VI CEBS-XBRL Workshop

Madrid, 4-5 October 2006

Extension of BdI Statistical Information System to manage standard XML-based data formats

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Agenda

- Primary Reporting in BdI.
- The IT solution.
- Extension of the IT solution to manage additional formats (XBRL, SDMX-ML).
- Q & A.

Primary Reporting in BdI

A process oriented view

DEFINITION

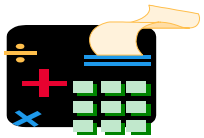
SPECIFICATIONS

EXTRACTION & TRASFORMATION

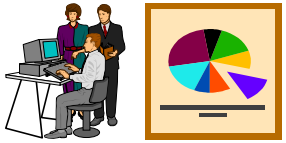
COLLECTION & VALIDATION

WAREHOUSE STORING

Calculation



Inquiry & Reporting



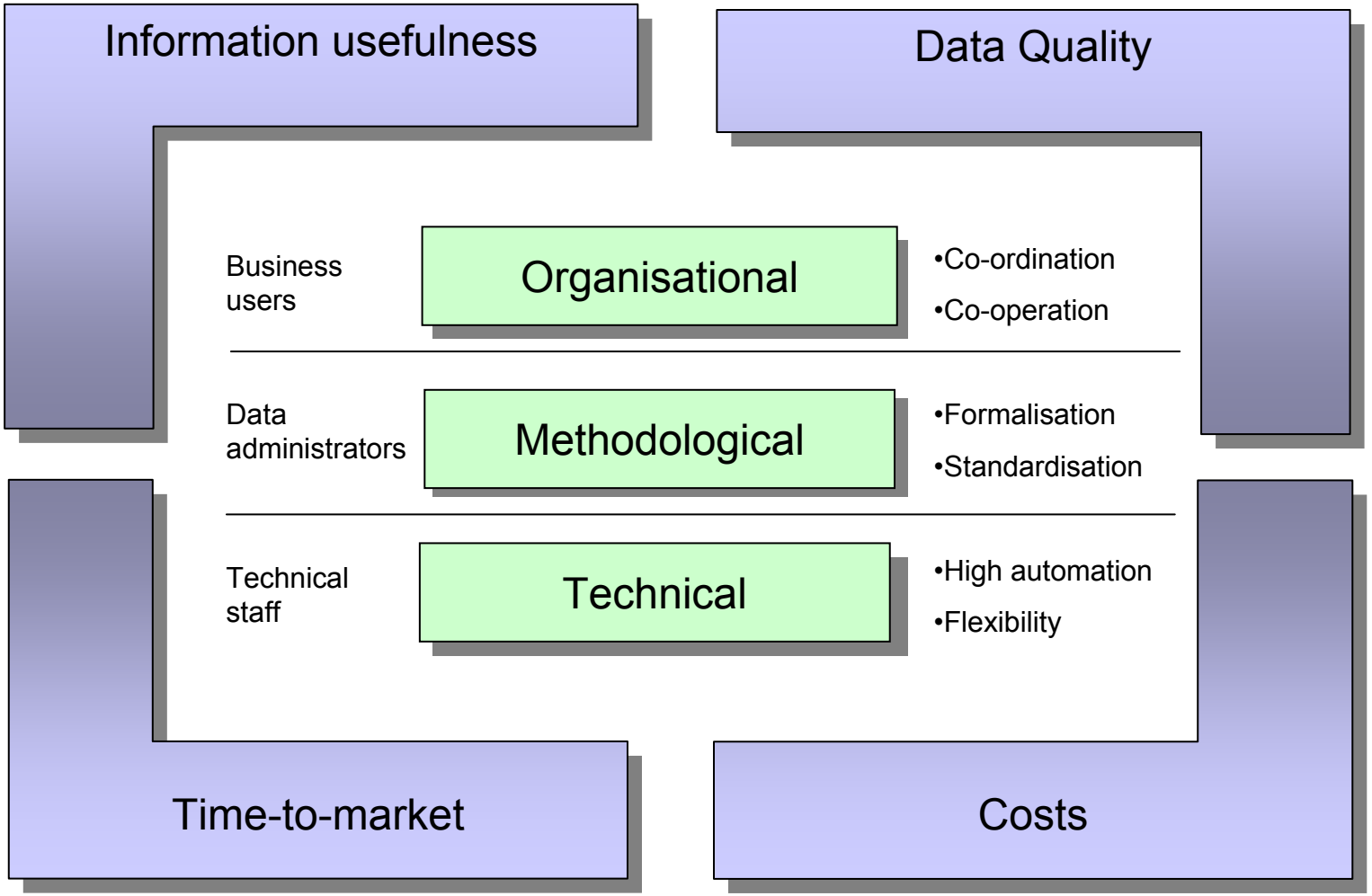
Analysis

Publishing

www.bancaditalia.it

Output production & Dissemination

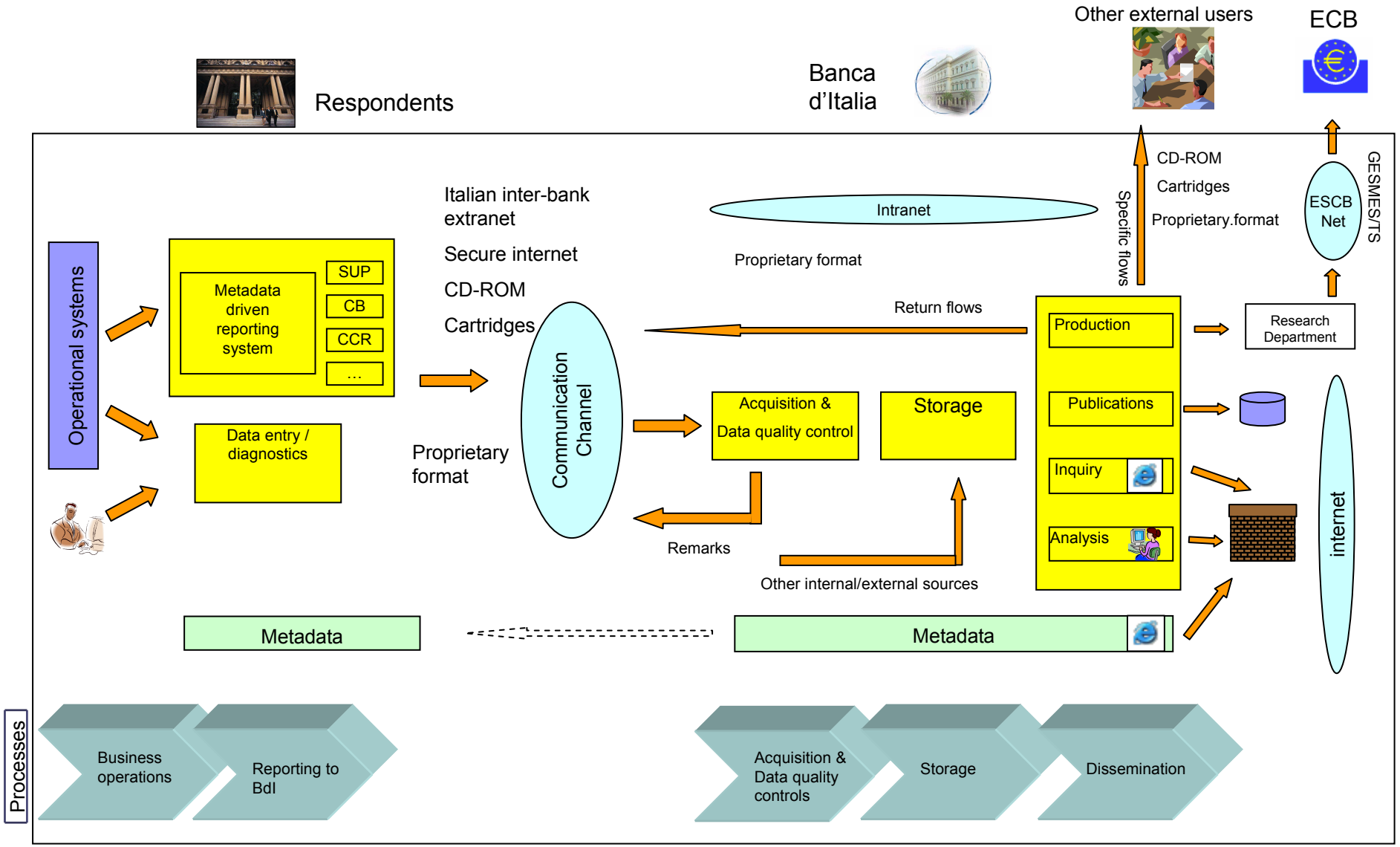
Primary reporting supply chain
Roles, Means, Objectives



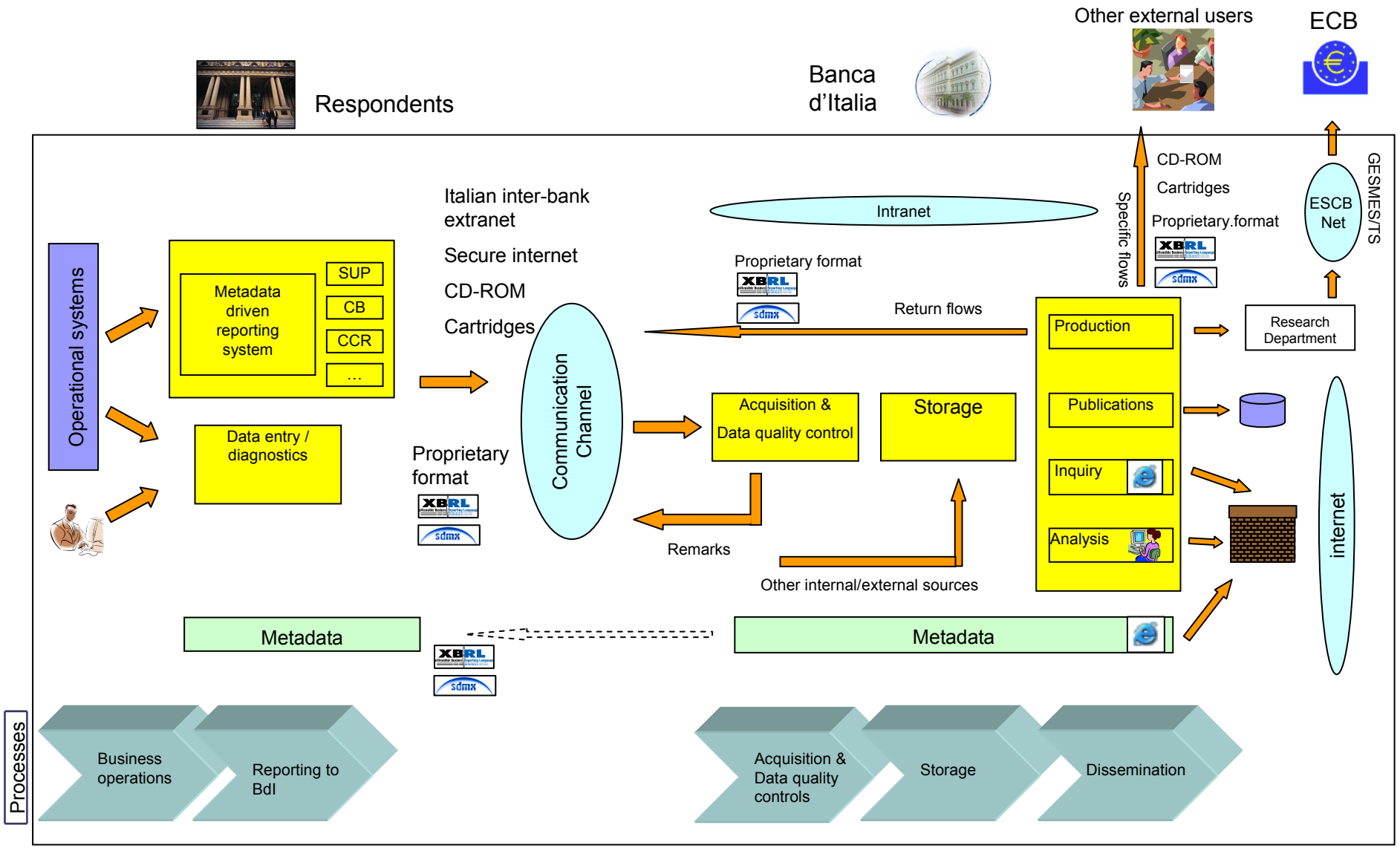
Software architecture foundations

- **Comprehensive data model for both: content and process**
  - *A set of rules able to model a "generic" statistical data.*
  - *Electronic data dictionary*
- **Metadata driven**
  - *Software takes "instructions" from the dictionary at the runtime*
- **Component based**
  - *Each component covers a specific part of the process*
  - *Each component is able to handle every data described according to the unified rules*
- **Essential and integrated data base system**
  - *Banca d'Italia data administrators have full control of the reporting system behaviour and evolution*
  - *Italian banks have a concrete help in the production of data to be reported*

The IT solution as it is today



The IT solution as it will be in a few months

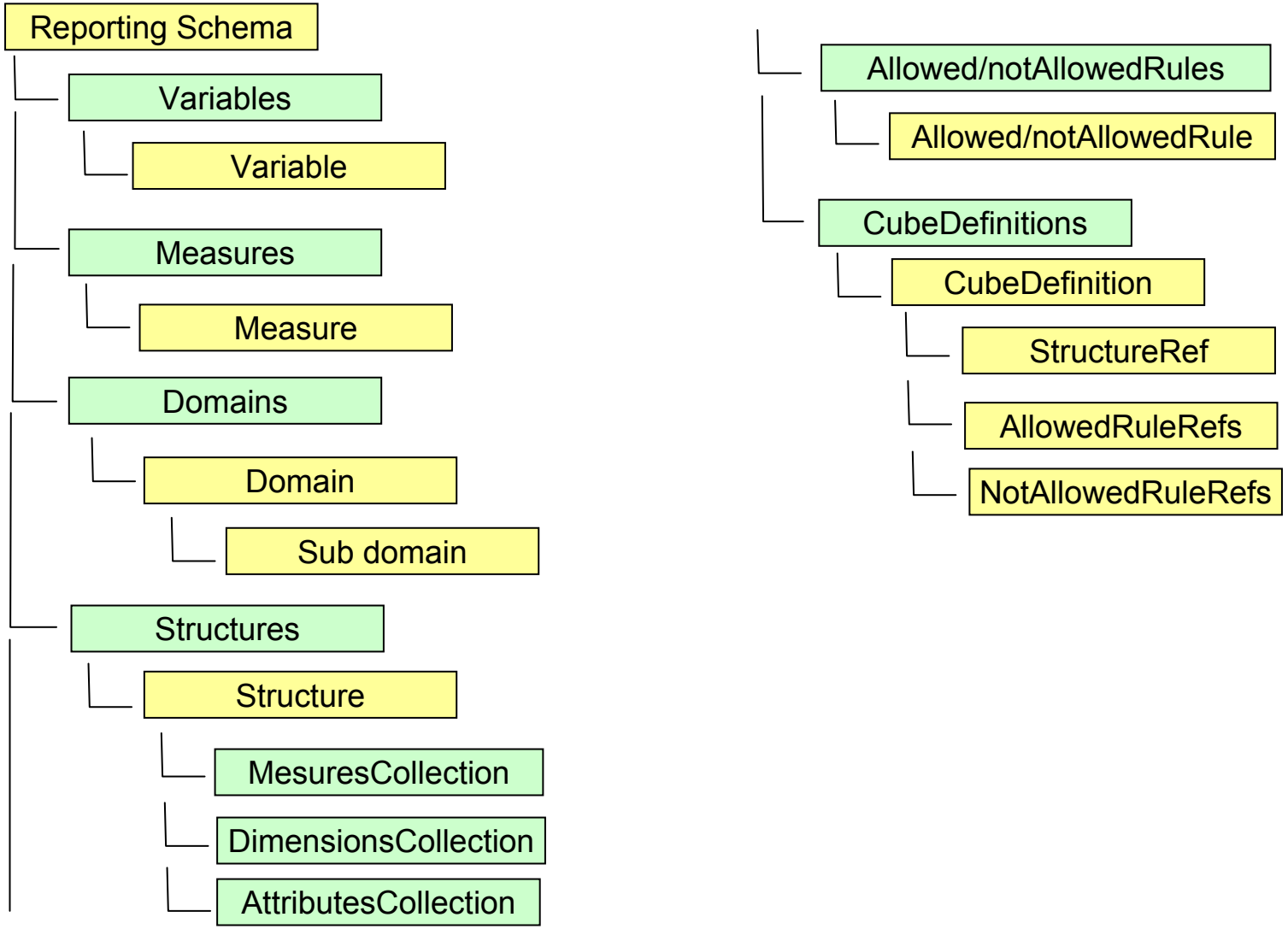


The technical solution

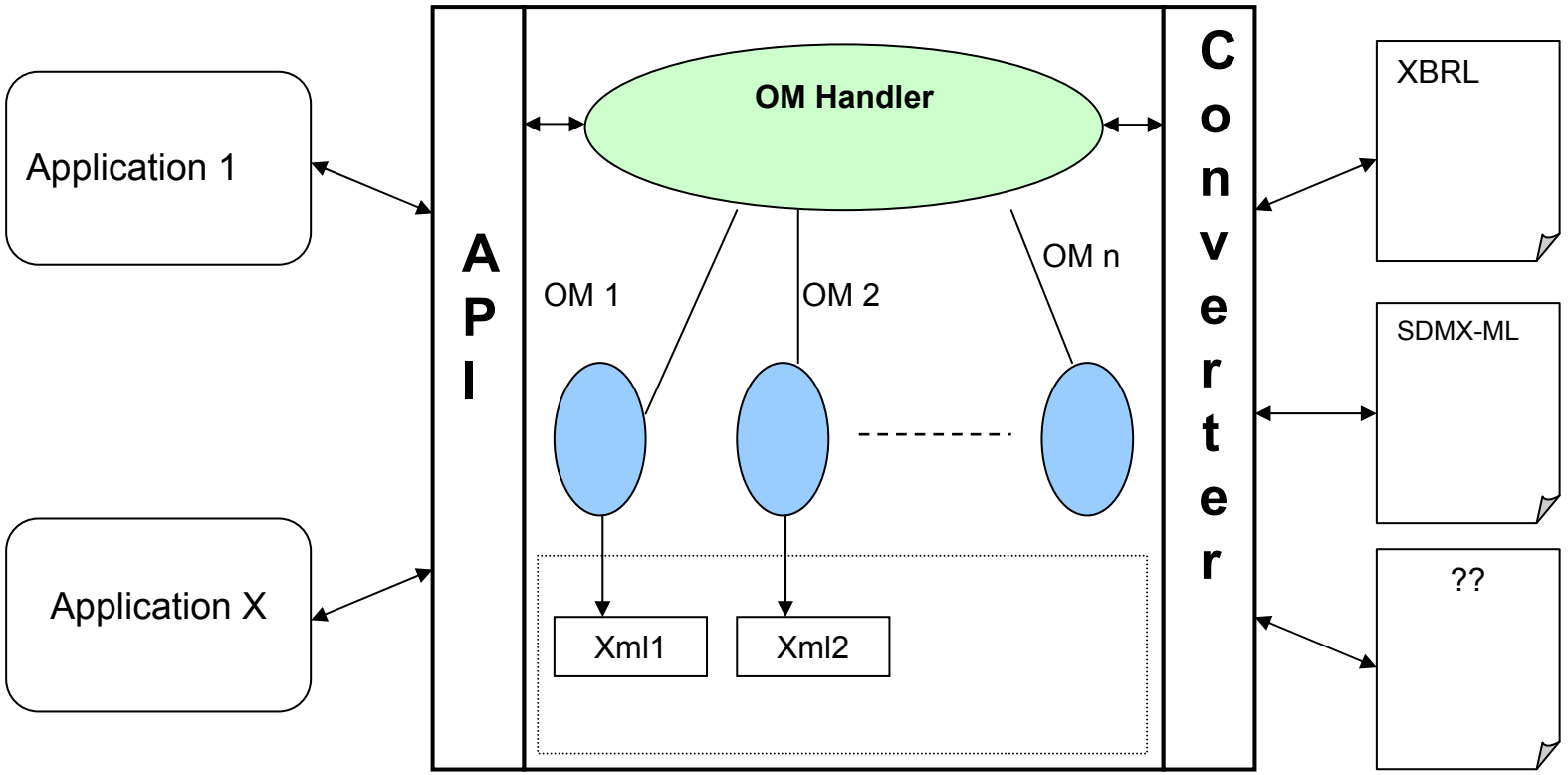
- **A new "component" that allows:**
  - semantic interoperability, in the form of mapping among XBRL/SDMX metamodel and BdI metamodel
  - transformation from one data format to another

- **Available functions**
  - Export/import of metadata to/from our data dictionary
  - Transformation from XBRL/SDMX-ML data formats to our proprietary format
  - Dissemination using XBRL/SDMX-ML data formats

The new component: Object model overview



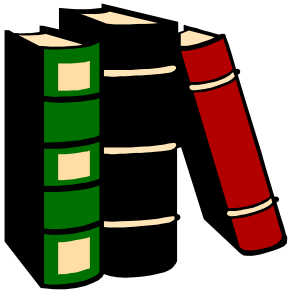
The "core" architecture of the new component



Export from the data dictionary

Manage

Export



Data dictionary

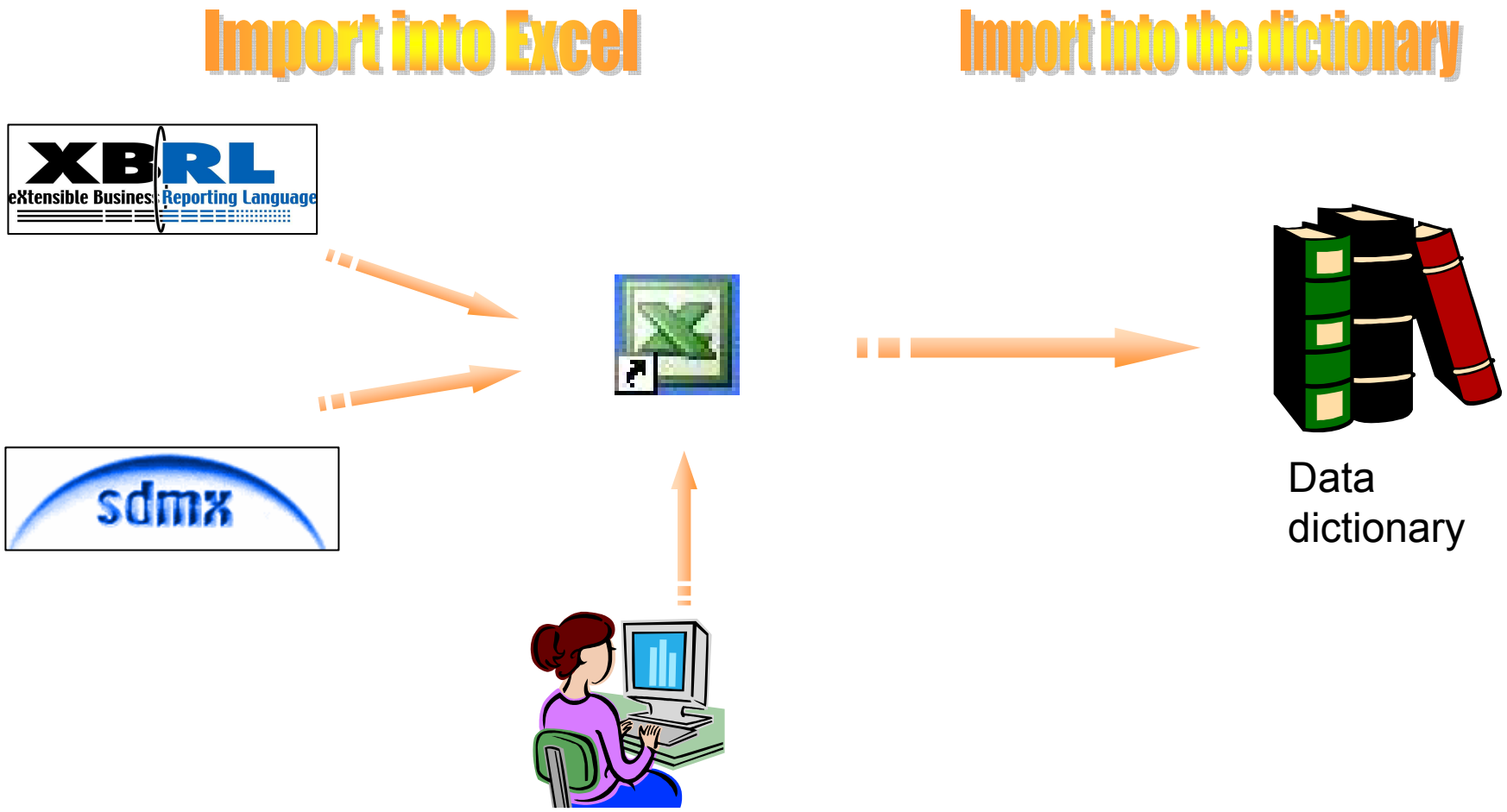
"Matriciale"

Loans	X	X	
Deposits			X

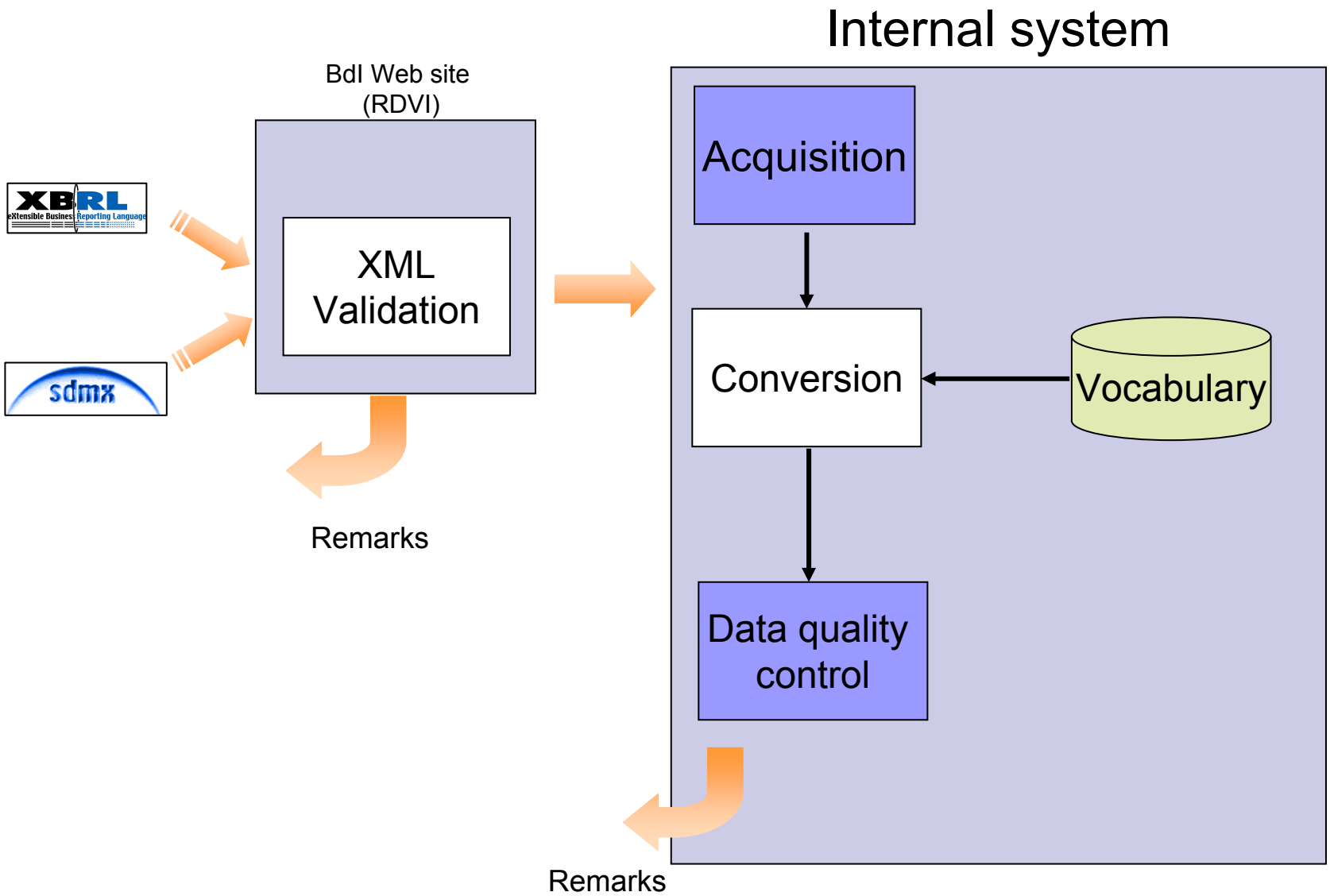
XBRL eXtensible Business Reporting Language

sdmx

Import into the data-dictionary

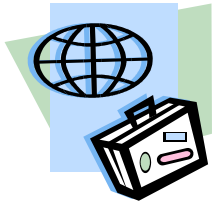


Data transformation



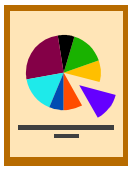
Dissemination

Inquiry



Production

Data WareHouse



Analysis

Vocabulary

Publishing

The project

- System available by 1° quarter 2007
- Generalized solution
- No change imposed on data administrators
- No change imposed on reporting institutions

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Any questions ?

Thank you

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