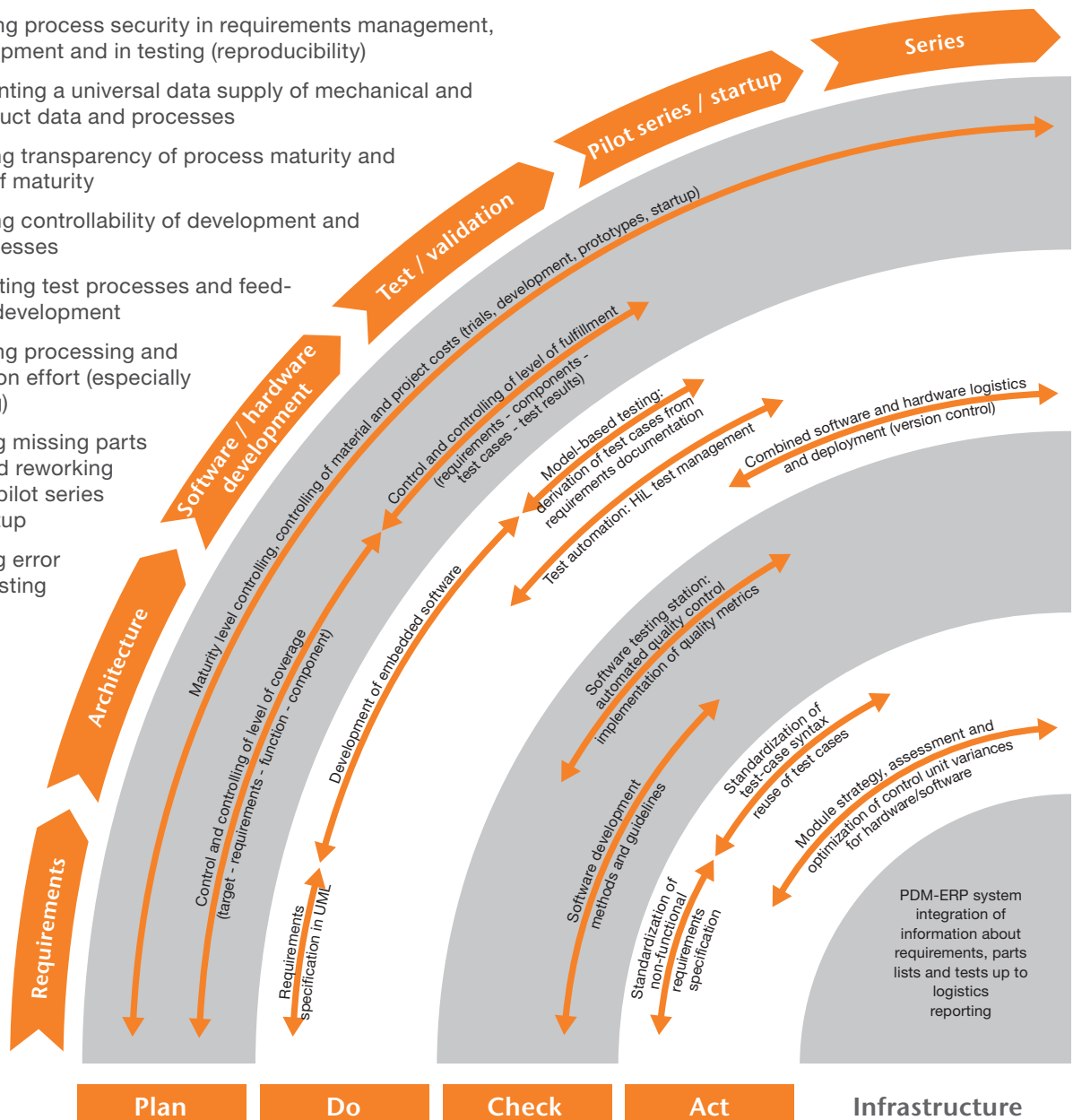


Solutions for the E/E Process Chain

Valtech's consultants are specialists in product development and production processes in the automotive industry. Our range of services comprises process consulting, solution design, system integration and services along the entire E/E process chain.

- Optimizing communication and reporting, reduce redundancies and increase transparency
- Minimizing loops and misunderstandings
- Reducing friction losses (improve data consistency)
- Increasing planning security in development and trials
- Optimizing process security in requirements management, in development and in testing (reproducibility)
- Implementing a universal data supply of mechanical and E/E product data and processes
- Increasing transparency of process maturity and degree of maturity
- Increasing controllability of development and test processes
- Accelerating test processes and feedback to development
- Minimizing processing and acquisition effort (especially reporting)
- Reducing missing parts costs and reworking costs in pilot series and startup
- Reducing error rate in testing



E/E Project References

Requirements-based Test Management

Universal information base for test management through linking with requirements and product documentation

- Linking of requirements – test cases – software/hardware components – test results – errors
- Control of test processes
- Controlling of maturity level

Customer benefits:

- Higher planning security
- Reduction of friction loss by immediate status feedback and active control
- Transparency of test coverage and fulfillment level

Test Modeling for Test Automation

Implementation of a model-based test method in the derivation of test cases from requirements

- Formalization of test description language
- Requirements specification on the basis of UML
- Step-by-step implementation process

Customer benefits:

- Acceleration of test processes
- Increase of process security through reproducibility of tests

HiL (Hardware in the Loop) Model Database

System for documentation and release of HiL test models

- Repository for HiL test models for systematic documentation and reuse
- Support of HiL model release process
- Process know-how for HiL model management
- IT implementation know-how from reference projects

Customer benefits:

- Increase of reusability rate of test methods
- Minimization of acquisition costs
- Reduction of errors in test modeling
- Optimization of capacity rate of HiL test stands (resource planning)

Strategic IT Development, E/E-PDM, DOORS-QualityCenter Interface

IT development in the E/E development environment

- Elaboration of IT strategies (E/E-PDM) for the E/E area
- Integration and interfaces (e.g. DOORS QualityCenter)
- Reporting
- Version and variant control for control units (according to conditions relating to optional extras, national conditions and/or optional extras packages), up to series support

Customer benefits:

- Universal process support
- Purging of system and data world
- Avoidance of friction losses and data inconsistencies
- Acceleration of processes
- Standardization of communication, error prevention

Structure Adjustment and Change Management, E/E-PDM

Conception of processes, methods and systems for E/E-PDM

- Conception of level of detail of requirements specification and derivation for test management
- Adjustment of structures, e.g. requirement – test management – parts lists – messages – functions – sensor – actor – energy data – cable harness
- Elaboration of integration concept of E/E change management, incl. baselining

Customer benefits:

- Standardization of requirements structures concerning consistency and completeness
- Minimization of effort in requirements specification and test management
- Clarity in communication and reduction of error rate

Development Procedure for Embedded Software

Optimization of procedure for development of embedded software

- Validation and measurement of software quality (VQS – Valtech Quality Suite), deployment of software testing station
- Definition of development guidelines for embedded software

Customer benefits:

- Optimization of software quality
- Standardization produces more efficient software development (acceleration) and reduction of error rate
- Mapping of software metrics for controlling in the development process

Software Logistics

Release and deployment management of embedded software

- Structure of release management of different software and hardware components in context
- Validation of deployment of valid versions (compatibility management)
- Support of processes and methods for change management or configuration management

Customer benefits:

- Reduction of production errors / pilot series errors concerning logistical components: software and hardware reaches the conveyor belt logistically correct and in time
- Reduction of material and process costs

Prototype Control

System support for specimen, prototype and pilot series control

- Logistical planning and control of components, test carriers and vehicles
- Validation of availability (quantities, versions, deadlines)
- Implementation of controlling and consistency checks
- System-technical integration of parts lists – specimen/prototype planning – testing – ERP (logistics/incoming goods)

Customer benefits:

- Reduction of errors in prototype integration (wrong version numbers)
- Increasing validity of validation/process security
- Optimization of prototype capacity / minimization of process costs

About Valtech

Big enough to deliver - small enough to care

Valtech is a global, independent provider of business consulting and IT consulting, of learning services and global sourcing. Worldwide, more than 1200 experts work on the basis of experience from over 1000 successful projects in automotive, aerospace and other industries – big enough for resilient partnerships, small enough for individual customer service.

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