

**IFC-Bank of Italy Workshop on "Data science in central banking: enhancing the access to and sharing of data"**

**17-19 October 2023**

# Data science in the context of international banking statistics<sup>1</sup>

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<sup>1</sup> This contribution was prepared for the workshop. The views expressed are those of the authors and do not necessarily reflect the views of the Bank of Italy, the BIS, the IFC or the other central banks and institutions represented at the event.

# Data science in the context of international banking statistics

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S V E R I G E S R I K S B A N K

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John Svanäng, Economist

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# Background to international banking statistics in Sweden



- New producers of this statistical product
- International banking statistics "pilot" for data science at the Riksbank
- Why this transformation?
  - Where did we start?
  - What are the benefits?
  - What is the long-term objective?

# Results of the project

- Fast and assured
- Rapid implementation of new ideas
- Lower cost than expected



# Ideas for enhancing data handling

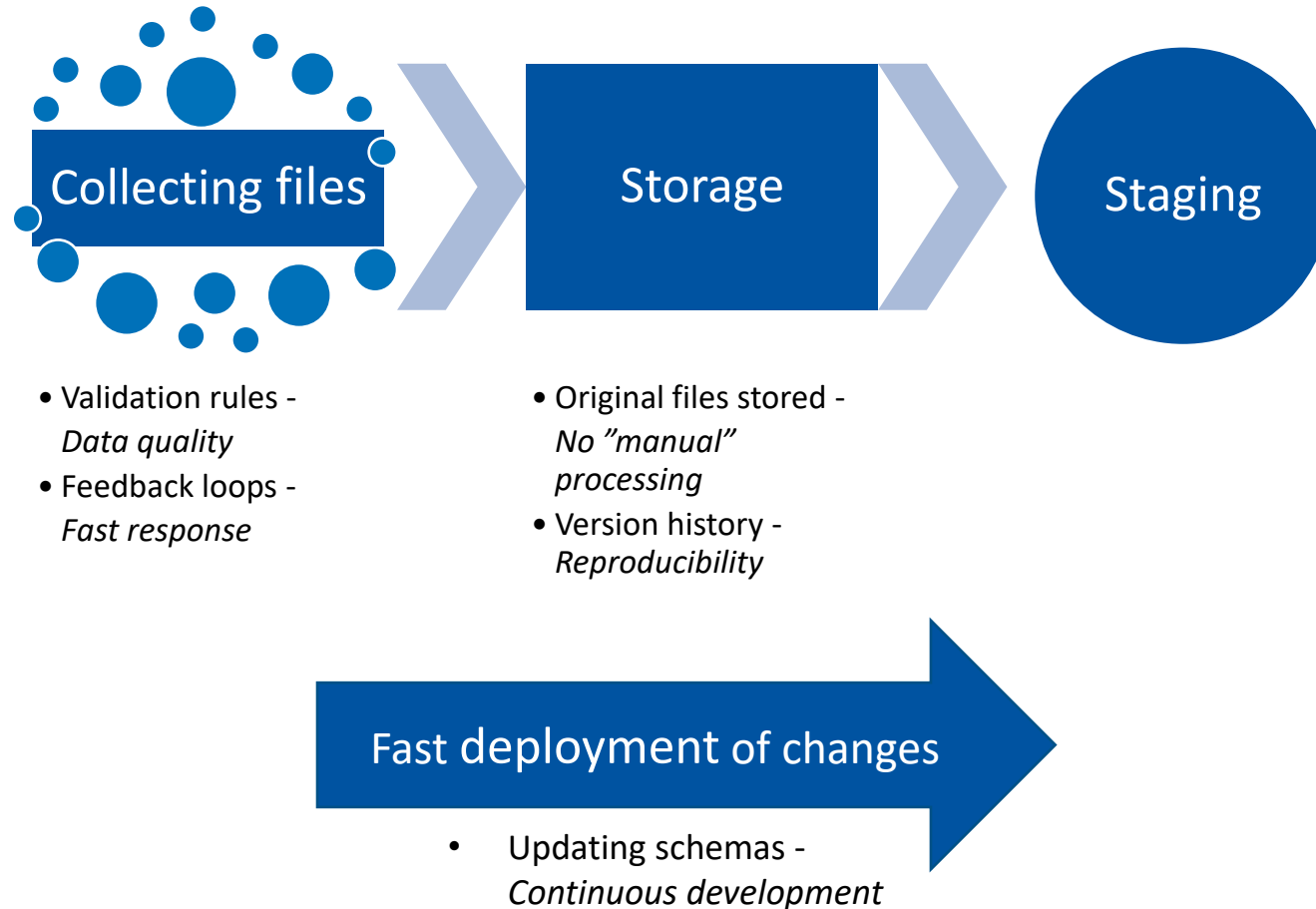
- Open source approach
- Continuous development
- Collaboration



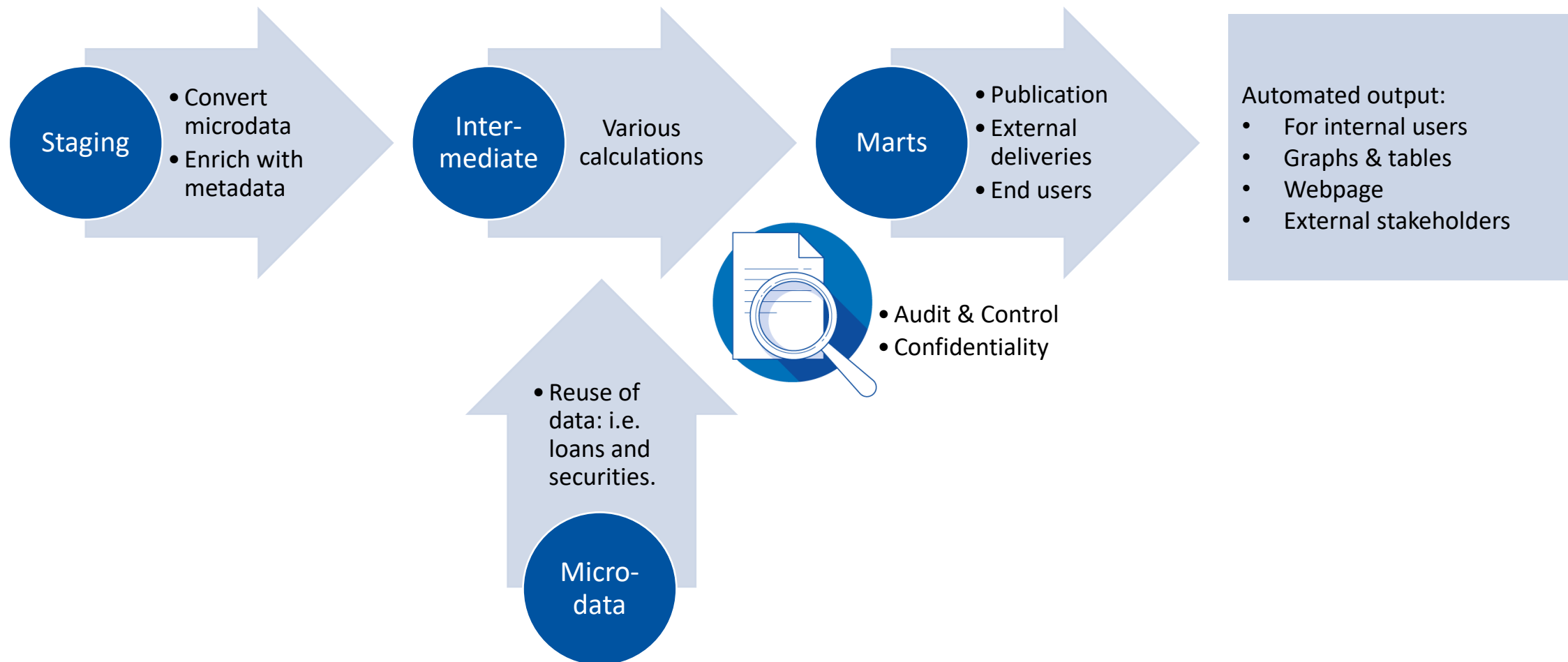
# How we produce international banking statistics

- Data collection
- Processing, Review & Dissemination
- Evaluation

# How we produce international banking statistics - Data collection



# How we produce international banking statistics – Processing, Review & Dissemination





# How we produce international banking statistics - Evaluation

- Agile way of working
- Small single team
- New products for end users
- Continuous development
  - Ability to create and modify code
  - Fast, secure and independent
  - Will effectively implement new ideas



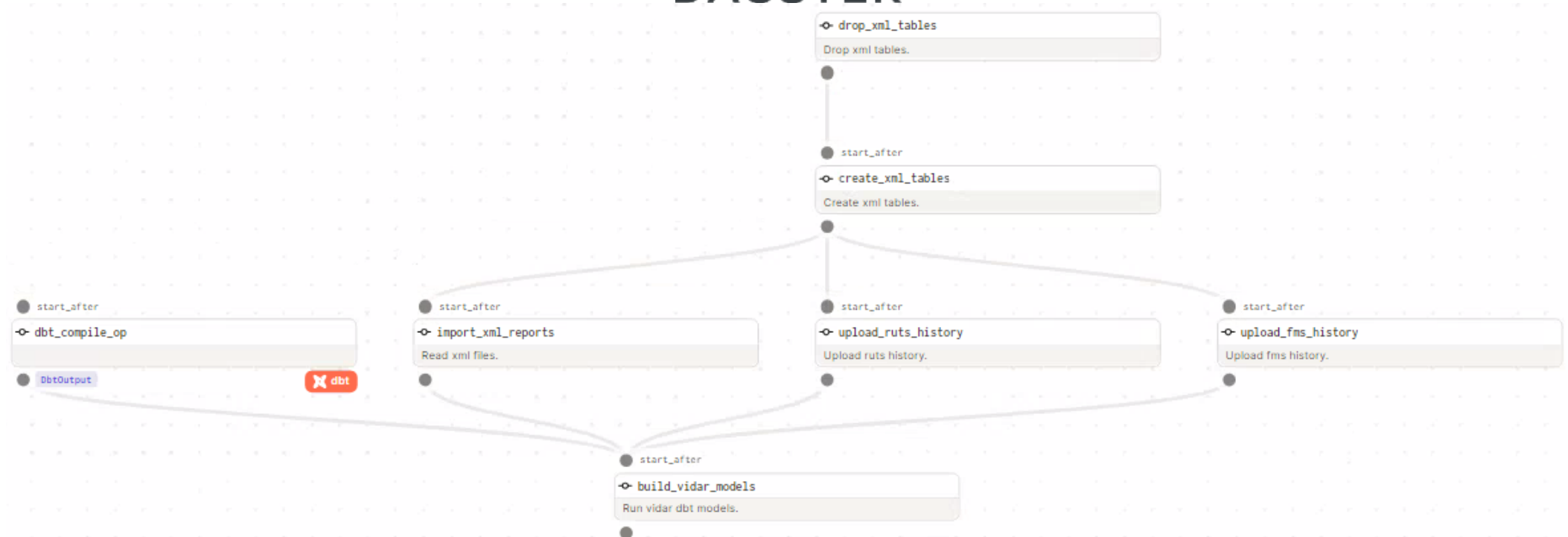
# Tools for continuous development

- Platform for project management
  - Code sharing and review
  - Pipeline for test and deployment
  - Package management
  - Planning and timeline



# Tools for continuous development

- Orchestrator and scheduler



# Tools for continuous development

- Data transformation
- Testing
- Access management
- Publication of documentation

