

PROCESS IMPROVEMENT_7

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ASPICE - Automotive Software Process Improvement and Capability dEtermination

Process Assessment

- A method for measuring process capability
- Analysis of processes
- Understanding the current situation
- Comparison with best practices, identify risks
- Achieving long-term efficiency and product quality

Planning

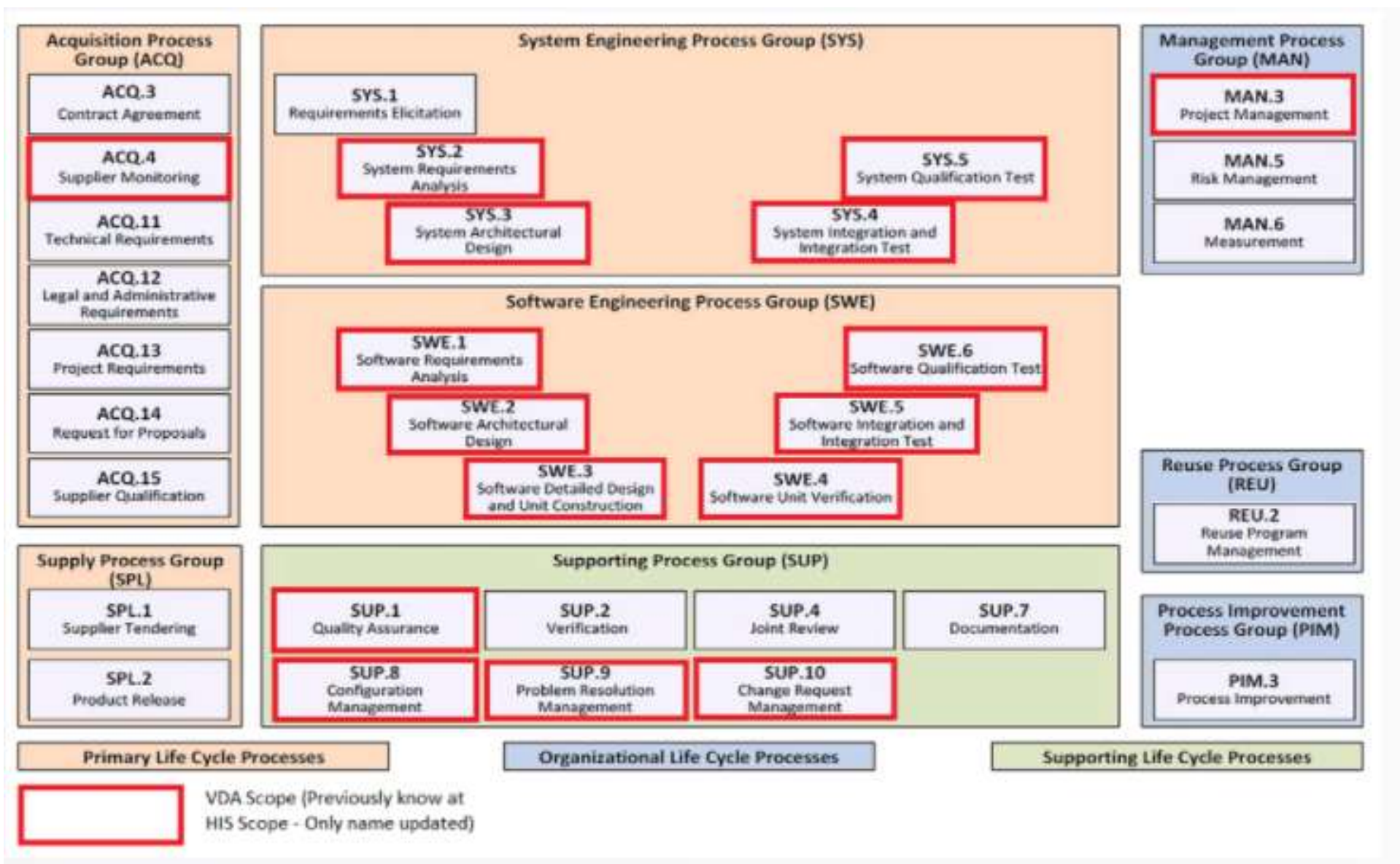
- What? (ASPICE, ISO...)
 - what is the goal? – what do we want to do and why? – what are the technical parameters?
- How? (V-model, tools...)
 - Tools, systems, best practices, methods, metrics, processes, actors, competence
- Do
 - tailoring

Process assessment

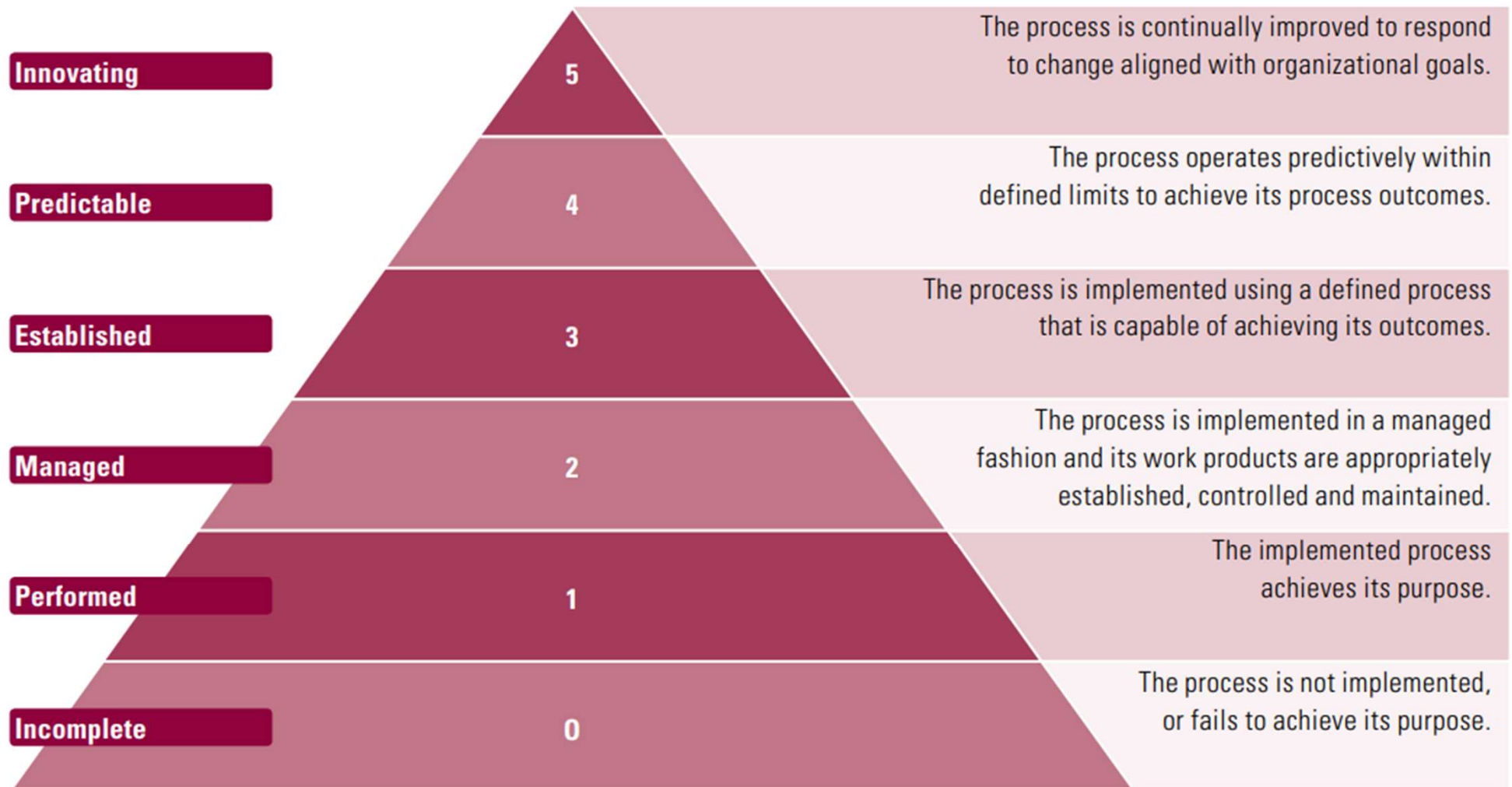
- ASPICE, ISO/IEC 330xx, ISO/IEC 15504
- Product development in focus
- Analyzes in detailed development processes
- Assessment according to 6 CLs, no certificate
- Variable target areas

Audit

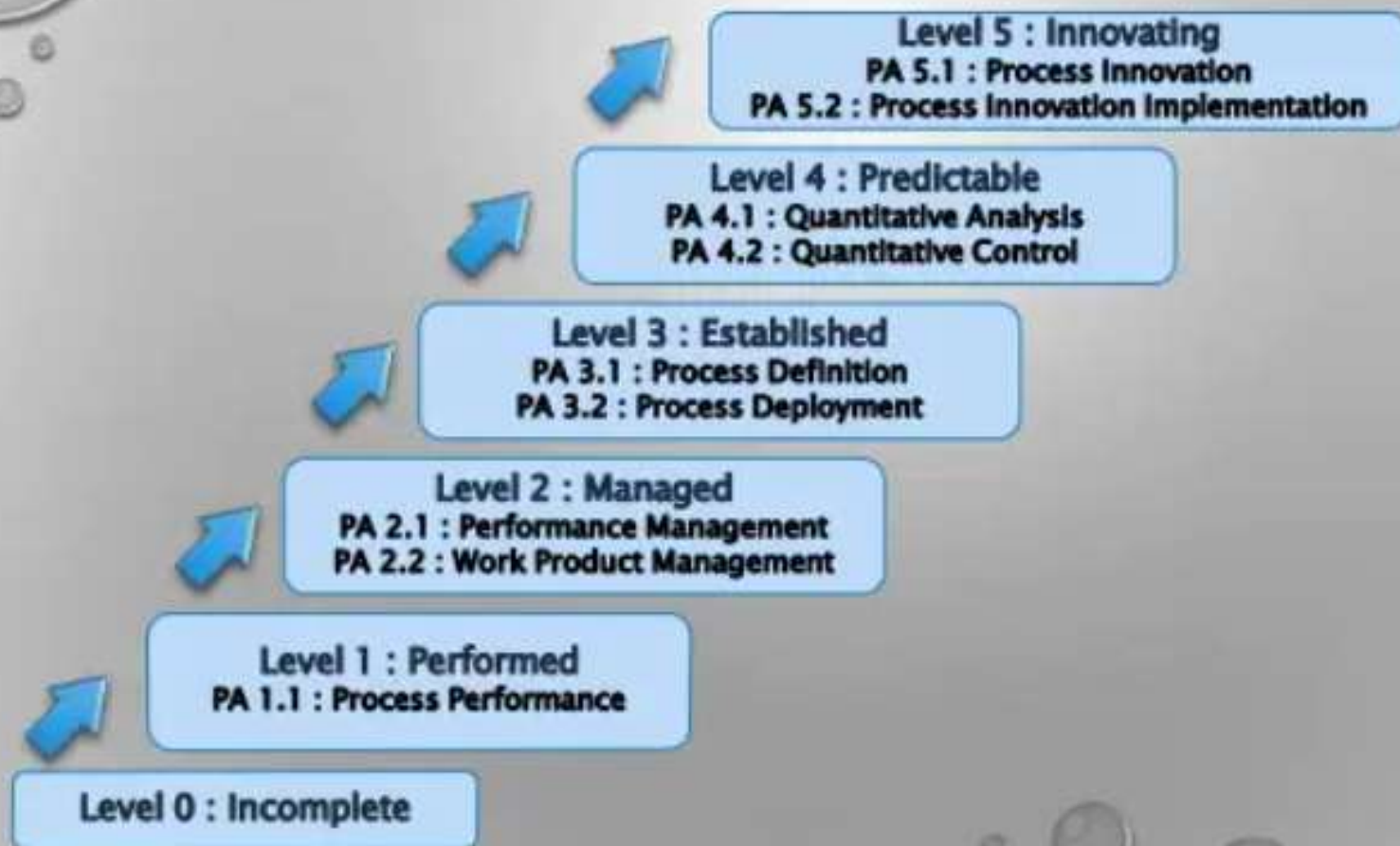
- IATF 16949, ISO 900x
- Focus on the entire company
- The goal is more of a general overview
- There is a certificate, you can fail
- The target area is given



Forrás: <https://www.tuleap.org/resources/success-stories/jtekt-achieving-automotive-spice/>



CAPABILITY LEVELS & PROCESS ATTRIBUTES



Forrás: <https://www.slideshare.net/snavali09/introduction-to-aspice>

Evaluation

N	Process attribute <i>not</i> achieved	0 to \leq 15% achievement
P	Process attribute <i>partially</i> achieved	> 15% to \leq 50% achievement
L	Process attribute <i>largely</i> achieved	> 50% to \leq 85% achievement
F	Process attribute <i>fully</i> achieved	> 85% to \leq 100% achievement

Structure

- **BP: Best practice**
 - 1. CL (PA.1.1.)
 - Process specific questions
- **GP: Generic practice**
 - From 2. CL
 - Generic, same questions

Evaluation

- BP-GP→PA→Level
- Based on evidences
- Rules

BP1	L	PA1.1=L
BP2	L	
BP3	F	
BP4	P	
BP5	L	
BP6	L	

GP2.1.1	L	PA2.1=F
GP2.1.2	F	
GP2.1.3	F	
GP2.1.4	F	
GP2.1.5	F	
GP2.1.6	L	
GP2.1.7	F	

	PA1.1	PA2.1	PA2.2.	PA3.1	PA3.2	
A folyamat	F	F	F	F/L	F/L	CP3
B folyamat	F	F/L	F/L			CP2
C folyamat	F/L					CP1

GP2.2.1	L	PA2.2=F
GP2.2.2	F	
GP2.2.3	F	
GP2.2.4	F	

Assessment structure

- Assessor team:
 - Lead assessor
 - Co-assessor
 - Interviewee
- Felkészülési csapat:
 - Coordinator
 - Consultant
 - Interviewee



Assessment structure

- **Planning**
 - Project selection and training of team members
 - What are the target areas?
 - Appointment of target area managers
 - Schedule
- **Preparation of an assessment plan – Agenda**
- **Assessment**
 - Assessment team introduction, opening
 - Presentation of team and project
 - Evaluation of processes
 - Feedback presentation
 - Assessment report (weaknesses, strengths, tips, evaluation)

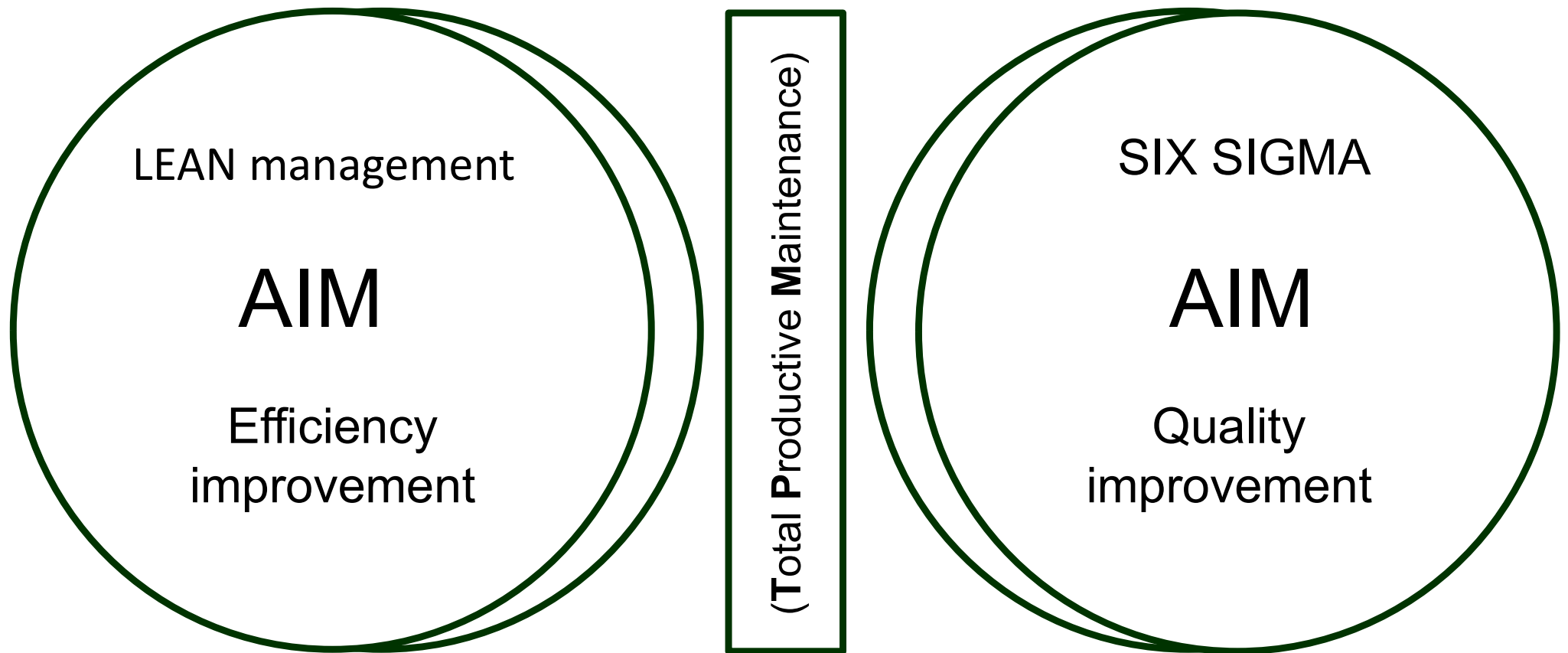
Assessment „types“

- Self assessment
 - Consultation, no assessor
- Gap Analysis
 - Organized, with assessors
 - Target to prepare the team for the assessment
- Internal Assessment
- External Assessment
 - Customer presence/communicate the result
 - Independent assessor team

PAM – Process Assessment Model

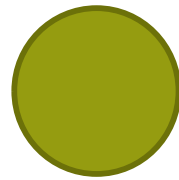
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Management paradigms in production

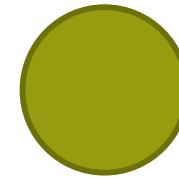


All refer to the (same) process!

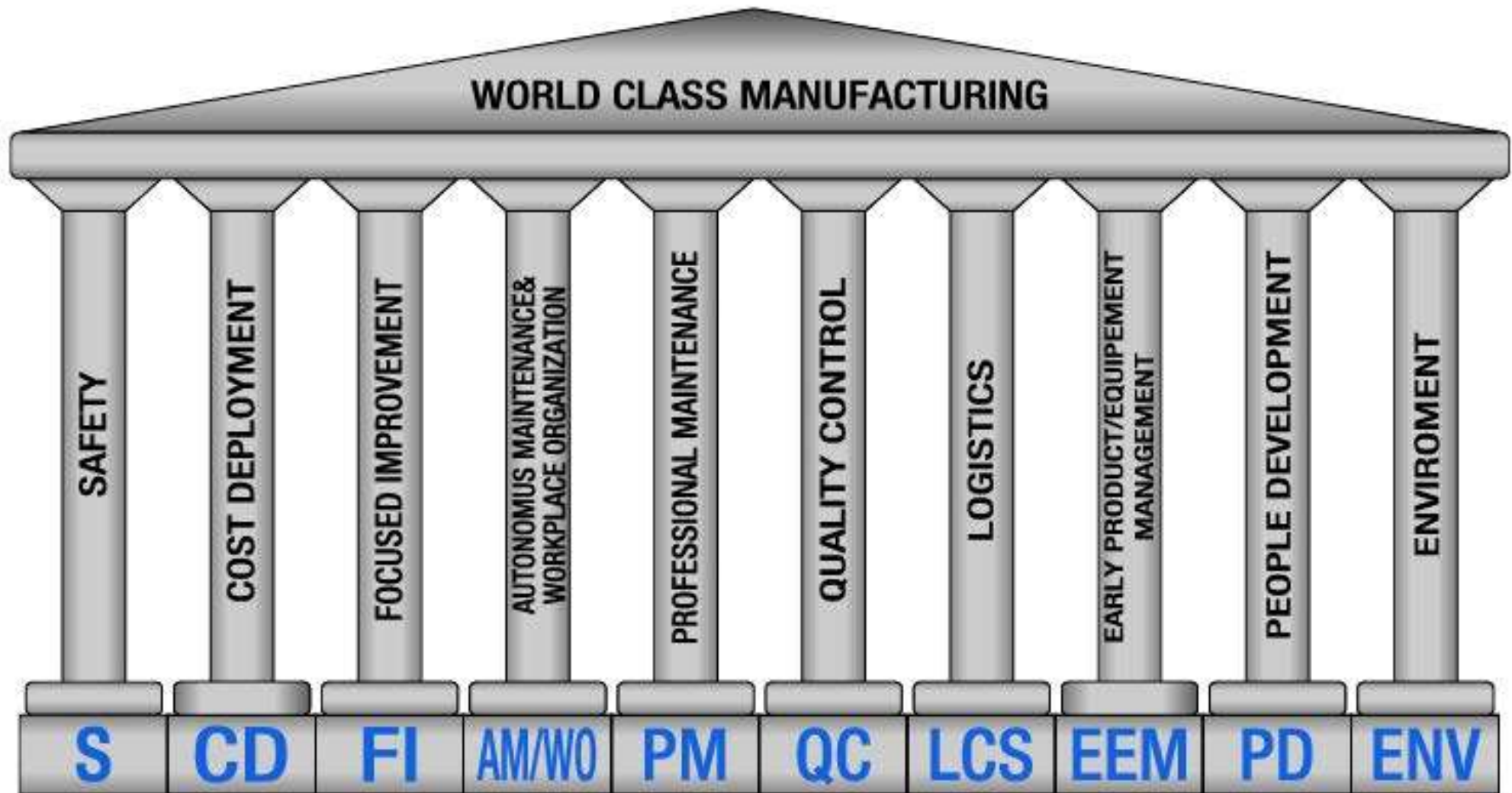
LEAN



TQM

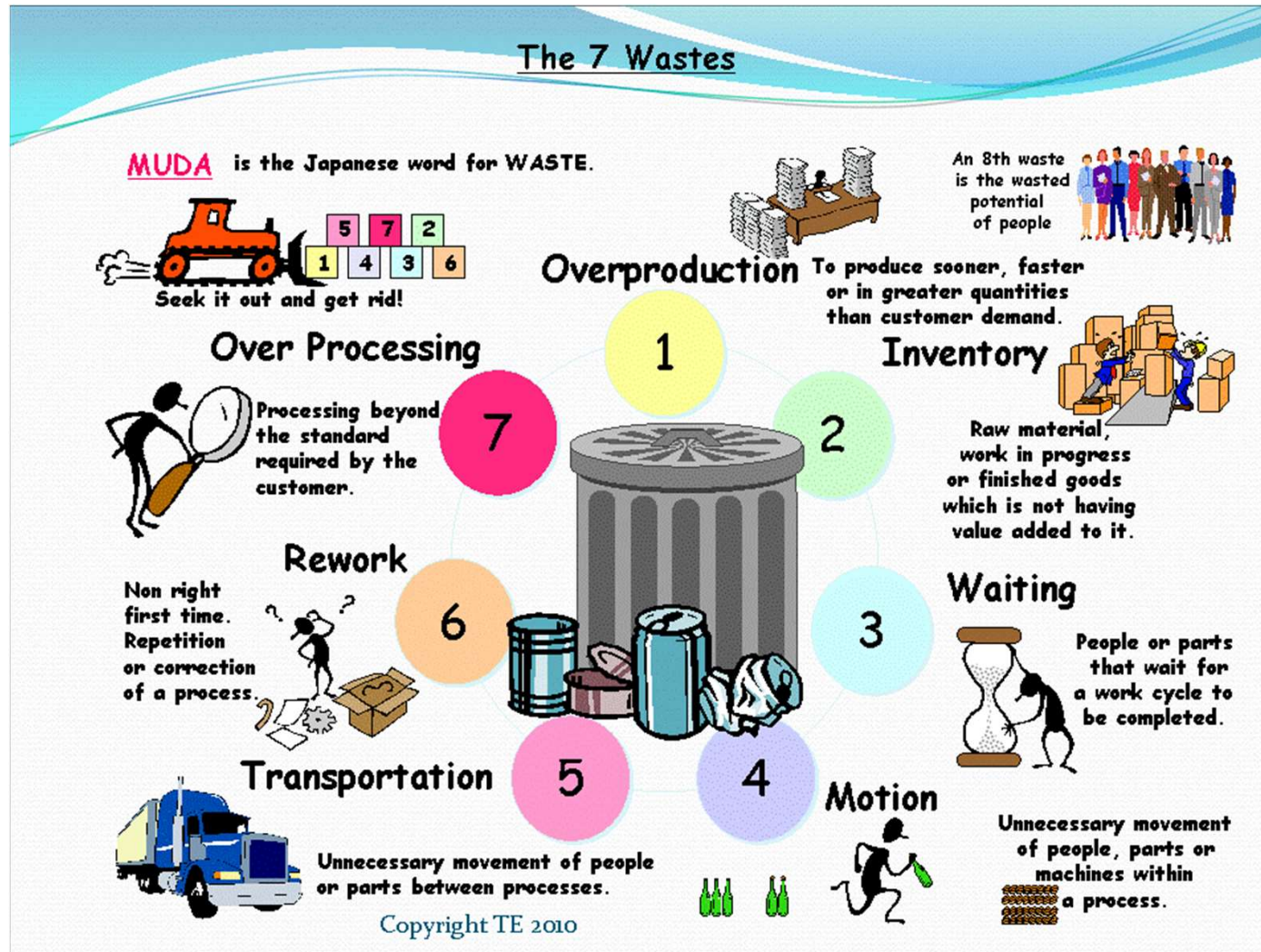


TPM



Industry 4.0

LEAN



World Classic Manufacturing - WCM

The WCM targets:

1. optimizing plant performance
2. optimizing product quality
3. optimization of management and administration processes
4. improving the quality of the work process
5. systemic development of the employees concerned
6. strengthening labor protection
7. improving health and environmental protection



THANK YOU FOR YOUR ATTENTION

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