

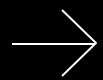


# Introduction to Industry Core

Building Data Chains for vehicles

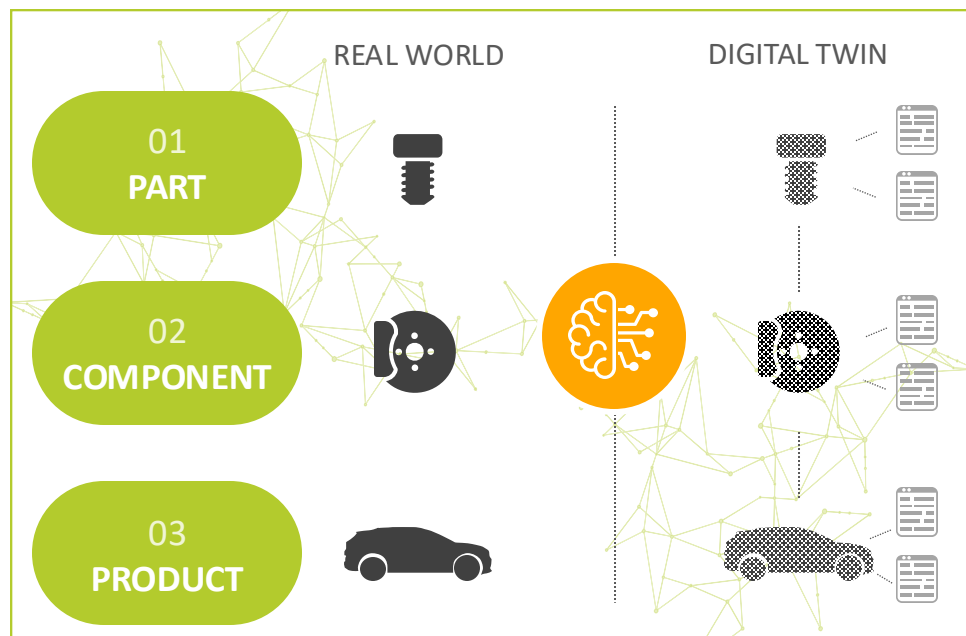
December 5<sup>th</sup> 2024

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Industry Core Committee Lead  
BASF



# What is Industry Core?

## Digitalization of the real world



## Purpose of the industry core

For every **component, part and material** built into a car and the car itself a **digital image is created** - a so called **Digital Twin**

This is the **base for any kind of traceability**

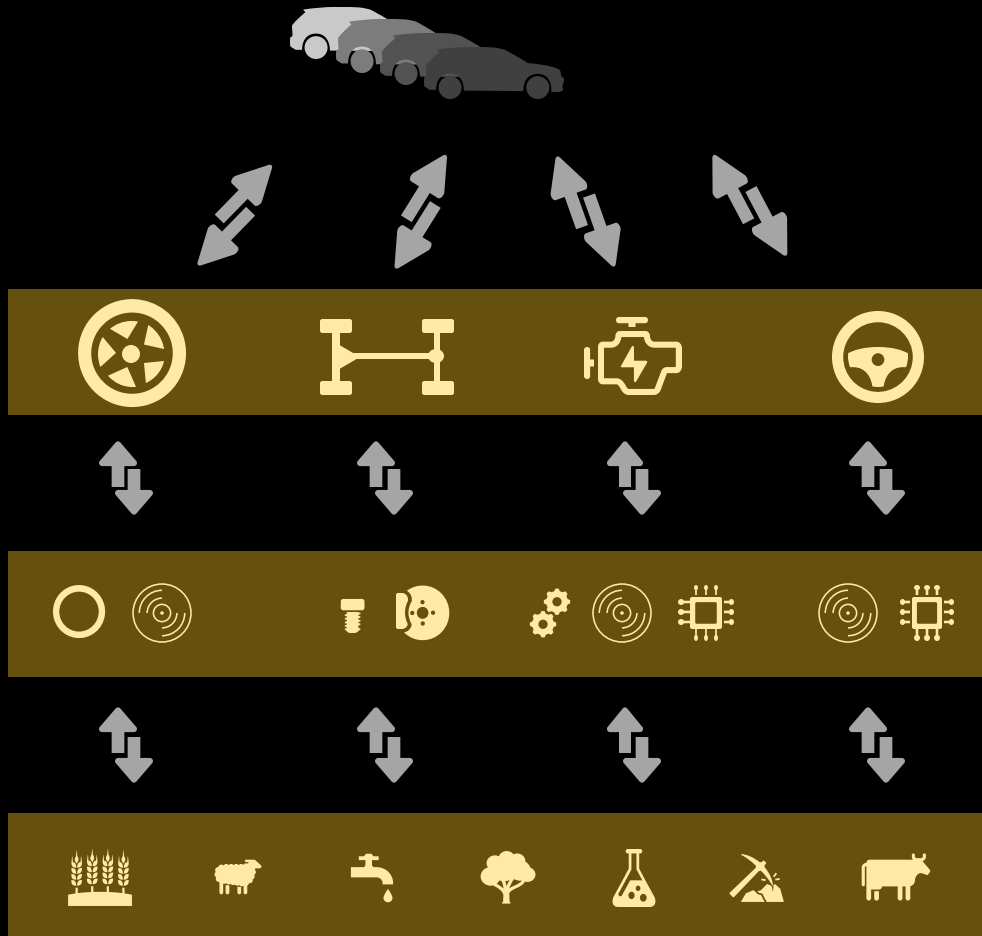
**Industry Core and its Digital Twins will be reused by use cases like sustainability (PCF) or demand & capacity**

Additionally, standardized **notifications** will be part of the Industry Core



**The digital twins are reusable in use cases based on parts. They can attach further information for standardized data exchange**

# C-X Industry Core | Instantiated Bill of Material (BoM)



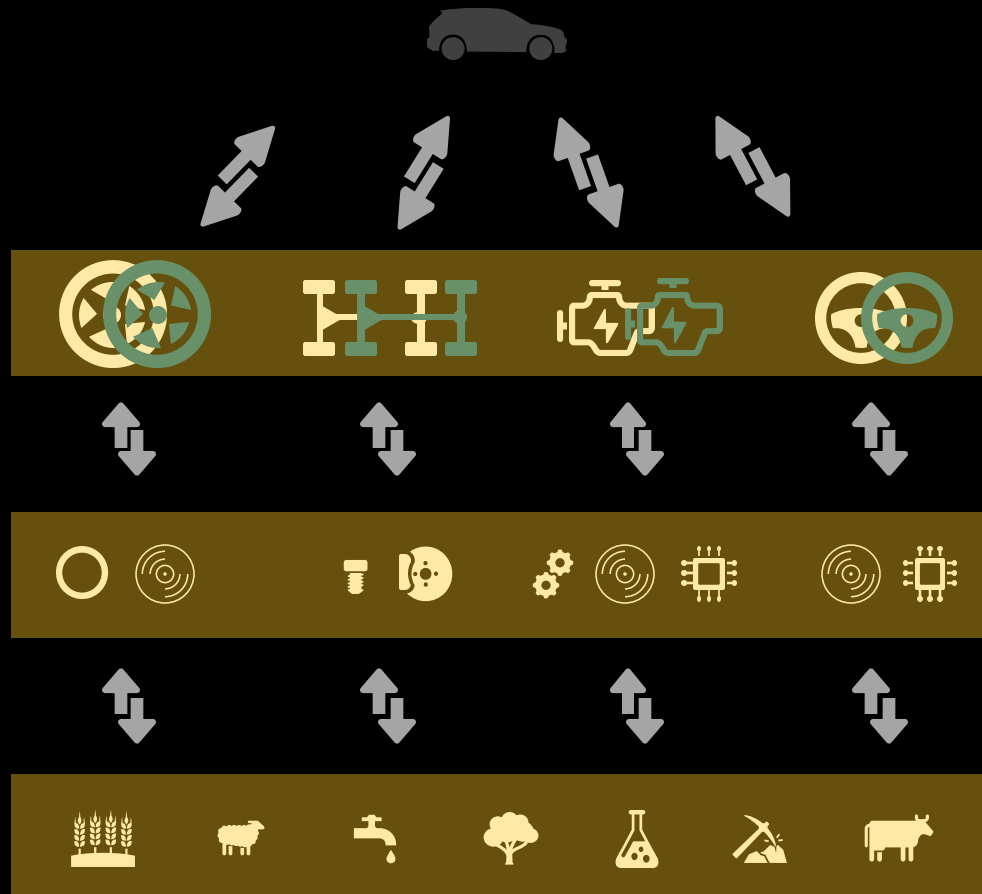
## “AS BUILT”

instanced, individual Bill of Material

- Resembles real existing products, a single vehicle
- Each vehicle built has its own individual BoM (e.g. 4 cars build result in 4 BoMs)
- Parts/Material in the BoM either have a serial number or a batch number or are generic parts

Used in e.g., Circular Economy

# C-X Industry Core | Vehicle Project Bill of Material (BoM)



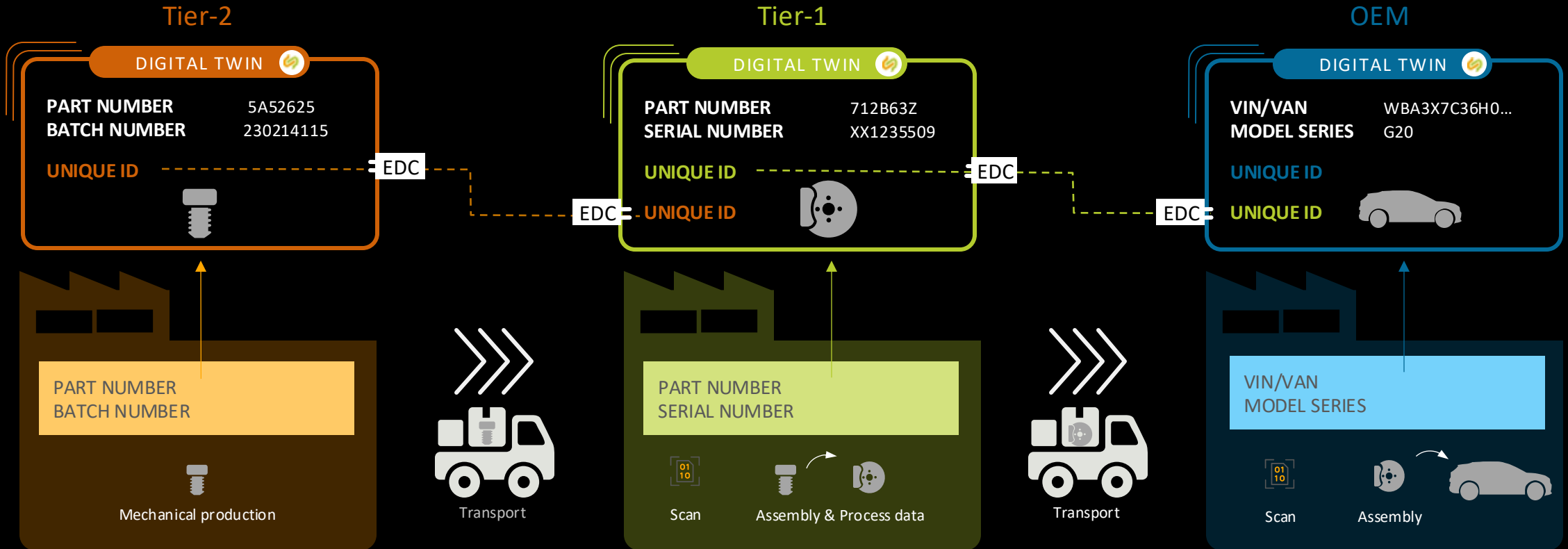
## “AS PLANNED”

list of catalogue parts

- Generic bill of material (used for Sourcing / Production Planning)
- Includes all possible parts/material of a vehicle project, e.g.
  - a) Alternative parts
  - b) Versions of parts like changed parts & parts for certain markets
- Complexity of generic is higher than instanced BoM

Used in e.g., PURIS, PCF

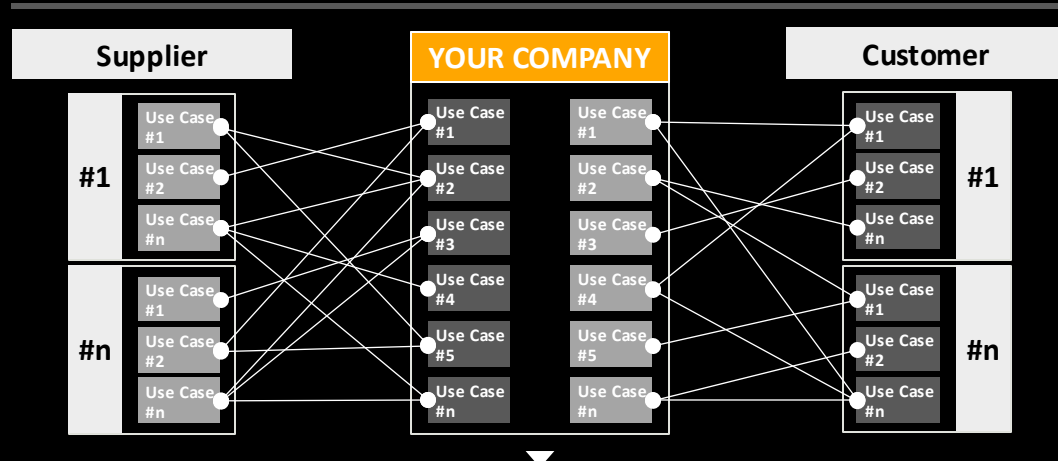
# Creating the data chain with Industry Core



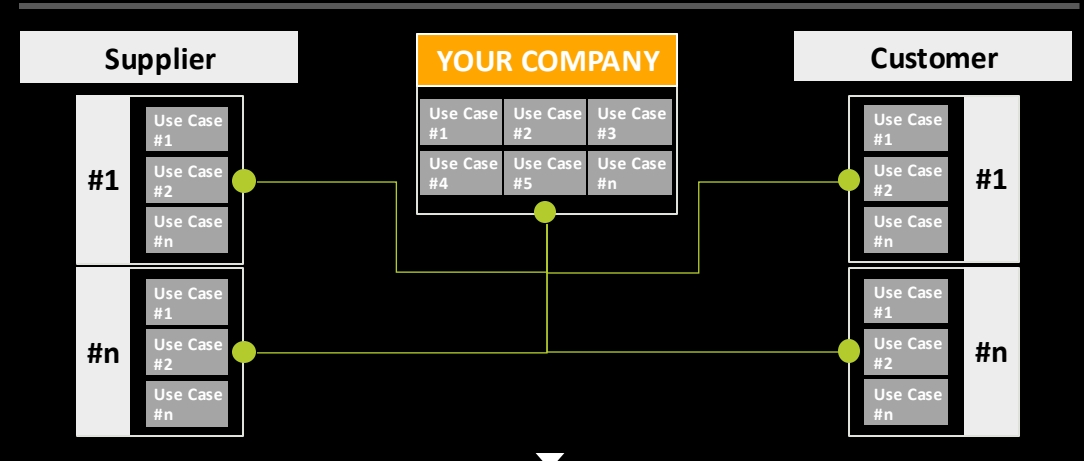
The added value is generated by digital twins and data chains based on standards. They are core for many further use-cases.

# Why do we need Industry Core?

**TODAY** without Catena-X Industry Core



**TOMORROW** with Catena-X Industry Core



- ✗
- ✗
- ✗
- ✗

Trusted multi-tier collaboration  
 Synergies of unified communication  
 Freedom of used software  
 Control of your data

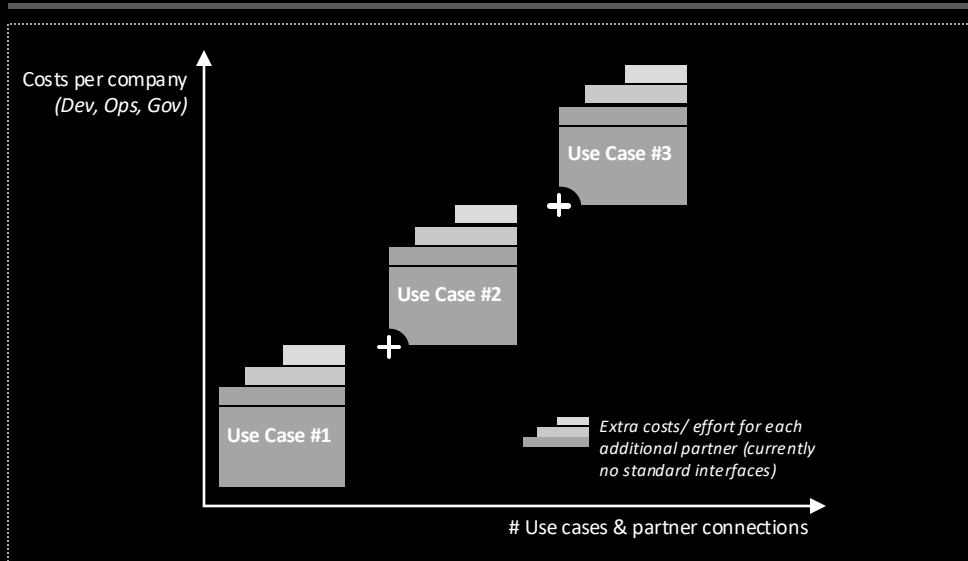
- ✓
- ✓
- ✓
- ✓

**Industry and individual companies are benefiting by using Catena-X**

(Cost down, freedom of choice, scalability, time to value, control, ...)

# Catena-X KITs benefit your business and IT

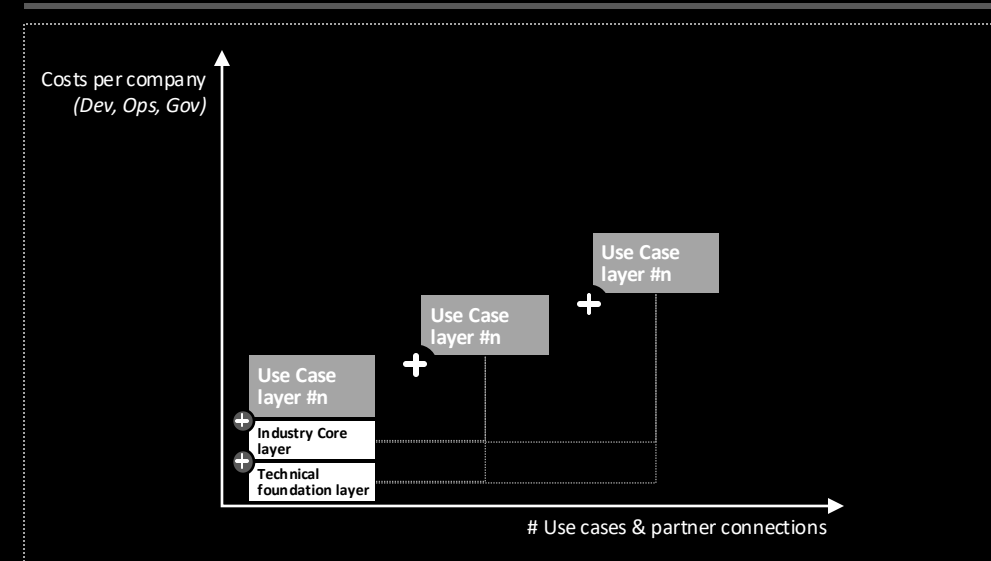
## TODAY without Catena-X Industry Core



- Limited to none cross use case synergies
- Rising Ops costs for n-partner connections
- Massive governance & policy handling



## TOMORROW with Catena-X Industry Core



- + Freedom of choice
- + Improved cyber security
- + Synergies of horizontal platform
- + Boost your existing landscape and providers

**Cutting costs and speeding up time to value by cross KIT synergies**

# Advantages of Industry Core Concept

01



## SINGLE SOURCE OF TRUTH

- + Unique concept to allow connection from vehicle to raw material
- + One single standard that is available for all use cases
- + Same base for everyone in the Automotive Industry not only OEMs

02



## SCALABILITY/REUSABILITY

- + One single Digital Twin per component/ part/ material – independent how often it is used
- + No additional effort if a company takes part in more than one use case
- + Attributes can be easily attached to the Digital Twins
- + Industry Core provides a concept for built car, but also generic car projects

03



## REGULATIONS

- + Will be the base for legal regulations in place and to come

*Examples:*

*German Supply Chain Act, European Battery Pass, Critical Materials Declaration, ...*