

Role of standardization in medical high-mix production

Lauri Anttila
Planmeca Oy

Testing – why should we standardize

- Save time and money
 - Streamline test development and test deployment
 - To get test data as a tool for business decision
 - Testing becomes more scalable and maintainable
- Make processes equally aligned throughout the organization
 - Ease the pain of change management
 - Minimize the need for target specific validation
 - ... And so on

It all comes down to the strategy

- Company strategy



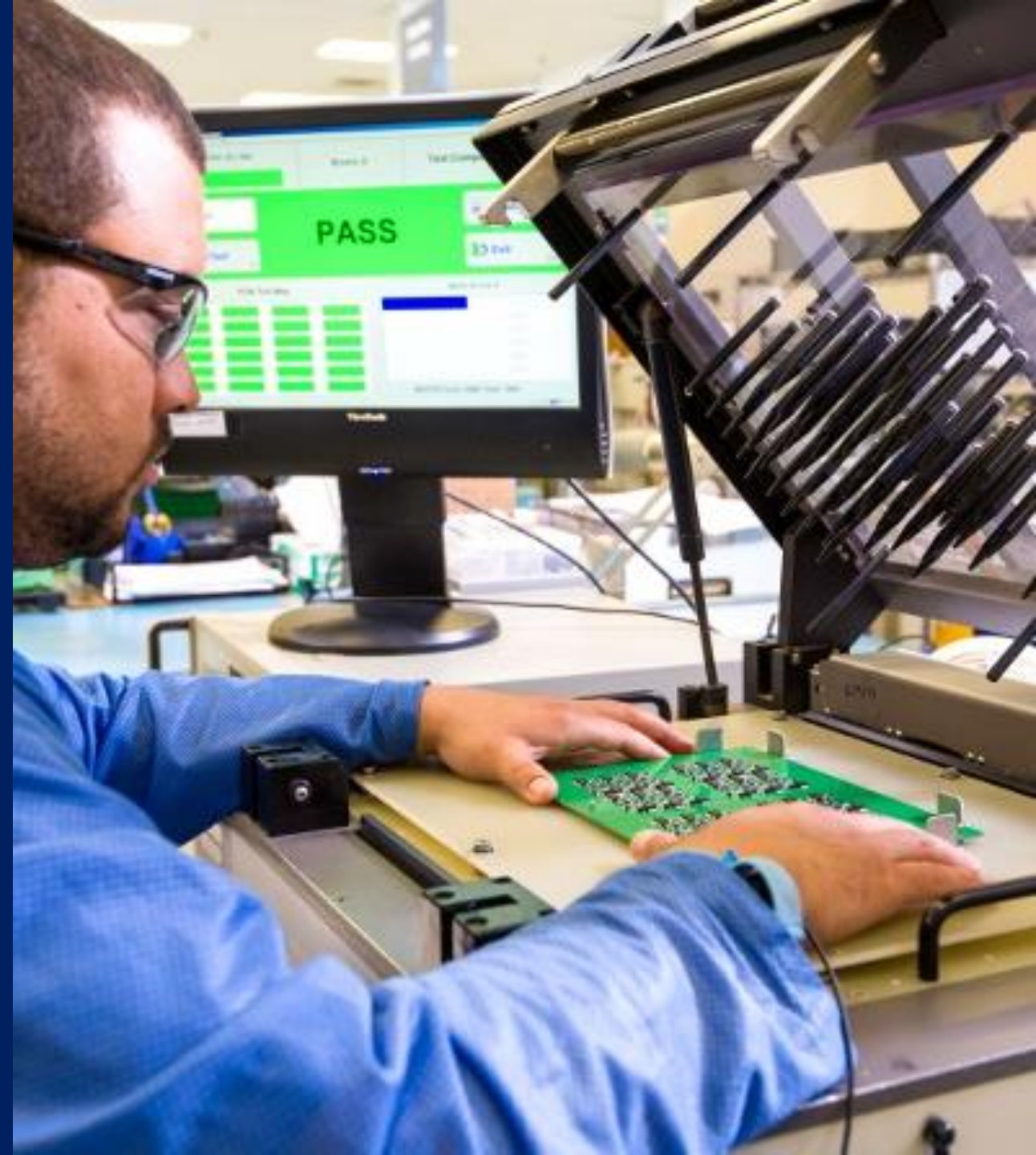
It all comes down to the strategy

- Company strategy
- **Test strategy?**



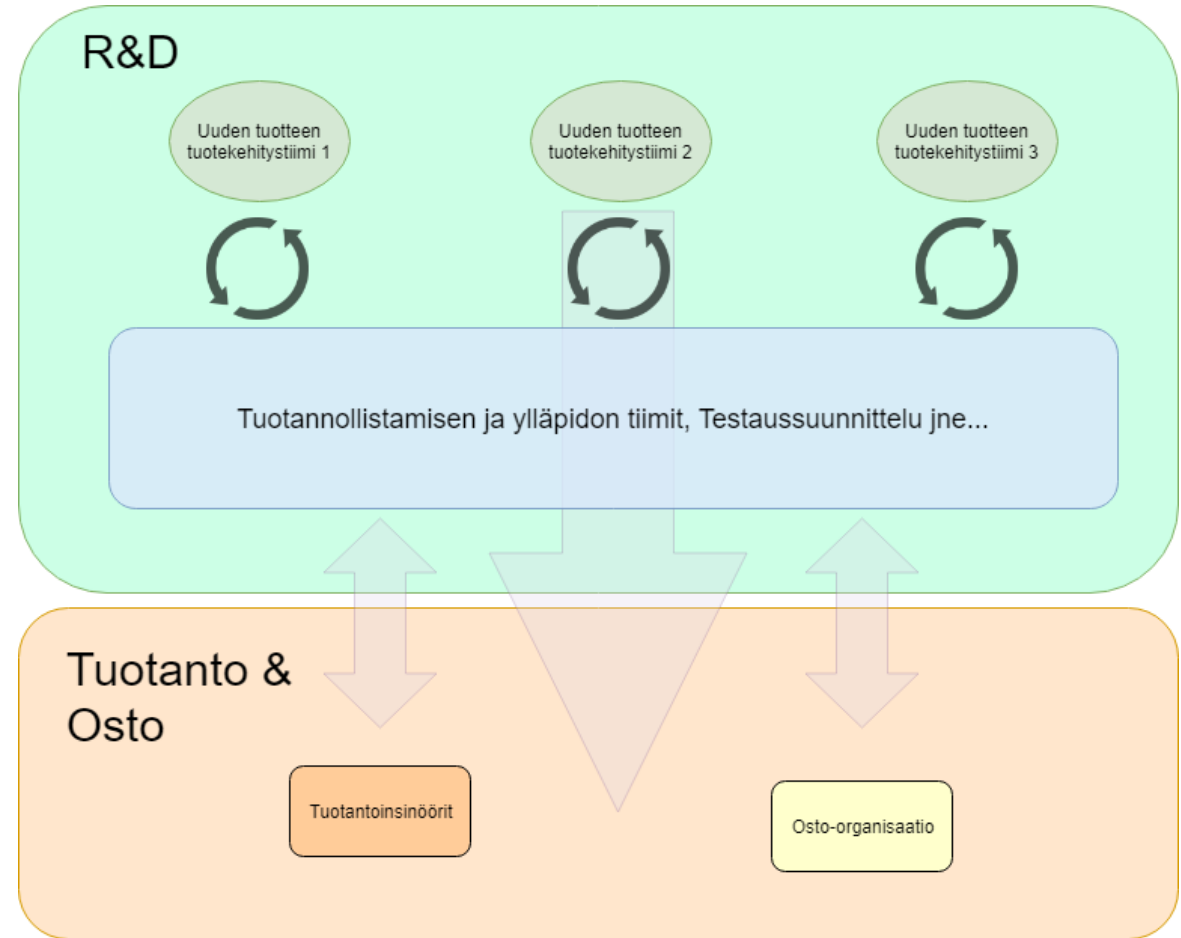
When forming the test strategy...

- Testing is considered as one of the most important quality control methods
- Testing is for **assuring** the quality not for making it
- Product testability is a requirement (Design for Testing)
 - Test coverage and test solutions
 - Continuous improvement



Benchmarks for defining the target state

- Test development is a part of product development process



Benchmarks for defining the target state

- Test development is a part of product development process
 - Subcontractors are used for test solutions
 - Standardized test methods and solutions
 - Significant investments in test solutions



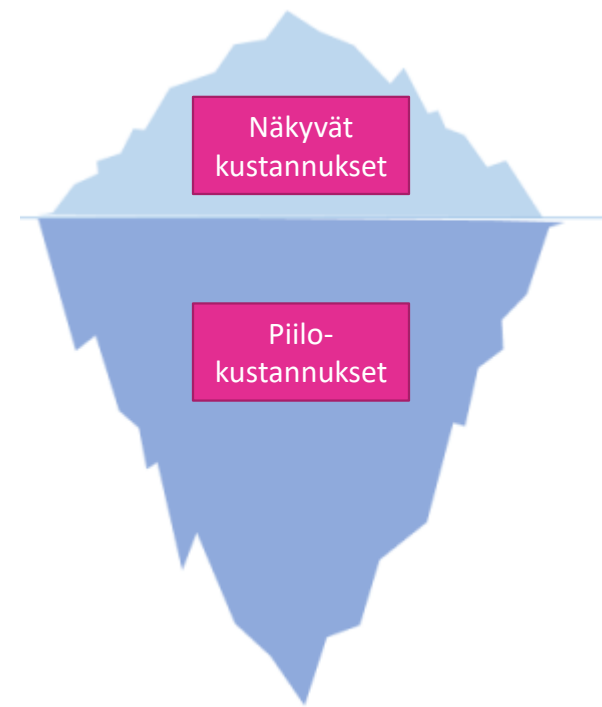
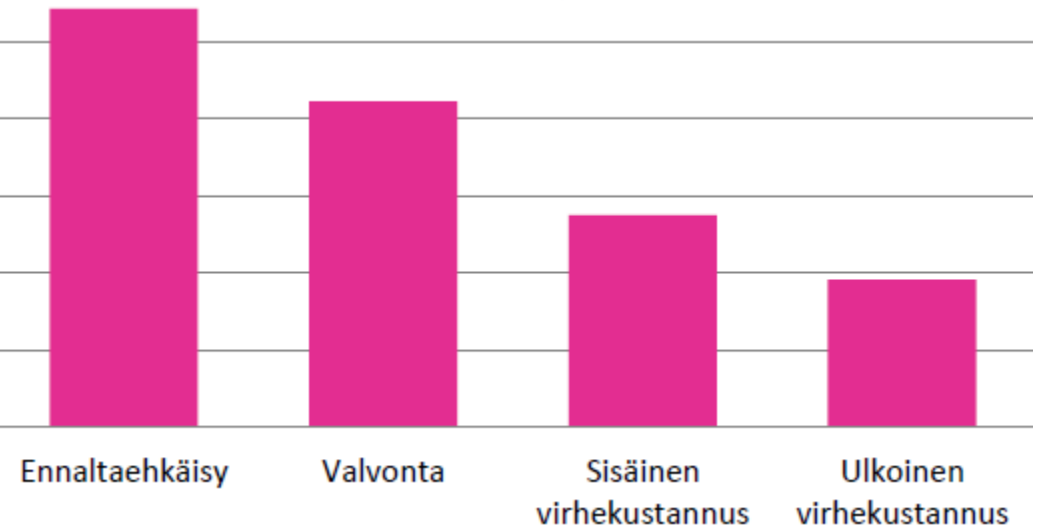
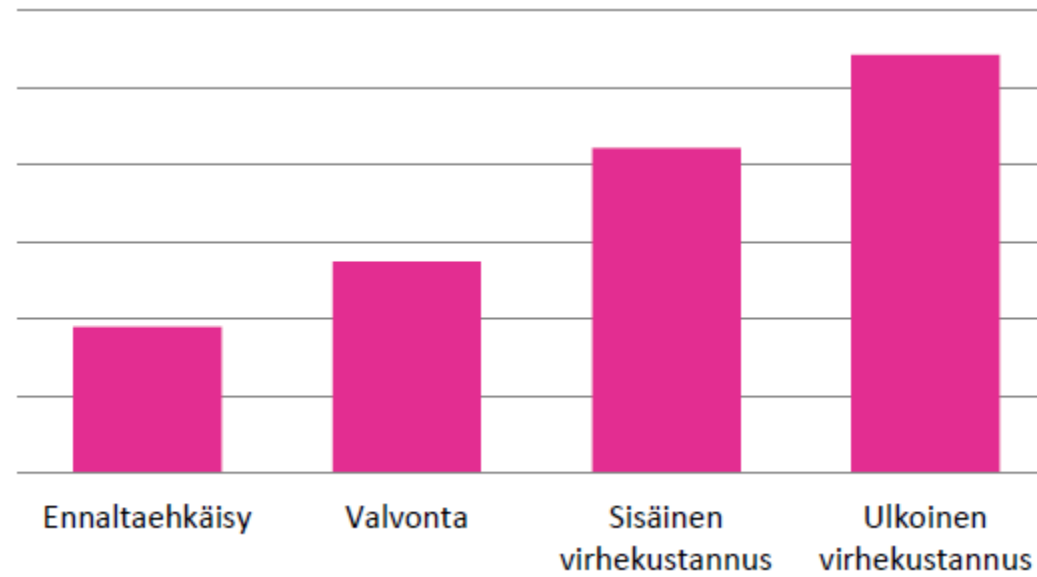
Current status of testing

- Test development operations are divided throughout the organization with little outsourcing
 - Product testability and test coverage is not a requirement in product development process



Know your numbers

- From fault costs to preventive costs



How to proceed?

- Accepting the current state
- Management should commit to enhanced test strategy
 - **Product testability**
- **Investments to test development and test solution outsourcing**



Lauri Anttila

+358406695547

Lauri.Anttila@Planmeca.com

