



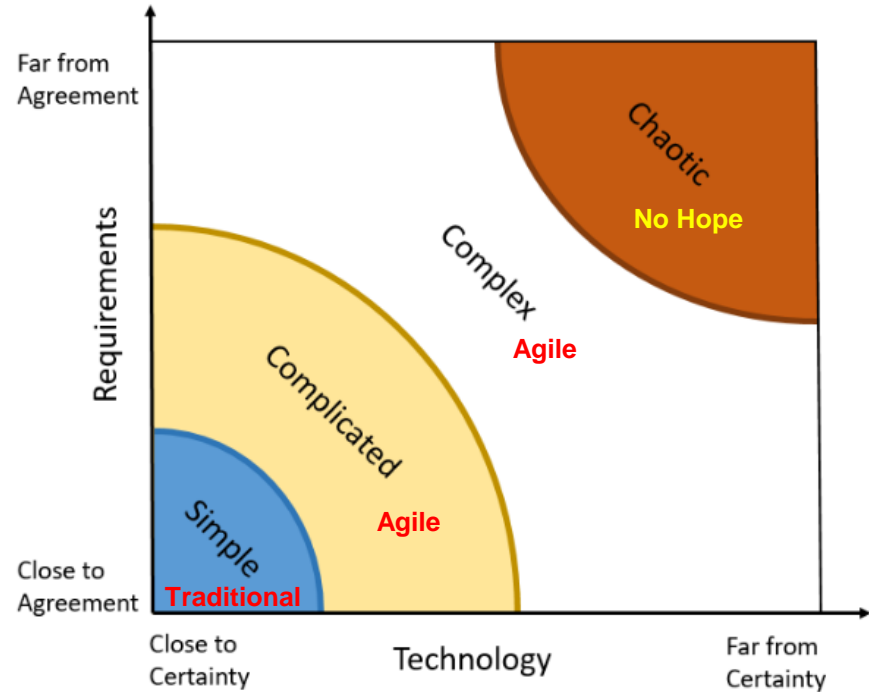
Agile Automotive PEP 2018

Agile Subcontracting and Future Collaboration Models

Herbert Deckenbach, Continental AG

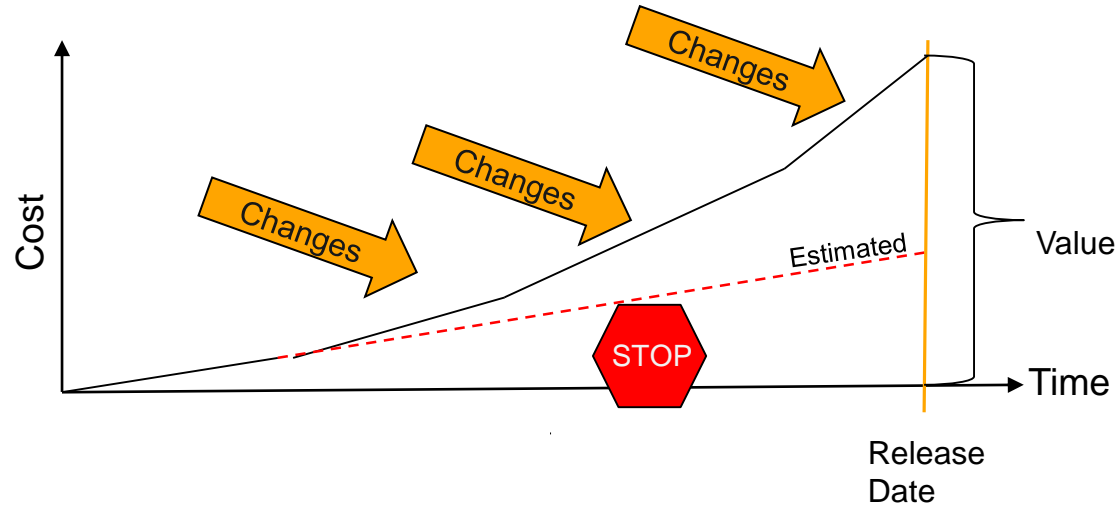
Do we really need agile collaboration models with our supplier?

- › Everyone knows what to do
→ Traditional
- › New technology or new product
→ Agile
- › Weak idea, but no experience, neither what to do nor how to do
→ Agile
- › Neither requirements nor known technology
→ No Hope



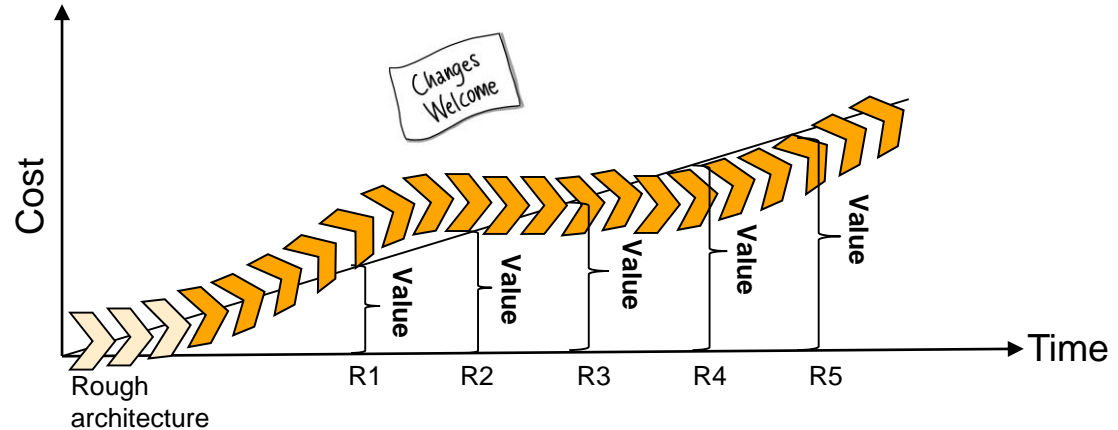
Typical traditional development run

- › Changes increases the cost
- › Value added at the end of project
- › No one can estimate the real development costs
- › No value created when the project will be stopped



Value driven development

- › Value added after each sprint/release
- › Small initial effort for rough architecture
- › Changes welcome to improve the results
- › Project is stopable after each sprint/release



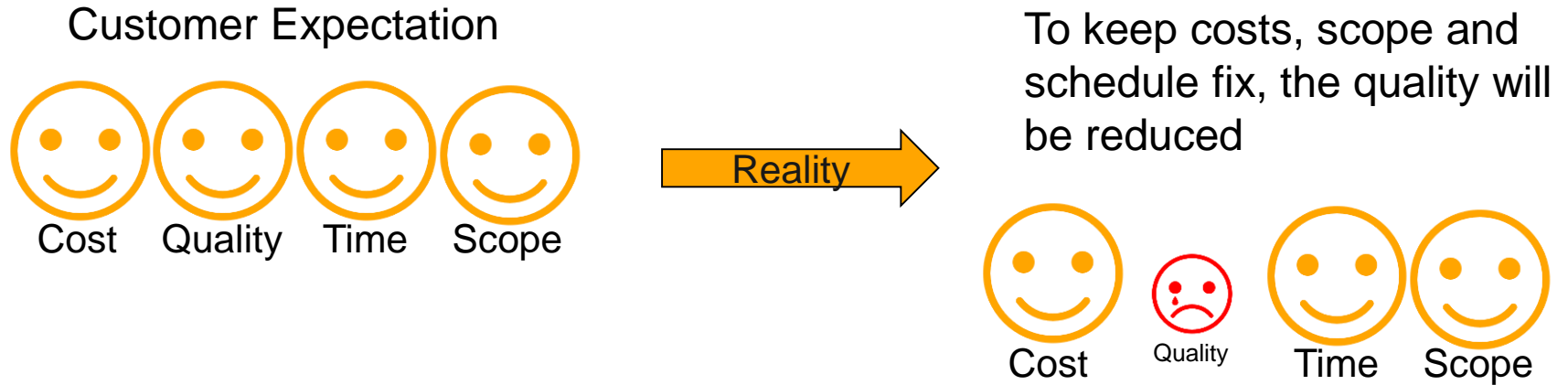
Do we really need agile collaboration models with our suppliers?

YES

- › Functionality at project start is not fixed (especially for innovation projects)
- › Iterative results and feedback is required
- › Ensure that the right software will be developed
- › Ensure high quality and productivity
- › Supplier approach should fit to our processes
- › Shared understanding how purchasing activities and agile development methods can be aligned

Classic Fix Price vs. Agile Fix Price Contract

Classic Fix Price



Classic Fix Price vs. Agile Fix Price Contract

Agile Fix Price



- Price is fix
- Quality is fix
- Time depends on value
- Scope is variable
- Collaboration is AGILE

Define the collaboration model

Analyze the cooperation scenarios and discuss them proactively.

Define the cooperation scenario and the fall back in the contract.

Adapt collaboration process based on the contract together.

Apply the committed agile rules and roles as agreed (trust).

Establish a communication path understanding AGILE on top level.

Inspect the used process regularly (retrospective).

**Initiate the AGILE
collaboration from the beginning!**

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3 Main topics are defined for Agile subcontractor collaboration

Supplier Selection

Contract Agreement

Supplier Interaction

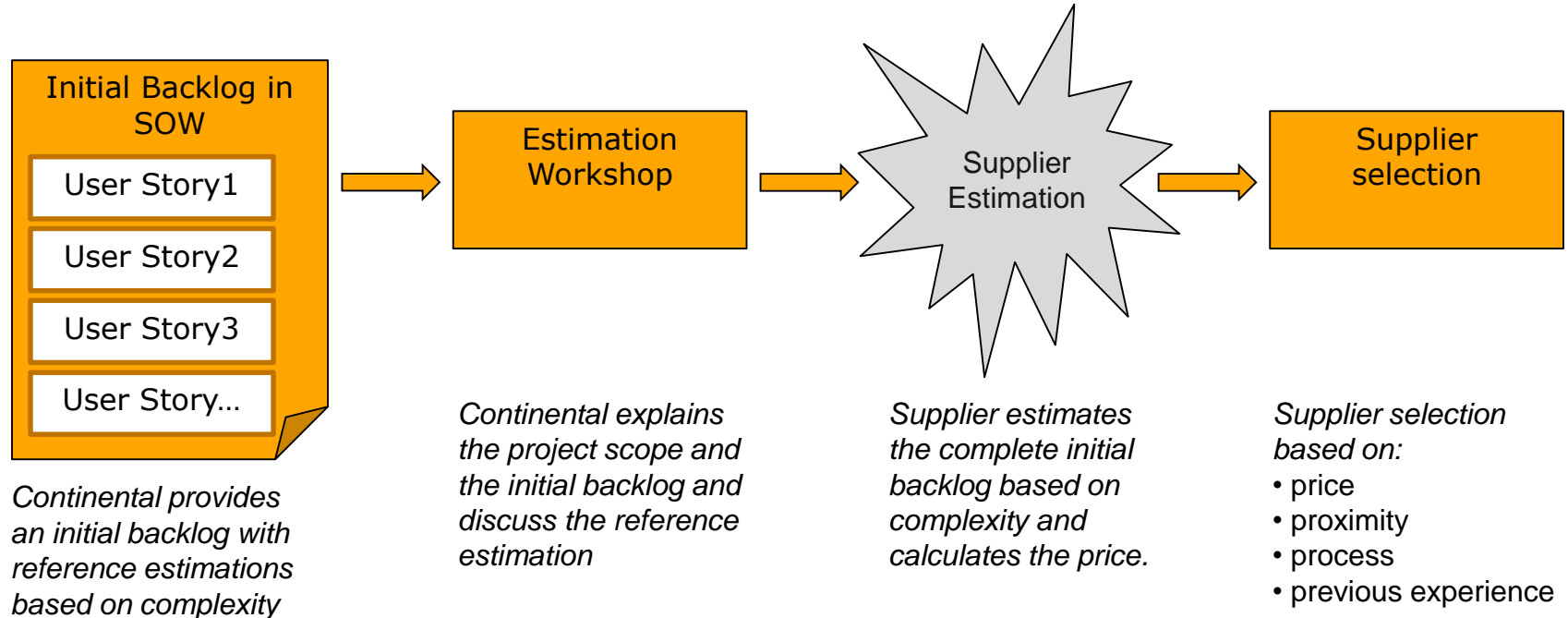
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Supplier selection for RFQ

- › Prefer to use established suppliers
- › New suppliers present and explain own agile process as part of selection
- › Communication/interaction needs some time do evolve
- › Trust is an important part when dealing with changing requirements / unknown technologies

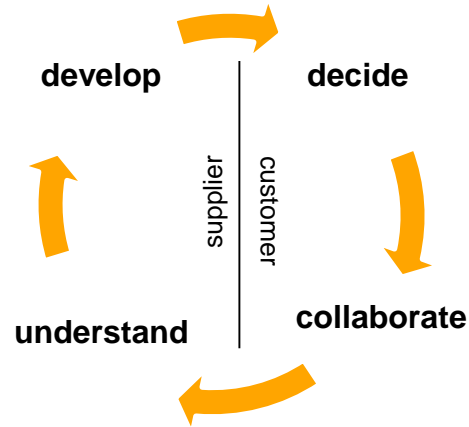
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Estimation process and supplier selection



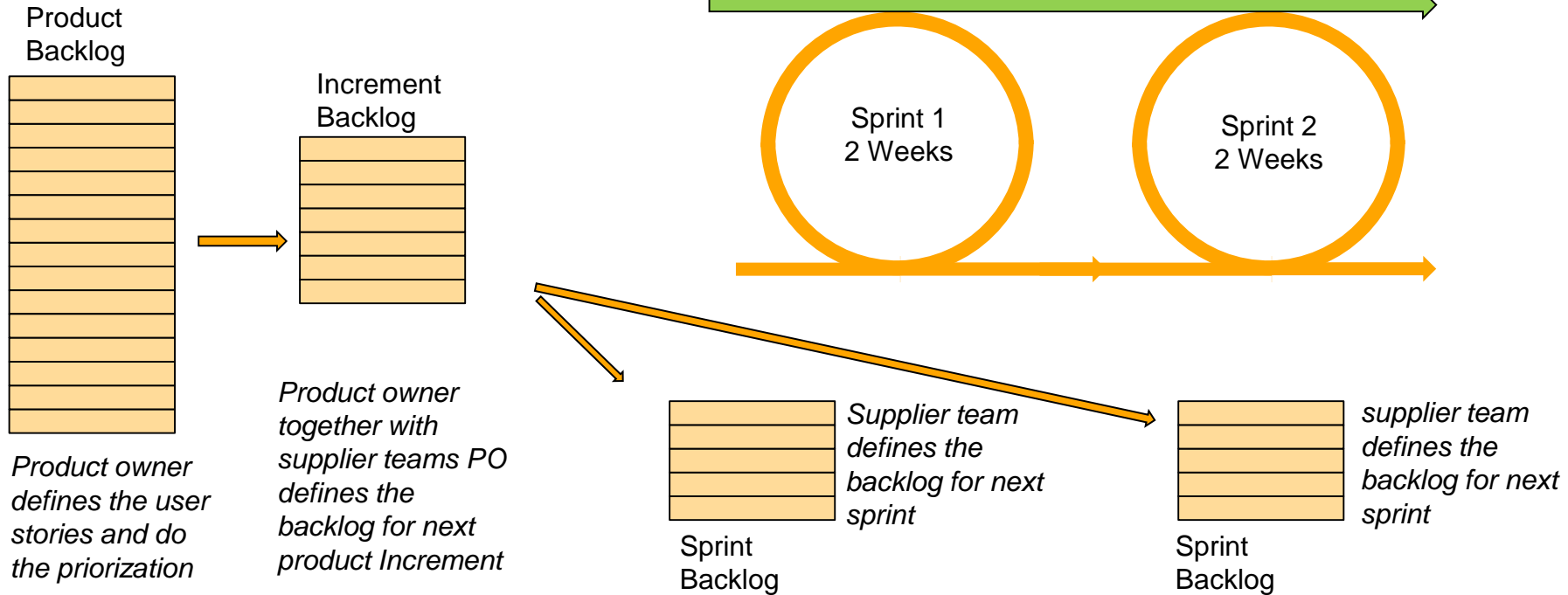
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- Focus is to establish a frequent interaction with supplier
- Software development contract agreement between customer and supplier for the following areas:
 - › Milestones
 - › Communication
 - › Documentation
 - › Tools
 - › Acceptance Testing



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Supplier interaction



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What happens if.....?

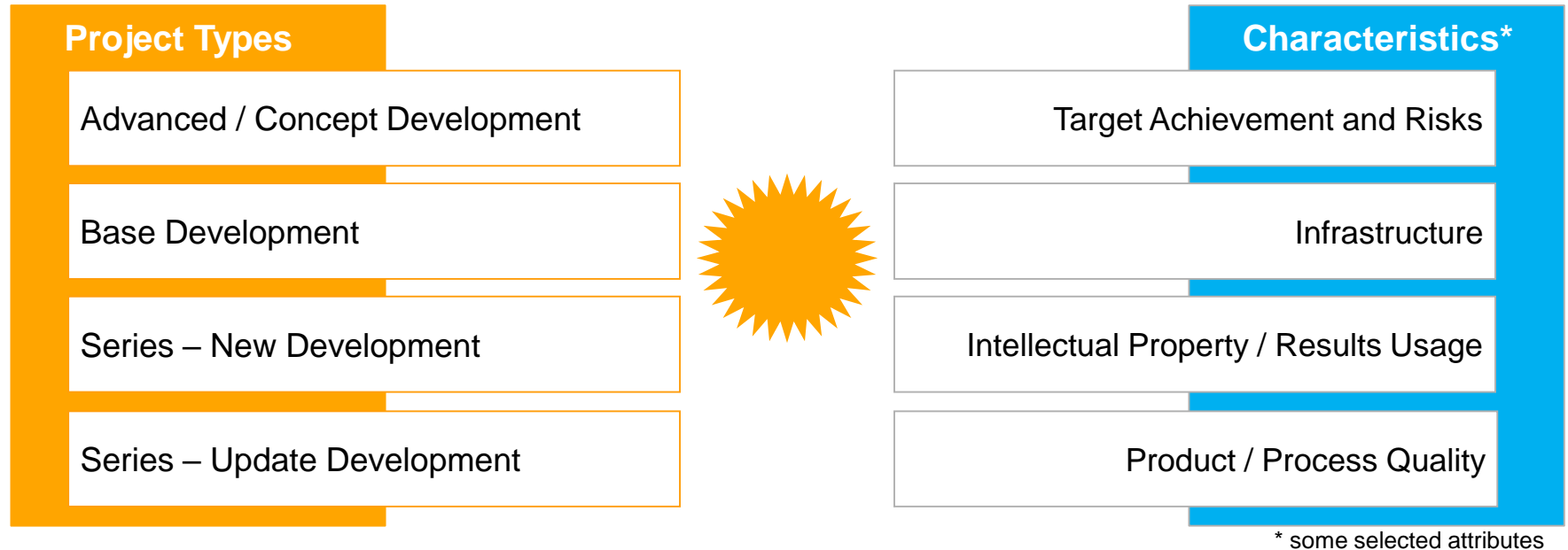
- What happens if change is required? (e.g. due to new insights)
 - › Agreement between supplier and Continental is required about other user story removed from the desired project result
- What happens if Continental and supplier can not agree on the contents of a product increment?
 - › Should not happen if the team is constant and the velocity known
- What happens if result is not accepted?
 - › Supplier has to manage rework in addition to normal work
 - › This might be critical if resources are not sufficient! -> Project delay gets likely!

Agile collaboration models

Trust is the key for successful collaboration!



Is this model also useful between OEM and TIER1?

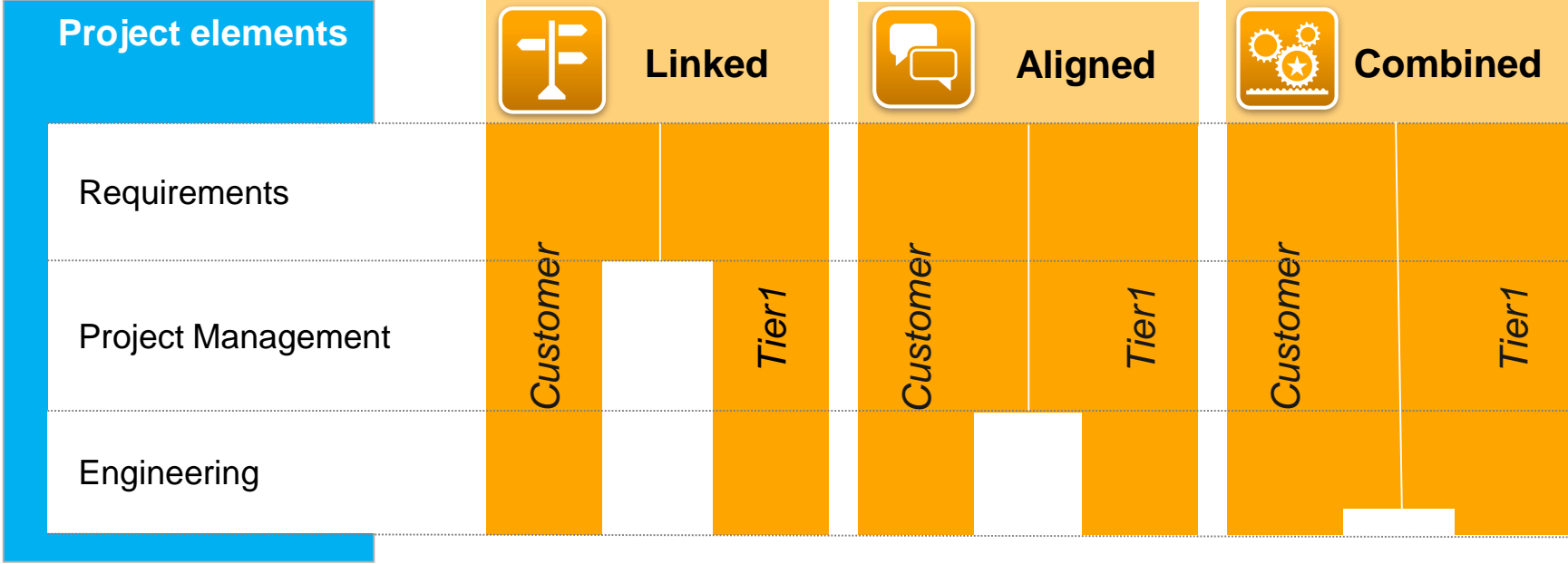


Characteristics and collaboration modes

Characteristics*	Linked	Aligned	Combined
Target Achievement / Risks	Tier1	Tier1 / OEM	OEM / Tier1
Infrastructure	Individually	Common Environment (Planning / Ticket)	Common Environment (Planning / Ticket / Repository / Build)
Intellectual Property / Results Usage	As of today	Detailed Agreement	Detailed Agreement
Product / Process Quality	Individually	Common Elements e.g. MAN.3	Common

* some selected attributes

Possible collaboration models



New VDA working group „Agile Collaboration“

- New VDA work group „Agile Collaboration“ started 2018
- Outcomes are recommendations and descriptions, e.g. of the
 - › Use cases for the cross-company agile development
 - › Rules of cooperation, typical roles and responsibilities – depending on the level and type of collaboration, e.g.
 - › Processes for the initiation, agreement and execution of agile collaboration
 - › Processes for change and problem management in agile development
 - › Safeguarding and compliance with applicable standards, such as ISO26262
- Members of the Workgroup are:  , BMW, Volkswagen, Ford, Electrobit, IAV, ZF, Bosch, Hella and Kugler Maag Cie

Agile is not only an internal approach,
Agile impacts the whole collaboration.