Diagnostic Processes
Moving from Legacy to Industry Standards

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Key Problem Statements & Implications

- Supplier specific diagnostic data formats
- Duplicate efforts in content creation across departments
- Complexity in vehicle diagnostic
- Duplicate software implementation
- Lack of Integrated process & tools

- Increasing engineering cost
- Delayed time-to-market
- Issues in quality
How diagnostic standards solves those issues?

- Common data formats across industry
- Support current and future diagnostic needs
- Integrated off-the-shelf tooling
- No dependency on S/W Tool suppliers
- Standardized process enables high reusability
- Data driven architecture based tester tools
Diagnostic Standards

Diagnostic Content

ODX
(ISO 22901)

OTX
(ISO 13209)

Diagnostic Runtime

D-Server
(ISO 22900-3)

D-PDU
(ISO 22900-2)
Roadmap: Legacy to Standardization

- Data authoring guidelines
- ODX data template

- Automated Convertor – Legacy to ODX data

- Standardized tooling for the diag. dev.

- Setup diag. process & Integrated dev. workflow

- Off-the-shelf test and validation tools

- Roll-out plan for downstream users (EoL, Service testers)
Common Challenges

- Learning curve associated with new standards, tools and processes
- Migration of legacy data to new data formats
- Impact on the downstream users
  - End-of-line or Service tester teams
- Adoption of required infrastructure components
- Governance around diagnostic data development across OEM and Tier-1
KPIT’s Tooling Landscape

**Web Applications**
- License Management
- Authorization

**Standalone Tools**
- OTX Checker Tool
- OTX Checker Tool
- Database Designer Tool (ODX Authoring Tool)

**Integrated Diagnostic Databases (IDD)**
- User Information
- Diagnostic Data
- License Data
- ODX Data
- OTX Sequence

**Cloud**
- ODX Data
- OTX Sequences
- Flash files

**Integrated Diagnostic Tools**
- ECU Editor (ODX Authoring Tool)
- OTX Suite (OTX Authoring Tools)
- ECU Validator (Diagnostic Validation Tool)
- Dashboards

**Data Import/Migration**
- Odx Data
- Legacy Data (.csv, .xls, .xml)

**Users**
- License Admin
- User Manager
- Manager /Leads

**Service Tools**
- EOL
- Service Tools

**OTA/Remote Diagnostics**
- DEXT Converter

**DBX**
Products and Service around Products

**Our Credentials**

20+ Years of **Experience** in Diagnostic products and associated services

- 350+ Resources dedicated to Diagnostics practice
- Diagnostic HQ in **Munich**
- ODCs in **Pune, Bangalore**
- Local in **UK, US, Japan**

**Tooling Recommended** by one of the **Top 3 OEMs**

**E-2-E Coverage**

- Cloud based diagnostic
- Embedded in-vehicle diagnostic & OTA
- After-sales diagnostic tester
- End-of-line flashing, calibration & validation
- Automated ECU validation
- Diagnostic Requirements Specification
- Diagnostic Process Design & Guidelines
- Diagnostic data & Sequences authoring

**Active Contributing Member**

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