.

To review the documentation and other technical aspects of the set of statistical operations selected.

To design a questionnaire for each technical team of the statistical operation (i.e., thematic, logistics, IT and sampling).

To conduct a pilot test in order to validate the questionnaire.

To have each of the technical teams complete the questionnaire.

To analyze the information collected.

Analyzed statistical operations

Great Integrated Households Survey (GEIH march 2015)

Quality of Life Survey (ECV 2014)

Multipurpose Survey for Bogota (EMB 2011).

Citizen security and coexistence survey (ECSC 2014).

Political culture (ECP 2014)

Domestic Spending on Tourism (EGIT 2013)

Household income and expenditures (ENIG 2013)

Formal Education

Cultural consumption (ECC 2014)

Child Labor (ENTI 2011)

National Time Use Survey (ENUT 2013)

Survey of Sexual Behavior and Attitudes toward sexuality among school-aged boys, girls and adolescents (ECAS)

General areas of improvement with respect to DANE production model

Need for modernization of methods and tools for the collection, processing and analysis of information.

Need for greater control with respect to field operating costs.

The framework for quality assessment and process improvement is not clearly defined.

Weaknesses in the standardization process.
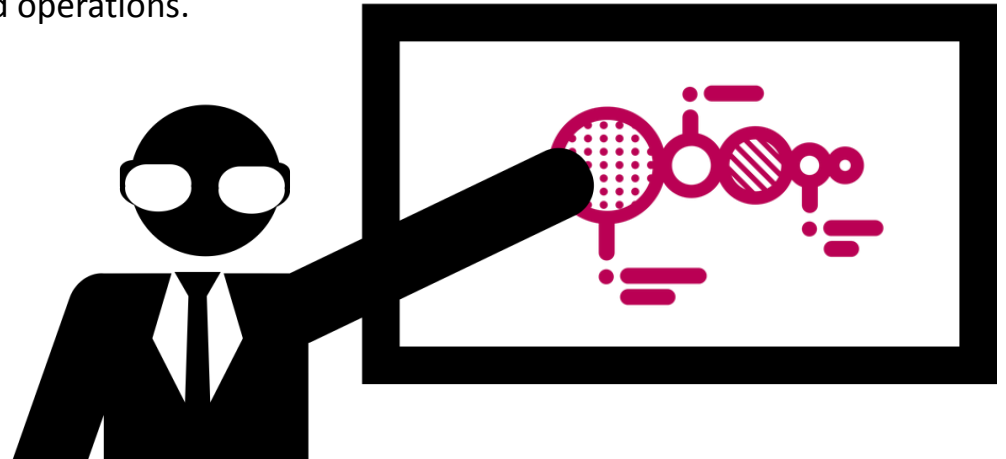
Issues in the design stage.

Inconsistency between databases.

Update of statistical frameworks.

- Human resource training.
- Extended use of self-completion for forms.
- Improvement of hand-held capture devices with respect to hardware and software.
- Design of an electronic form.
- Promotion of the use of technological tools.
- Creation of a single cost model
- Creation of modules and bank of questions standardized by topic.
- Strengthening of the SIMCO system.
- Establishment of improvements in the quality assessment process.
- Creating a harmonized system of variables.
- Standardization of a methodology for field operations.

Identification of opportunities