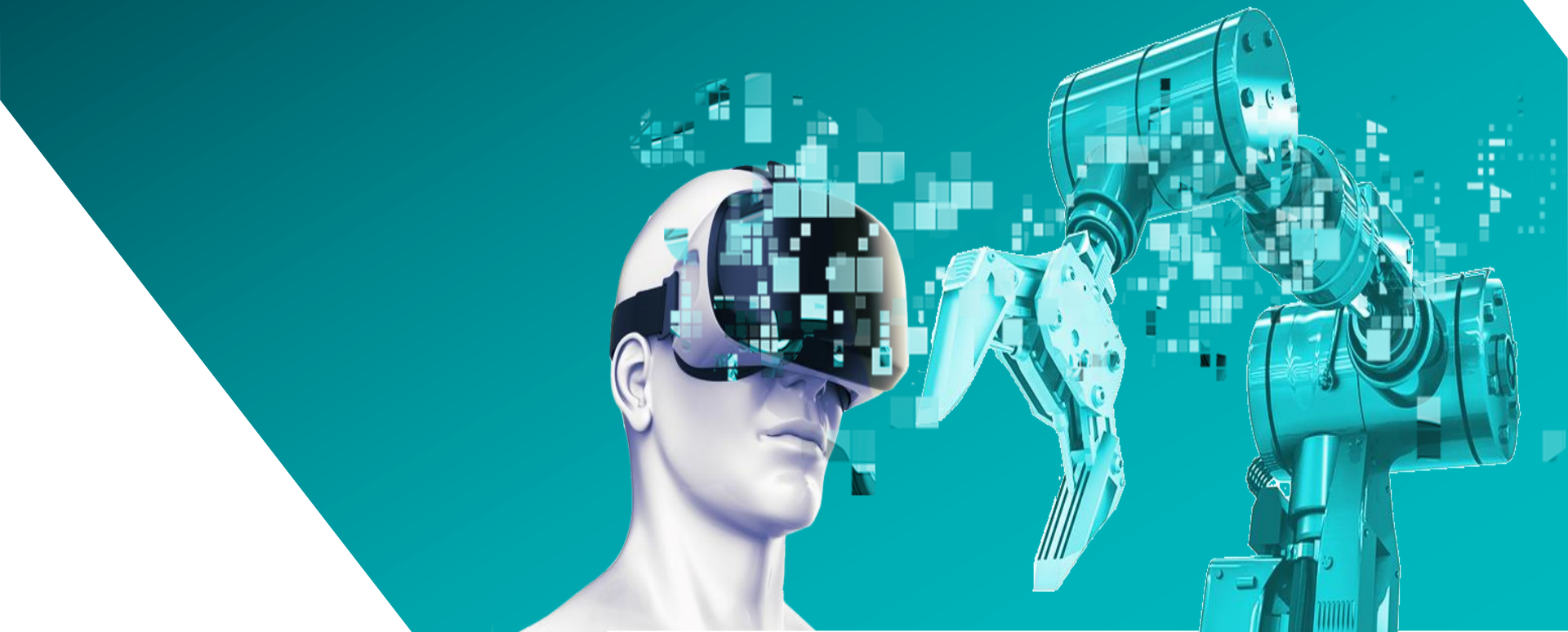
VDA Verband der Automobilindustrie

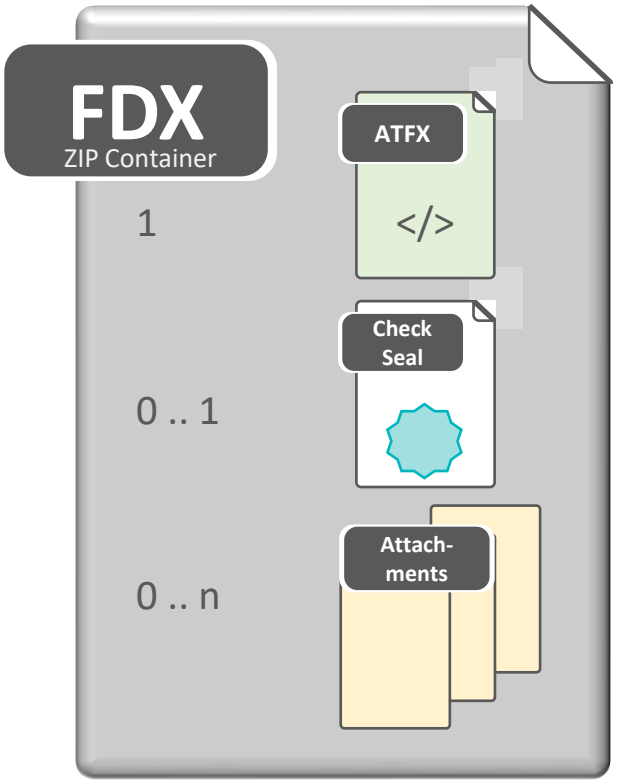
prostep IVIP

Functional Data Exchange (FDX)

openMDM5 Working Group



FDX ZIP Container Exchange Format



The main file carrying both the functional data and the data documentation

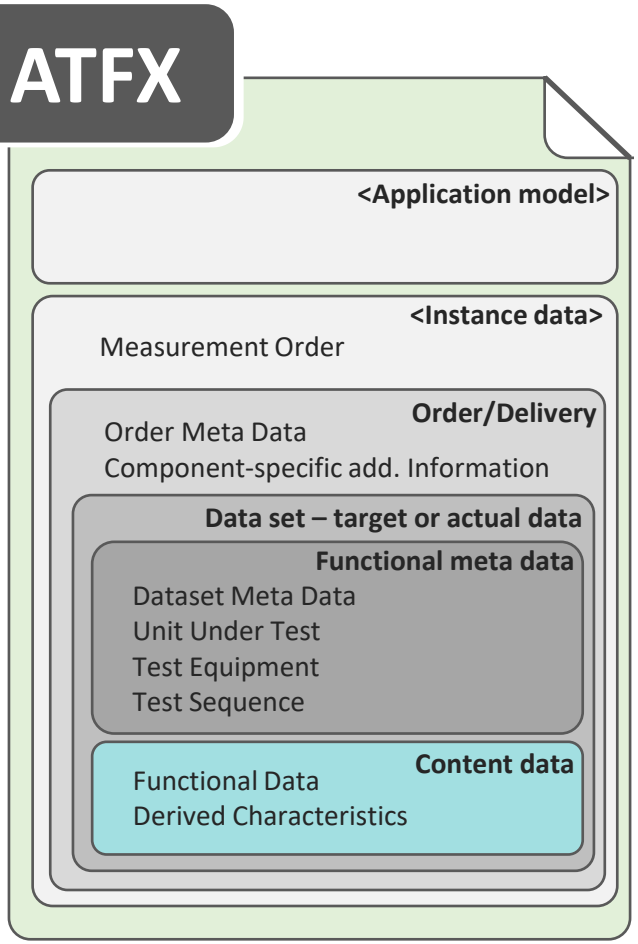
- 120 % approach (covering state of the art content)
- Customer specific add-ons possible

Quality-Check Seal

Drawings, Pictures, Pre-Test Documentation, …

FDX ZIP Container Exchange Format - ATFx

Functional data: Currently stored in the ATFx file

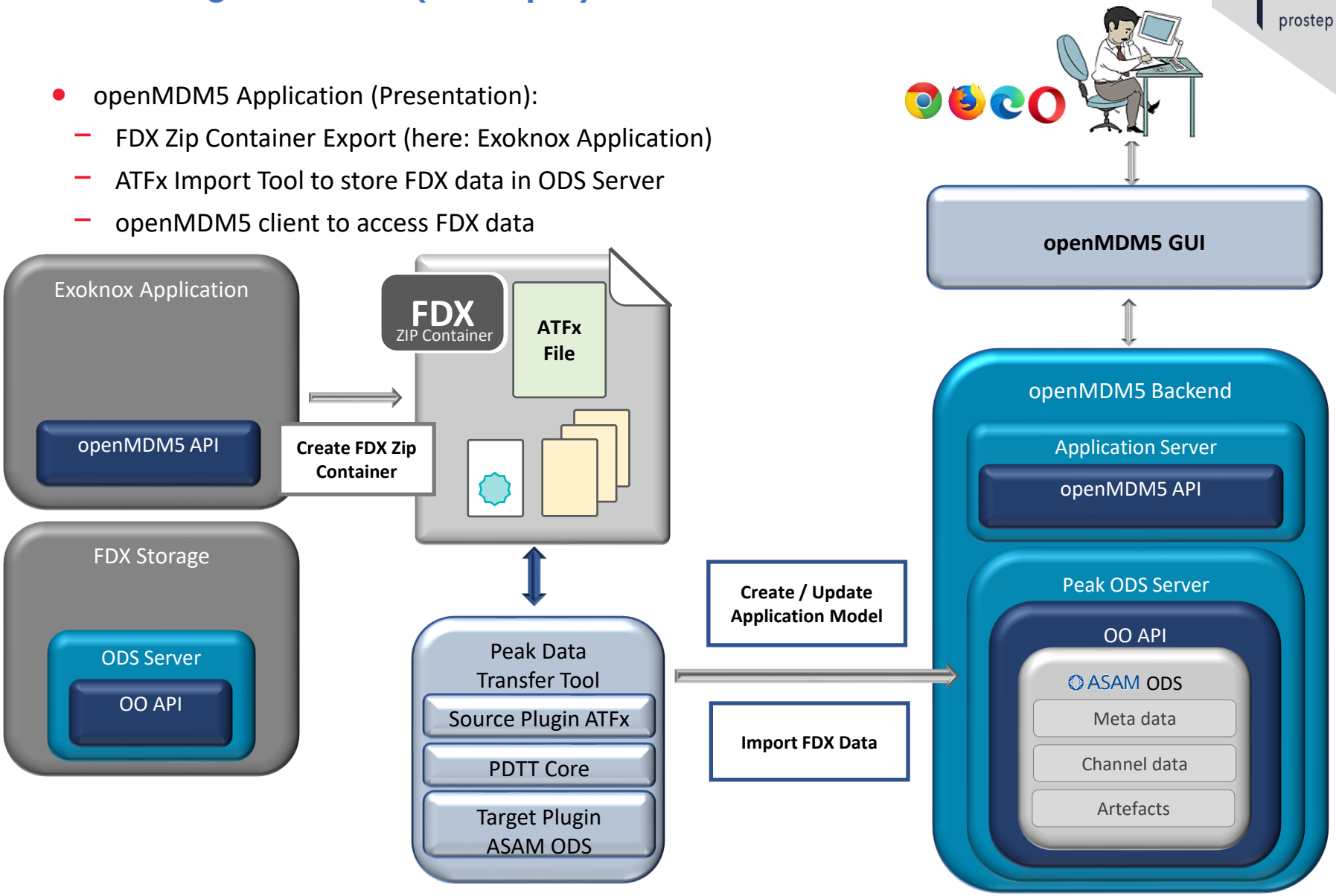


Comprehensive documentation of the instance data makes it independent from individuals

- Representation of extensive information on components and functional data
- Component-specific data models
- Representation of rule-based dependencies between attributes and values of attributes (extension of openMDM data model)
- Data model distinguishes between order and delivery (extension of openMDM data model for order context)
- Expandability for customer-specific information

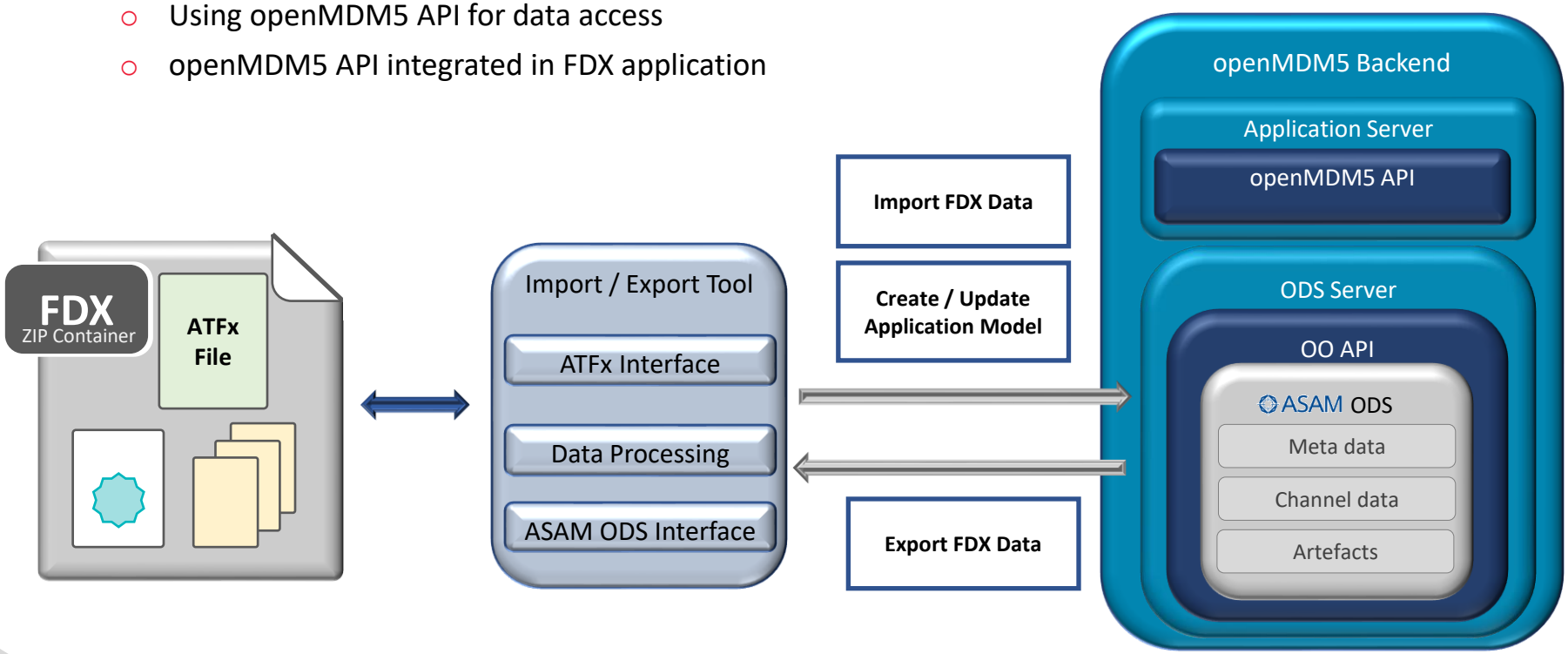
Processing FDX data (Example)

- openMDM5 Application (Presentation):
  - FDX Zip Container Export (here: Exoknox Application)
  - ATFx Import Tool to store FDX data in ODS Server
  - openMDM5 client to access FDX data



Outlook: Processing FDX data

- FDX compliant application:
  - FDX Zip Container for Functional Data Exchange
  - Import / Export Component
    - Importing FDX Zip Container into FDX Storage
    - Creating FDX Zip Container as Export
  - FDX Data Management Tool
    - Using openMDM5 API for data access
    - openMDM5 API integrated in FDX application



Outlook: Possible FDX Compliant Applications

- Application / tools with FDX data access
  - FDX Order and Delivery ManagementTools (like Exoknox tool)
  - Component / Part / BOM Management Tools
    - Adding functional data to objects
  - Test Data Management Tool
    - E.g. Creating functional data
  - Simulation Data Management Tool
    - E.g. Using functional data as imput parameters for simulation / calculation
  - Automatization Tools
    - E.g. Using functional data as imput parameters for tests

- Required functionality:
  - Read and Write FDX Zip Container
  - Managing FDX data
    - File based: As FDX zip Container files
    - Server based: Using an **openMDM5 Repository** and **openMDM5 API**

FDX Workflow Forum and Implementer Forum