

INTEGRATION OF DPM ARCHITECT WITH RELATIONAL DATABASES

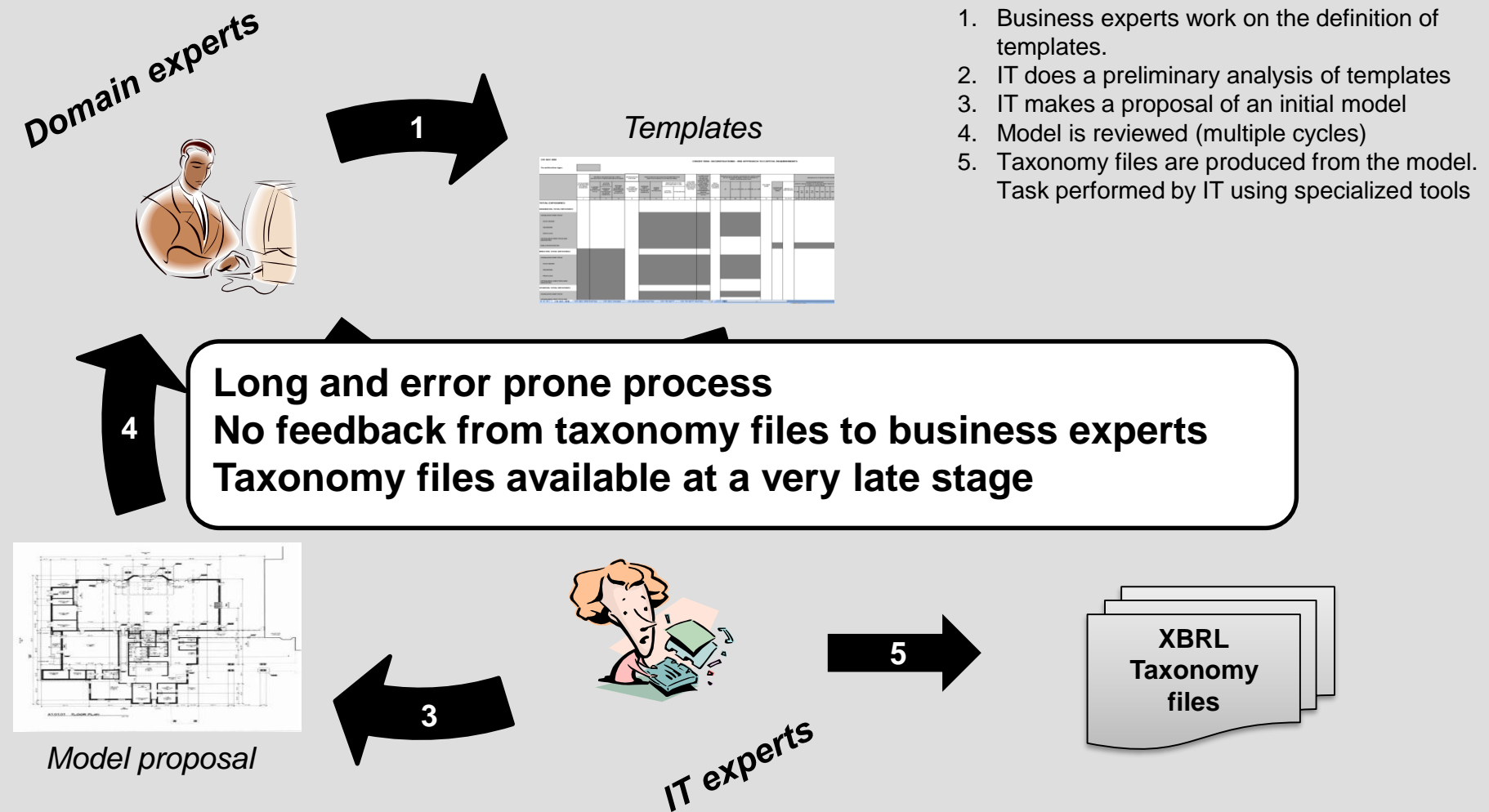
Víctor Morilla

Banco de España

XBRL WEEK

Frankfurt, June 2016

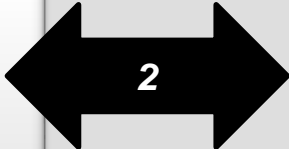
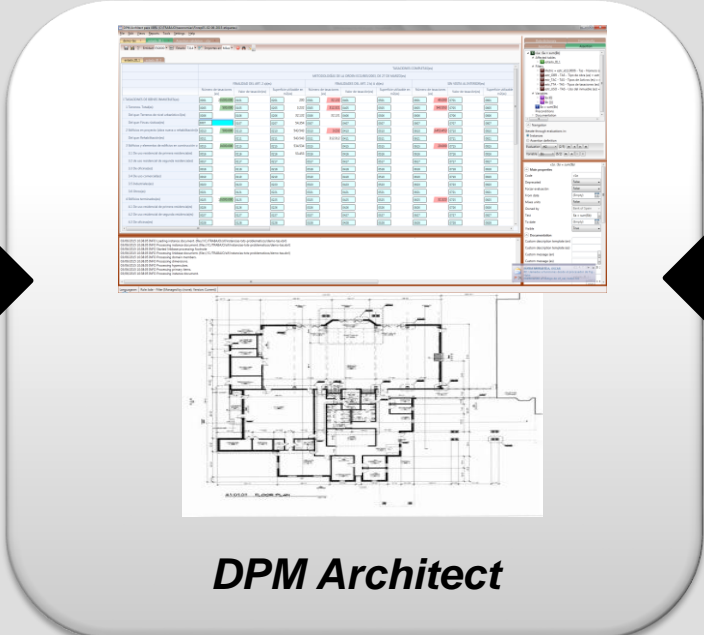
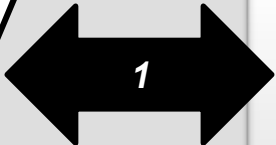
TAXONOMY DESIGN CYCLE IN THE PAST



COMPUTER AIDED DESIGN OF FINANCIAL MODELS



**Domain experts
(data architect)**



CURRENT STATUS



Successfully used in Bank of Spain:

- 47 taxonomies already in production
- Maintained by business users with no knowledge of XBRL

Already in use by other institutions:

- Support agreement with the ECB
- Production of EBA taxonomies
- Review of EBA taxonomies by most NCAs
- New taxonomies and extensions by some NCAs
- Database taxonomy loading process by some NCAs
- Other international institutions...

Available for free on request (no support):

- Distribution list with 150 users

Please, subscribe to:

<https://groups.google.com/d/forum/dpm-architect>

SOME FEATURES

User oriented

- Hides XBRL gory details
- Extensibility made easy
- Opinionated approach to modelling

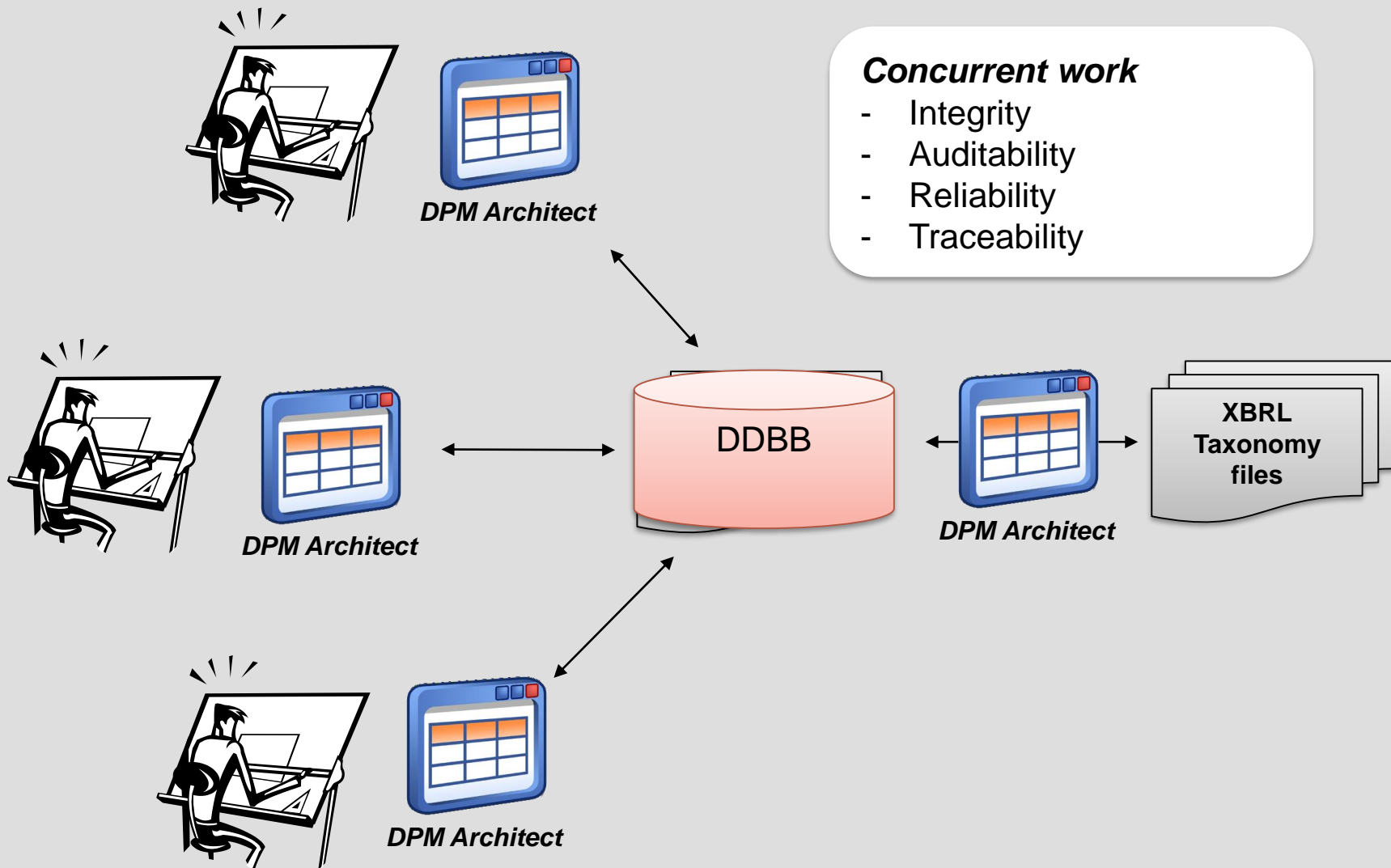
Table linkbase graphical editor

- Link between the model and the view
- Integrated instance editor
- Generation of sample instance documents

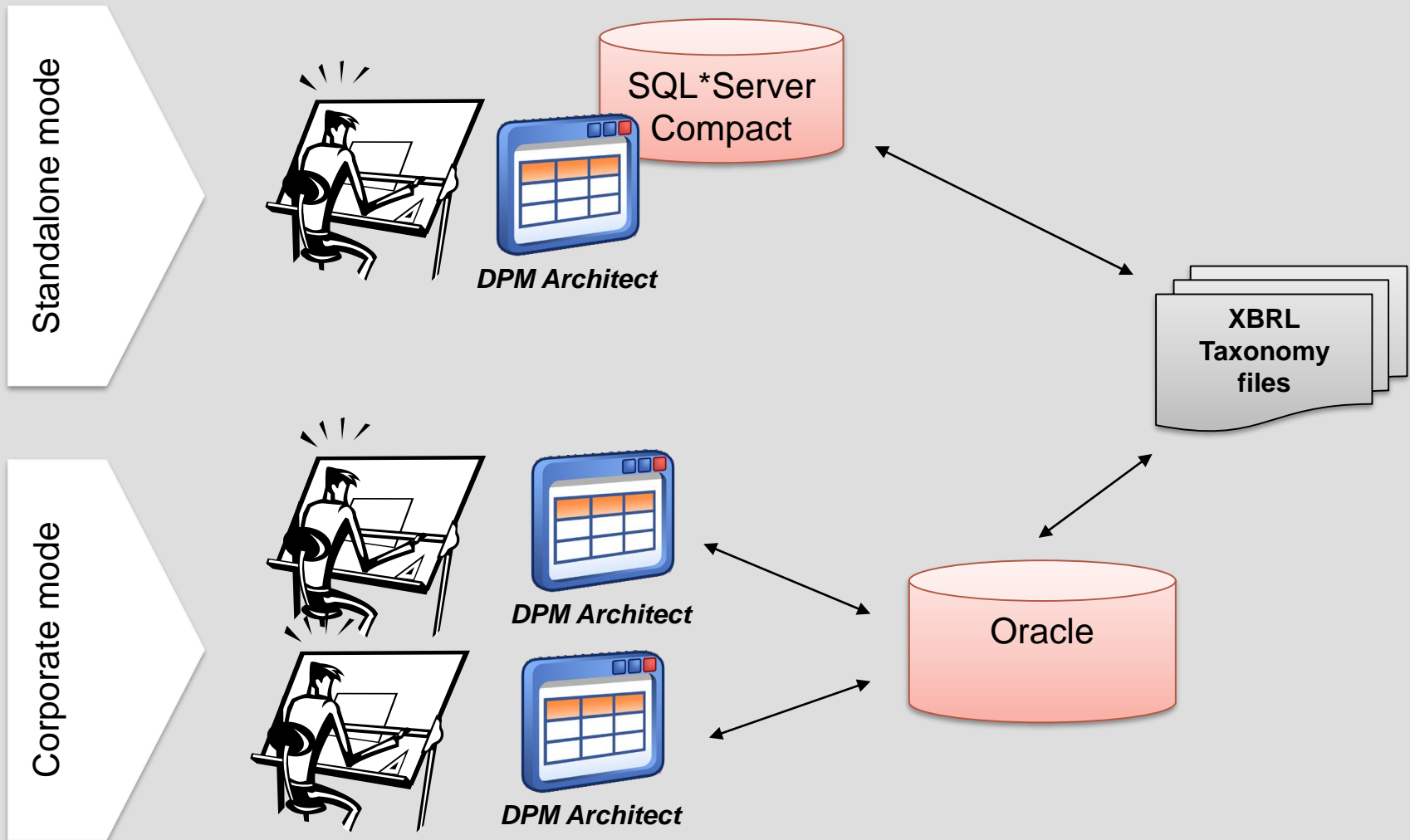
Powerful validation rule editor

- Dual view of formulae: graphical view and data centric view
- Generation of descriptions, error messages and documentation
- Instance editor and test lab (plugins by two vendors available)

NEW REQUIREMENTS

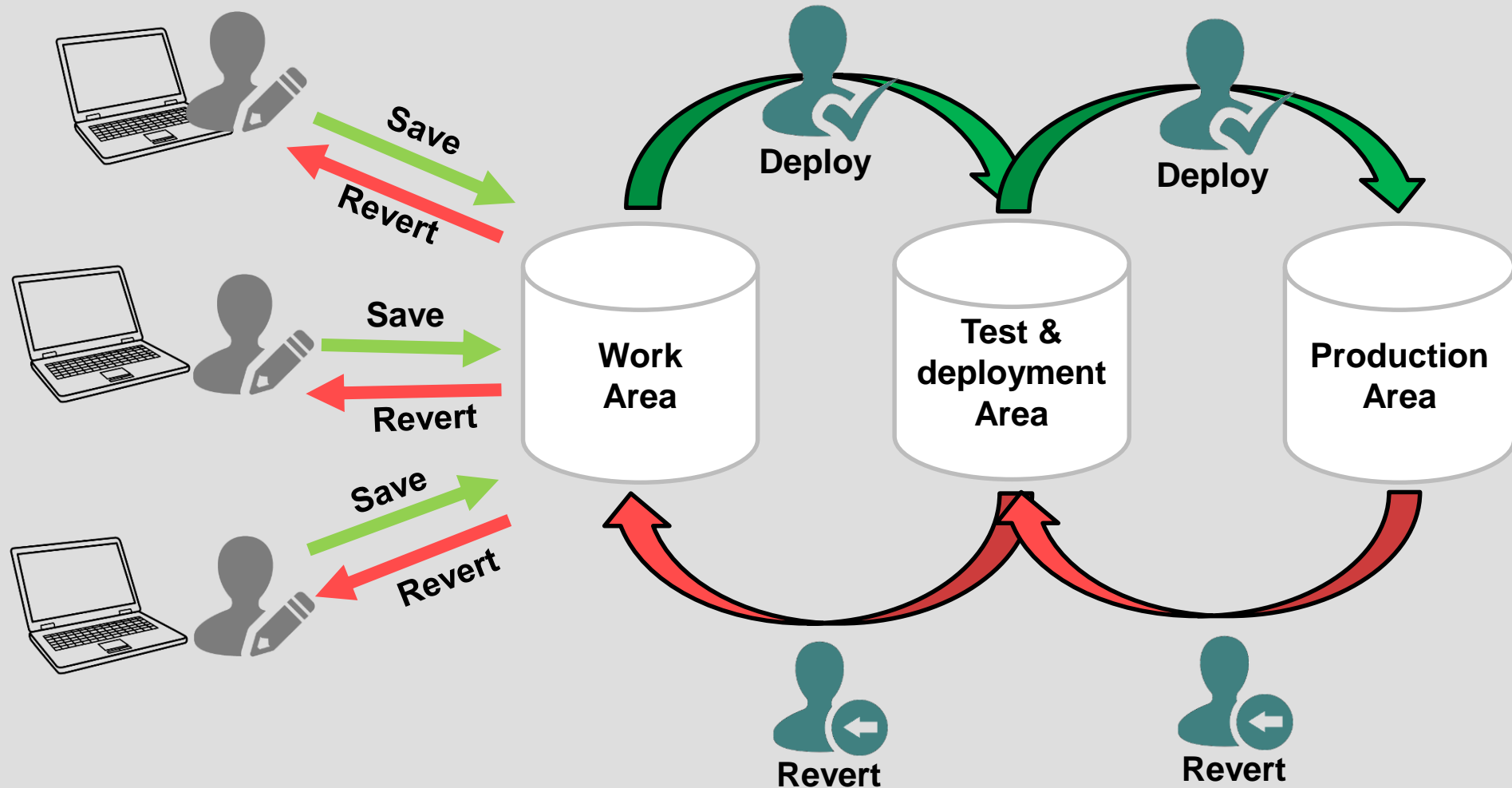


STANDALONE VS CORPORATE MODE



DEPLOYING CHANGES IN CORPORATE MODE

Configuring multiple logical areas



OPENING THE DOOR TO NEW FEATURES



Reporting capabilities

- Analysis of usage of a certain concept
- Unused concepts
- Quality controls based on usage patterns
- Changes report

Metadata access

- Existing export capabilities require ETL processes
- Better integration with in-house solutions
- Easier access to non XBRL experts
- Possibility to create additional services

OPENING THE DOOR TO NEW FEATURES



Integration with other standards

- SDMXs DSD
- OIM
- Single Data Dictionary
- Modelling ontologies

Collaborative work

- Construction of models collaboratively
- Online reviews of drafts
- Discussions on changes

THE RELATIONAL MODEL BEHIND



Many similarities with some of the models used in supervision: EBA, EIOPA...

Internal object model of DPM Architect based on EBA's abstract model*

Mapped to relational model using ORM techniques

Possibility of creating views

<https://www.eba.europa.eu/documents/10180/632822/Description+of+DPM+formal+model.pdf>

SCHEDULE



November 2015

Mid November

End of 2016





THANKS FOR YOUR ATTENTION

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BANCO DE **ESPAÑA**
Eurosistema

INFORMATION SYSTEMS