Implementing DCCs in Industry
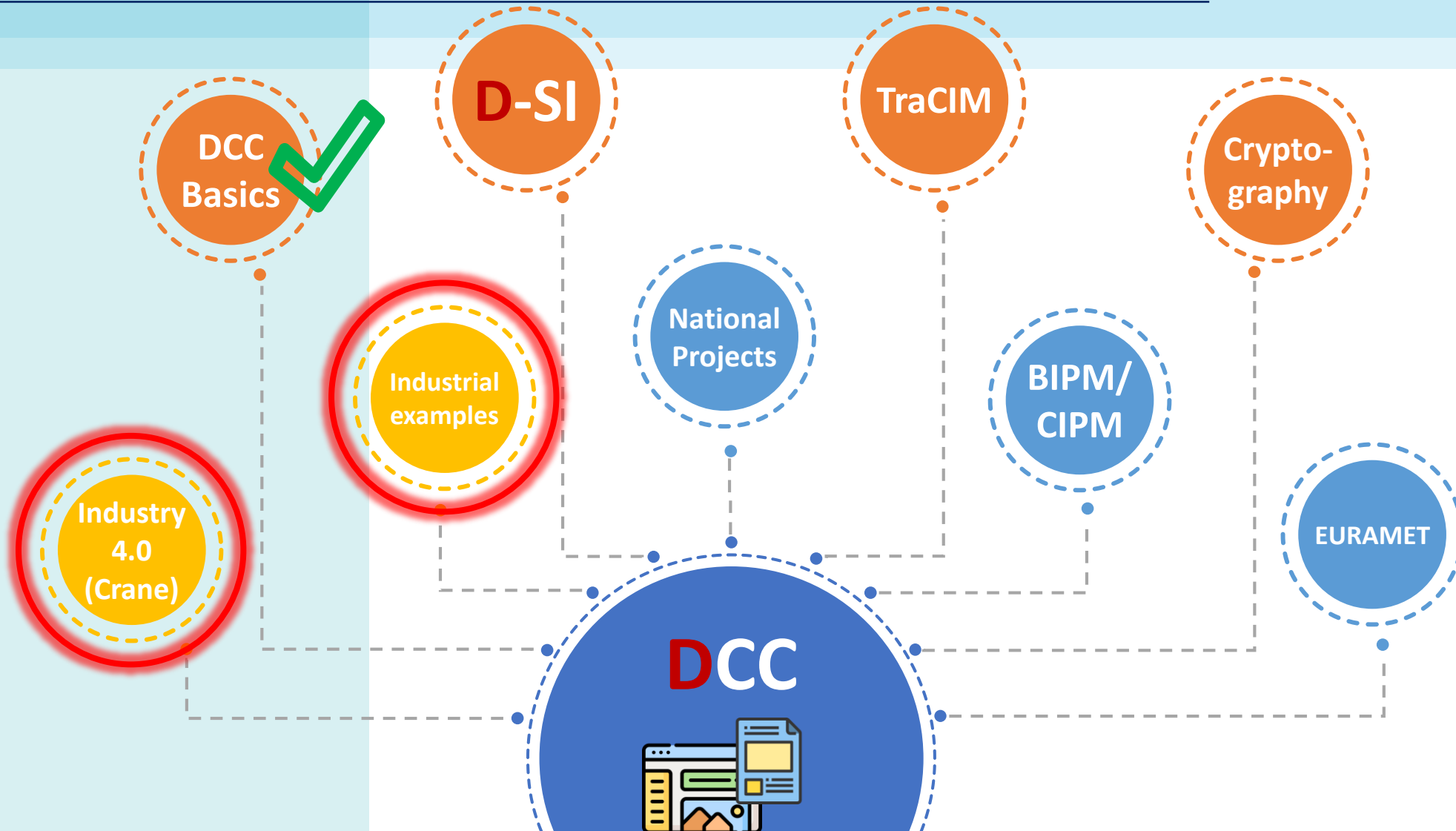*SmartCom Showcase Part I*
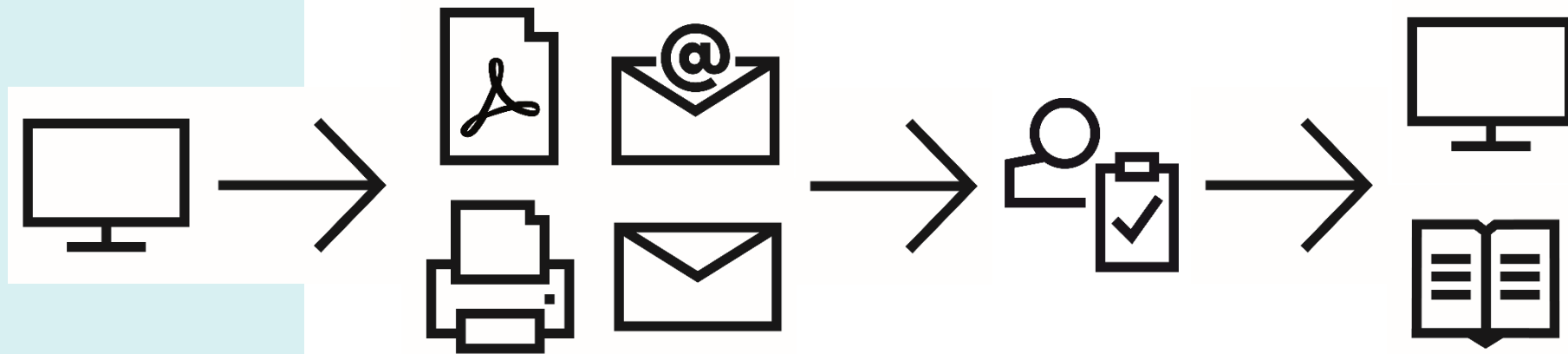
DCC – Showcases

Current handling of Calibration Certificates

Calibration Certificates are created by Software, then transferred to the customer as PDF file or hardcopy.
At the customer, Certificates are manually checked and manually transferred to TEMS or stored.
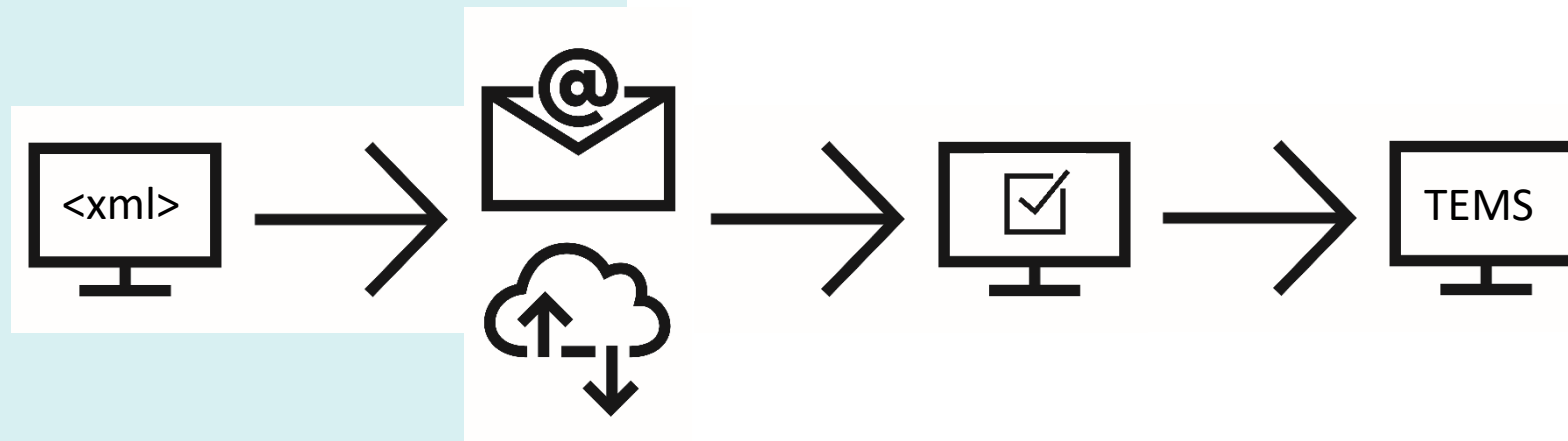
error-prone   time-consuming   hindering further functionalities

Use Cases for Weights, Balances and Pipettes
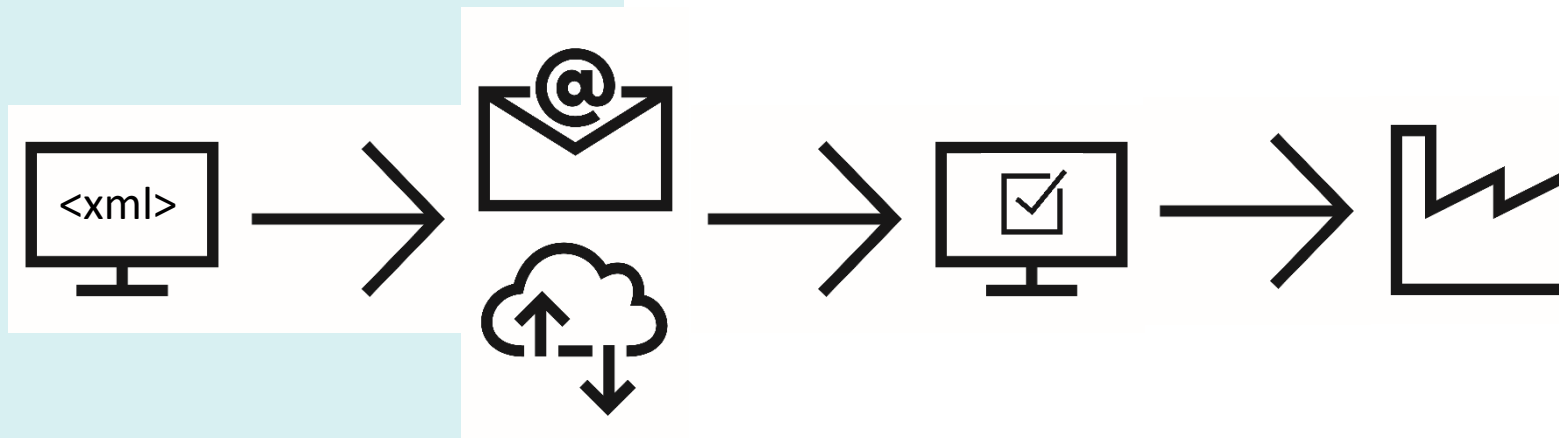

Test Equipment Management System
- Calibration history
- Calibration interval determination
- Optimized use
- ...

Use Cases for Industrial Processes

SPS / SCADA / MES / LIMS
▪ Use of corrected "true" values for steering/controlling of processes
▪ ....

Use Cases for Weights, Balances and Pipettes
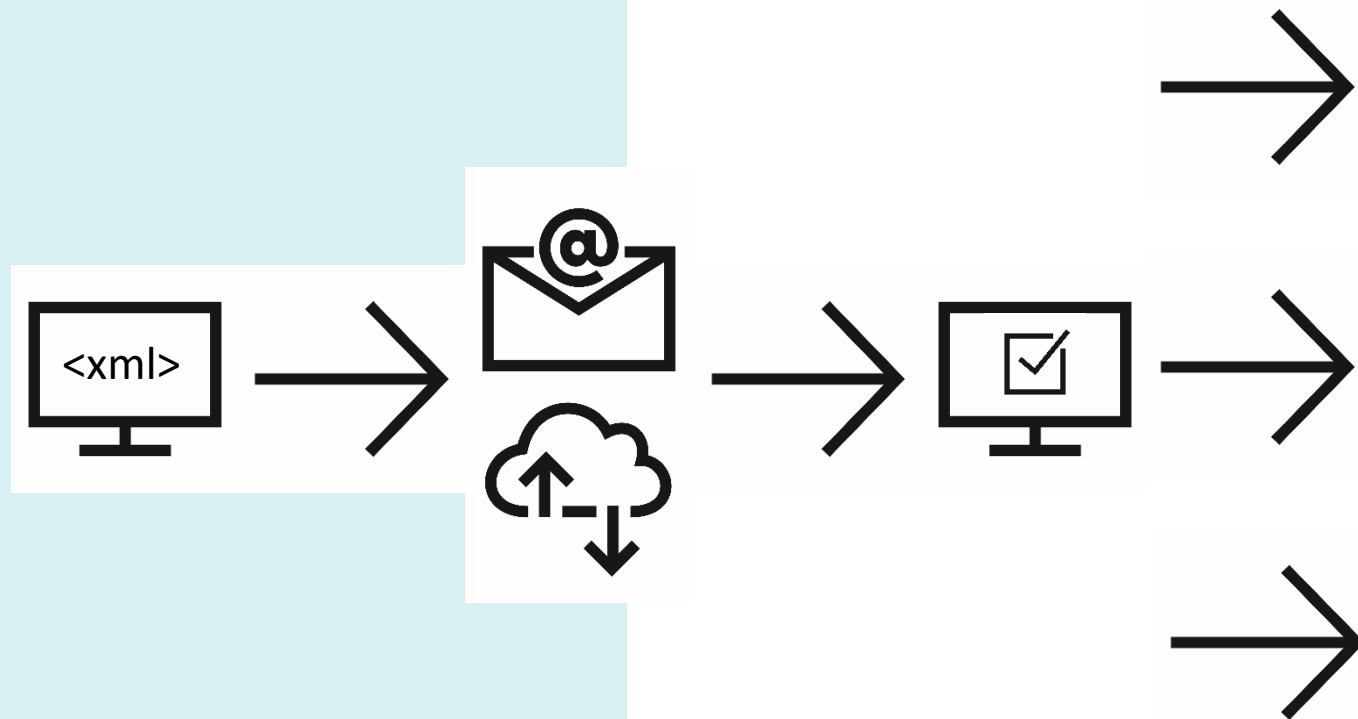
- Use calibrated weight values in Weight Management in Balance software
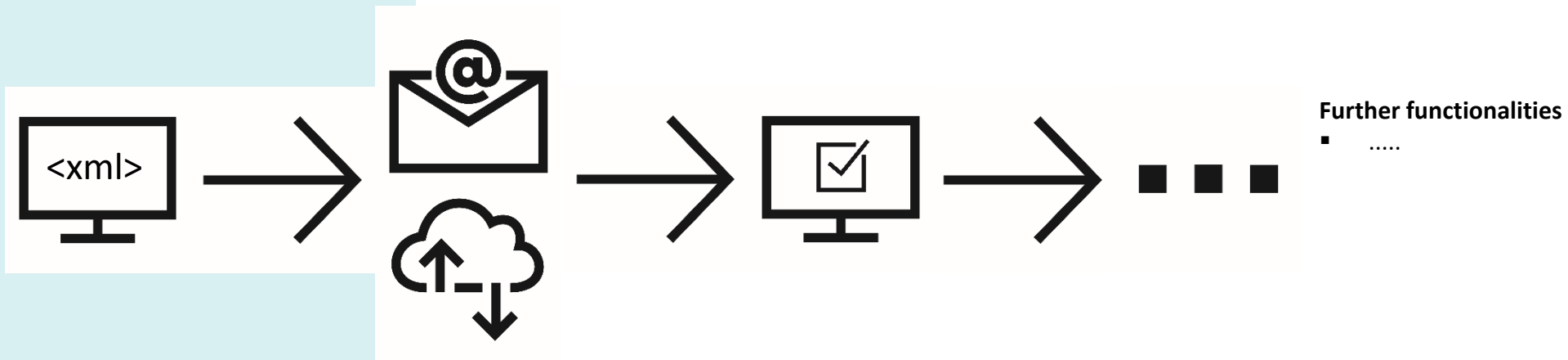
- Weight import into calibration software for balances

- Balance calibration results/status into calibration SW for pipettes

Use Cases for Weights, Balances and Pipettes

Further functionalities
- .....

Conclusions and Outlook

Conclusions

- DCCs will improve process safety, data integrity, efficiency and ease of use of calibration data
- Current DCC schema is flexible enough to allow digital representation of all current calibration scenarios

Open points

- Harmonisation worldwide needed to ensure laboratory-independent data usage
- Global coordination of definitions, schemata and usage urgently needed
    - E.g. like with the BIPM for the metre convention / SI units
    - E.g. like with OPC-UA for definition of companion specifications for different branches

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