



Webinar hosted by the .Stat Academy

Using ILO SDMX tools for data preparation and modelling for the .Stat Suite

Wednesday 19 October 2022
13h (1PM) CEST

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Topics to cover

**Background &
Scope**

SDMX Constructor

Data modelling & structural data preparation in LMIS (DEMO)

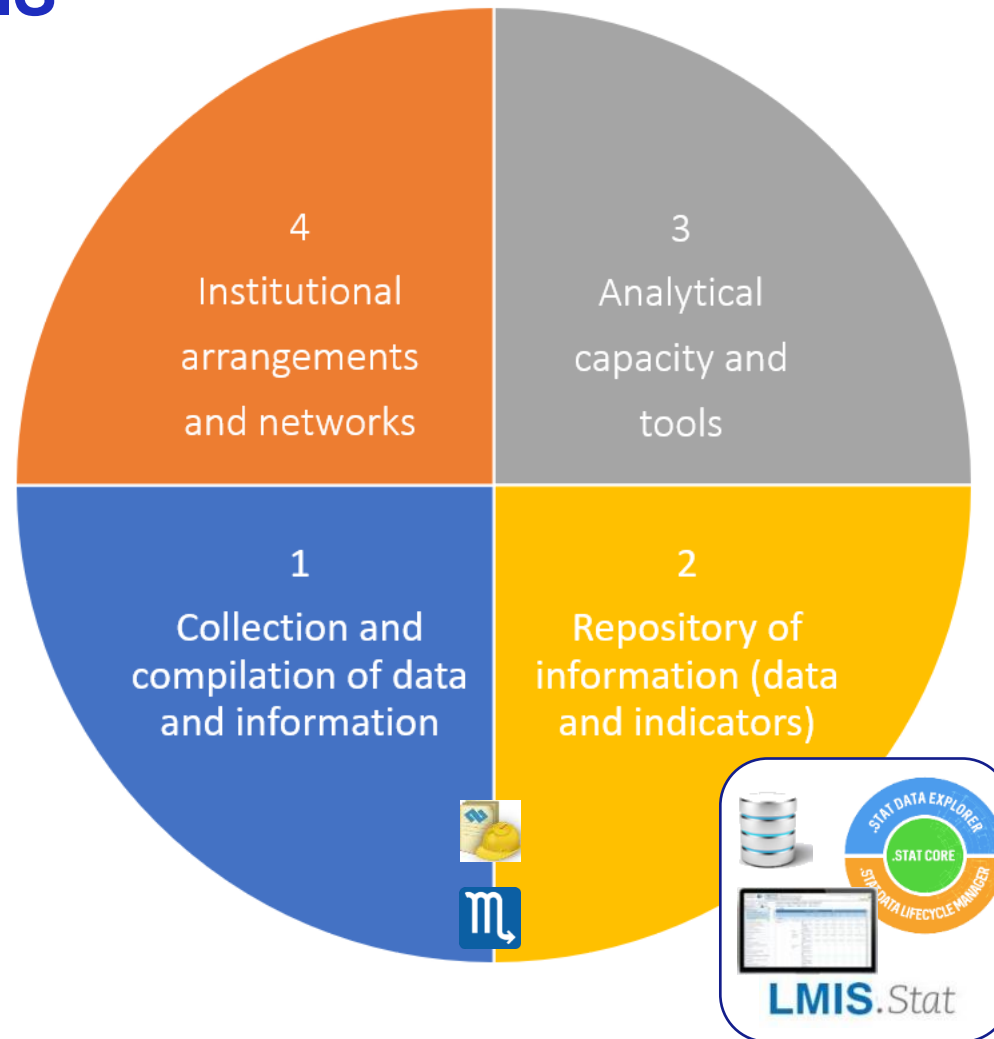
**Data preparation & uploading
using SMART (DEMO)**



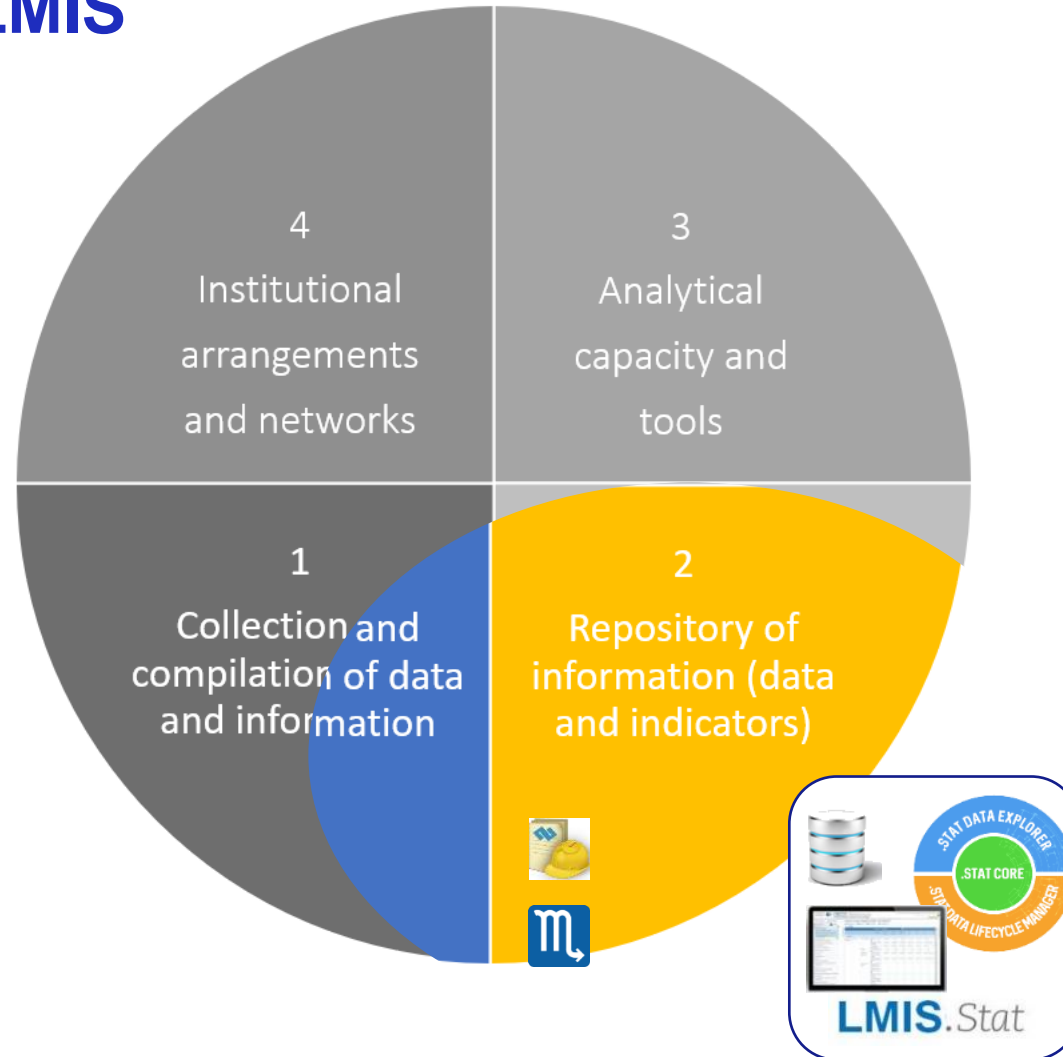
Background & Scope



► Main components of LMIS

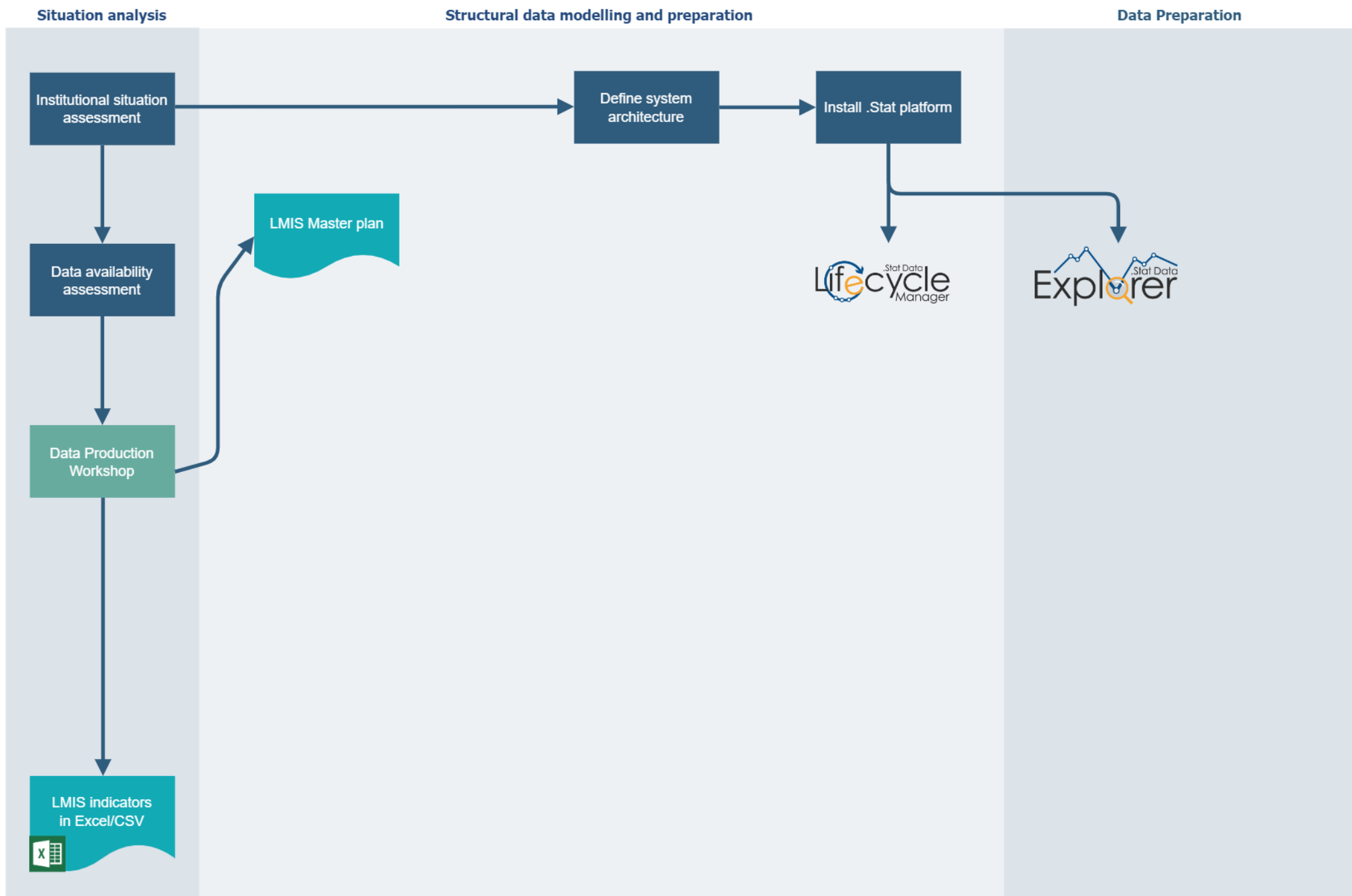


► Main components of LMIS

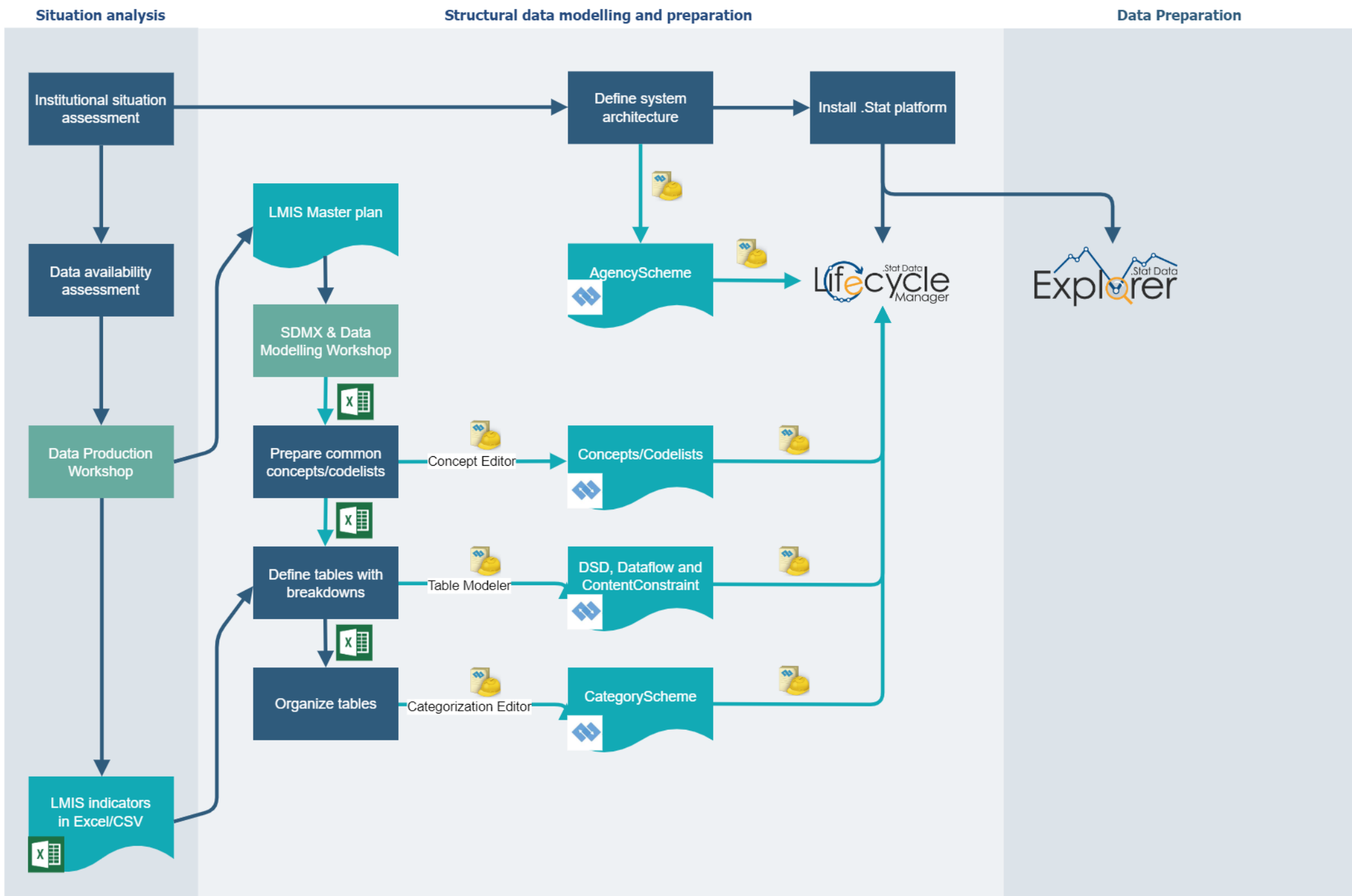




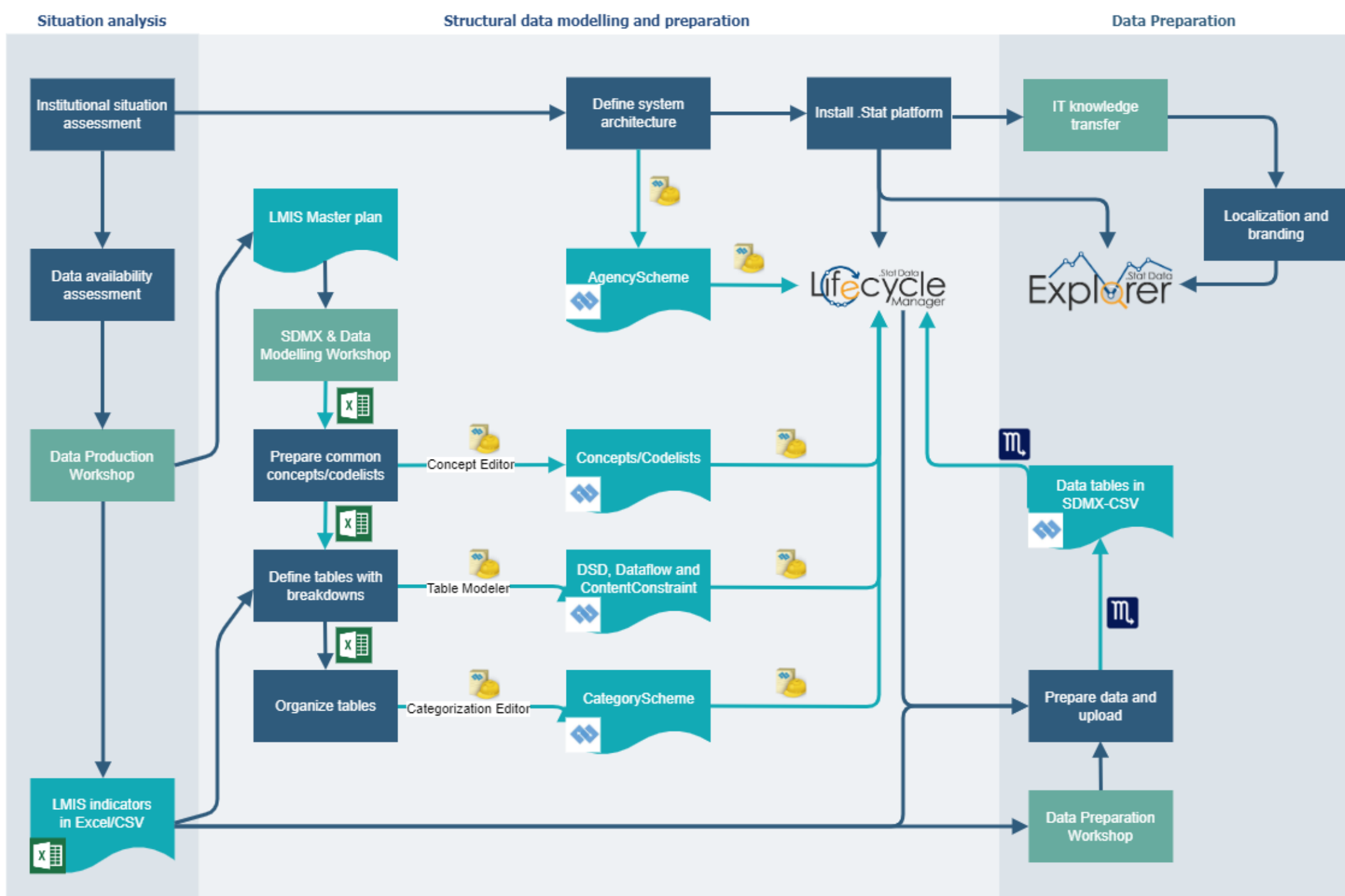
LMIS Implementation Workflow



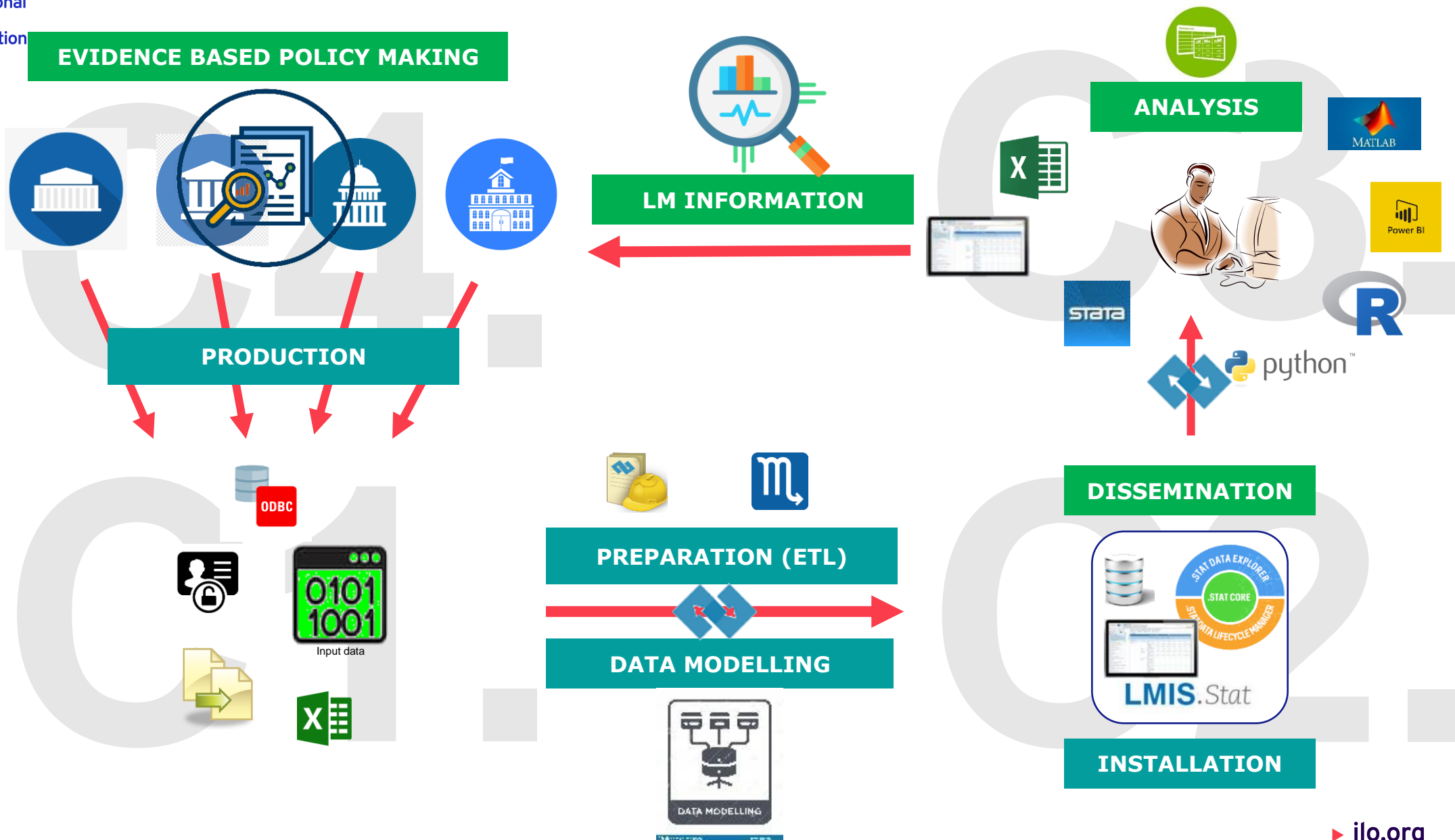
LMIS Implementation Workflow



LMIS Implementation Workflow



LMIS components information flow

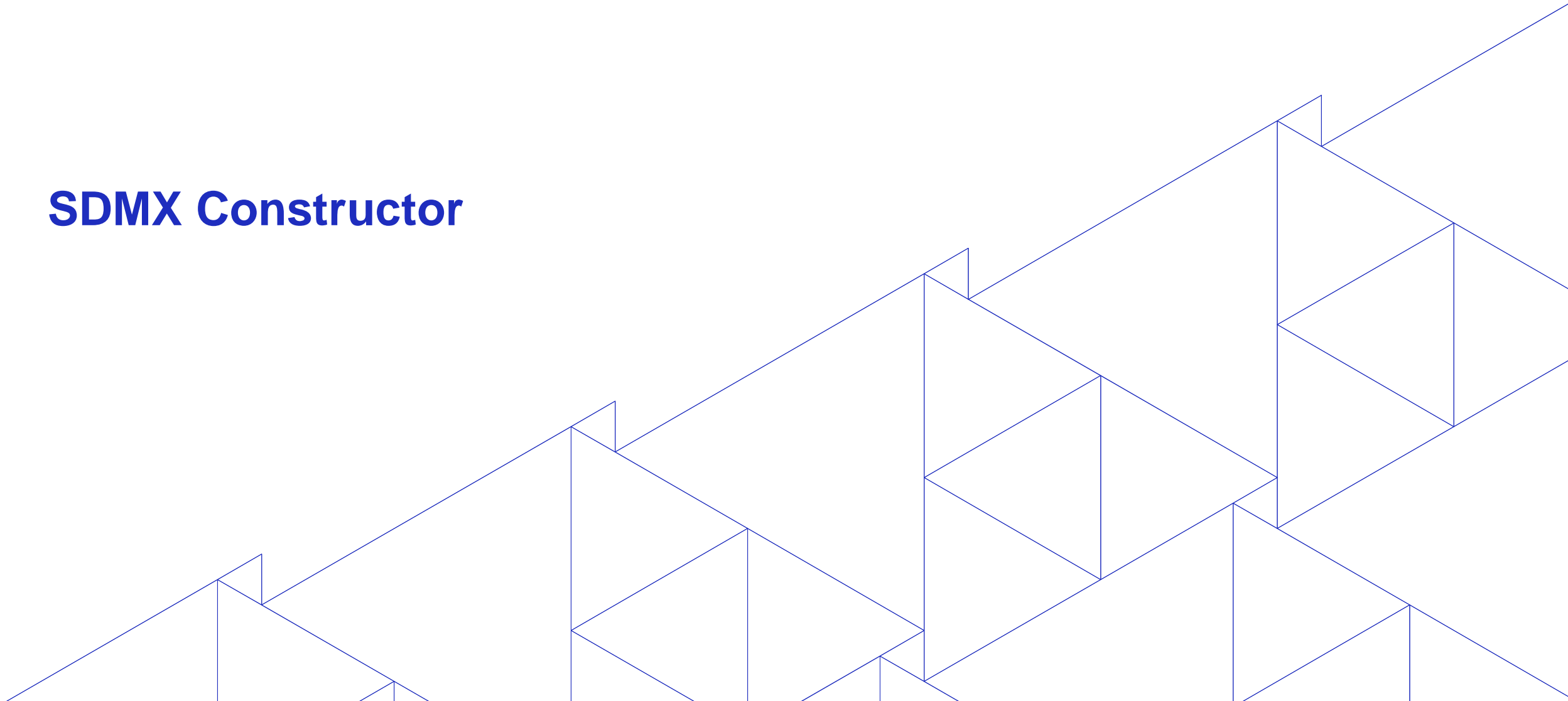


▶ Scope of this presentation

- ▶ Start a **new .Stat Suite** instance
- ▶ Data modelling for **dissemination**, not for exchange and collection
- ▶ Modelling and preparation on **aggregated data**
- ▶ **Referential metadata** modelling is **not** considered
- ▶ Still ongoing projects → Lessons learned → **Process evolution**
- ▶ Hands-on, practical exercises

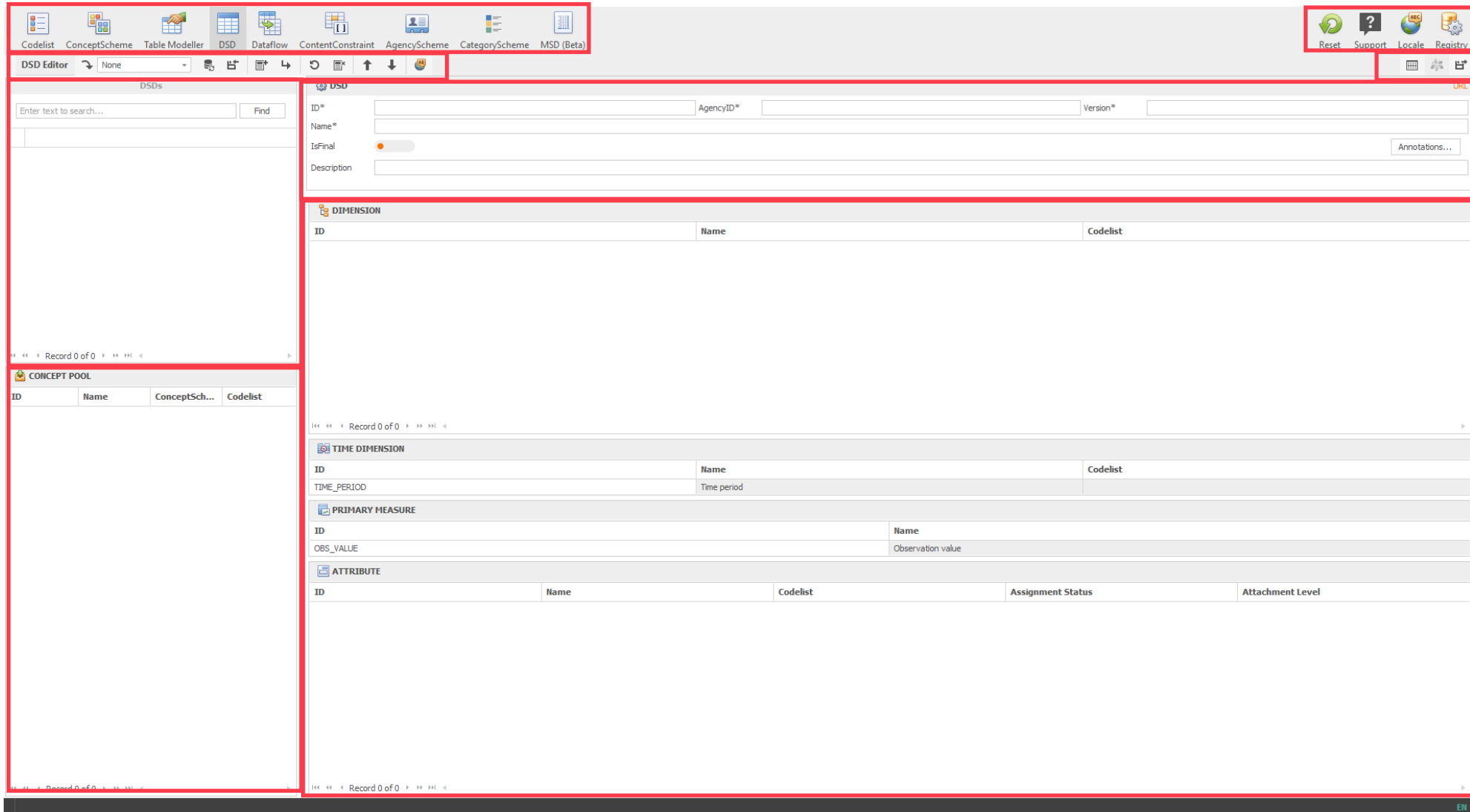


SDMX Constructor



▶ SDMX (DSD) Constructor

- ▶▶ A simple standalone tool, which is able to create and edit DSD/dataflow and all their related artefacts.
- ▶ Free to use, free first-level support
- ▶ Easy to install and update
- ▶ Modularized editors
- ▶ Support both offline (local) and online (registry) mode
- ▶ Annotations management
- ▶ Support up to 3 languages for names and descriptions
- ▶ Google and DeepL translation API
- ▶ Direct connection to .Stat DLM



The screenshot displays the SDMX Tools interface, which is modular in design. It features a top toolbar with various tool icons and a search bar. Below the toolbar, there are several panels:

- DSD Editor:** A panel on the left with a search bar and a 'Find' button.
- DSD Form:** A central panel with fields for ID*, AgencyID*, Version*, Name*, IsFinal (toggle), and Description. It also includes an 'Annotations...' button.
- CONCEPT POOL:** A table with columns for ID, Name, ConceptSch..., and Codelist.
- DIMENSION:** A table with columns for ID, Name, and Codelist.
- TIME DIMENSION:** A table with columns for ID, Name, and Codelist, containing a row for TIME_PERIOD with the value 'Time period'.
- PRIMARY MEASURE:** A table with columns for ID, Name, and Codelist, containing a row for OBS_VALUE with the value 'Observation value'.
- ATTRIBUTE:** A table with columns for ID, Name, Codelist, Assignment Status, and Attachment Level.

Each table includes a pagination control at the bottom, showing 'Record 0 of 0'.



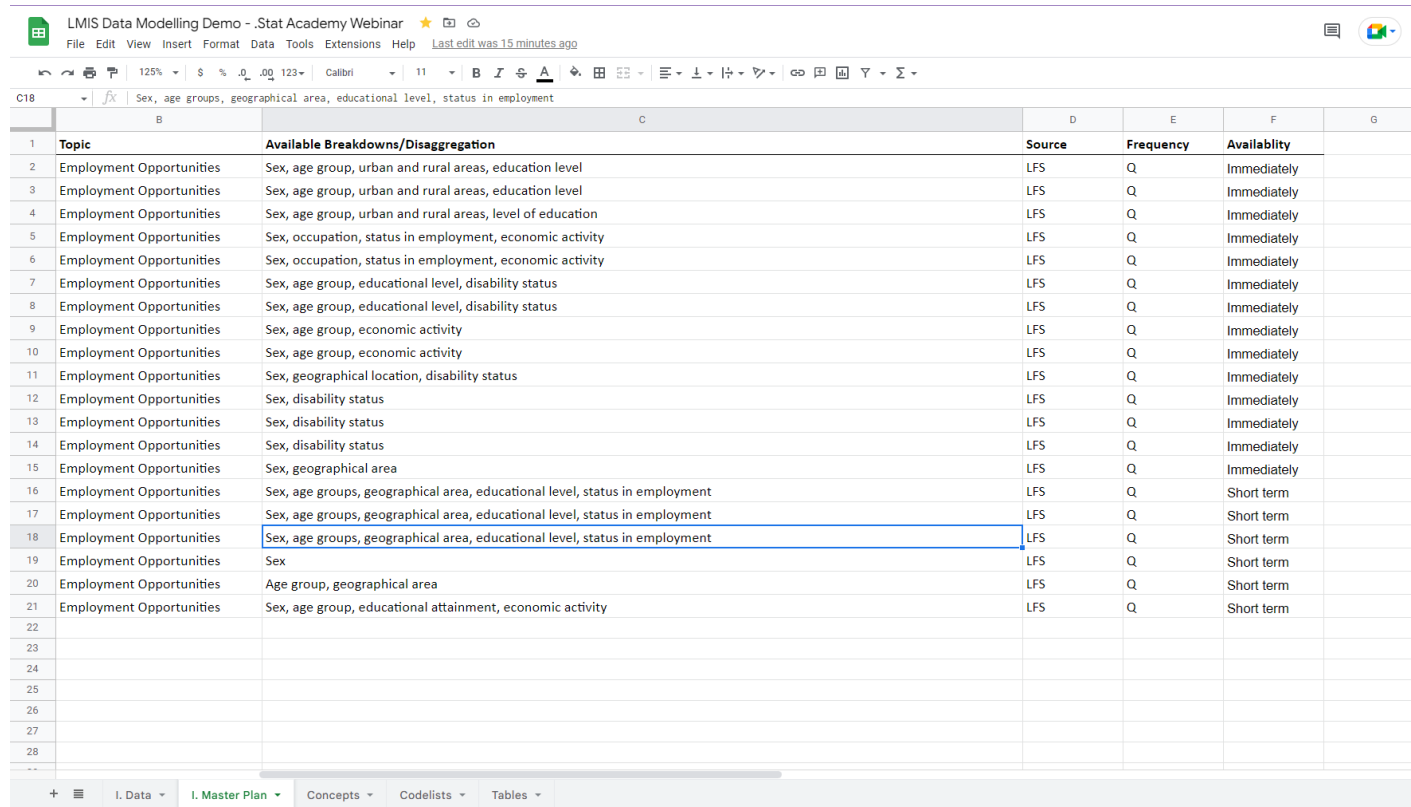
Demo Setup

Input

- ▶ Data tables in worksheet, **I. Data**
- ▶ Master plan in worksheet, **I. Master Plan**

Modelling Template

- ▶ Concepts in worksheet, **Concepts**
- ▶ Codelists in worksheet, **Codelists**
- ▶ Tables in worksheet, **Tables**



| 1 | Topic | Available Breakdowns/Disaggregation | Source | Frequency | Availability |
|----|--------------------------|---|--------|-----------|--------------|
| 2 | Employment Opportunities | Sex, age group, urban and rural areas, education level | LFS | Q | Immediately |
| 3 | Employment Opportunities | Sex, age group, urban and rural areas, education level | LFS | Q | Immediately |
| 4 | Employment Opportunities | Sex, age group, urban and rural areas, level of education | LFS | Q | Immediately |
| 5 | Employment Opportunities | Sex, occupation, status in employment, economic activity | LFS | Q | Immediately |
| 6 | Employment Opportunities | Sex, occupation, status in employment, economic activity | LFS | Q | Immediately |
| 7 | Employment Opportunities | Sex, age group, educational level, disability status | LFS | Q | Immediately |
| 8 | Employment Opportunities | Sex, age group, educational level, disability status | LFS | Q | Immediately |
| 9 | Employment Opportunities | Sex, age group, economic activity | LFS | Q | Immediately |
| 10 | Employment Opportunities | Sex, age group, economic activity | LFS | Q | Immediately |
| 11 | Employment Opportunities | Sex, geographical location, disability status | LFS | Q | Immediately |
| 12 | Employment Opportunities | Sex, disability status | LFS | Q | Immediately |
| 13 | Employment Opportunities | Sex, disability status | LFS | Q | Immediately |
| 14 | Employment Opportunities | Sex, disability status | LFS | Q | Immediately |
| 15 | Employment Opportunities | Sex, geographical area | LFS | Q | Immediately |
| 16 | Employment Opportunities | Sex, age groups, geographical area, educational level, status in employment | LFS | Q | Short term |
| 17 | Employment Opportunities | Sex, age groups, geographical area, educational level, status in employment | LFS | Q | Short term |
| 18 | Employment Opportunities | Sex, age groups, geographical area, educational level, status in employment | LFS | Q | Short term |
| 19 | Employment Opportunities | Sex | LFS | Q | Short term |
| 20 | Employment Opportunities | Age group, geographical area | LFS | Q | Short term |
| 21 | Employment Opportunities | Sex, age group, educational attainment, economic activity | LFS | Q | Short term |
| 22 | | | | | |
| 23 | | | | | |
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▶ Data modelling steps

- ▶ Verify the system connection
 - ▶ AgencyScheme

- ▶ Prepare the list of common concepts and define their representation
 - ▶ ConceptScheme, codelists

- ▶ Define tables by establishing the indicators and their respective breakdowns (**Table modeller**)
 - ▶ DSD, dataflow and contentConstraint

- ▶ Organize the tables by themes or any other criteria
 - ▶ CategoryScheme

▶ **Demo**



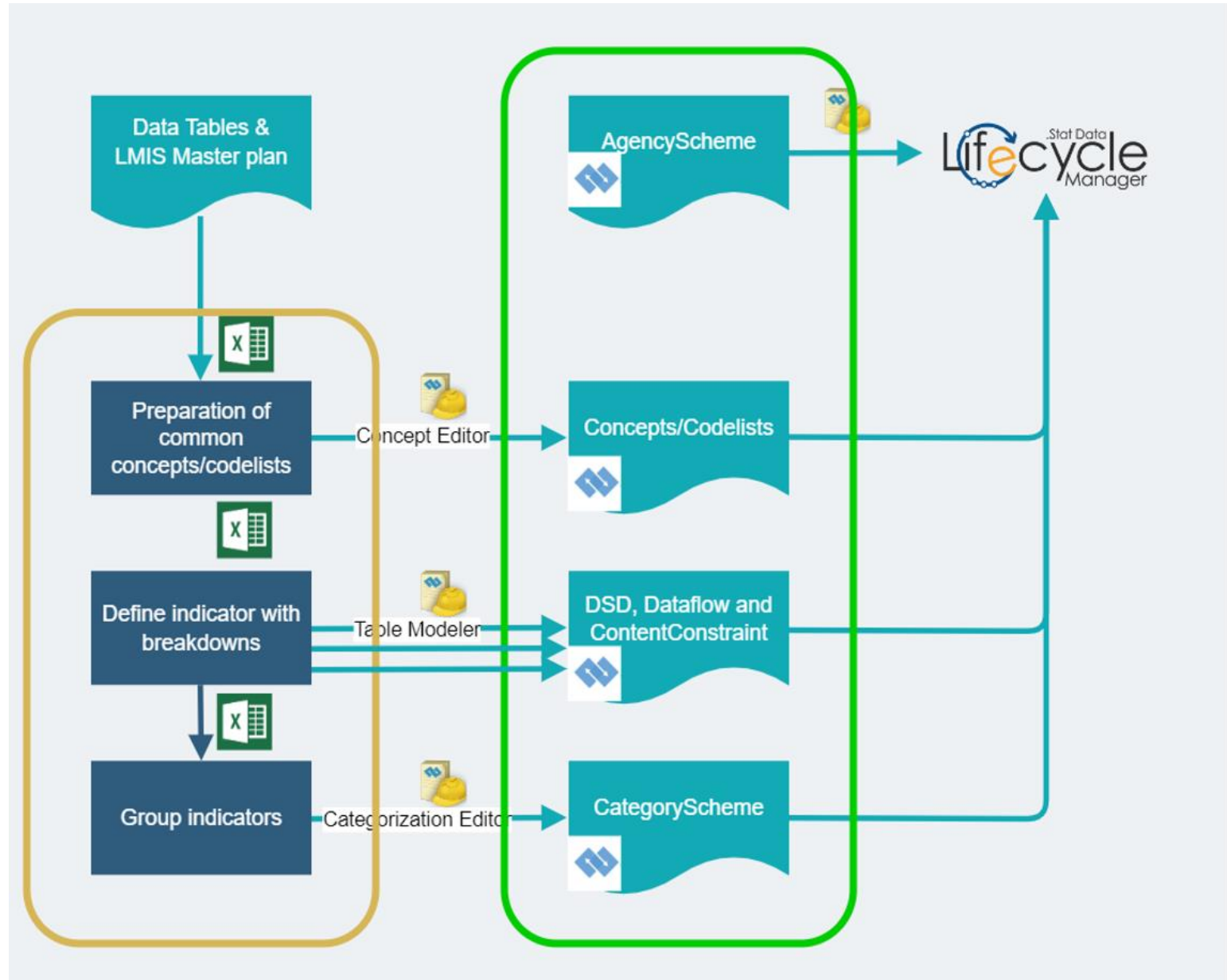
▶ **Thank you**

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Annex: Modelling workflow

- ▶ Separate roles
- ▶ Joint/individual work
- ▶ Worksheets/XML
- ▶ Local/registry



Annex: SMART

To facilitate the production of data reporting

- ▶ Receive as input a micro dataset from LFS
- ▶ **The specification of tables defined by means of DSD or Dataflow**
- ▶ Data conversion for SDG reporting
 - ▶ Convert microdata to SDMX
- ▶ Data preparation to feed a dissemination platform like .STAT Data Lifecycle Manager (DLM)

