

# TRANSFORMATION IN PROCESSES



Body High Performance Computer: A Living Example



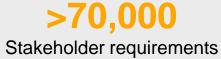
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Stakeholder requirements



101001 011101 110001



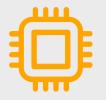


>800 Continental developers

101001 011101 110001

>70,000 Stakeholder requirements iji

>800 Continental developers



TechShow

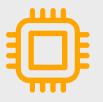
2021

#### 68 Links to other Electronic Control Units (ECUs)

101001 011101 110001 >70,000 Stakeholder requirements



>800 Continental developers



TechShow

#### 68 Links to other Electronic Control Units (ECUs)

**13** Development locations around Europe

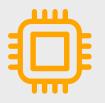


101001 011101 110001 **>70,000** 

Stakeholder requirements



>800 Continental developers



TechShow

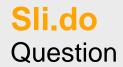
Links to other Electronic Control Units (ECUs)

13 Development locations around Europe





19 Companies working on the SW for a single ECU





# > What do you think, how big is the **amount of software** in the ICAS1?

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Served in Figure

#### under control if:

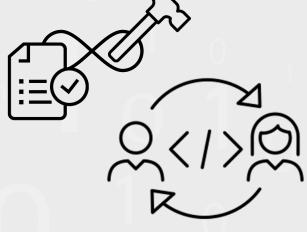
Body High Performance Computer: A Living Example

 Processes and toolchain are excellent

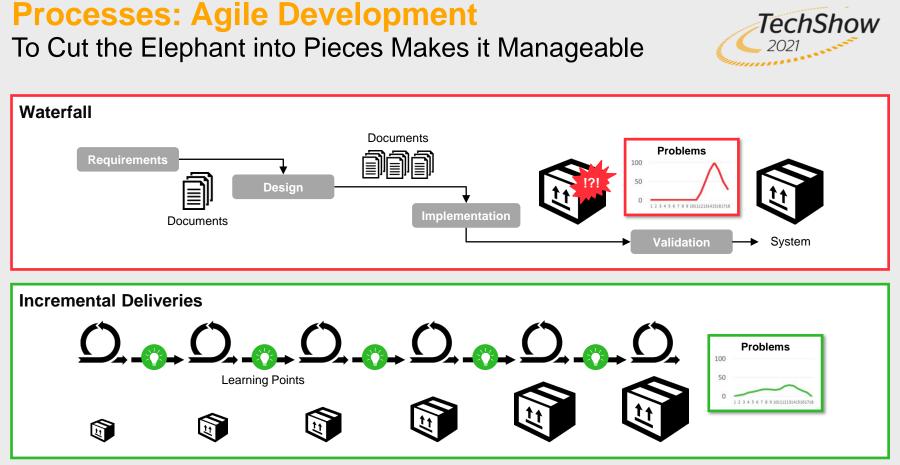
An animal you only get

**VW ID.3 – ICAS1** 

 The level of cooperation in between the customer and supplier is raised up to a new level

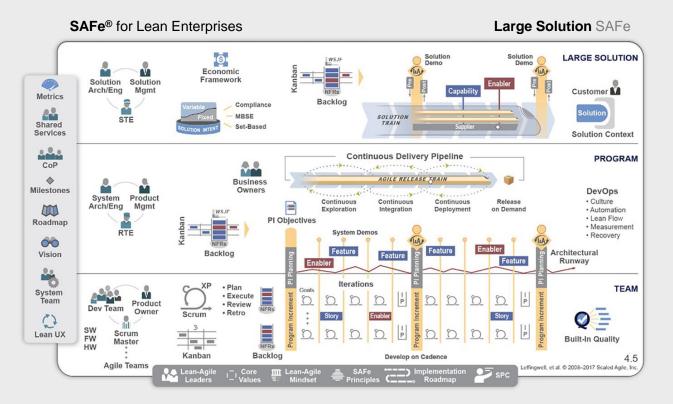


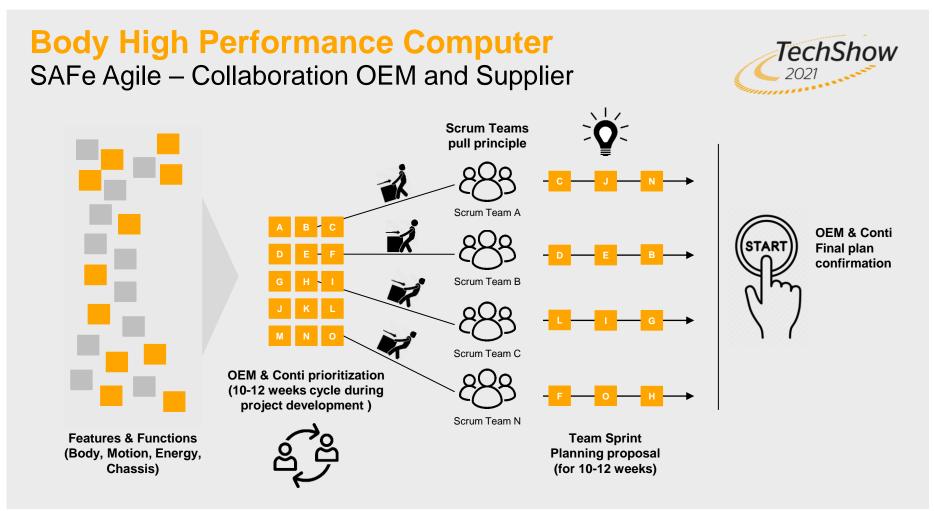




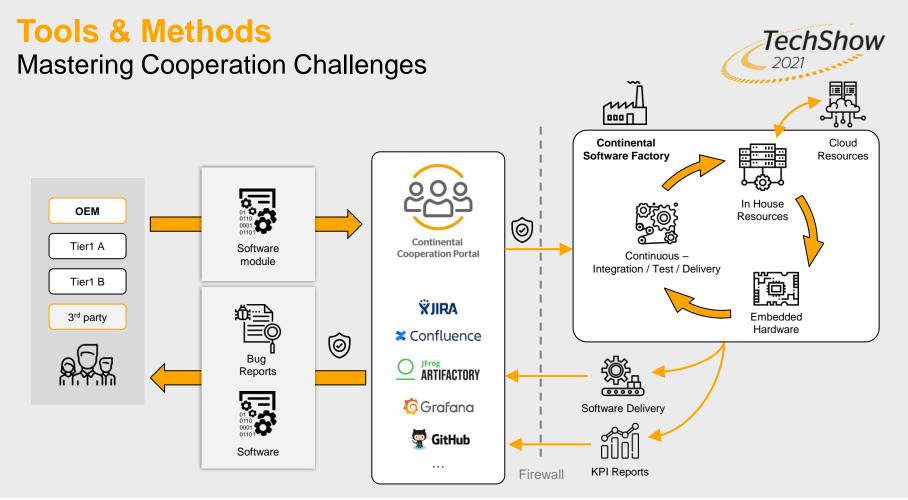
#### Processes: Agile Development To Cut the Elephant into Pieces Makes it Manageable











#### **Continental Cooperation Portal** Broad Range of Benefits to OEMs & Suppliers





- > Automation of software development and integration  $\checkmark$
- > Secure and scalable project-based collaboration platform  $\checkmark$
- > Central communication interface for all project members  $\checkmark$
- > Continuous integration and delivery concepts applied  $\checkmark$
- > Latest information available to all project members  $\checkmark$
- > Transfer of error-free applications into development system  $\checkmark$
- Overall quality and efficiency improvement

#### Continental Cooperation Portal

#### Tools & Methods Mastering Complexity

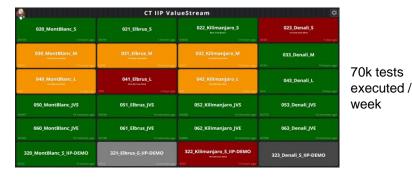


#### **Qualified Continuous Integration (QCI):**

- > Requirements automatically tested
- > Features automatically tested
- > Fast feedback for developers
- Feature maturity guaranteed by quality gates











Continuous – Integration / Test / Delivery

#### Environment complexity Required for Continuous Development

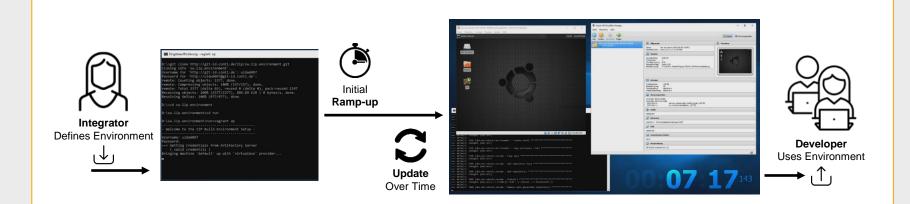


	Collaborate Build		Deploy Deployment Cotopus Deploy (1) DEPLOY	Run	Image Source: http://www.jamesbowman.me/p
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O Montor	Today's Tooling				Developer
	Complex Infrastructure				Still paid to write code

## **Cross Development Environment**

#### Start Coding Immediately







- > Enables fully managed environments across all sites and suppliers
- > All configurations/settings/user rights set up automatically
- All development tools integrated, immediately available and updateable over project lifetime
- > 1-click installer, 30 minutes bring-up

#### **Quality Monitor** What Gets Measured Gets Managed









- Feature reports, requirements vs testing
- Code quality (e.g., unit tests, static checks)
- Infrastructure Monitoring

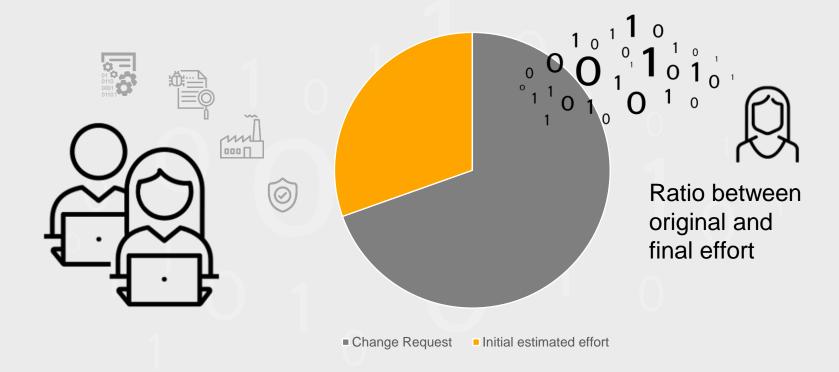
> Live with every build

- History and trend
- Clickable: Navigate from overview to details



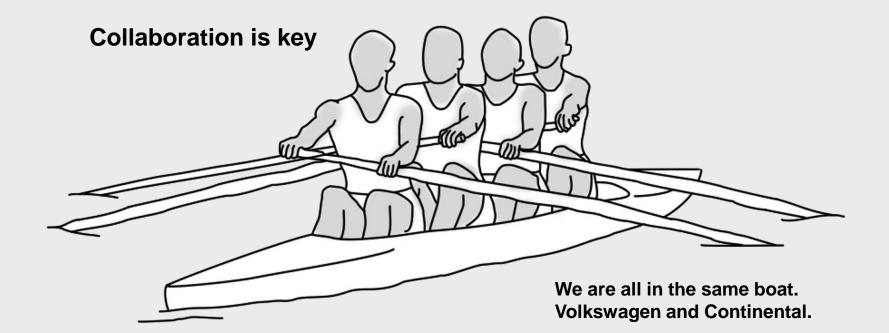
### VW ID.3 – ICAS1 Body Domain Controller A Living Example





#### VW ID.3 – ICAS1 Body Domain Controller A Living Example





# **QUESTIONS?**

