Irving Fisher Committee on
Central Bank Statistics

BANK FOR INTERNATIONAL SETTLEMENTS

IFC High Level Meeting on Data Governance, co-organised with the International Statistical Institute

22 November 2019, Tunis, Tunisia

Updating BIS statistical processes
to face the challenges of the data revolution[1]

Edward Lambe,

BIS

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[1] This presentation was prepared for the meeting. The views expressed are those of the author and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.

Updating BIS statistical processes
to face the challenges of the data revolution

IFC High Level Meeting on Data Governance
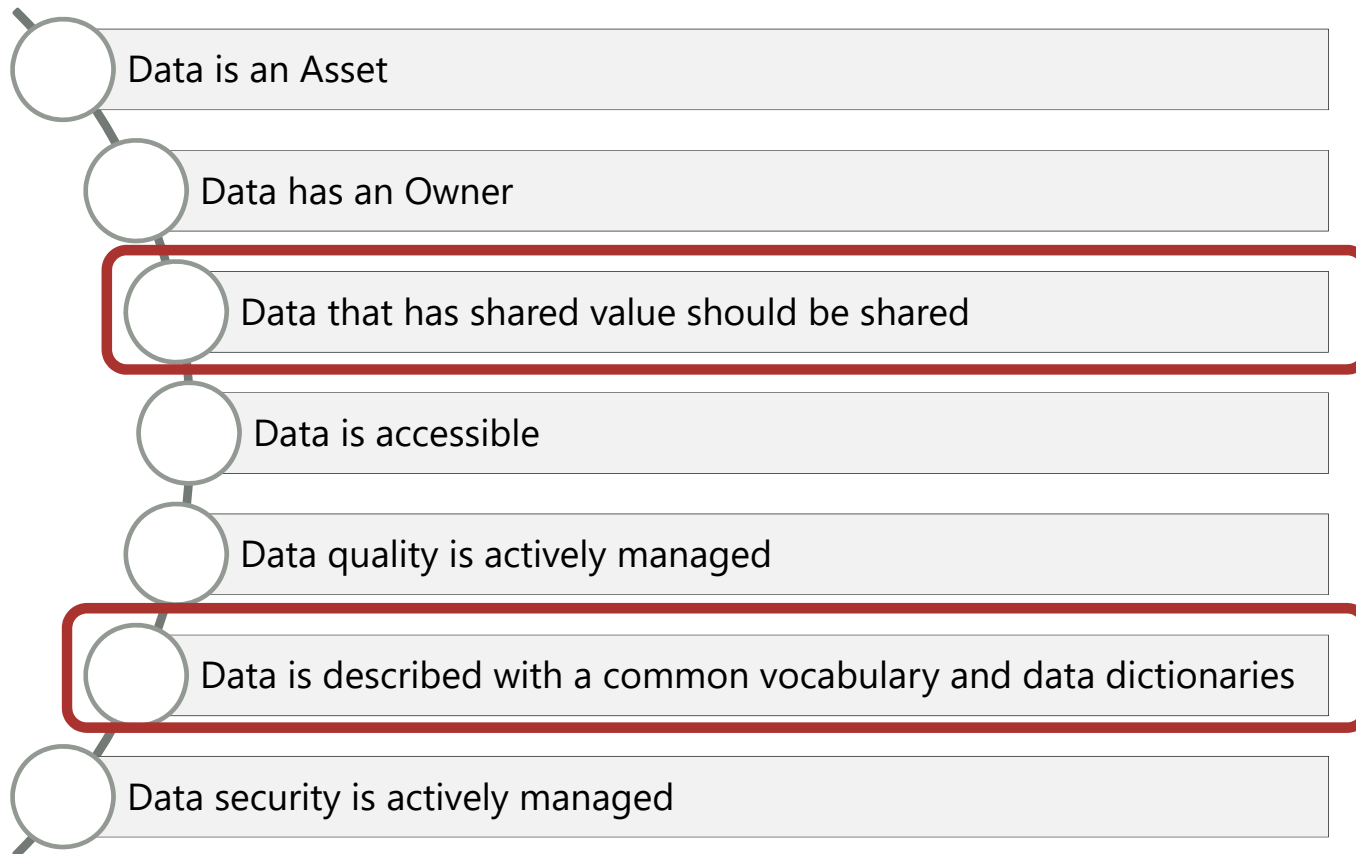
Edward Lambe, 22nd Nov 2019

Agenda

- Facing the challenges of the data revolution
- Changing culture
    - Data Governance Principles
    - Data Stewards Mandate
- Changing technology
    - SDMX (Statistical Data and Metadata Exchange) Information Model
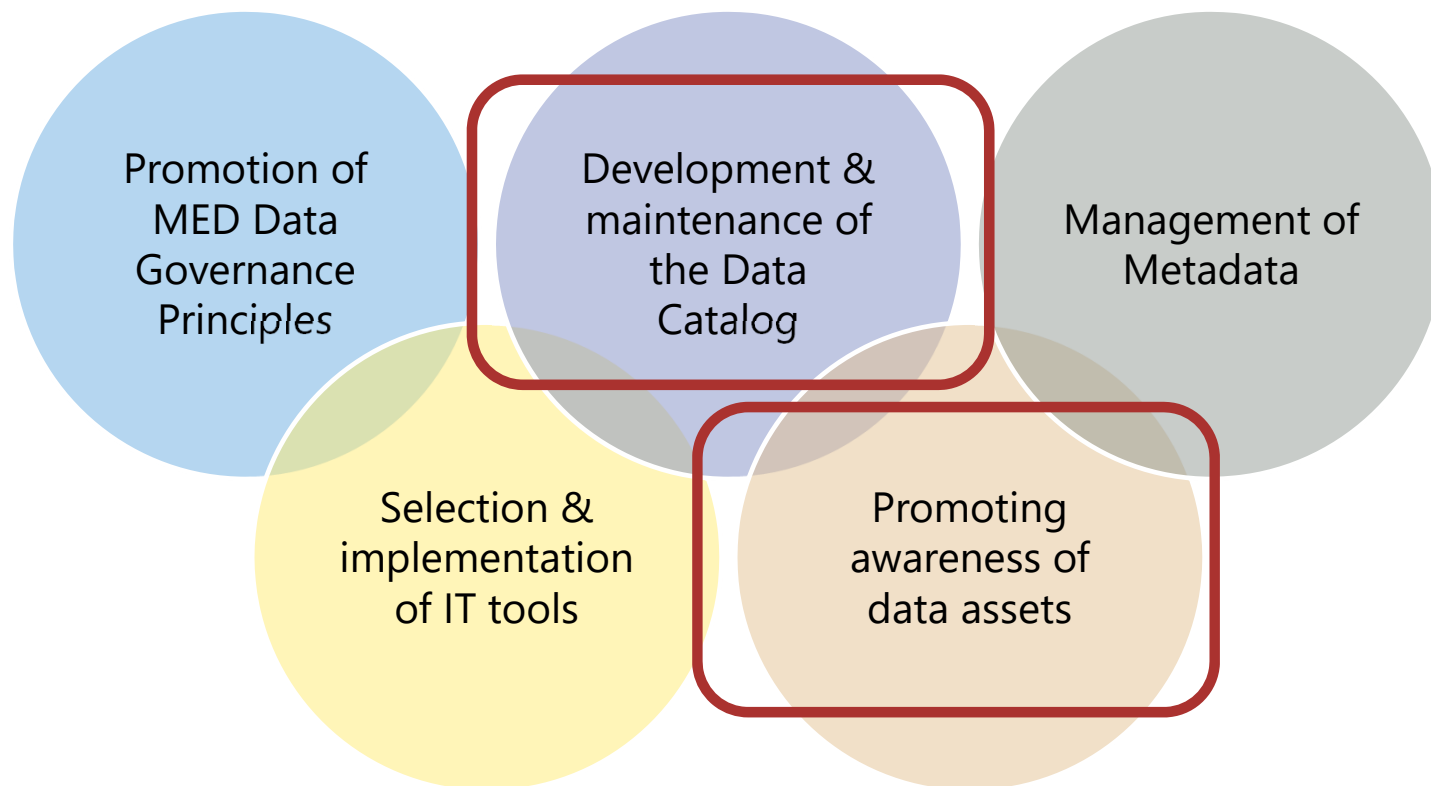   - Future BIS processing architecture (MEDAL)
- Envisaging the BIS Data Portal

Facing the challenges of the data revolution

- The data revolution offers opportunities for the BIS, Central Banks, IO's and NSI's
    - Access to new data sources
        - 3 V's of Big Data; Volume, Variety, Velocity
        - Internet of things (IOT)
    - Advances in Artificial Intelligence

- How should we adapt to exploit the opportunities presented?
    - Culture
    - Technology

Data Governance Principles

Data is an Asset

Data has an Owner

Data that has shared value should be shared

Data is accessible

Data quality is actively managed

Data is described with a common vocabulary and data dictionaries

Data security is actively managed

BIS

Data Stewards Mandate

Data Catalog

Dashboards

SDMX (Statistical Data and Metadata Exchange) Information Model

- Global standard for statistical data and metadata exchange (**ISO/IS 17369**)
- Facilitates data exchange between central banks and international organisations
- Provides an information model with which to model data, key elements being:
    - Data Flow
    - Data Structure Definition (DSD)
    - Code Lists
    - Constraints
    - Validation and Transformation Language (VTL)
- The BIS has many years of experience working with SDMX

Future BIS Statistical Processing Architecture (MEDAL)
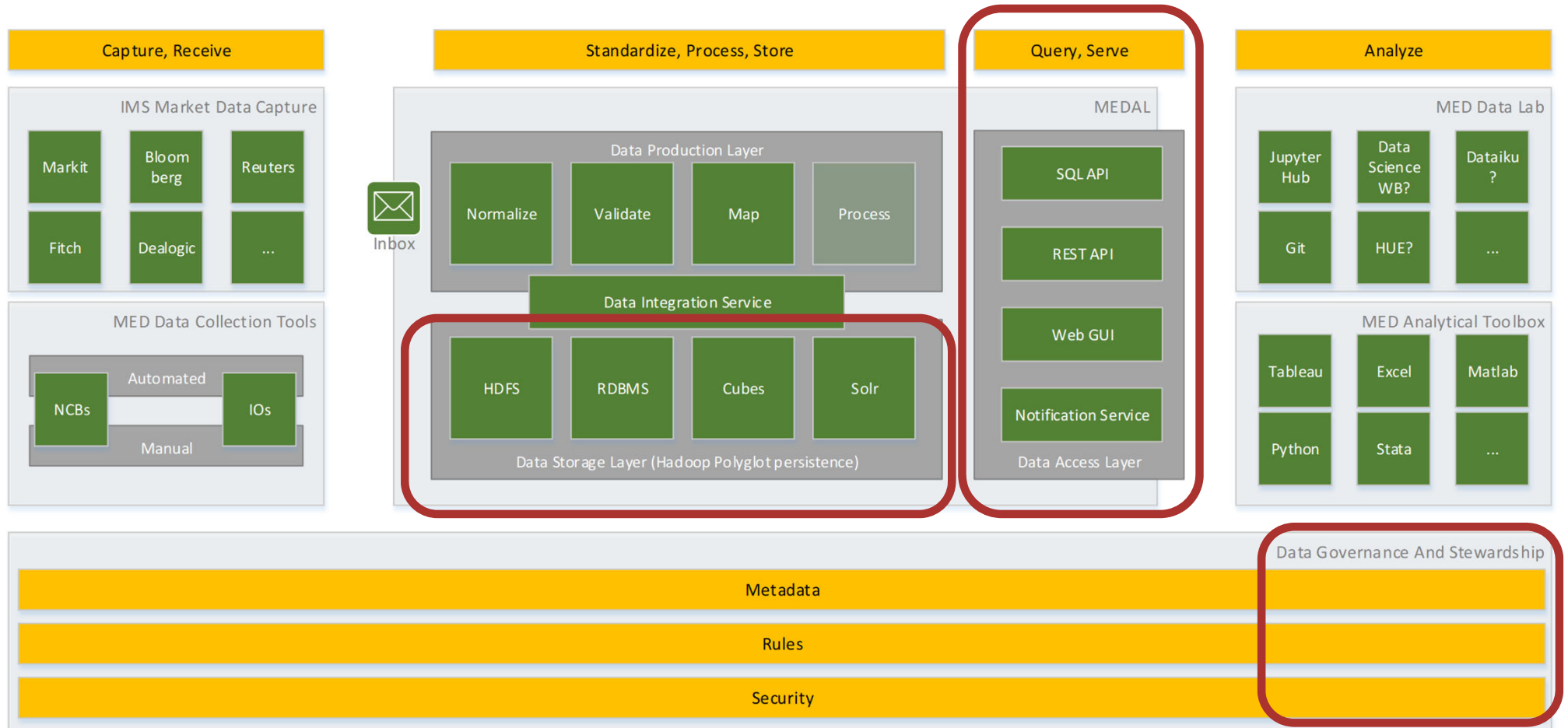
Existing Statistical Dissemination Toolset
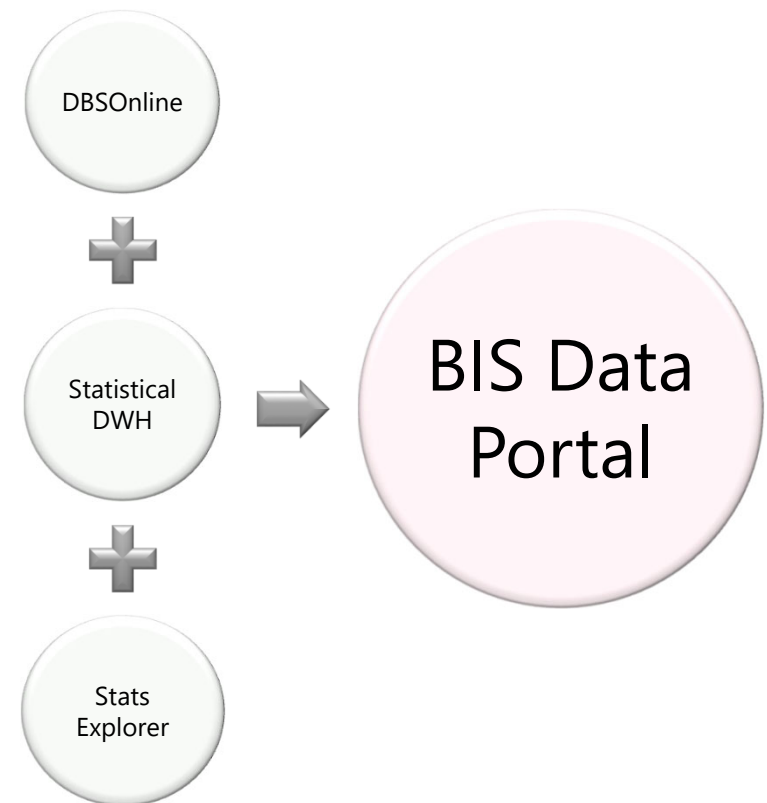
- 3 discrete offerings;
    - DBSOnline (Extranet and Internal audience / MED-IT)
    - Stats Explorer (Public / Web Communications)
    - Statistical DWH (Public / Web Communications)

- Lack of consistency in the user experience / design
- They don't share a common architecture

Envisaging the BIS Data Portal (BIS 2025)

- The BIS Data Portal will be a single location for the dissemination of statistical outputs
- Serving the general public, extranet and internal customer needs
- Clean modern interface for BIS statistical output
- Leverage the power of the MEDAL platform
- Unified interface for the querying, downloading and sharing of data
- Enhanced search performance
- Personalisation of content;
  - Tagging content of interest
  - Saving of queries
  - Notification of new releases

DBSOnline

Statistical DWH → BIS Data Portal

Stats Explorer

Thank you