Statistical Office of the Republic of Serbia

Business process model ready… what now?

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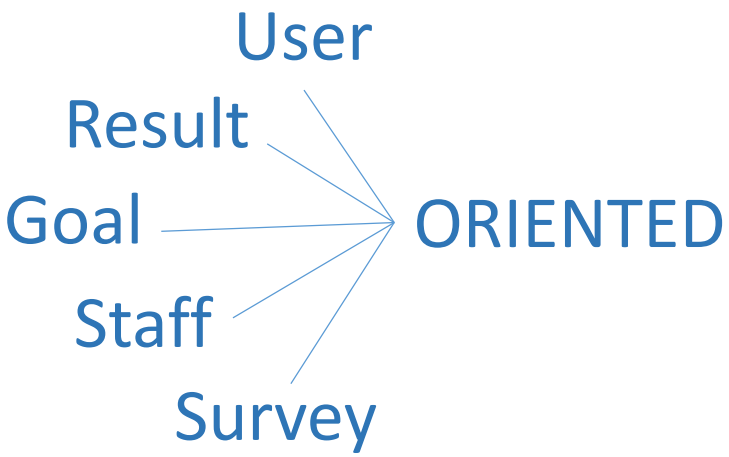
UNECE ModernStats World Workshop 2019
Geneva, June 2019

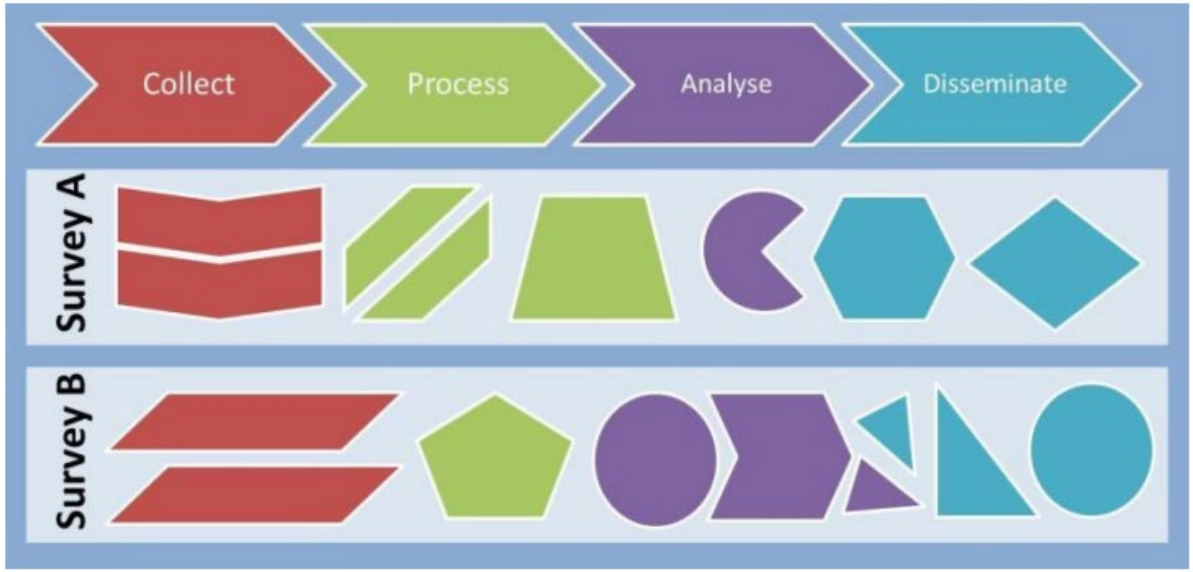
Statistical organization



Process - ORIENTED

Stovepipe vs. process oriented organization

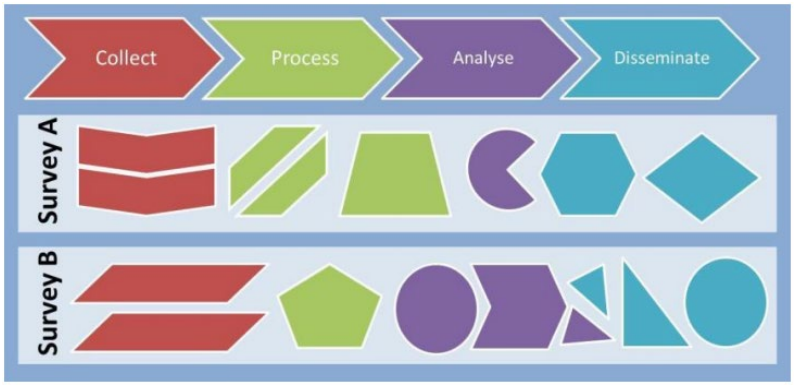
Long history of stovepipe production in SORS



Stovepipe vs. process oriented organization

Features of stovepipe organization:

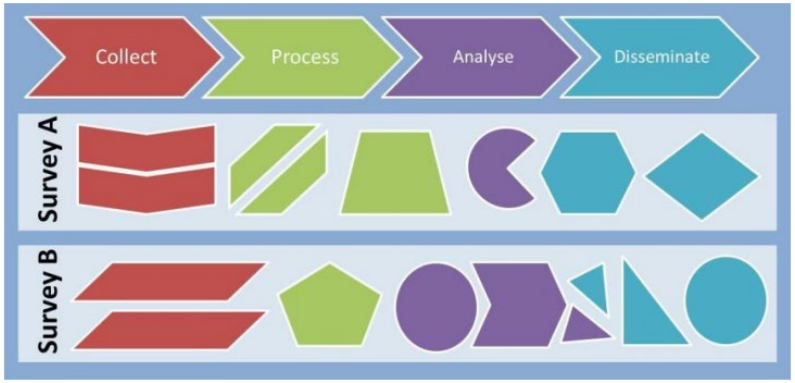
- Significant efforts and resources needed to shape, develop, maintain and document all the survey specific methods/tools
- Replacement of specific methods and tools that are tailor-made for each process by new and improved solutions is a complicated task
- Lack of common terminology and understanding
- Lack of standard criteria for assigning of competence or monitoring process quality



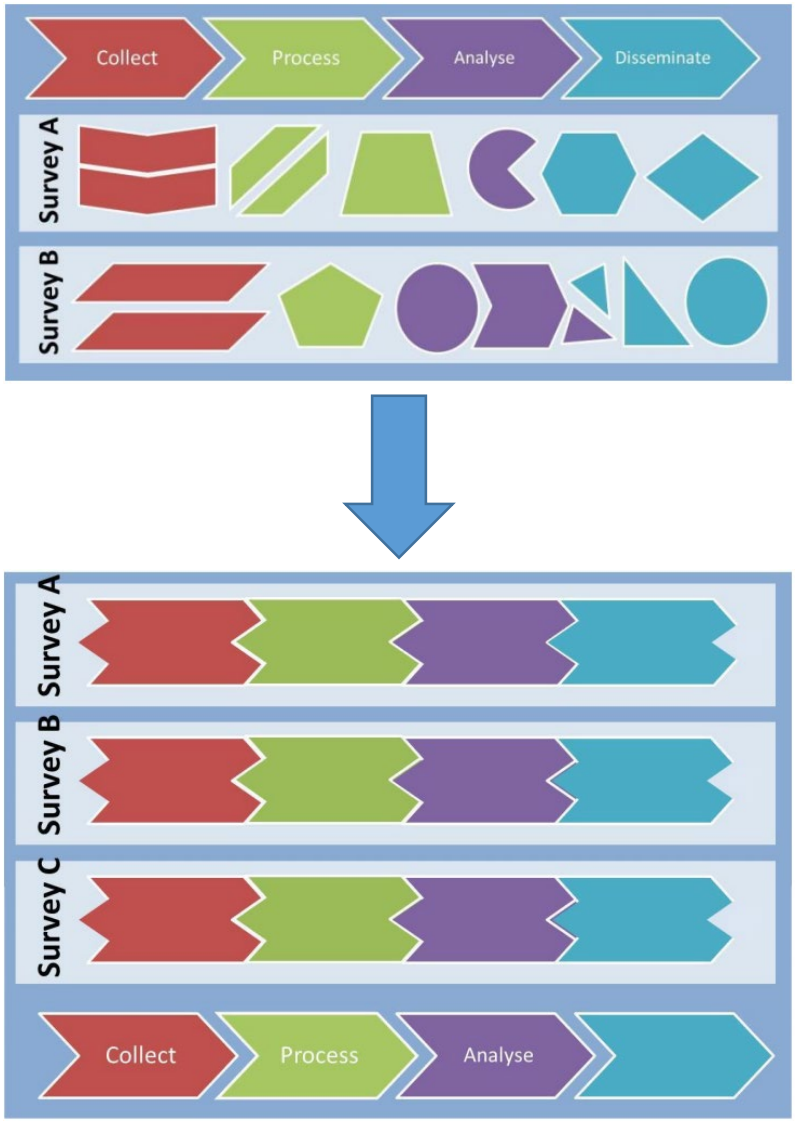
Stovepipe vs. process oriented organization

Features of stovepipe organization:

- Difficulties to reuse information, methods or technology solution
- Common problems got solved in different ways in different stove pipes
- Long time needed to launch new statistical products
- Unnecessary duplication, redundancy and internal competition



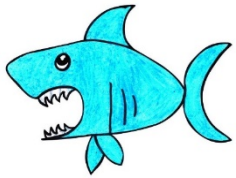
Stovepipe vs. process oriented organization



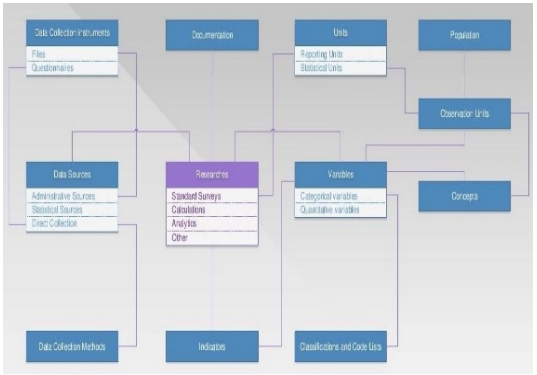
We need new metaphor

We need actors

Starring:



New metaphor



DISSEMINATION DB

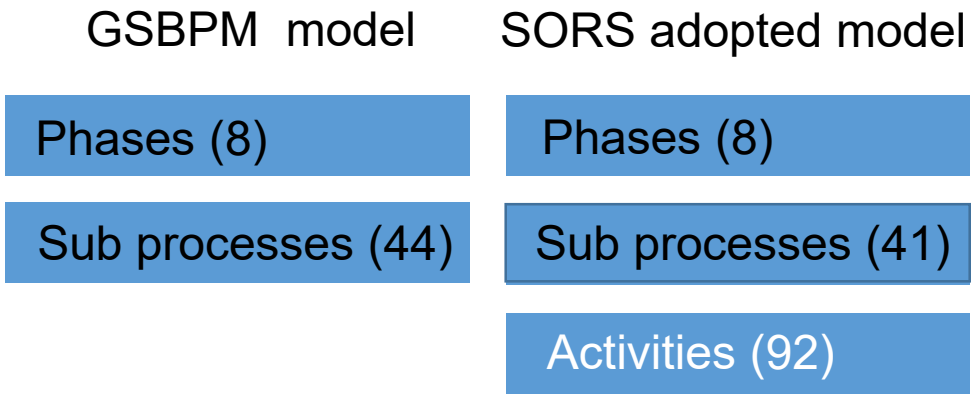
Specify needs | Design | Build | Collect | Process | Analyse | Disseminate | Evaluate

RZSMETA

1 Identify needs	2 Methodological design	3 Build and test production systems	4 Data collection	5 Data processing	6 Output analysis	7 Dissemination	8 Evaluation
1.1 Identify needs	2.1 Design outputs	3.1 Build and test IT support for data collection	4.1 Create frame and select sample	5.1 Integrate data	6.1 Produce first results and quality measures	7.1 Prepare outputs for dissemination	8.1 Gather materials for evaluation
1.2 Consult and confirm needs	2.2 Design variables and units	3.2 Build and test IT support for data processing	4.2 Set up collection	5.2 Classify and code	6.2 Validate outputs	7.2 Finalize statistical products for dissemination	8.2 Conduct evaluation
1.3 Check data availability	2.3 Design data collection	3.3 Build and test IT support for data dissemination	4.3 Run collection	5.3 Validate data	6.3 Interpret and explain outputs	7.3 Release of statistical products	8.3 Produce and adopt action plan for process improvement
1.4 Design draft project	2.4 Design frame and sample	3.4 Configure workflow and linking production systems	4.4 Finalize data collection	5.4 Change data	6.4 Apply confidentiality rules	7.4 Promote statistical products	
	2.5 Design processing and analysis	3.5 Test statistical process		5.5 Derive new variables and statistical units	6.5 Finalize outputs	7.5 Manage users' requests	
	2.6 Design workflow and production systems	3.6 Finalize production systems		5.6 Calculate weights			
				5.7 Calculate aggregates			
				5.8 Finalize data processing			

SORS business process model

- It is adjusted model **compliant to GSBPM 5.1. version**
- **Some of the sub-processes** of the model have been **grouped** and one more detailed **level called "activities" added**

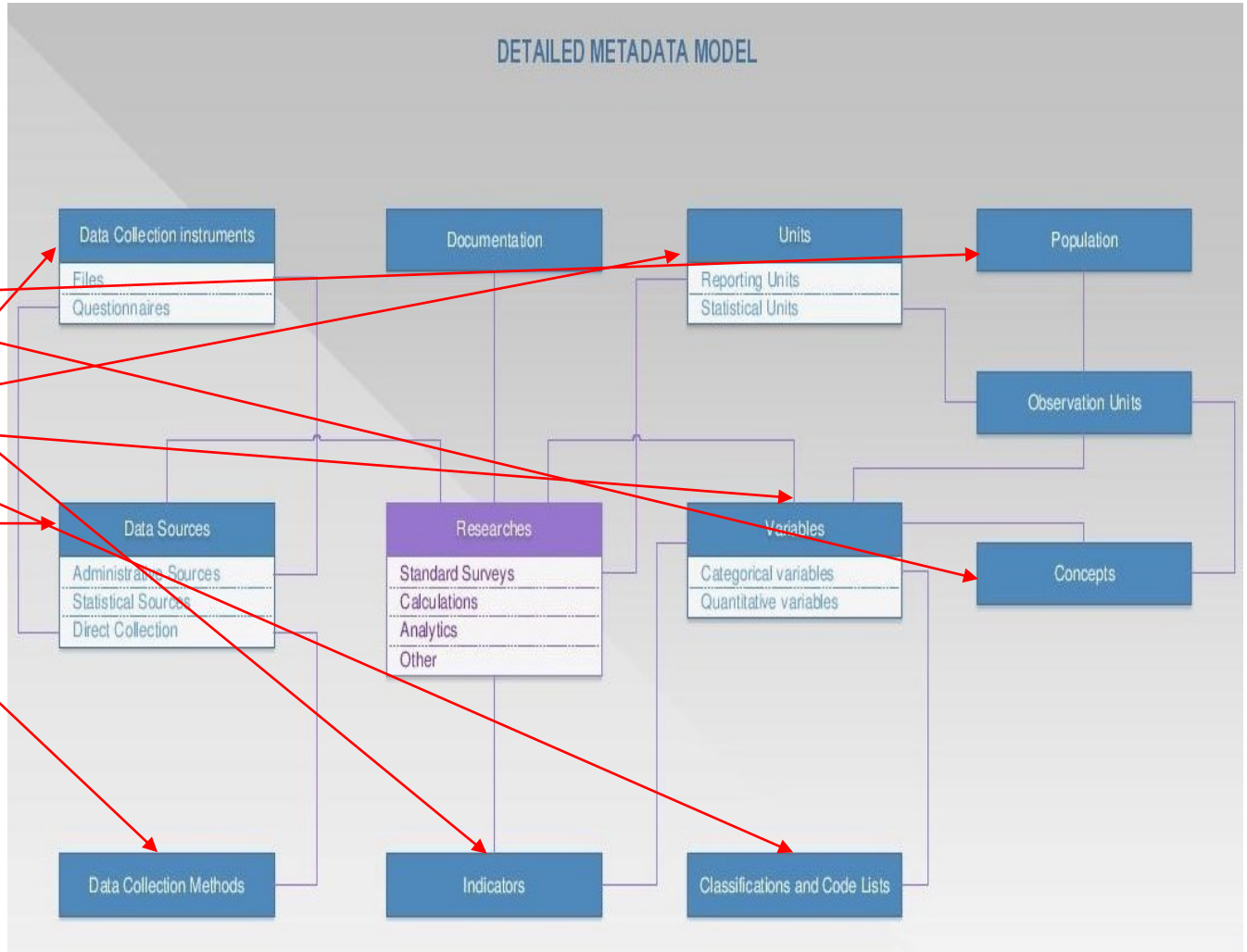


- A document with the **description** of each activity has been prepared
- **Interrelation among activities** has been described, especially where the output from one phase is certified as suitable input of another

Phase 2

2 Methodological design

- 2.1 Design outputs
- 2.2 Design variables and units
- 2.3 Design data collection
- 2.4 Design frame and sample
- 2.5 Design processing and analysis
- 2.6 Design workflow and production systems



More features

- Intention to establish **relation to GAMSO** in order to extend GSBPM to include non-statistical activities common to all statistical offices

- Model is followed by document named **“Quality guidelines”** that is under construction and will contain recommendations and concrete instructions in order to raise up quality of statistical process. It also describes relation to information about the standards as well as how they should be applied in different situations

- **It is not really a business process model**, because the flow is not strict

More features (this is important)

SORS Bussiness Process Model

IS NOT bundle of empty patterns for never-ending, free and imaginative descriptions of particular statistical processes

IS simplified and detailed repository of different statistical activities that constitute the statistical process (kind of taxonomy of phases, sub processes and activities that constitute the statistical processes)

Business model ready…what now?

1. Maybe…testing and finalizing model?

Testing on three surveys:

"Survey on usage of information and communication technologies"
"Census of population, households and dwellings 2020"
"Survey on registered employment"

Analysis of the results of testing

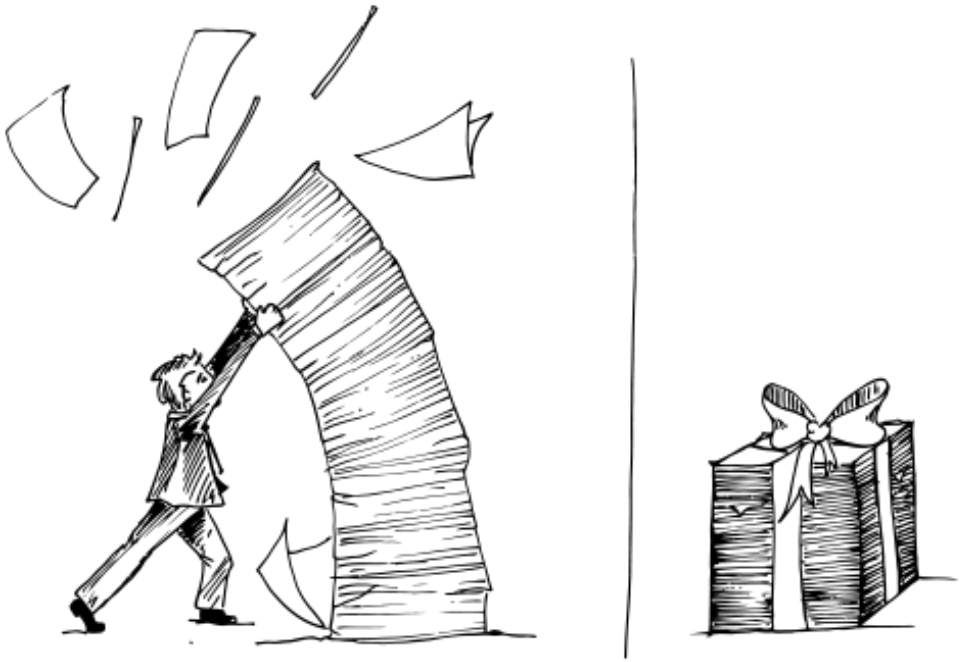
Finalization of the model and of the document with descriptions

Business model ready…what now?

2. Building business process matrix

Activity name	Activity code	Activity description	Interrelated activities	Responsible unit	Participating unit	Applicability	…
Activity 1							
Activity 2							
Activity 3							
…							
Activity n							

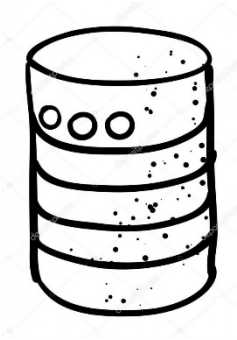
Business model ready…what now?



Business model ready…what now?

3. Building model database and related application

It should be expressed in a standard and machine-readable form, in order to be easily referenced as a part of active metadata repository, used for creation of statistical plan (program), production of documentation and other purposes



Database of the model, that will contain all elements of the model (at all levels), based on filled-in business process matrix

Application for dealing with the model (overview and maintenance of elements)

Business model ready…what now?

4. Here we go - mapping

- All statistical processes will be encouraged to map their work by using activities represented in the model (by using developed user application) plus to put some additional data for each process

- Additional data apart from the model activities, i.e. data needed for planning (dates/periods linked to activities related to sampling, collecting, and publishing)

Business model ready…what now?

5. Production of methodological and technical documentation

- Mandatory for each process (survey)
- Standardized (based on standard template documents)

Conclusions

1. Keep it simple

- Process of model implementation should be without becoming either too restrictive or too abstract and theoretical
- Statistical processes should be released of writing as much as possible
- They should be applied with predefined content and schemes to the greatest possible extent

Conclusions

2. Key benefits

- Opportunity for **integrating data and metadata standards**, including integration with planning process
- Base for preparation of **Quality guidelines** as a supplementary document to the main document of the model, important for introducing quality management
- Opportunity to ensure production of minimum of **documentation** as obligatory for each statistical business process

Conclusions

3. Other possible uses and benefits

- Establishing a common vocabulary that secure shared semantic for the national statistical system (harmonized/standard terminology)
- Providing a framework for process quality assessment and improvement (including risk management and auditing of statistical processes)
- Starting point for analyzing and harmonizing use of statistical software (IT tools)
- Base for measuring operational costs
- Opportunity to mark missing procedures
- etc.

Thank you for your attention!