
Applying Statistical Business Process Documentation in Egypt - The Challenges Overcome

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Abstract

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The Central Agency for Public Mobilization and Statistics in Egypt (CAPMAS) went through several phases to find the model that ensures preserving the history of its statistical products and modernize official statistics. The Generic Statistical Business Process Model (GSBPM) is the model, which has chosen and applied since 2013 that includes documentation of all potential statistical operations in a standardized way through eight main phases and more than forty subprocesses for those phases. Despite the continued training, streamlining the documentation measures for the staff members to use the model efficiency and benefits achieved, CAPMAS encounters challenges require additional measures to achieve the high-quality statistical business process. Define the departments to be mapped on the right phases in the model and raising the quality of documentation in each phase is the continued challenges. Keywords

CAPMAS; GSBPM; Metadata; quality

Background

following the 2006 census, the top management in CAPMAS decided to make data available for all segments of society to maximize their usefulness. By the end of 2009, CAPMAS coordinated with the Organization for Economic Cooperation and Development (OECD) to apply data documentation, archiving and dissemination. For that purpose, a Metadata Unit is established to coordinate among statistical departments and dissemination department and provides the technical support and training. The project characterized by delaying the timeline of data dissemination. An assessment of the business process of data production was necessary to define the weakness points. The evaluation showed that:

- There is no unified data preservation system to be retrieved when needed (each department has its own preservation method as well as each employee within the department).
- Lack of interdepartmental coordination to compile the materials required for publication (bulletins - microdata - information on data collection - information on data editing ... etc.).
- There is no documentation of any statistical production phase and all the information stored in the memory of each employee individually, and, accordingly, losing a lot of important information related to the statistical memory of CAPMAS, which is needed to modernize the official statistics.

That required modernizing the infrastructure of the statistical metadata system. By the mid of 2012, the top management has delegated The Metadata Unit to undertake additional tasks to overcome those obstacles.

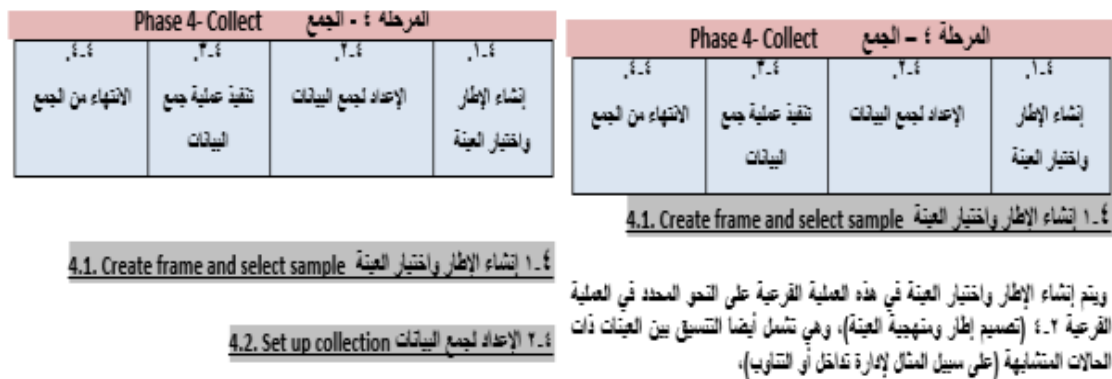
1-The Metadata Unit

Once the metadata unit has undertaken the responsibility of modernizing the statistical business processes, it started searching about a standardized model that achieves coordination and collaboration among departments that share in producing a specific statistical product. Several meeting were held and a model was established and applied, but, in practice, it was not succeeded because each department had their own vision about documentation which different from other departments even if they have the same methodology. By the end of 2012, the unit reached to apply the Generic Statistical Business Process Model (GSBPM)¹.

2- The model

The GSPBM (previously known as the Statistical Value Chain (SVC)) was produced by UN/OECD/Eurostat. It describes and defines the set of business processes needed to produce official statistics. It is consists of eight phases, each phase consists of subprocesses that describe specific area of statistical data production. The Metadata Unit has translated the GSBPM-version 4 (UNECE, 2009) and made an empty template to fill to enable the staff members to use the model easily (Figure 1). An associated folder contains the attachments of each phase (for example: the attachment of phase 4-1 contains the updated frame – the attachment of phase 5-8 contains the microdata – etc...).

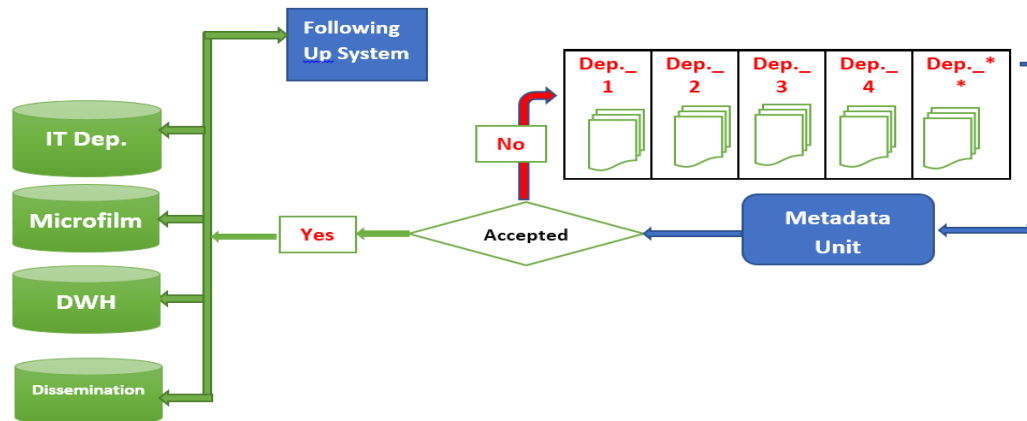
Figure 1. translated GSBPM and empty template to fill



CAPMAS has applied that version “as is” by the beginning of 2013. For a better understanding of the model, the unit has translated the census documentation of Armenia to be a guide. In the mid of 2014, CAPMAS has updated, revised and GSBPM v. 5.0 (UNECE, 2013) followed by workshops to explain the difference from the previous version, in addition to the ongoing support. The following up system is established to ensure that it is embedded and controlled within the statistical metadata system and the project is implemented accurately.

¹ Visit <https://statswiki.unece.org/display/GSBPM/Generic+Statistical+Business+Process+Model>

Figure 2. Statistical Metadata System after applying GSBPM



The Metadata Unit is the place of checking the goodness of documentation and the presence of documents before distributing them each to its relevant departments (Figure 2), the attachments are reviewed and distributed to after the product is approved by the top management. Each department know the place of its attachments according to its related subprocess in the model

3.The challenges to apply the model

Because the staff members have different cultures, the unit has encountered varied obstacles when applying the model. The resistance and rejection from the department's staff members to apply the model were the first impressions as they consider that it is additional work and there are no benefits behind its implementation. The answer was that documentation is an essential part of the statistical data production process to maintain the history of data production as it is considered the memory of CAPMAS that can any staff member retrieve any required information in the future. Because the model contains about 44 subprocesses to fill, the overlapping among departments when documenting their phases in the model were expected. The unit has drawn a map for the phases and departments in which enable the department to know its phase from the map to fill without exceeding it to another phases. Some difficulties were encountered specific departments (like Sampling Unit) when applying their phases. They considered the model is not sufficient for them to understand and fill their subprocesses. Therefore, the Unit has been guided by external reports (like CYSTAT - Hungary) to study these phases and enable departments that resemble the same difficulties to document in light of that reports.

4.benefits

Experience in applying GSBPM has demonstrated that it has achieved a comprehensive and integrative view of the staff members that together produce the statistical products and maintained it for future usage or modernization. As a result of the standardization nature of the model, it is used in CAPMAS to communicate internally and externally with other organizations for discussion to achieve best practices. Good preservation for the documented materials and their attachments according to its own phase helped to retrieve the materials (questionnaire - bulletin - press release - datasets) required for publication on the CAPMAS' website according to timeline accurately.

5. Future plan

To implement and manage the quality of the statistical products, CAPMAS has translated "Quality Indicators for the Generic Statistical Business Process Model (GSBPM) - For Statistics derived from Surveys" (Version 1.0, May 2016) into Arabic under the title ["مؤشرات الجودة لنموذج المنهجية العامة للعمل الإحصائي" \(GSBPM\)](#)

[للإحصاءات المستمدة من المسوح](#)" and published it in GSBPM Resources Repository² and apply some of its indicators when documenting the statistical products. As part of the modernization of official statistics, phase eight (evaluation) still in need of activation for some departments which, accordingly, activate documentation the first three phases. A number of statistical models that can be integrated with GSBPM will be subject to revision to apply such as Generic Activity Model for Statistical Organizations (GAMSO), Generic Statistical Information Model (GSIM) and Common Statistical Production Architecture (CESPA).

6. Conclusion

the experience of applying "GSBPM" has proved the need for strong support from the top management, as this initiative requires an institutional and cultural shift for both of the statistical metadata system and the staff members. Resistance and rejection from the department's staff members were expected, as they do not see clearly the advantages that may derive from this work, but only additional work burden they will do. Although the staff members who are involved in these works have the commitment towards their tasks, they are permanently in need of getting training and assistance to facilitate the achievement of high-quality documentation

² Visit <https://statswiki.unece.org/display/GSBPM/GSBPM+Resources+Repository>