



The MEASURE project: Measuring Software Engineering

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Context and Objectives

Context:

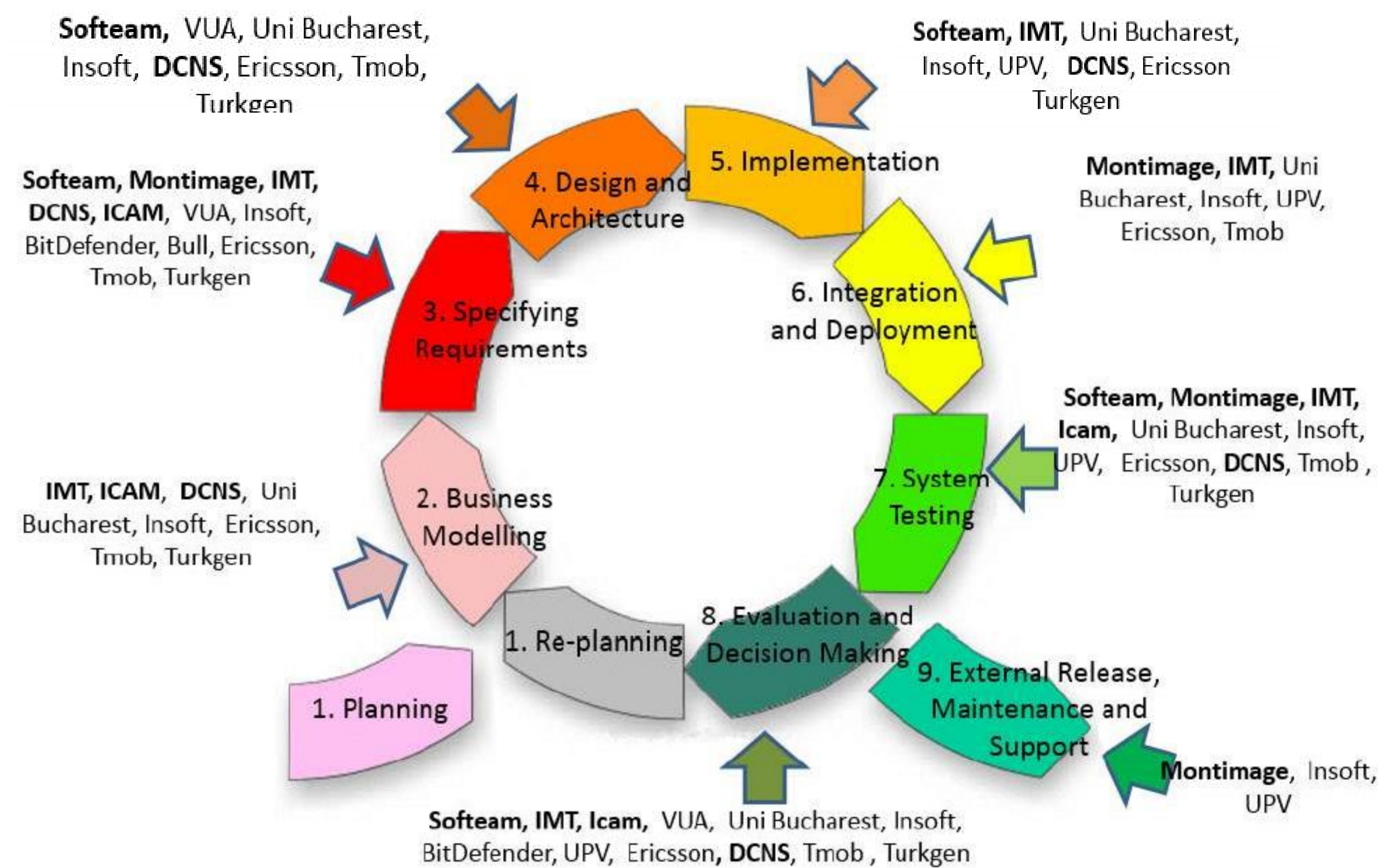
- High demand for cost-effectiveness and quality software from industry.
- Traditional metrics and evaluation methods are no longer sufficient.
- Advanced metrics and evaluation methods to cope with complexity.
- New tools are required to implement metrics in real industrial environments
- Need to analyze big amounts of data.
- High requirements for green computing techniques.

Objective: Increase the quality and efficiency, and reduce the costs and time-to-market of software engineering in Europe.

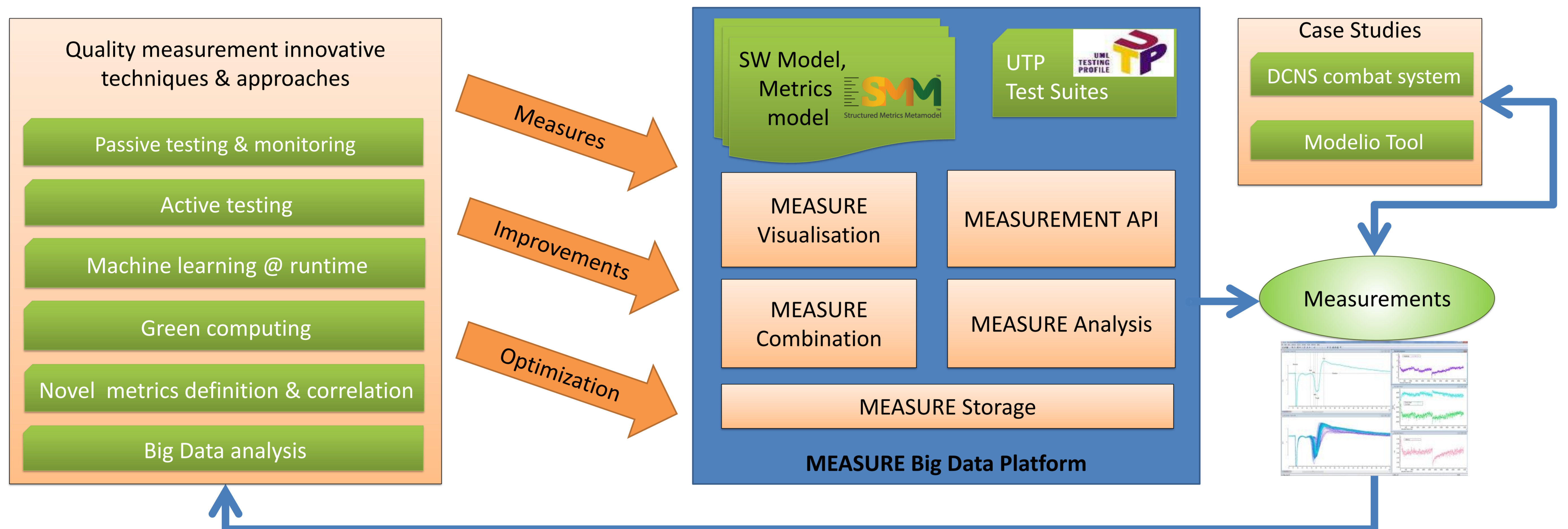
Innovation:

- A framework of techniques and tools to perform automated and continuous measurements.
- A tool set for advanced metrics providing new measures for high quality software.
- Big data analysis to collect, correlate and analyse the information coming from diverse sources, increasing the application scope of the metrics.
- Development of metrics to produce greener software.

Key selling points within ITEA3 context

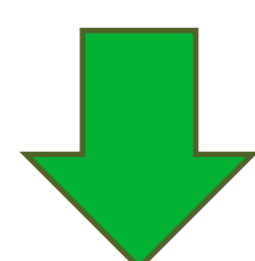


MEASURE Approach



Project idea description

- Define advanced metrics and methods to improve software quality.
- Provide performance measurements and data visualization to help decision making.
- Enable automated metrics application and measurement.
- Provide integrated tools, techniques and metrics within a global framework.
- Introduction of big data techniques to guarantee scalability and advanced metrics design.
- Study of green computing techniques to improve software production.



MEASURE will provide an advanced solution for developers, designers and testers during all phases of software lifecycle.

Real case studies

Case Study 1:

DCNS combat system

DCNS intends to optimize its software factory related to naval ships using better tools and methods and comprehensive metrics to pilot the development process.



Case Study 2:

Modelio Tool

Modelio UML Tool, developed by SOFTEAM, aims to improve the quality of its own design processes and implementation of its code. Modelio tool will provide measurements integrating input from all the development phases.

