

### PRODUCTION@BMW

DR FRANZ DECKER HEAD OF PRODUCTION NETWORK STRATEGY.





# CUSTOMERS, INDIVIDUALIZATION OF PRODUCTS AND DYNAMIC MARKETS.



# BMW GROUP SUCCESSFULLY APPLIES FOUR CORE ELEMENTS TO ITS ONE GLOBALLY ALIGNED NETWORK.

BMW Group is best in managing customers' individual needs in production

**Our instruments:** 

- **A** Flexibility management
- **B** Complexity management

BMW Group balances global growth and optimizes risks.

**Our instruments:** 

- **C** Production follows market
- Management of cost & capital structure



...and all as ONE GLOBALLY ALIGNED NETWORK

# WE MANAGE OUR FLEXIBILITY WITH VARIOUS INSTRUMENTS AT NETWORK, STRUCTURE AND EMPLOYEE LEVEL.

#### **FLEXIBILITY MANAGEMENT**

#### **BMW Group success stories**

- Fast reaction to global automotive crisis and Euro crisis
- Production and sales volume at new record in 2014
- Stable achievement of margin targets
- **No production stop** after Japan Tsunami
- Integration of BMW i production
- Short term reaction swop of Russia production volume to US



Architecture: Product and process modular system Network Splits of derivatives 3<sup>rd</sup> party manufacturer Make vs. buy Derivatives per line Structure Reaction time Operating shift model **Employee** Labor model and accounts **Qualifications** 



### **B** MODULAR PRODUCTS, LEAN SYSTEMS AND EFFICIENT PROCESSES ENABLE STRONG COMPLEXITY MANAGEMENT.

#### **COMPLEXITY MANAGEMENT**

#### **BMW Group success stories**

- Broad market coverage through high number of derivatives
- Almost endless number of options and equipment variants, i.e. BMW 7 Series at Plant Dingolfing, with theoretically up to 10<sup>32</sup> possible configurations
- **165** customer relevant **options**
- BMW Individual process and broad brand spread
- Changes up to six days prior to the start of assembly possible

Source: BMW

- Built-to-order-approach
- Launch as new normal

#### Levers

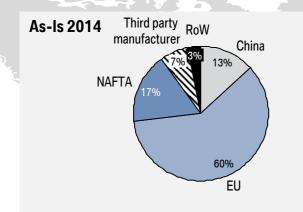


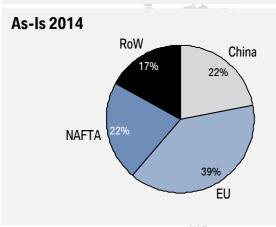
### • INVESTMENTS OUTSIDE EUROPE AND THIRD PARTY MANUFACTURER ARE STRATEGIC ELEMENTS FOR BALANCED GROWTH.

#### GLOBAL BALANCED GROWTH – PRODUCTION FOLLOWS MARKET

Global production allocation

**Global sales** 



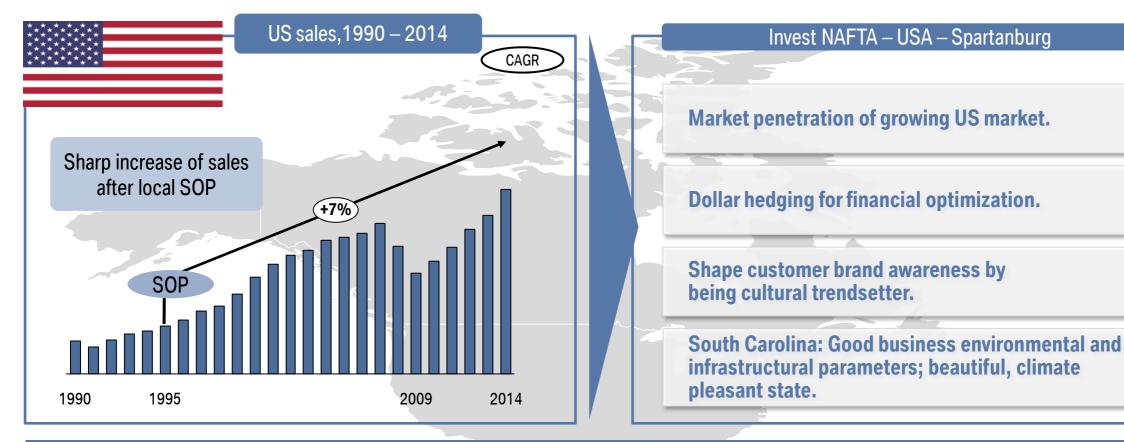




#### **Our activities:**

- Production follows market
- Recent and ongoing investments outside Europe:
  - All new production plant roll-out in San Luis Potosí (150,000 units, SOP 2019)
  - SOP in Brazil Araquari plant in 10/2014
    (30,000 units, MINI countryman, BMW 1series 3dr/5dr, 3ser. Sedan, X1, X3)
  - Production increase in Spartanburg (X7, X4, 800 new jobs)
  - Extension of existing China facility (Dadong)
    (Expansion to six models (from 3 currently))
  - New engine plant in China (Tiexi)
- Third party manufacturer as strategic element for flexibility and profitable growth

# OUR MOTIVATION FOR INVESTMENT INTO NAFTA US IS MARKET PENETRATION, RISK HEDGING AND BRAND SHAPING.



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Plant Spartanburg as X-hub for the production network; biggest automotive export plant / company within the US.

Source: BMW

### FURTHER INVESTMENTS INTO MEXICO AND BRAZIL ARE BASED ON SALES AND COST ARGUMENTS.



Further NAFTA market penetration due to increasing sales figures.

Realization of production cost advantages.

**Extension of production base.** 

**Start of site preparation** 

Source: BMW



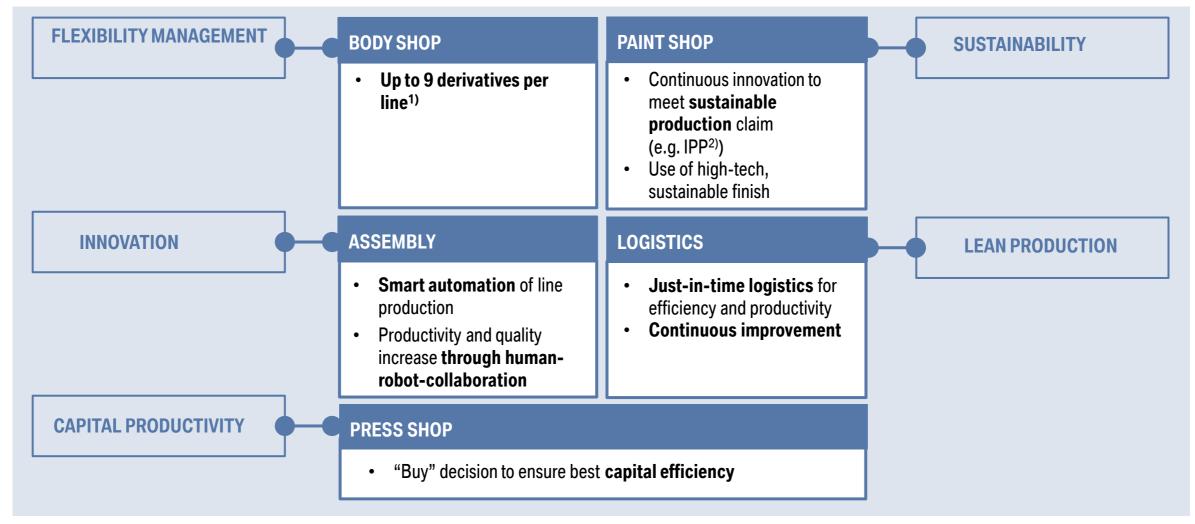
Marketability to South American market.

Local content due to protectionism and high import taxes.

**Exploitation of market by other OEMs.** 

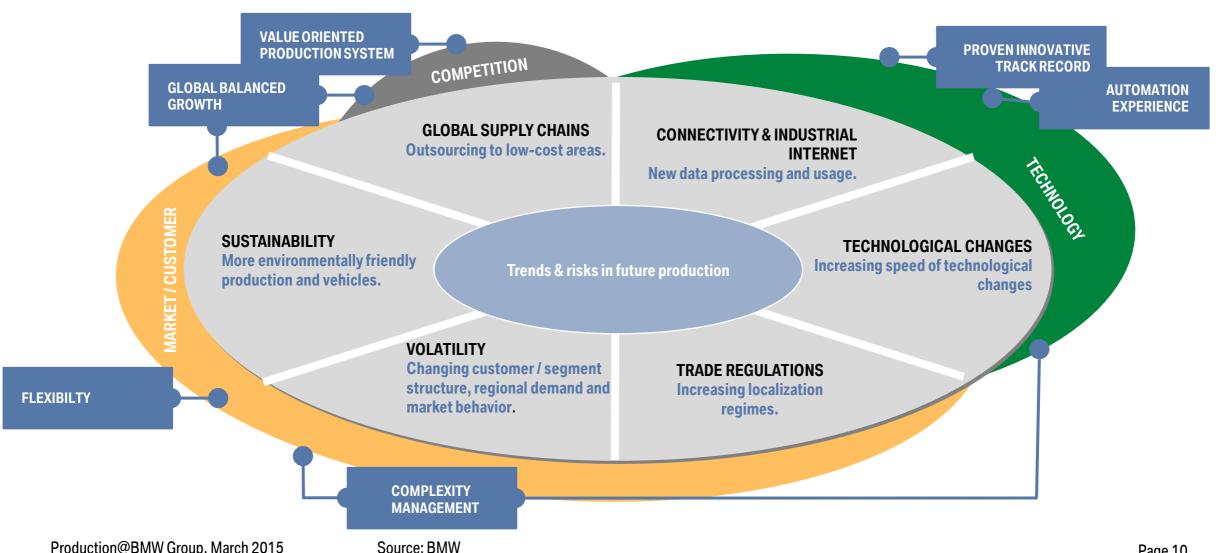
Assembly start in 10/2014

### OUR CORE ELEMENTS ARE EVEN VISIBLE AT EVERY STEP OF OUR VALUE CHAIN.



1) Including M derivatives; 2) Integrated Paint Process Source: BMW

### BMW GROUP IS BEST PREPARED TO APPLY FUTURE TRENDS AND TO MEET FUTURE RISKS IN PRODUCTION.



Production@BMW Group, March 2015

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### **SUMMARY:**

BMW Group production acts as one global network with smart allocation of value creation.

We apply flexibility and complexity management to efficiently provide individualization for our customers.

Success factor is coherence of architecture, sourcing and production at all levels.

Mexico & Brazil will add strong pillars for our production network to foster sales.

Source: BMW

BMW Group is best prepared to master future trends and to meet risks in production.

Production@BMW Group, March 2015