Harnessing VTL in business

VTL ENGINE & EDITOR: AN EASY TO USE TOOL FOR BUSINESS ORIENTED STATISTICIANS
Context

- SDMX models data and metadata
  - Standard meta/data exchange and dissemination

- VTL models transformations and validations
  - Discoverable, actionable, reproducible processes
  - High-level, metadata driven, meant for business

- VTL and SDMX: a perfect match
  - Mappings exist for data and metadata
  - Rules can be embedded in Dataflows
VTL Engine & Editor

- Designed to simplify VTL development and test
  - No complex IT infrastructure or IT expertise needed
  - SDMX web services and other meta/data sources
  - Very high coverage of VTL specification

- Available on GitHub as open source
  - Distributed under EU Public License
  - Integrated with R and Shiny as package

```r
> install.packages("RVTL")
> vtlStudio()
```
Pilot on ESCB Balance Sheet Items

- Business scenario
  - BSI is a SDMX Dataflow disseminated by ECB
  - Data sent by NCBs to ECB must comply with some rules
  - These rules are expressed in a pseudo-language
  - NCBs implementations may lead to differing results

- Pilot results
  - All the rules translated into VTL using VTL Editor
  - All the rules tested with real data using VTL Engine

- VTL removes ambiguities on rules interpretation and execution
ECB Validation & Calculation Engine

- Business scenario
  - VALICE is one of the components of ECB data-centric platform
  - Its role is to support validations and transformations
  - Aimed at business users without IT skills

- VTL Engine is at the core of VALICE
  - The activity lasted for several years
  - Requirements of VALICE led to performance improvements
SDMX.IO collaboration

- Business case
  - Sdmx.io is a BIS initiative to integrate SDMX tools
  - Integration of VTL E&E with Fusion Metadata Registry

- The collaboration started very recently
  - VTL E&E would process VTL rules embedded in SDMX
  - Further scenarios considered based on users feedback
VTL E&E: Ideas for the future

- Complete the coverage of VTL 2.0 specification
- Improved support for Apache Spark
- Improved usability of VTL Editor with new UI
- VTL Editor additional features (i.e. GIT support)
- Deployment of VTL Engine in the cloud
- Improved integration with other languages

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Thank you!

For any question, suggestion or information please drop a line:

- Valentino Pinna valentino.pinna@bancaditalia.it
- Attilio Mattiocco attilio.mattiocco@bancaditalia.it
- Giuseppe Bruno giusepppe.bruno@bancaditalia.it

Questions can also be posted in the SDMX User Forum

  https://www.yammer.com/unstats/#/threads/inGroup?type=in_group&feedId=121500557312