

What if OEMs stopped demanding ASPICE?



Automotive SPICE® is a registered trademark of the Verband der Automobilindustrie e.V. (VDA)

Frédéric Fradet, Yohan Bourgoïn

2026, March 18th

About the presenters



Frédéric Fradet

Associate Partner @ Capjaya

ASPICE Competent Assessor

**Model Based Systems Engineering
Specialist & Trainer**

25 years of working experience



Yohan Bourgoïn

Associate Partner @ Capjaya

ASPICE Provisional Assessor

**CMMI Lead Appraiser for
Development**

28 years of working experience



Process Excellence for Software-Based Systems Engineering

Consulting firm founded in 2012.

Capjaya helps organizations improve software-based systems development by leveraging industry standards and best practices while preserving their engineering know-how.

What we do

Consulting & Coaching

Support engineering teams in structuring and improving their development processes

Process Assessments

Evaluate compliance and maturity against international engineering standards

Training

Develop teams' capabilities in systems and software engineering best practices

Core expertise

ASPICE

CMMI

MBSE

Agile Systems
Engineering

Industries

Automotive - Defense & Aerospace - Industrial Automation - Energy Management - Banking & insurance

What if OEMs stopped demanding ASPICE?

Would Automotive Suppliers still use
Automotive SPICE® for improving their
processes?



Agenda

- Context
- Process improvement
- Process improvement in ASPICE
- Wrap-up



ASPICE PAM: 2 intended use cases

Capability dEtermination: ASPICE



*“Automotive SPICE process assessment model (PAM) is intended for use **when performing conformant assessments** of the process capability on the development of embedded automotive systems.”*

Source: Automotive SPICE Process Assessment / Reference Model – 4.0

Process Improvement: ASPICE



*“This Automotive SPICE process assessment model contains a set of indicators to be considered when interpreting the intent of the Automotive SPICE process reference model. These indicators may also be used **when implementing a process improvement program.**”*

Source: Automotive SPICE Process Assessment / Reference Model – 4.0

While the first use case is primarily pulled by the OEMs the second should be pushed by the suppliers

OEMs influence the approach to using ASPICE



"ASPICE" is often perceived as a requirement to comply with



"ASPICE" is rarely perceived as a necessary process improvement approach



The processes in scope are pre-selected by the OEMs



Processes are rarely selected to support the achievement of improvement objectives



OEM requirements deal with achieving a capability level



The measure of capability levels obtained by process assessments has become a target



In automotive suppliers, Quality Engineers often have a strong focus on ASPICE



Visibility on compliance with internal processes tends to become secondary

OEM requirements towards ASPICE contribute to its large deployment within the automotive industry

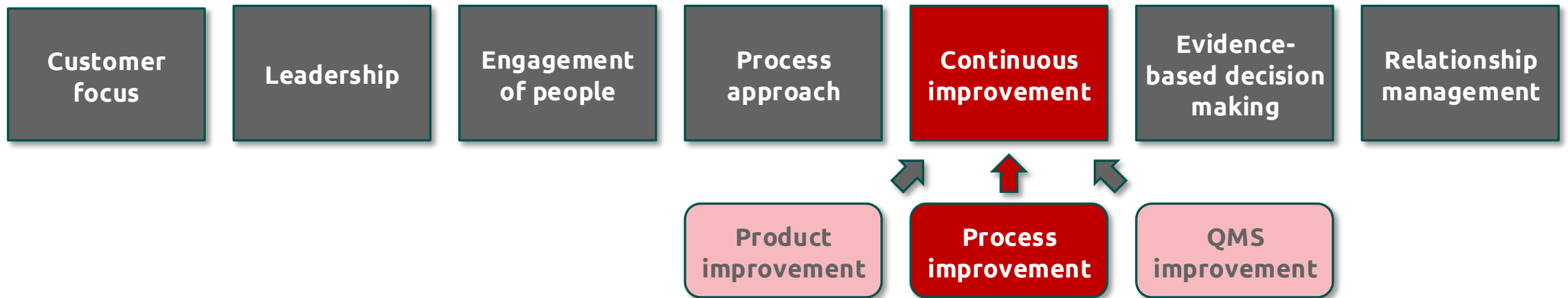
Agenda

- Context
- **Process improvement**
- Process improvement in ASPICE
- Wrap-up



Process improvement

IATF 16949 Quality Management Principles



Process improvement is a component of continuous improvement

Continuous improvement & Process improvement

Continuous improvement



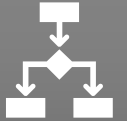
an overall and sustainable approach aimed at improving the organization's performance

For instance,

- Analyze assessment results
- Identify areas for improvement
- Follow an improvement plan

Continuous improvement is an organizational mindset often structured by PDCA cycles

Process improvement



Actions taken to improve the quality of the organization's processes aligned with the business needs and the needs of other concerned parties

Source: ISO33001

For instance,

- Reduce the time for reviewing requirements
- Improve the workflow to manage defects
- Improve the escalation mechanism

Process improvement is an operational activity

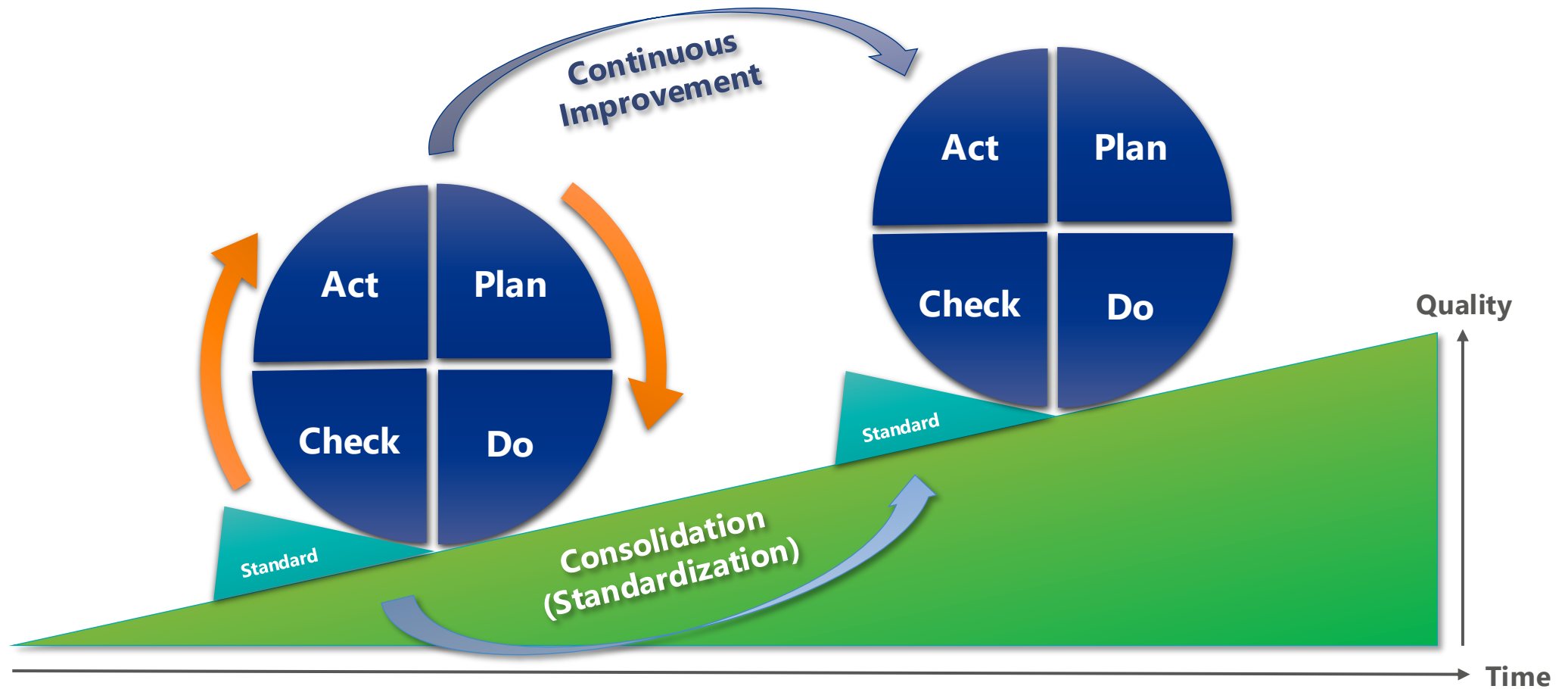
Continuous improvement

***“It is not necessary to change.
Survival is not mandatory.”***

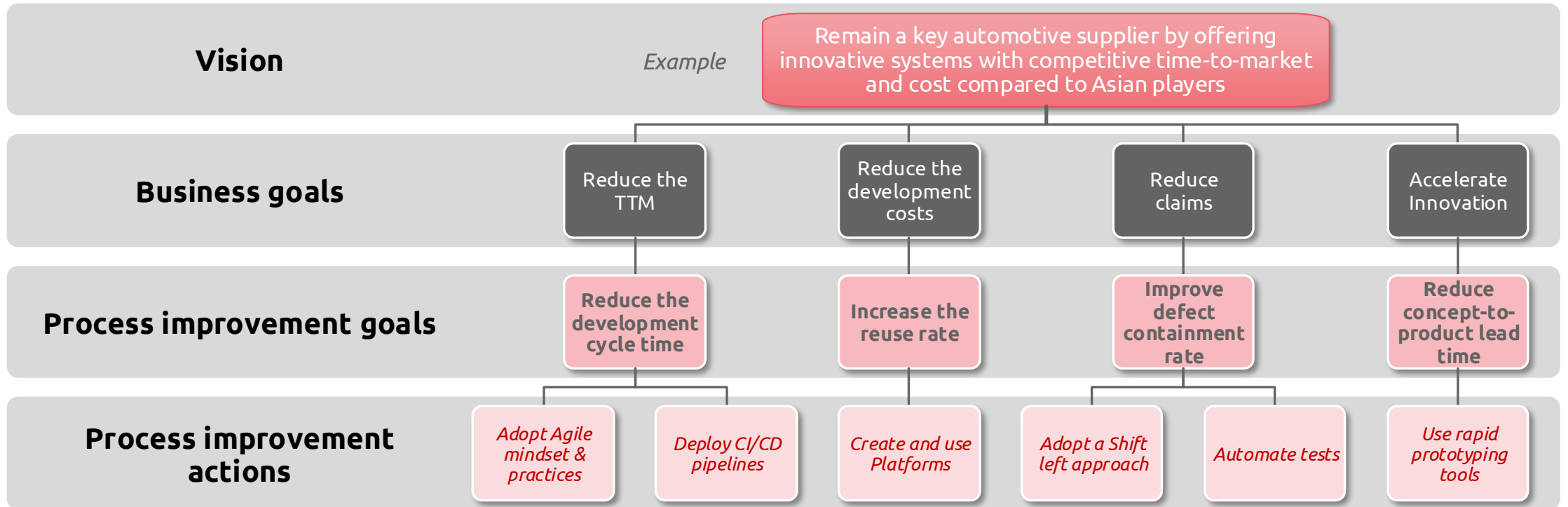
- W. Edwards Deming -



The Deming wheel

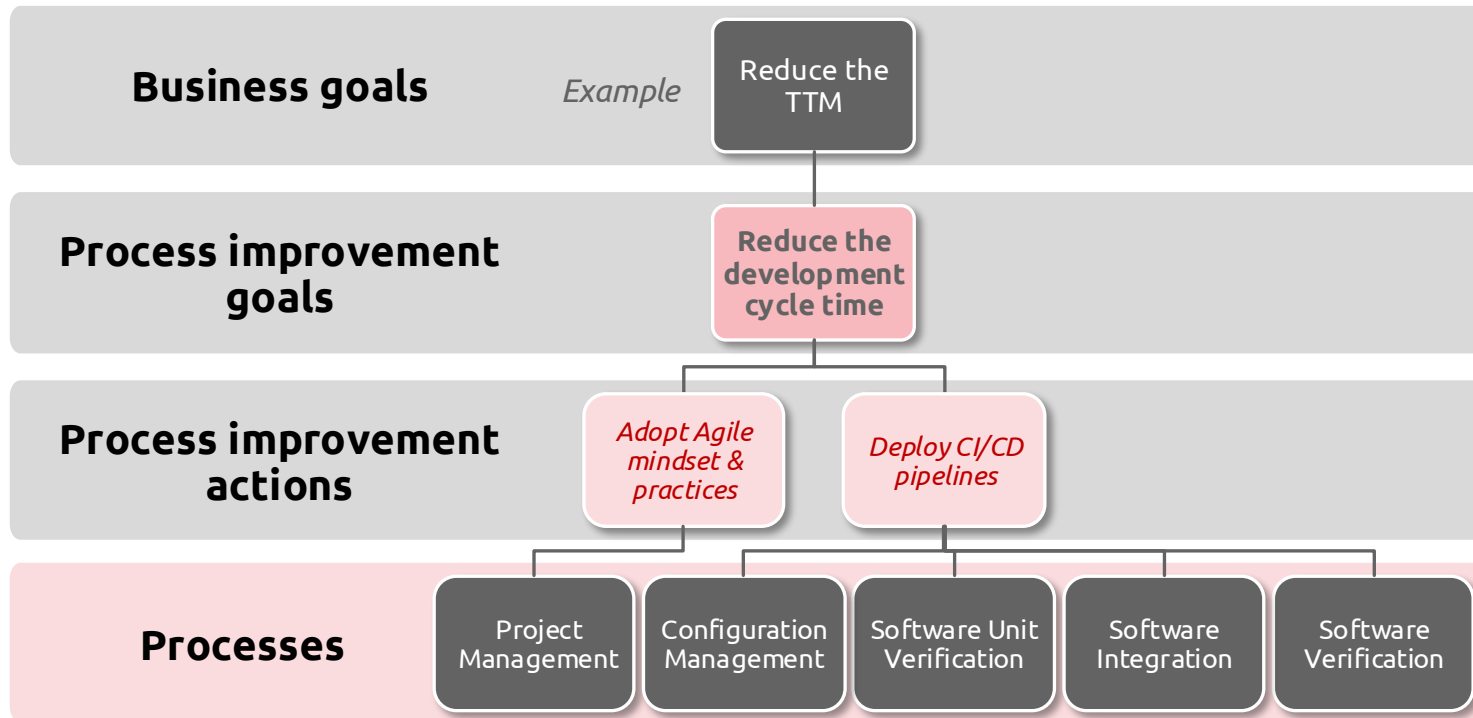


Process improvement goals



Process improvement goals are derived from the business goals (Hoshin Kanri)

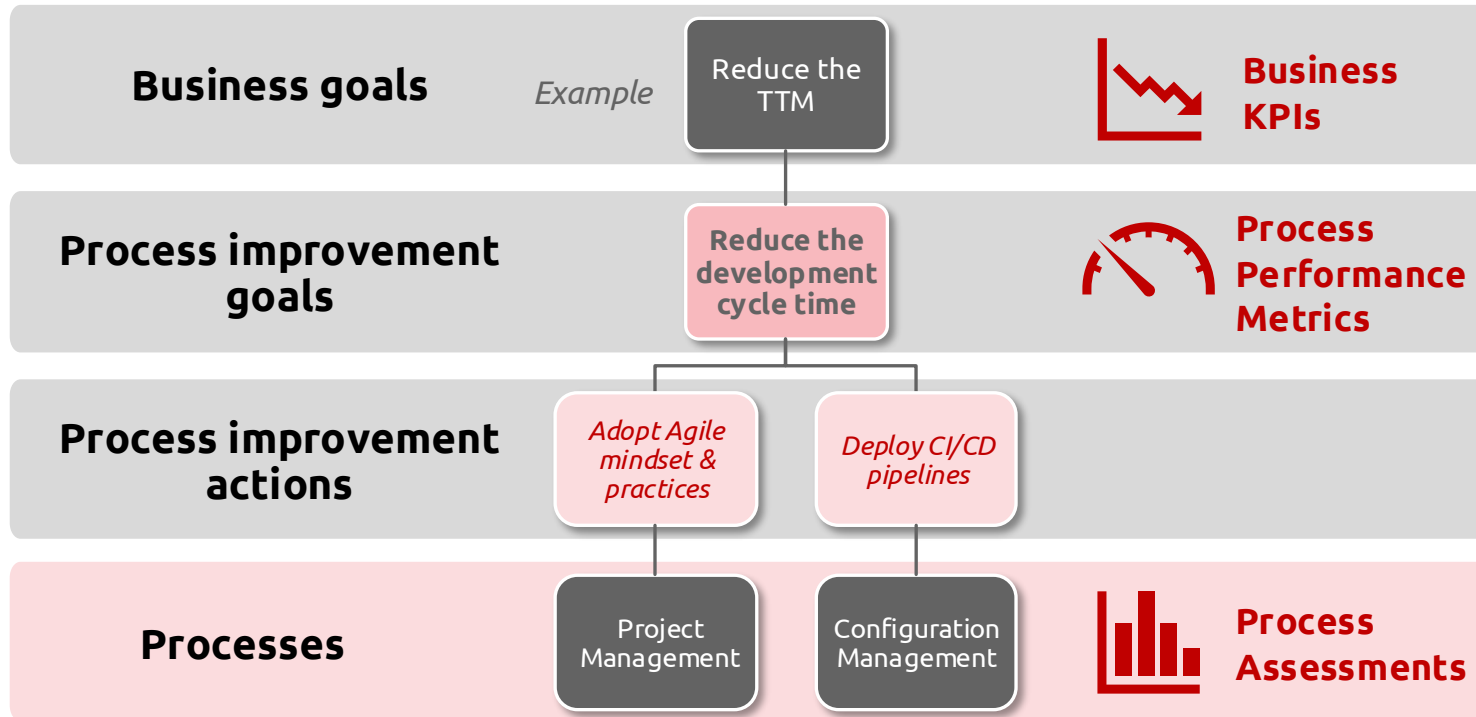
Process capability levels



- Processes are selected from the improvement actions
- Capability levels provide a framework for improving processes in a sustainable way
- They give insight into:
 - process performance (CL1)
 - process control (CL2)
 - process institutionalization (CL3)

**ASPICE Capability levels do not directly improve business performance;
they create the organizational conditions that enable it to improve**

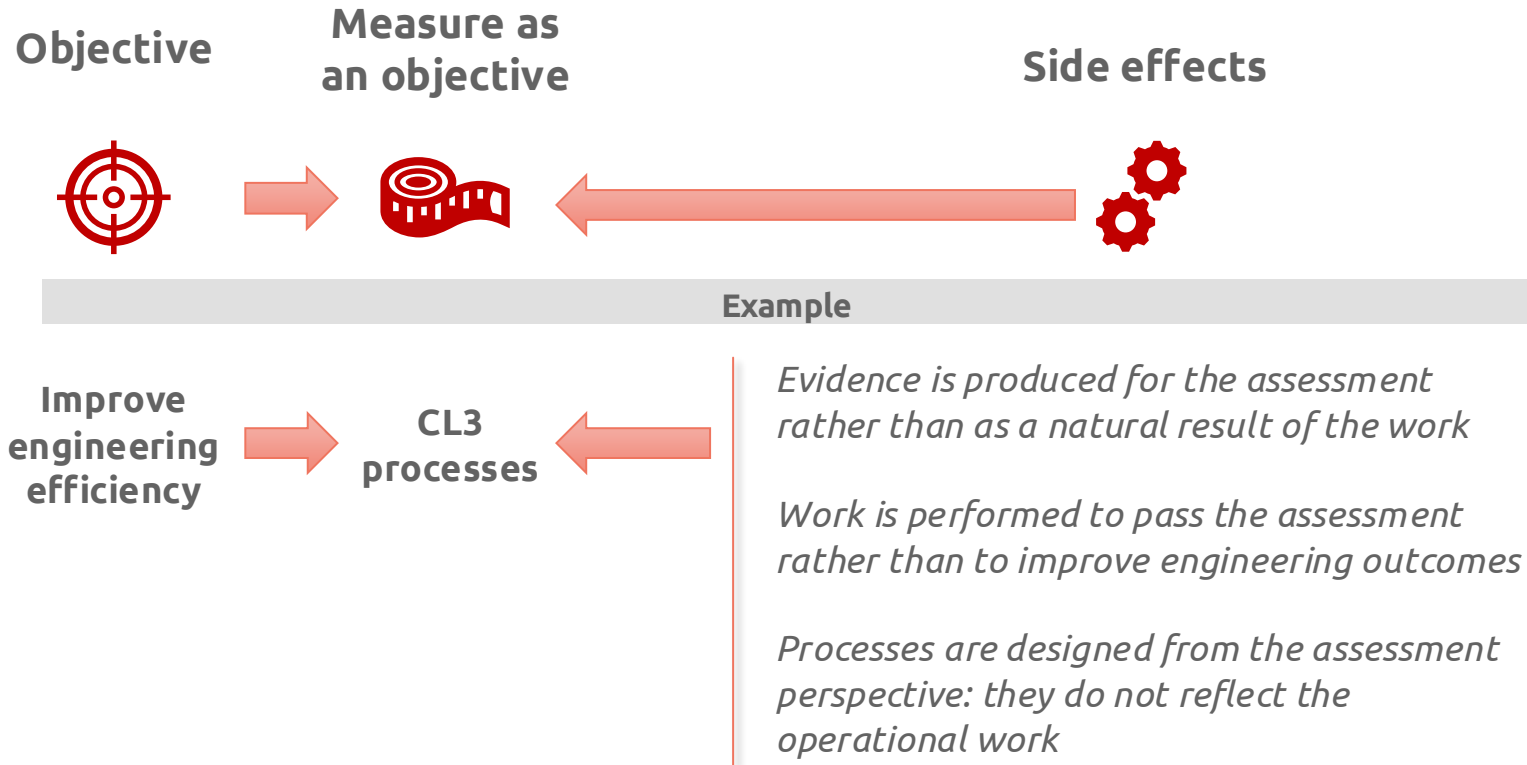
Goals achievement



- A CL3 process means that the process
 - achieves its outcomes,
 - is planned, monitored and controlled
 - is based on company standards
- A CL3 process does not automatically produce great engineering
 - A process can achieve CL3 and
 - be slow, heavy, costly ...

Performance Metrics are used to evaluate the achievement of improvement goals
Process Assessments are used to measure process capability

Capability levels as objectives



“When a measure becomes a target, it ceases to be a good measure”

Goodharts'law

Treating capability levels as objectives risks losing sight of the real process improvement goals

Agenda

- Context
- Process improvement
- **Process improvement in ASPICE**
- Wrap-up



Process improvement in ASPICE

○ Does ASPICE cover the following properties of Continuous Improvement?



The improvement cycles (e.g., the Deming wheel)



The standards (i.e., the wedge of the Deming wheel)



The business goals



The process improvement goals

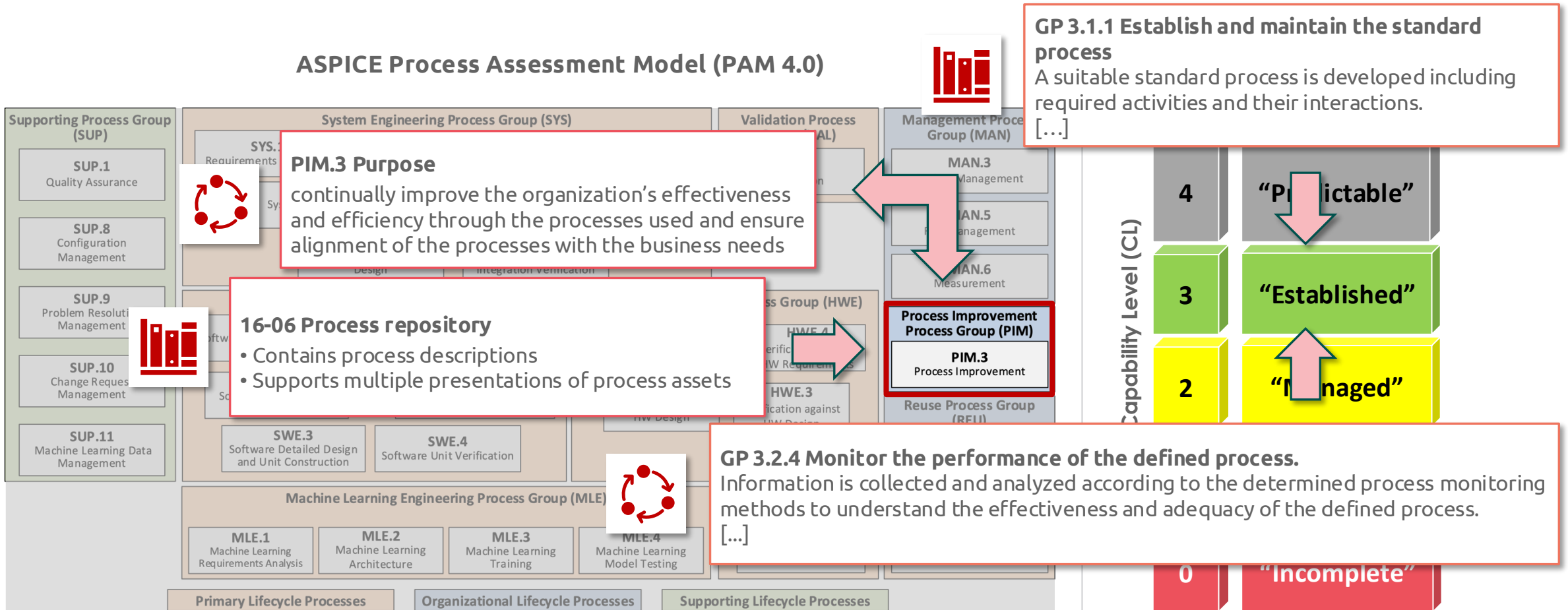


The metrics that help evaluate goals achievement

○ How can ASPICE assessments support Continuous Improvement?



Page 10 of 10



Process improvement in ASPICE

ASPICE Process Assessment Model (PAM 4.0)

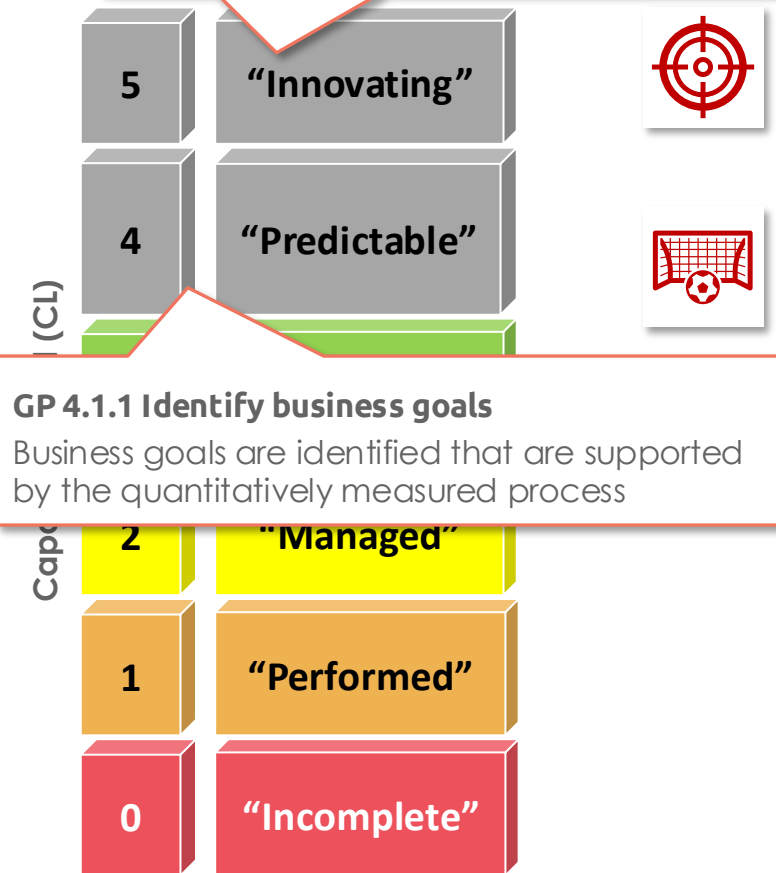
MAN.6 Purpose

Collect and analyze data relating to the development results and processes implemented within the organization and its projects, to support effective management of the processes.

PIM.3.BP3 Establish improvement goals

Analyze the current status of the existing processes and establish improvement goals

GP 5.1.1 Define the process innovation objectives for the process that support the relevant business goals.
New business visions and goals are analyzed to give guidance for new process objectives and potential areas of process innovation



GP 4.1.1 Identify business goals

Business goals are identified that are supported by the quantitatively measured process

ASPICE assessments

Class	Purpose	Instances	Confidence level
1	The assessment results are suitable for reliable comparison across different organizations (e.g., benchmarking)	≥ 4	High
2	The assessment results are suitable for comparisons across an organizational scope (e.g., business units or product lines)	≥ 2	Medium
3	The results may indicate critical opportunities for improvement on key areas of process-related risk <i>Note: Class 3 assessments are typically not intended for organization-wide evaluations</i>	not specified	Low

Source: ISO 33002

- **Automotive SPICE VDA Guidelines (§8.1):**
 - The assessment is classified as "Class 3"
 - The assessment is not intended to evaluate organizational maturity
- **Intacs® Guideline Organization SPICE:**
 - Class 1
 - At minimum, 2 "focus projects"
 - At minimum, 4 instances, including the focus projects

Assessment classes indicate the degree of confidence that the results of an assessment are representative of process performance across the organizational scope of the assessment

Agenda

- Context
- Process improvement
- Process improvement in ASPICE
- **Wrap-up**



2 approaches based on ASPICE

Supplier Quality Assurance

Processes in scope

They are selected by the OEM to:

- ensure product quality
- get confidence about supplier's capability to fulfill their commitments
- obtain visibility on project progress

Capability Levels

They are set by the OEM as a target to achieve

Assessments

They are conducted on a single project (Class 3)

The Organizational Unit is the project

They are used for supplier selection and during execution

Focus

Project

Continuous Improvement

Processes in scope

They are selected from the Process Improvement goals to support the business goals achievement

Capability Levels

They provide a framework for sustainable process improvement by establishing stable and capable processes

Assessments

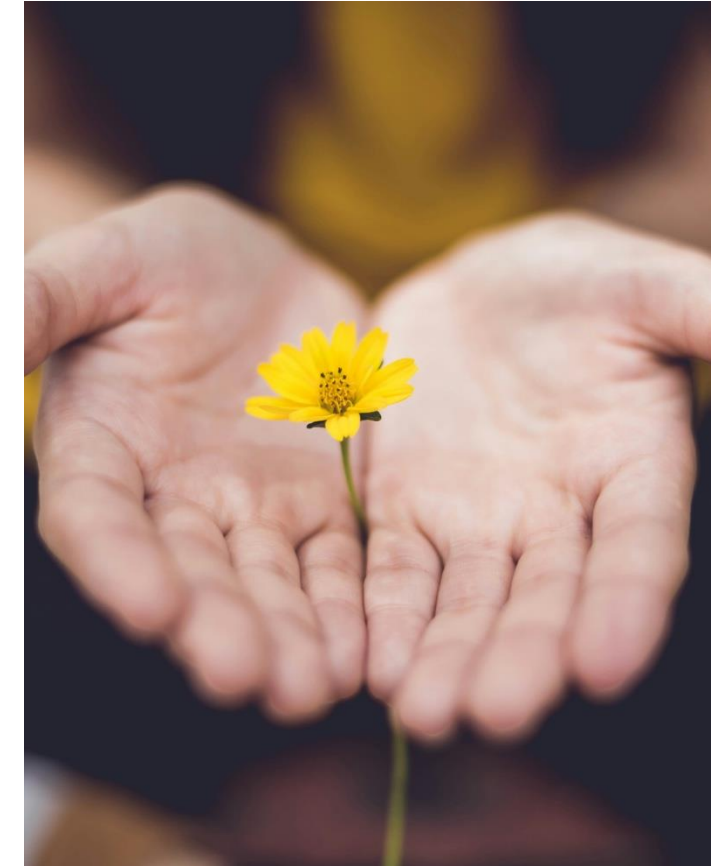
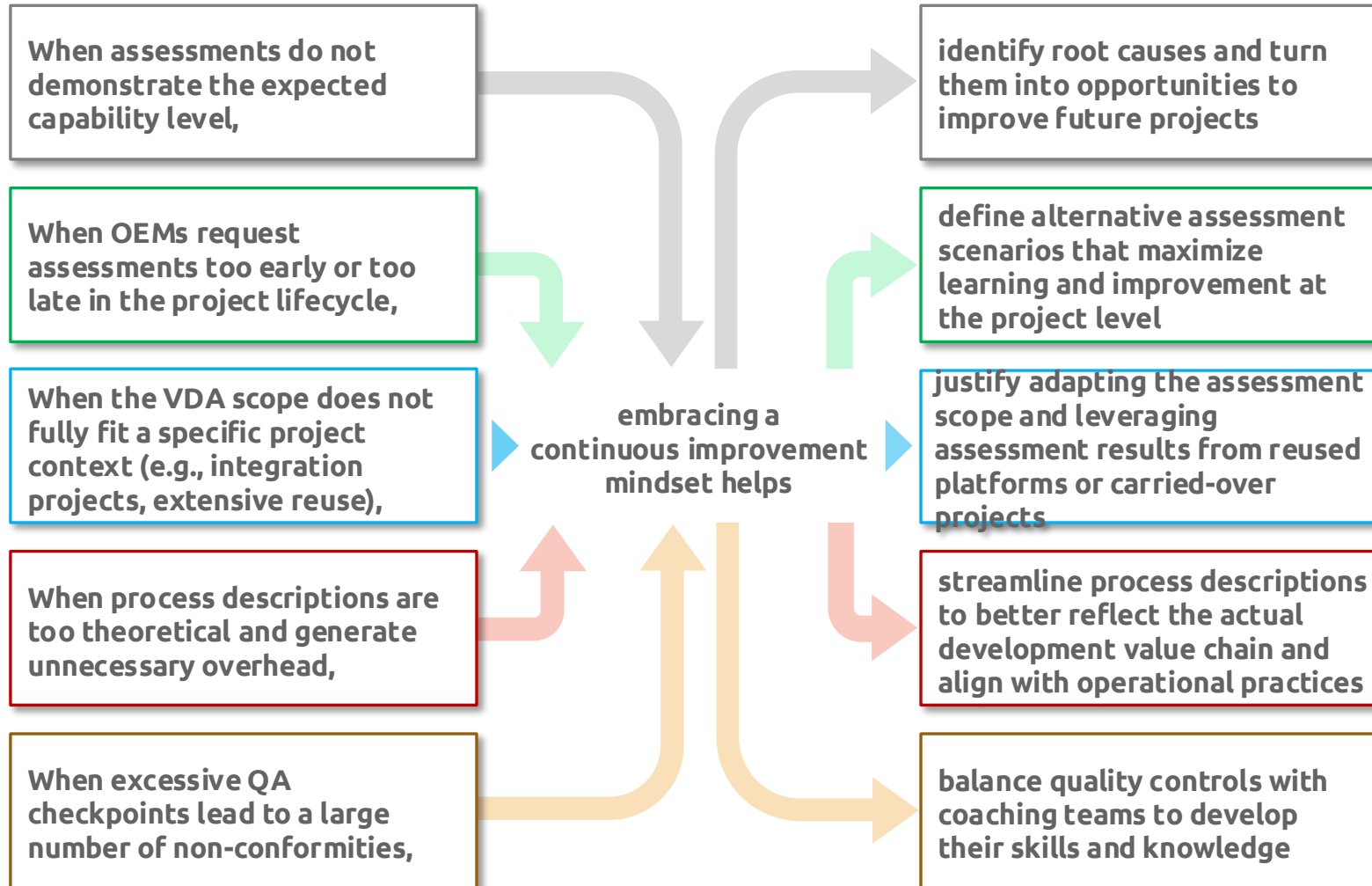
They are conducted on several projects (Class 1 or 2) to understand the organizational maturity, get more insight about the deployment of the practices in the organization and their variability

The Organizational Unit is a whole company, a business unit, a department...

Focus

Organization

Enhanced “Supplier QA” approach



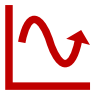
Towards Engineering Excellence with ASPICE



Establish CL3 processes across the VDA scope as a foundation



Define process improvement goals aligned with business goals



Use metrics to monitor progress and measure business impact



Establish a process improvement initiative sponsored by senior management



This approach sustains project-level efforts to achieve CL3 and restores the meaning of Automotive SPICE for engineering teams



*We help companies comply with Automotive SPICE®
by embracing a continuous improvement mindset*

