



وزارة التخطيط التنوي والإحصاء  
Ministry of Development Planning and Statistics

# Modernization of Official Statistics in Qatar: The Road Map

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ورشة عمل بشأن تحديث الإحصاءات الرسمية في دولة قطر  
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# *Sustainable Development Goals 2030 ( 17 goals , 169 targets and 232 indicators )*



# National Development Strategy 2017-2022

## Sector Strategies

- Social protection*
- Public security and safety*
- Education and training*
- Healthcare*
- Cultural enrichment and sports excellence*
- Environmental sustainability, natural resources and economic infrastructure*
- Economic diversification and private sector development*
- International cooperation*



# *What is Modernization of Official Statistics ?*

- Modernization of official statistics is about the re-design of statistical business processes along which data are collected, processed and disseminated.*
- In order to do so, a common framework is needed to identify and describe each individual process.*

# Modernization of official statistics in Qatar:

## *A strategic priority*

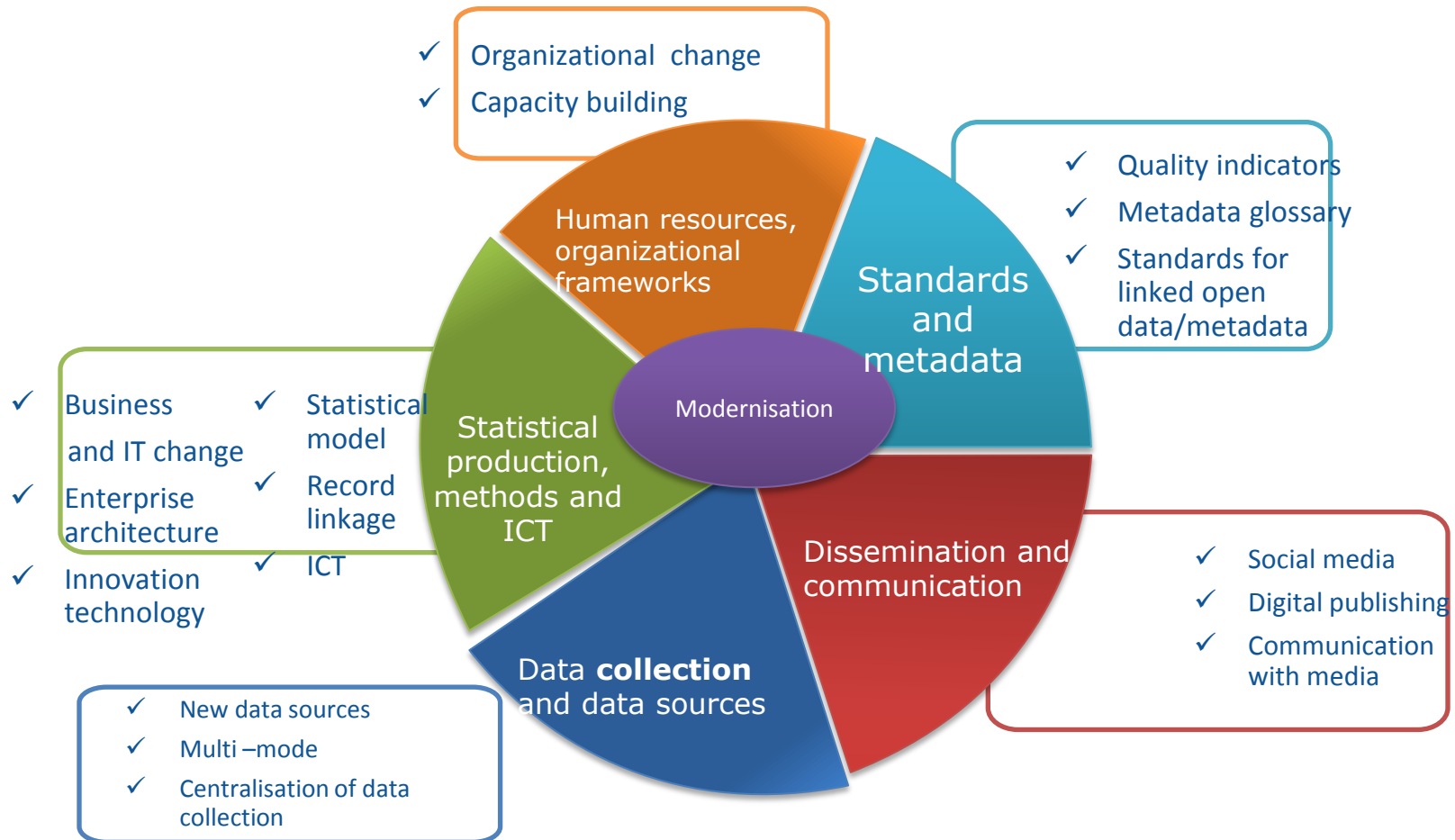
***Modernization of official statistics in Qatar is to :***

- *Improve the efficiency of the statistical production process.*
- *Produce and disseminate outputs that better meet user needs.*
- *Work with line-ministries , private sector, academia and research centers.*
- *Increase collaboration, coordination and communication with stakeholders.*
- *Develop frameworks and share information, tools and methods to support the modernization of statistical system in Qatar*

## *Modernisation of Statistics includes also:*

- *Change in the set of products and services;*
- *Change in the organisation and management of the statistical production;*
- *Adjustment of the quality framework;*
- *Implementation of technical and statistical standards;*
- *Develop HR strategy as an integral part of the modernisation strategy.*

# Drivers of modernization of official statistics in Qatar



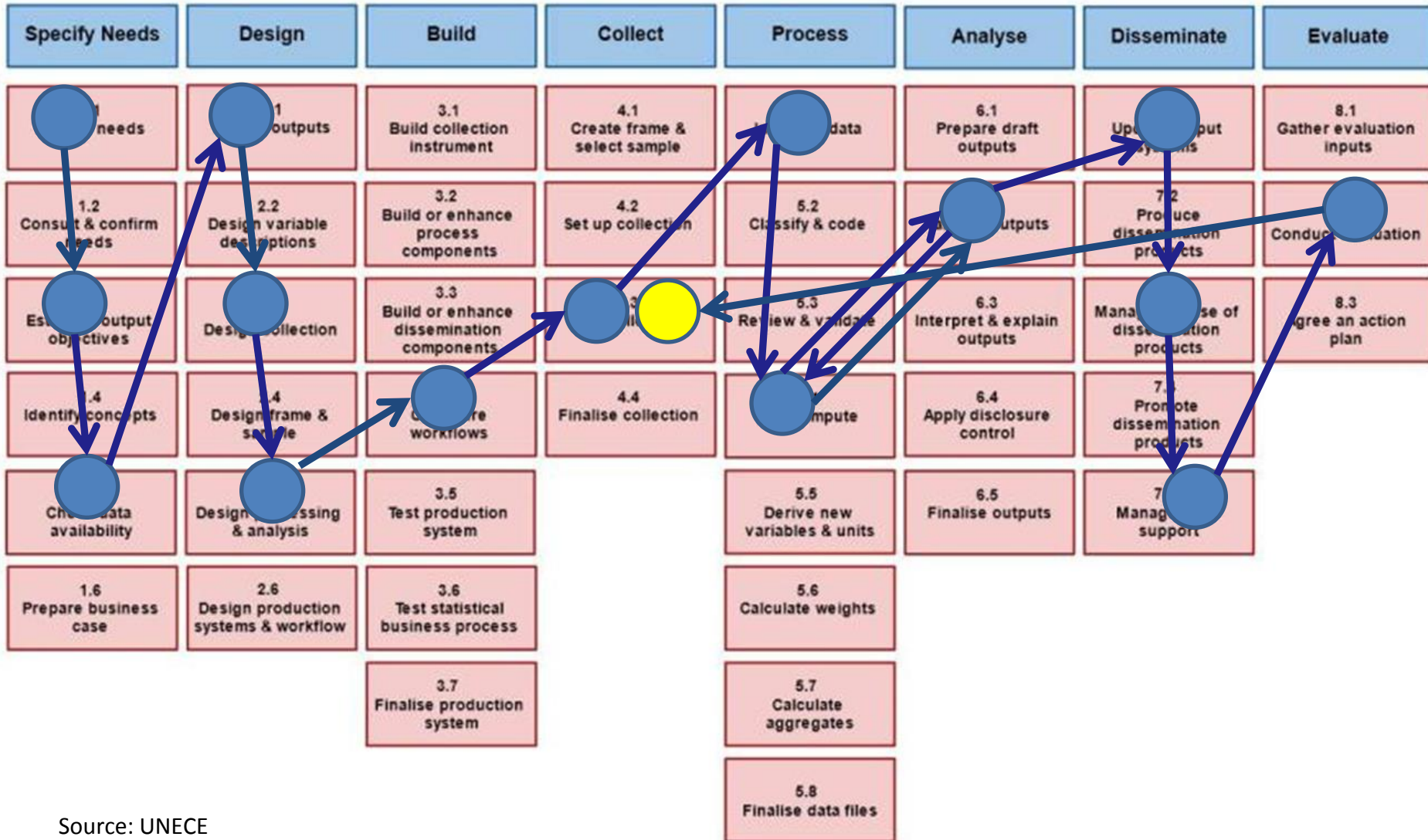


# Projects for modernization

## 1. Generic Statistical Business Process Model (GSBPM)

- *GSBPM describes and defines the set of business processes needed to produce official statistics.*
- *GSBPM provides a standard framework and harmonized terminology to help in modernizing statistical production processes, as well as to share methods and components.*
- *GSBPM can be used for integrating data and metadata standards, as a template for process documentation.*
- *GSBPM can also be used for harmonizing statistical computing infrastructures and providing a framework for process quality assessment and improvement.*

Quality Management / Metadata Management



Source: UNECE

## 2. *Generic Statistical Information Model(GSIM)*

- ***Generic Statistical Information Model (GSIM):***  
This model is a companion to GSBPM. While GSBPM describes the stages of the statistical production process, GSIM describes the different objects (e.g. data, metadata, editing rules and classifications) that flow between those stages.

### *3. Common Statistical Production Architecture (CSPA)*

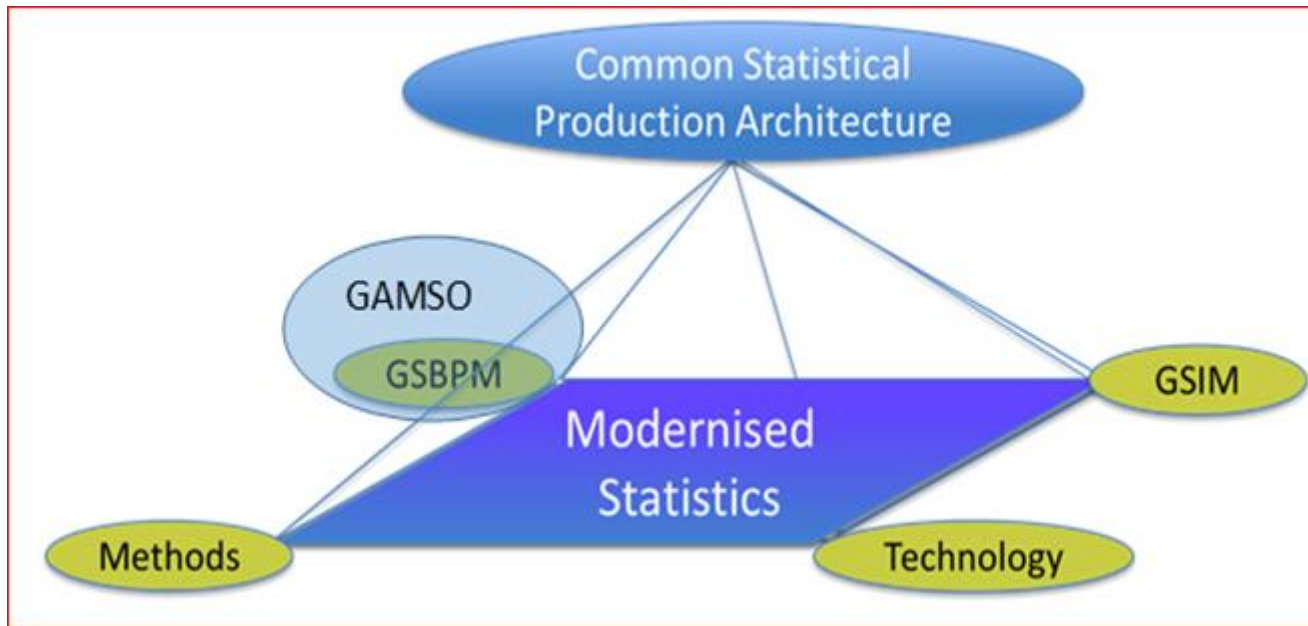
*CSPA provides a blueprint for designing and developing statistical production components in a way that makes them much easier to share within and between organizations.*

<http://www1.unece.org/stat/platform/display/CSPA/Common+Statistical+Production+Architecture+>

## *Common Statistical Production Architecture (CSPA)Cont.*

- Facilitate the process of modernization
- Provide guidance for transformation
- Apply a consistent enterprise architecture approach
- Facilitate the reuse / sharing of solutions
- Encourage interoperability of systems and processes
- Provide a basis for flexible information systems to accomplish their mission
- Leverage the wider statistical community to more rapidly develop capabilities
- Enable international collaboration initiatives for building common infrastructures and services
- Provide the ability to supplement internal capability
- Foster alignment with existing industry standards such as the Generic Statistical Business Process Model (GSBPM) and the Generic Statistical Information Model (GSIM)

# *Common Statistical Production Architecture (CSPA)*



## 4. *Generic Activity Model for Statistical Organizations (GAMSO)*

- The Generic Activity Model for Statistical organizations (GAMSO) describes and defines the activities that take place within a typical statistical organization.
- GAMSO extends and complements the GSBPM by adding additional activities needed to support statistical production.
- GAMSO was developed to expand the GSBPM to better cover the statistical activities.

## *Some expected uses of GAMS0*

- *As a basis for resource planning*
- *As a basis for the measurement of costs of production of official statistics*
- *As a tool to implement different aspects of modernization*
- *To support risk management*
- *To support the implementation of enterprise architecture*
- *To help measure and communicate the value of modernization*



## 5. Framework for Data Integration

*There are many new opportunities created by data sources, such as big data and administrative data. These sources have the potential to provide more timely, more disaggregated statistics at higher frequencies than traditional survey and census data.*

<https://statswiki.unece.org/display/DI/WPA%3A+a+framework+for+Data+Integration>

# *Data integration motivation*

## *Integrating different types of data can:*

- Provide more timely & more detailed statistics*
- Provide new official statistics*
- Meet new and unmet data needs*
- Lower response burden*
- Overcome effects of reducing response rates*
- Address quality and bias issues in surveys*

## *Framework for Data Integration (cont.)*

1	2	3	4	5
<i>Integrating survey and administrative sources</i>	<i>New data sources, such as big data and traditional sources</i>	<i>Integrating geospatial and statistical information</i>	<i>Micro – Macro integration of data</i>	<i>Validating official statistics</i>

## *6. Using administrative registers in official statistics: Advantages*

- Reduced cost*
- Reduced response burden on data suppliers*
- Produced more frequently*
- Often give complete or almost complete coverage of target population*
- Timeliness , allowing access to more up to date certain variables*

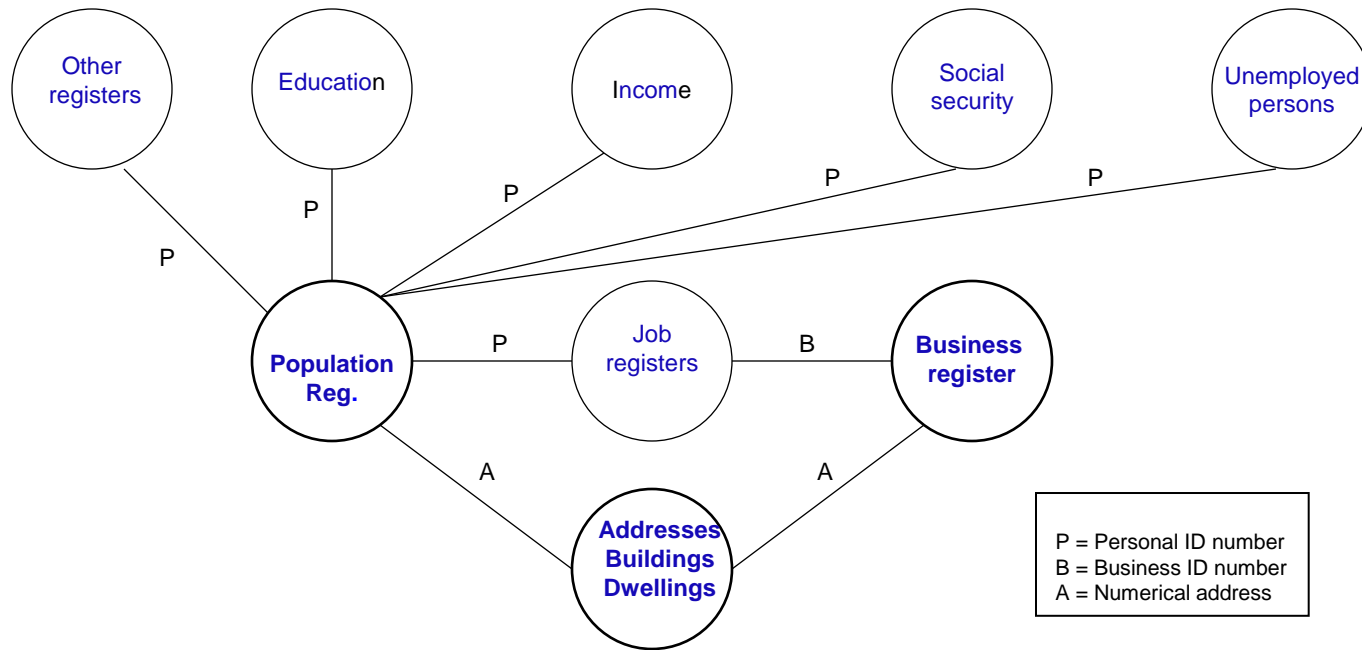
## 7. Multi-Mode Population and Housing Census in Qatar, 2020

**Multi-mode  
sources**

**Data  
integration**

**Census  
results**

# Norway register-based population and housing census system



- Units covered in base registers: Persons, dwellings/buildings and enterprises/establishment
- Derived units: Families and households
- Persons linked to
  - Dwellings
  - Workplaces (establishments) through job registers



## *8. Big Data : challenges*

- *Legislative*
- *Privacy*
- *Financial*
- *Management*
- *Technological*
- *Methodological*

# *New tools for a modern statistical communication*

## ***Social media: we have to go where the users are...***

Social media usage is growing rapidly (more than 550 million active Twitter users).

Social media help reach and get in contact with more people.

Social media allow quick and spontaneous reaction to issues raised in society.

Social media are very present in mobile devices.



Social media become entry point to online information.



## Strategic areas for improving dissemination and communication of official statistics:

- Permanent dialogue with users;
- Free access and reuse of statistics;
- Modernisation of dissemination products and services towards visualisation and interaction;
- Combining statistics and geospatial information;
- Improved access to microdata, especially for research purposes;
- Educating people about statistics;
- Communicating about the National Statistical System

# Conclusion

- *Old ways won't open new doors*
- *The world is changing profoundly*
- *We have to adapt or become obsolete*
- *Collaboration and joining forces are vital*

*Thank you*



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