

# BMW GROUP PRODUCTION NETWORK.

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Munich  
December 3rd 2018

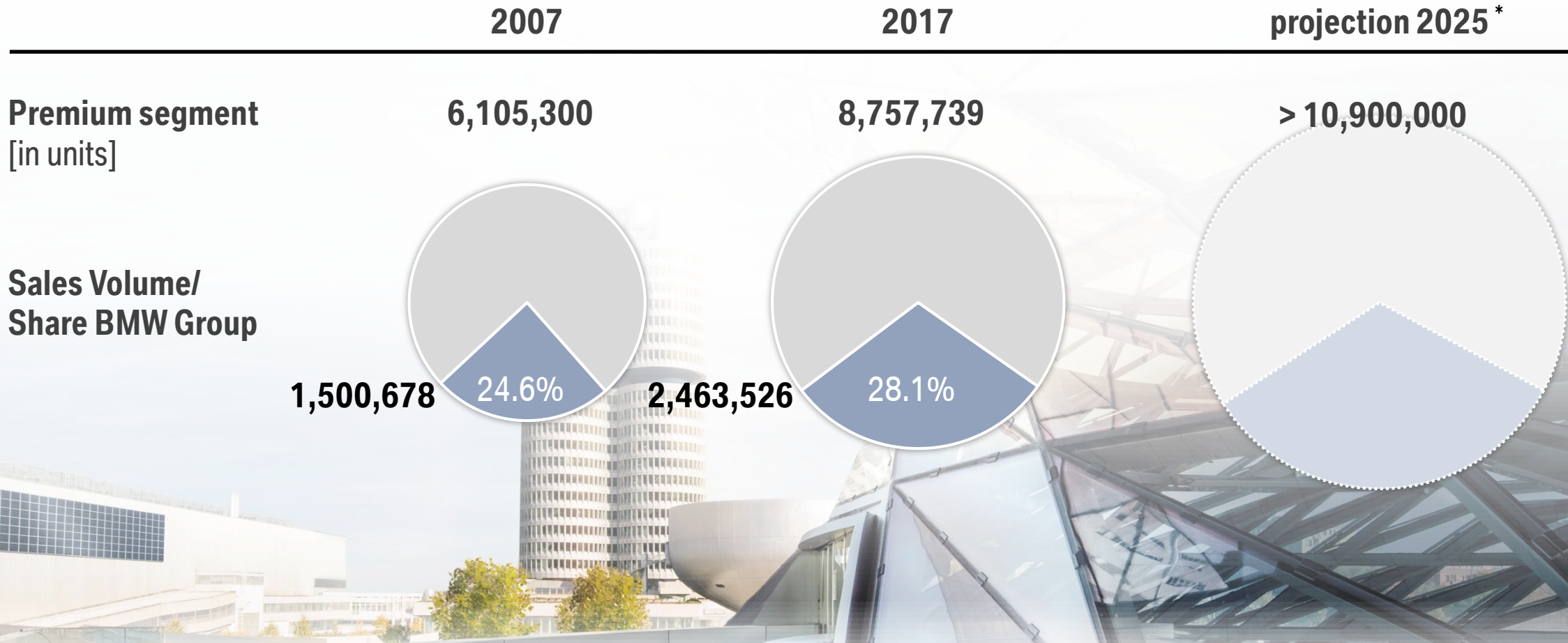


Rolls-Royce  
Motor Cars Limited



**PILLAR 1.  
THE BMW GROUP'S GLOBAL PRODUCTION NETWORK PROVIDES  
STABILITY IN A WORLD OF VOLATILITY.**

# THE AUTOMOTIVE PREMIUM SECTOR IS A WORLDWIDE GROWING MARKET. THE BMW GROUP'S MARKET SHARE AND SALES VOLUME ARE INCREASING.



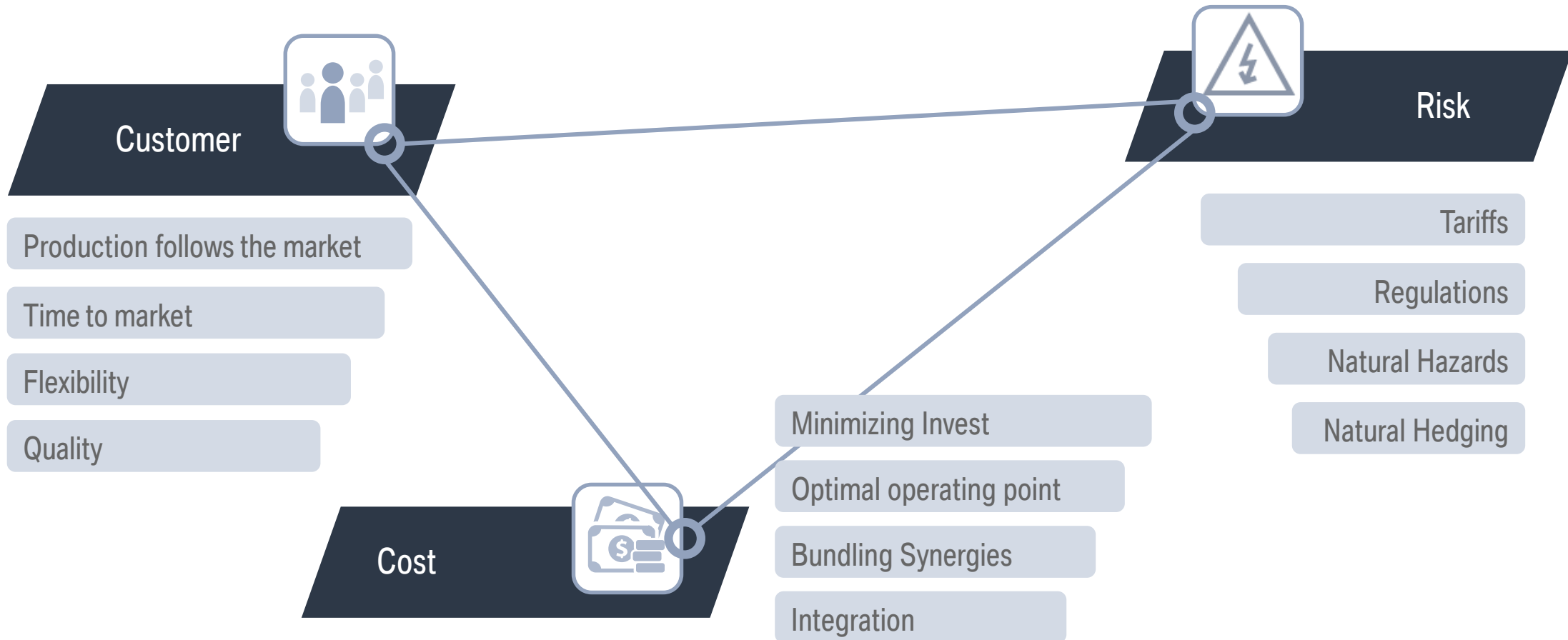
EXTERNAL CONDITIONS ARE CHANGING FASTER THAN EVER.  
THE ONLY CONSTANT WE CAN RELY ON IS OUR STRATEGIC FOCUS.



In volatile times, **profitability**, **flexibility**, and a consistent **strategic direction** are key.

# THE BMW GROUP STRIVES FOR A ROBUST PRODUCTION NETWORK TO BALANCE CUSTOMER FOCUS, RISK-EVALUATION AND TOTAL COSTS.

## Premises for the allocation of models within BMW Group's global production network

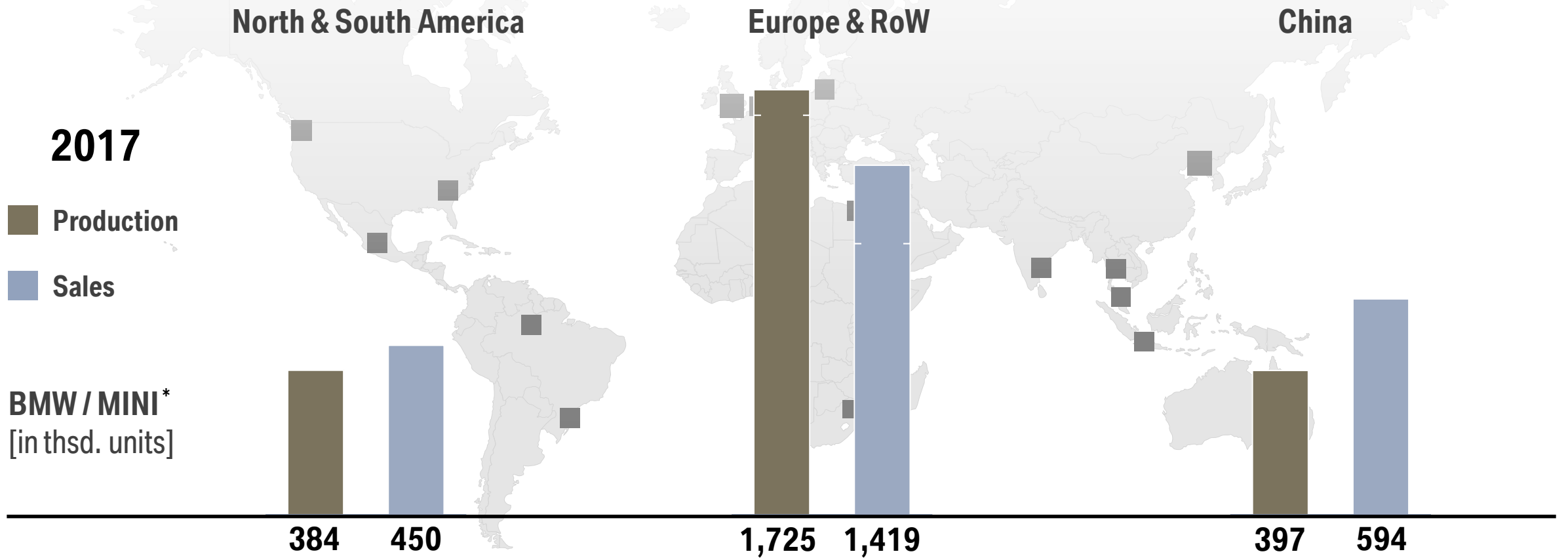


# THE BMW GROUP PRODUCTION NETWORK IS GLOBAL. ESTABLISHING PROXIMITY TO OUR CUSTOMERS AND RESILIENCE TO COPE WITH CHANGES ARE KEY TO OUR PRODUCTION/BUSINESS.



# THE CORNERSTONE OF A SOLID PRODUCTION NETWORK IS A WELL BALANCED RELATION BETWEEN SALES VOLUME AND PRODUCTION CAPACITY.

## Sales vs. production volumes



# WE IMPLEMENTED ALREADY IMPORTANT STRATEGIC STEPS TO COUNTER PROTECTIONIST ACTIONS: THE 3SERIES & THE X3 SERVE AS PRIME EXAMPLES.

## Important localized models in the three world regions

### North & South America



from 2019 on



### Europe & RoW



### China



BMW  
3-series  
Sedan

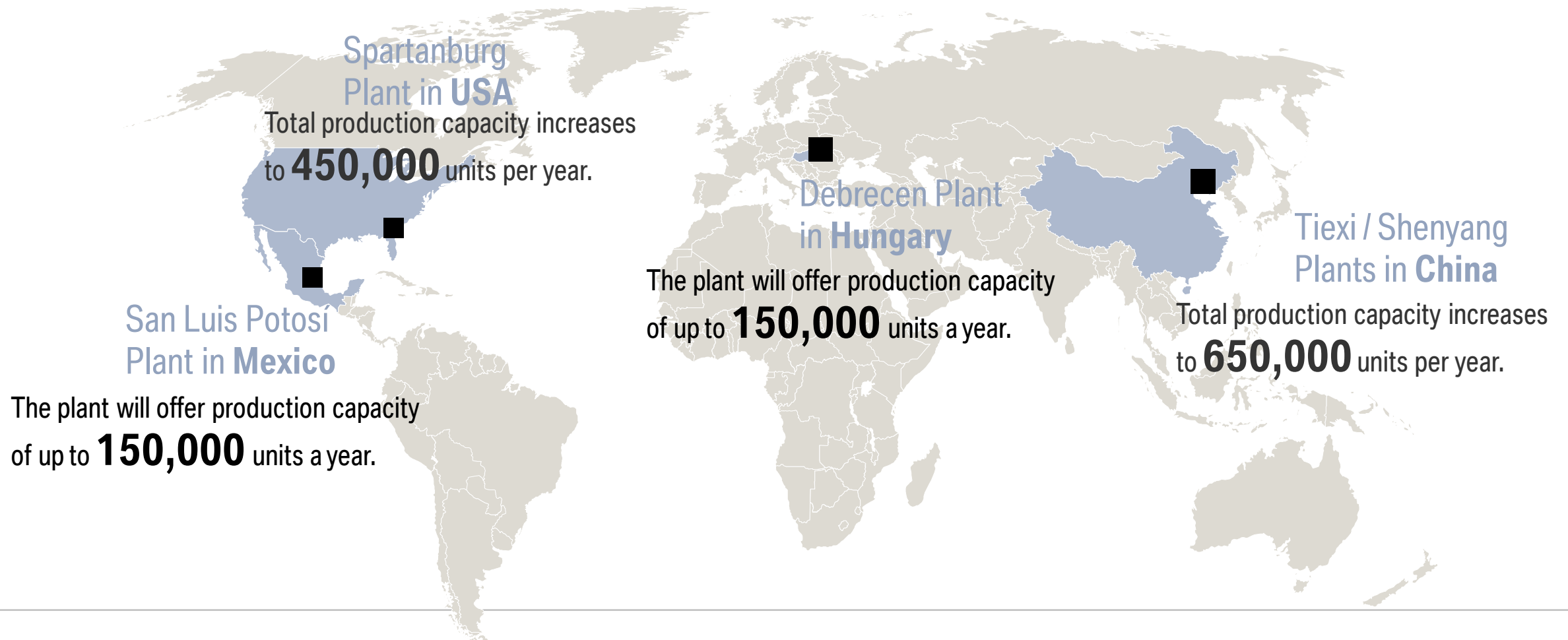
BMW  
X3

**No tariffs for all major markets.**



# DECISION FOR NEW PLANTS & PLANT EXPANSIONS IN LINE WITH THE TREND OF A GROWING PREMIUM AUTOMOBILE SECTOR.

## News in the BMW Group's Production Network

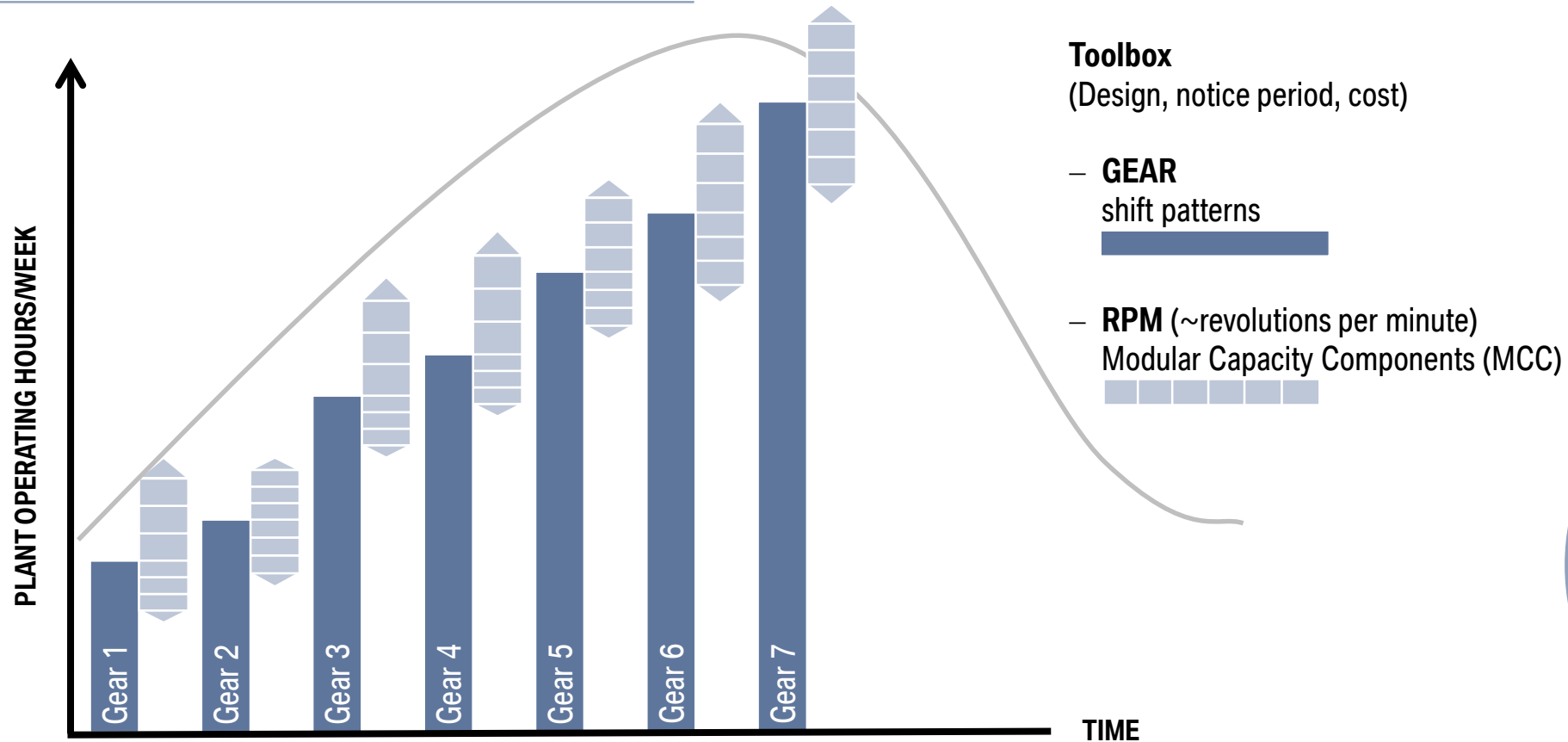




**PILLAR 2.  
A FLEXIBLE PRODUCTION SYSTEM PROVIDES ROOM FOR ADJUSTMENT.**

# OUR FLEXIBILITY TOOLBOX ALLOWS US TO REACT TO SHORT AND LONG-TERM FLUCTUATIONS IN DEMAND (UP/DOWN).

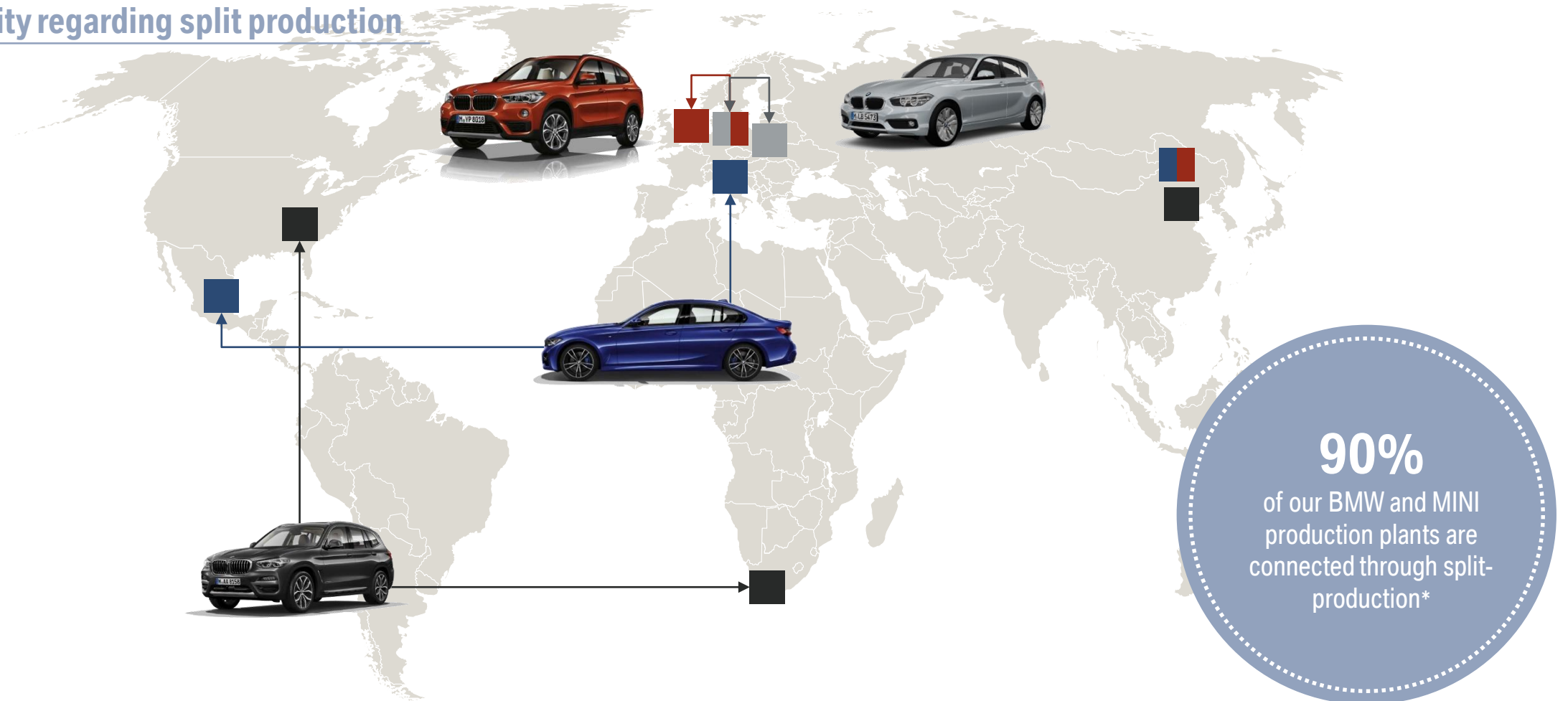
## Flexibility in terms of operating hours



in average  
**+/- 25%**  
volume adjustments can be covered by flexible plant operating hours and shift models

# SPLIT PRODUCTION OFFERS FLEXIBILITY TO STEER THE PRODUCTION NETWORK AND ENABLES A BALANCED VOLUME ALLOCATION.

## Flexibility regarding split production



# FLEXIBILITY BETWEEN CONCEPTS, ARCHITECTURES AND DRIVETRAINS ENABLES THE FULFILMENT OF CUSTOMERS' PREFERENCES.

## Flexibility regarding customer's preferences



Diesel : Petrol



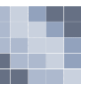
ICE : xEV



Up to  
**100%**  
flexible

CONCEPT

between the concept  
LIM : SAV/SUV



between the architectures  
CLAR : FAAR

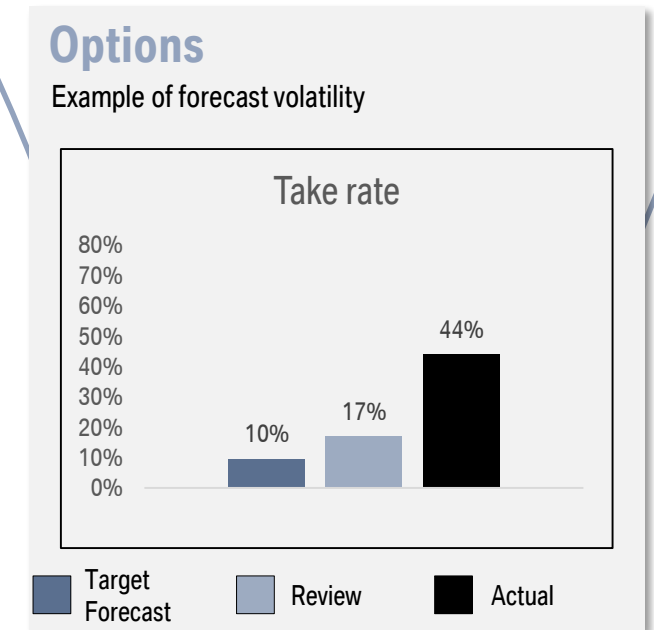
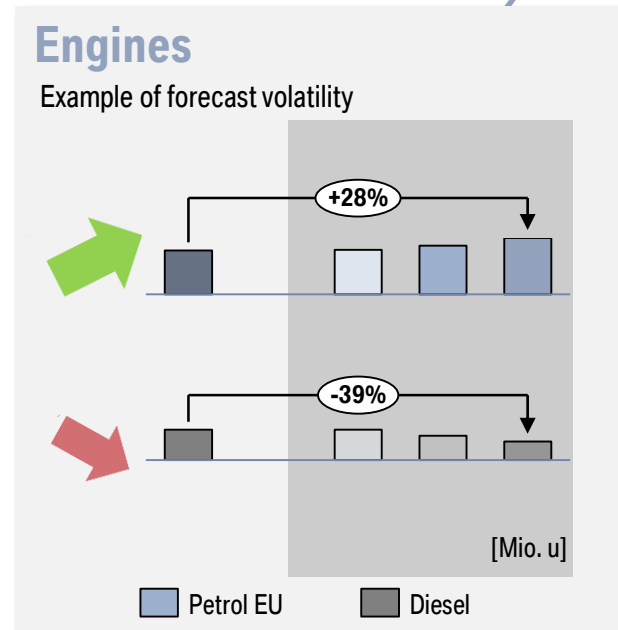
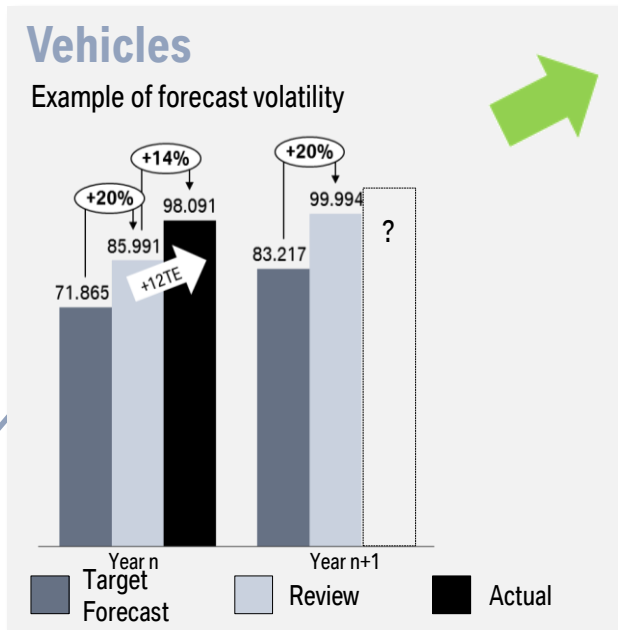


**PILLAR 3.  
FLEXIBILITY COMPLEMENTED BY LEAN-THINKING: „MEASURES TO RESPOND“  
COMBINE FEASIBILITY, SHORT LEAD TIMES AND PROFITABILITY.**



# EVEN WITH PREDICTIVE ANALYTICS, VOLATILITY AND UNCERTAINTY REMAIN IN VARIOUS FIELDS OF OUR DAILY BUSINESS.

## Exemplary factors of volatility – relevant for the production network

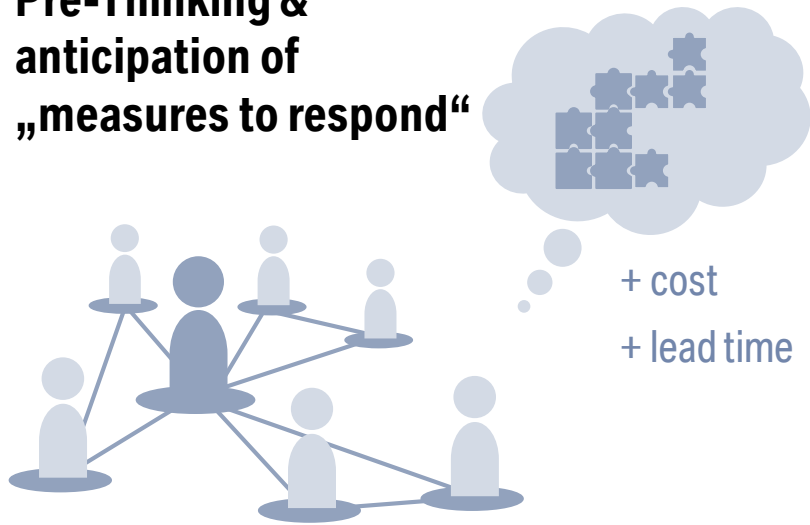


The environment is getting more and more volatile. **“Measures to respond” are our key answer to this volatility.**

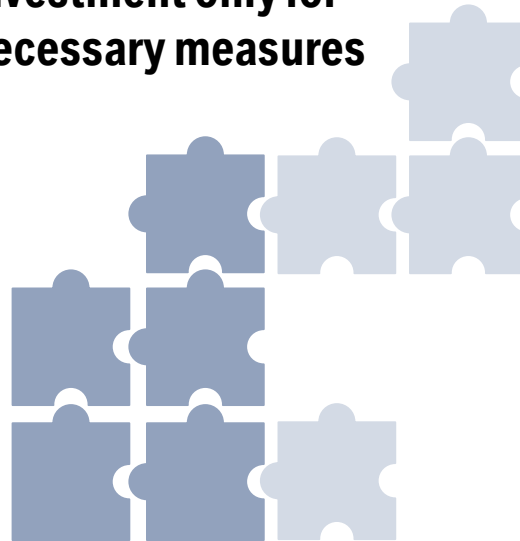
# „MEASURES TO RESPOND“ ENABLE A DEMAND-ORIENTED EXTENSION OF CAPACITIES IN THE PRODUCTION NETWORK.

## Flexibility regarding customer's request

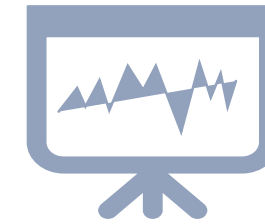
**Pre-Thinking & anticipation of „measures to respond“**



**Investment only for necessary measures**

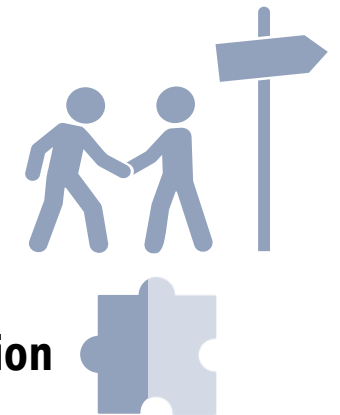


- Pre installed (investment)
- Future elements on hold as „measures to respond“ (no investment yet)



**Tracking the trend**

**Acting on demand and implementation**



**Avoids over-investment in advance. Provides options for the future.**



# THE CONCEPT OF MEASURES TO RESPOND IS HOLISTICALLY IMPLEMENTED AT BMW GROUP.



Production Plant



Logistics Supply Chain



Supplier Network

A long, straight road stretches into the distance towards a bright sun, with a checkered flag pattern on the road surface. The road is flanked by dark, silhouetted mountains. The sun is positioned high in the sky, creating a lens flare effect. The road surface is marked with a checkered pattern of white and red squares, suggesting a race track or a path of achievement. The overall scene is dramatic and evocative, symbolizing a journey or a path towards a goal.

**PILLAR 4.  
THE ABILITY OF HOLISTIC INTEGRATION IS AN IMPORTANT COMPETITIVE  
ADVANTAGE IN THE PRODUCTION OF TECHNOLOGICALLY COMPLEX PRODUCTS.**

# IT IS THE AUTOMOBILE INDUSTRY'S CHALLENGE TO OVERCOME THE TECHNOLOGICAL CHANGE AND CREATE THE FUTURE OF MOBILITY.

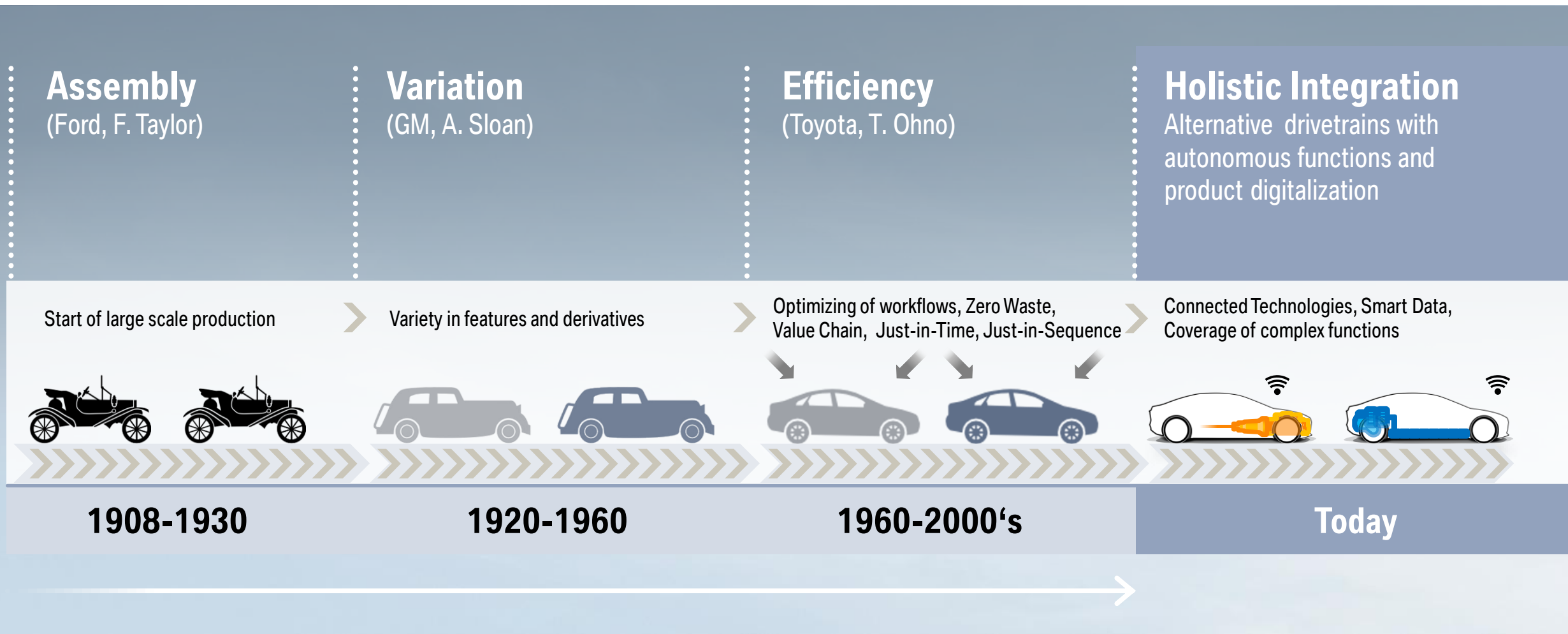


Digitalization

Autonomous Driving

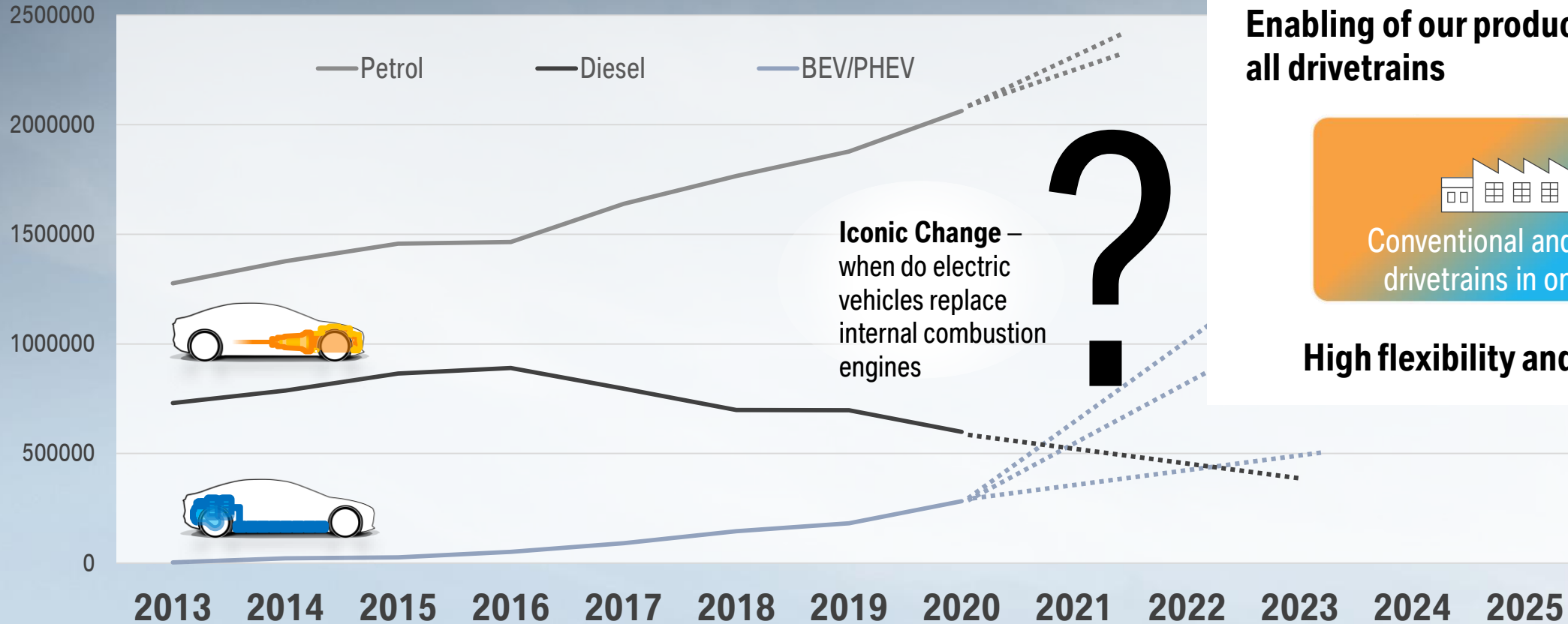
E-Mobility

# HOLISTIC INTEGRATION IS THE BIGGEST TECHNOLOGICAL CHALLENGE FOR THE PRODUCTION IN THE FUTURE. THE FUTURE STARTS NOW.

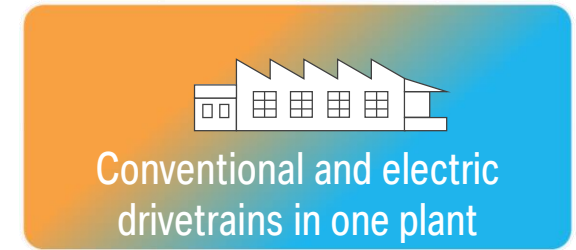


# OUR COMPETITIVE ADVANTAGE IS OUR EXPERIENCE WITH A DEDICATED E-MOBILITY ARCHITECTURE. WE MANAGE THE ICONIC CHANGE CONSCIOUSLY WITH INTEGRATION.

## Internal combustion vs. electric vehicles

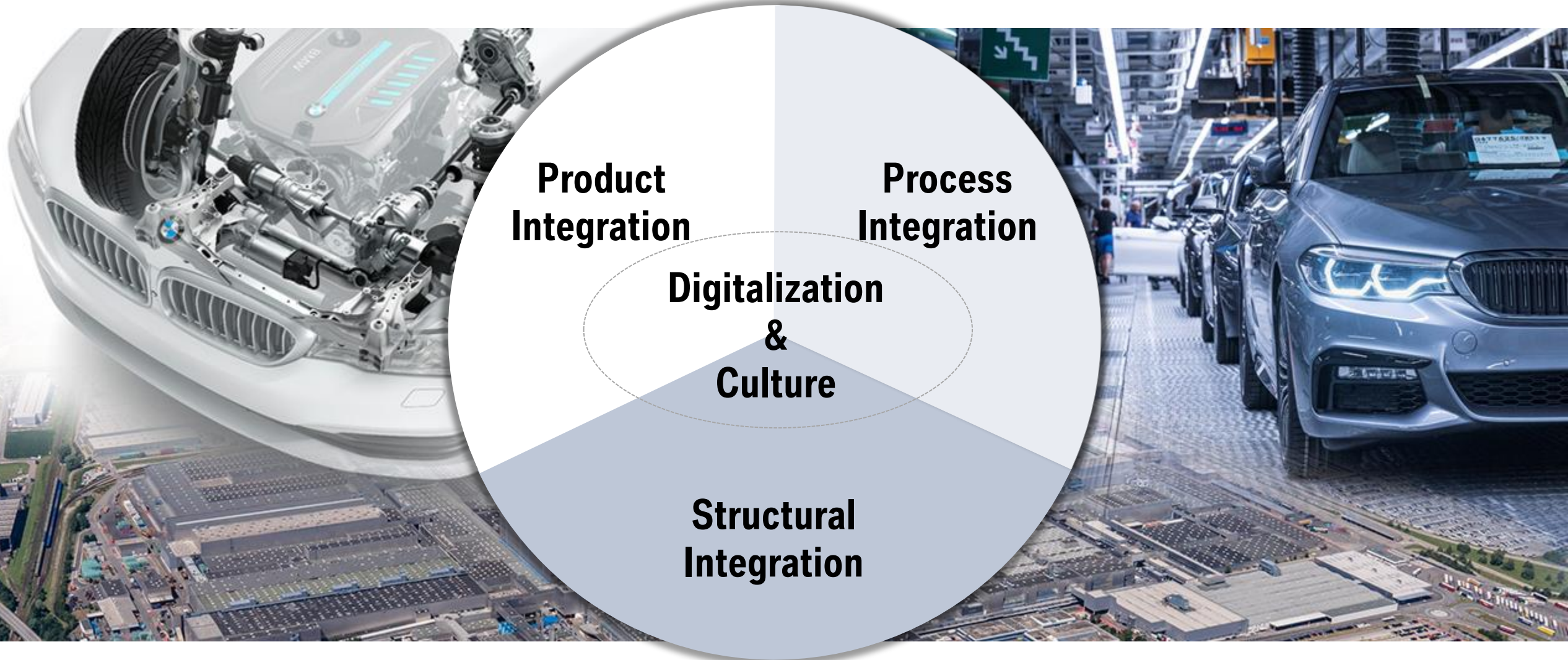


**Enabling of our production plants for all drivetrains**



**High flexibility and utilization**

# FIVE MAIN FACTORS ARE KEY TO A SUCCESSFUL HOLISTIC INTEGRATION.





**THE BMW GROUP PRODUCTION NETWORK IS LEADING BECAUSE OF ITS...**

**... PRINCIPLE TO BALANCE “CUSTOMER –  
COST - RISK”.**

**... MULTI-DIMENSIONAL FLEXIBILITY.**

**... MEASURES TO RESPOND.**

**... HOLISTIC INTEGRATION CAPABILITIES.**