

## Performance Footprints Dietmar von Polenz



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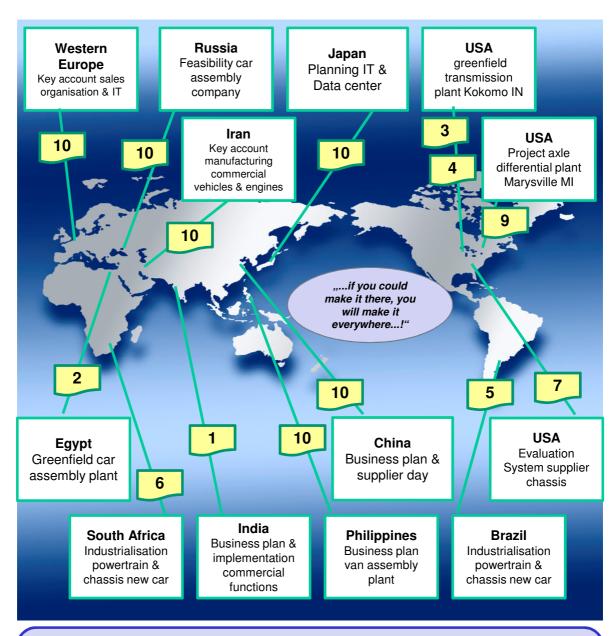
consulting & management for international manufacturing industries

### Success stories and references:

- Global management experience on 4 continents
- Leadership expertise through entire value chain
- Business plan for a car assembly plant in India and buildup of commercial functions
- 2. Greenfield car assembly plant in Egypt
- 3. Worldwide transmission strategy cars and commercial vehicles
- 4. Technology transfer and industrialization of an automatic transmission in USA
- 5. Transformation of a powertrain & suspension manufacturing plant to a system supplier with production in Brazil
- 6. Local content and new assembly power train & chassis in South Africa
- 7. Evaluation of a chassis-supplier's business system in USA for possible takeover
- 8. Project management power train new 4WD-generation
- Creation of a corporate production network for axle differentials with technology transfer, worldwide procurement and high parts communality
- 10. Other Projects

(Samples of project leaderships in the last 10 years; Deutsche Fassung erhältlich; version française à demander)

## **Dietmar von Polenz - Global Experience**

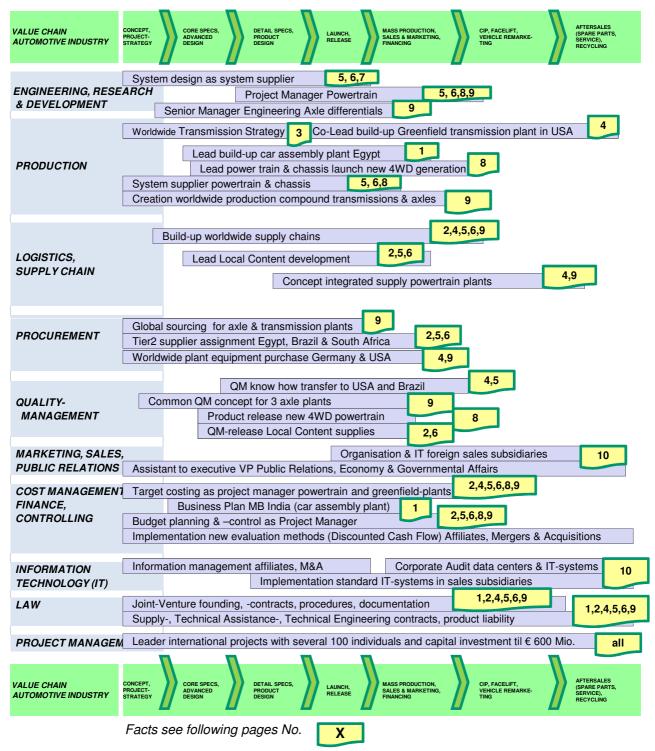


On four continents through entire value chain sole responsibility or major contribution for complete business systems in concept, build-up, restructuring or evaluation!

Details see following pages No.



## Leadership expertise through the entire value chain



## Business plan for a car assembly plant in India and build-up of commercial functions





## Key data:

- Joint Venture Mercedes-Benz India Ltd. (51% Daimler AG, today 100%, with Tata-TELCO group) with share capital € 86 Mil.
- Build-up of a ckd car assembly Eclass in Pune/India in TELCOfacility with modernisation of pressand paint shop
- Capacity 20.000 cars/year in 2shift operation
- Entry in closed luxury car market India with local ckd manufacturing
- Development Local Content and supply base, build-up retailnetwork and aftersales

## Personal contribution:

- •Creation Business Plan incl. balance sheet, P&L statement, finance plan, Discounted Cash Flow over all project steps from 3/1994 to 3/96
- •Commercial responsibility for contracts and rules of engagement, reconciliation assumptions and business plan with Joint Venture partner TELCO
- •Build-up and operation of local commercial functions in Pune in the first 2 months after founding of company 1995
- Acceleration of production launch by
  1 month to use tax benefits before
  3/95

#### References:

Glaser, Dr. Niess, Follmann

VALUE CHAIN
AUTOMOTIVE INDUSTRY

CONCEPT.
PROJECTSTRATEGY

CORE SPECS,
ADVANCED DESIGN

DETAIL SPECS,
PRODUCT DESIGN

DETAIL SPECS,
PRODUCT DESIGN

LAUNCH,
SALES & MARKETING,
FINANCING

CIP, FACELIFT,
VEHICLE REMARKETING

AFTERSALES (SPARE PARTS,
SERVICE)
RECYCLING

# Greenfield car assembly plant in Egypt



## **Key data:**

- Passenger car assembly plant "Egyptian German Automotive Co." in 6th of October City west of Cairo
- Joint Venture Contract 4/1996, Start of ckd-production 10/1997
- 26% share of Daimler AG
- Normal capacity 2.500 Mercedes-Benz E-class / year in 1-shift operation
- Sales volume quadrupling by local production
- 42% Local Content
- Capital investment € 13 mil. for Body shop, paint shop and assembly + facilities € 11 mil.
- Capital return EGA after only 2 years by dividends with additional Daimler profit by inhouse supplies

### Personal contribution:

- Sole responsibility for entire project since contract signature until full production in 7/1998
- Negotiations with egyptian majority shareholders and foundation of the public company
- •Teaming and lead of numerous project teams and suppliers
- •Organization of supply chain and release of local supply products
- •Handover in time and budget to line management
- Coordination support of truck & bus license assembly MCV Ghabbour

#### References:

Follmann, Dr. Niess



## Worldwide transmission strategy cars and commercial vehicles





## Key data:

- Board project "Worldwide Transmission Scenario": Study of all inhouse and purchased transmissions in the DaimlerChrysler corporation from smart to heavy duty truck
- Classification according to key data as input torque, gross vehicle & combined weight, costs, technology,..
- Strategic restructuring of transmission business of 4,2 mil.
   units/year in 8 plants staffed with
   18.000 workers at € 4,6 bill. Internal
   revenue and € 0,8 bill. purchase
   volume
- Results: Reduction by 50% to strategic products with higher scale effects, creation of centers of competence, redesign manufacturing landscape, joint procurement, long term product development roadmap avoiding parallel work by technology transfer

### Personal contribution:

- •Project lead and execution as No. 2 in a 5-head core team from 4/1999 to 12/2000
- •Elaboration of analysis concepts, presentations and board decision papers
- •Lead all operative negotiations and alignments with Chrysler, truck business unit and Mercedes-Benz car group incl. post merger integration
- •Implementation of core project "Cloning of MB Automatictransmission NAG1 in a greenfield plant ITP2 by Chrysler in Kokomo/Indiana" as project manager Mercedes-Benz (cf. page 4)

#### References:

Dr. Dostal, Stauch, Harlow, Brandstetter, Engling



## Technology transfer and industrialisation of an automatic transmission in USA



## **Key data:**

- Greenfield Indiana Transmission Plant No.2 in Kokomo and extension of Toledo Machining Plant, Kokomo Casting Plant + MB plants Hedelfingen, Mettingen, Berlin and Gaggenau
- ITP2-capacity 800.000 Automatic transmissions and torque converters for Chrysler300C +Grand Cherokee
- Capital investment US\$ 550 mil. in USA and € 25 mil. in Germany
- Savings of own product development by Chrysler and of time to market
- Benchmark cost level, savings
   €20/unit by scale effects and joint
   procurement
- Trusted same processes and equipment in Germany and USA
- Integrated supply, transfer pricing and manufacturing concept
- "Best Chrysler-plant" by Harbor Report & Chrysler-management assessment



## Personal contribution:

- Responsible co-development of overall strategy (cf. No. 3)
- •Leadership of entire Mercedes-Benz project for transmissions and torque converters and lead of project teams from 7/2000 to 3/2004
- •Organisation of Planning support, technology transfer, training and supply chains from Stuttgart, Berlin and Gaggenau to Kokomo/Indiana and Toledo/Ohio
- •Tracking cost target achievement for products and supply chain from Europe
- Support of Chrysler in USA

#### References:

Stauch, Dr. Dostal, Harlow, Engling, Dr. Niess, Dr. Michels, Neuer, Brandstetter, Weber



# Transformation of a powertrain & suspension manufacturing plant to a system supplier with production in Brazil





## Key data:

- Extension of smart model portfolio by a light Sport Utility Vehicle based on C-class with manufacturing in Brazil
- Vehicle product development with system suppliers
- Adaptation A-class assembly plant Juiz de Fora in Brazil and local content supplies
- First tier1-role of MB-plant Untertuerkheim as "system supplier power train and chassis" with coordination of product development and tier2 suppliers
- Capital investment for power train and chassis of € 42 mil. planned
- Project stopped by restructuring smart GmbH in 2004 just before ordering of tools and plant equipment

### Personal contribution:

- Project leader powertrain & chassis (engine, transmission, axles, suspension) in product development project smart formore (SUV) from 2002 to 3/04
- Build-up of project organisation of system drivetrain development and supply with car system developer Magna Steyr, smart, MB do Brazil and tier2 suppliers
- Project lead planning assembly line drivetrain Juiz de Fora in operation responsibility Untertuerkheim plant including supply chain local and from Europe (BOT)
- Selection of local content suppliers in Brazil
- Use of plans and network to transfer
   M-B CLC to Juiz de Fora in 2006

#### References:

Stauch, Kasper, Brandstetter, Pauler, Neuer

VALUE CHAIN
AUTOMOTIVE INDUSTRY

CONCEPT, PROJECT- ADVANCED DESIGN

DESIGN

DETAIL SPECS, PRODUCT SALES & MARKETING, VEHICLE REMARKE- TING

CIP, FACELIFT, VEHICLE REMARKE- (SPARE PARTS, SERVICE), RECYCLING

## Local content and new assembly powertrain & chassis in South Africa



## **Key data:**

- Doubling the capacity of East London assembly plant to 75.000 cars/year for Southern Africa and USA under customs preference AGOA with new C-class W204
- Raise of local content according AGOA-criteria and worldwide single source of suspension struts from South Africa for all C-class plants
- Planning and build-up of new lines for body shop, coating & paint shop and car assembly
- Transfer of new welding, coating and assembly technologies to South Africa
- New supply chain concepts with supplier park



### Personal contribution:

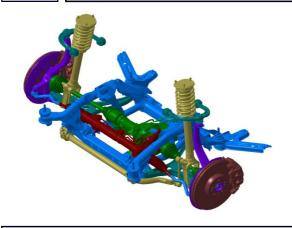
- Project leader powertrain and Chassis W204 South Africa for Mercedes-Benz Cars (budget € 11 million)
- Integration of planning power train and suspension assembly, supply chain and procurement in Europe and South Africa
- Tracking industrialisation of "forging of struts and press-in elastomer bushings" single source worldwide
- Integration of supply chain planning with car assembly plants Sindelfingen, Bremen and East London and tier 1

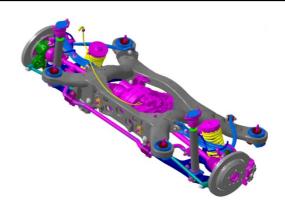
#### References:

Follmann, Kasper, Neuer, Brandstetter



## **Evaluation of a chassis-supplier's business system in USA for possible takeover**





## Key data:

- Complete Evaluation of the NAFTA business system of the "system supplier chassis" under consideration of contractual relations including tier2 and tier 3 suppliers for Tuscaloosa plant (ML and Rclass) in USA
- Value analysis of chassis-parts and manufacturing processes to identify cost savings potentials and alternatives
- Time schedule, funding, risk evaluation and organisation concept for a take over of tier1responsibility and facilities
- Results: Continuation of business system with improved conditions and stretched cost targets according benchmarks to avoid take-over risks

## **Personal contribution:**

- Confidential investigation and analysis together with a team head procurement planning supported by internal experts and 3 consultants part time in USA and Europe for 6 months in 2005
- Generating of improvement proposals and road map for implementation
- Presentation and discussion of results to car division and car program management, procurement, corporate audit
- Monitoring & tracking follow-up target costing process with system supplier

#### References:

Stauch, Kasper, Brandstetter, Glaser



## Project management power train and chassis new 4WD car generation





## Key data:

- Product development and market launch of third generation 4matic all wheel drive car powertrain with integrated transfer case NAG2i
- SOP in 8/2006 in MB S-class; more vehicles & vans followed
- Total budget € 45 million
- Savings of package, weight, fuel and costs compared with previous generation from MagnaSteyr; unique car body with 2x2 cars
- Development of a small SUV "GLK" based on C-class 4matic with manufacturing SOP in Bremen 2008

## Personal contribution:

- **Project leader Compact** Allwheel Powertrain & Chassis from 12/05 to 12/06 for market launch of first target vehicle Sclass
- Successful launch in time, budget and under target cost
- Project manager powertrain and chassis M-B GLK program
- Leader project coordination of product development, production, supply chain, target costing for transfer case, side shafts, engine adaptation, front axle and chassis

#### Literature:

Supplement "The new 4matic in S-class by Mercedes-Benz" to Automobiltechnische Zeitschrift ATZ/MTZ, Wiesbaden September 2006

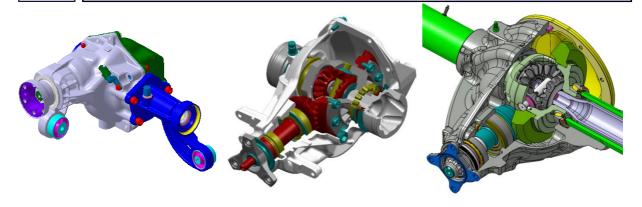
#### References:

Stauch, Kasper, Engling, Wieland, Brandstetter, Spahn, Werner

VALUE CHAIN AUTOMOTIVE INDUSTRY



# Creation of a worldwide network for axle differentials with technology transfer, worldwide procurement and high parts communality



## **Key data:**

- Transfer of Mercedes-Benz car technology "Fuel Economy Axle Differentials" by Chrysler and Daimler Trucks
- Product development of additional sizes, front and rigid beam axle differentials with up to 60% parts communality per ring gear diameter
- Scale- and cost reduction effects by parts communality and joint global sourcing for up to 4,7 mil. axles per year
- Greenfield Marysville Axle Plant in Michigan and extension of plants Mettingen and Kassel with common process matrix
- Capital investment of ca. US\$ 700 mil., thereof US\$ 500 mil. in USA
- Reduced continuation after separation of Daimler and Chrysler

### Personal contribution:

- Concept creation, elaboration and reconciliation of productand project strategy as responsible MB Cars manager in 3-head leading team since ab 3/2006 until approval by DaimlerChrysler Board of Management
- Senior Manager leading the product development of the entire project (MB Cars, Chrysler LLC, Daimler Trucks) with 3 teams in USA and Germany and in double responsibility cross-functional project leader MB Cars 12/06 to 12/08

#### References:

Stauch, Kasper, Harlow, Brandstetter, Wieland, Spahn, Werner

## **Other Projects Worldwide**



## Personal contribution to smaller projects:

- Brazil: Consulting project team Aclass with business plan (1996)
- Set up powertrain & chassis project for transfer of CLC Sportcoupé to Juiz de Fora in 2006
- China: Cross-check business plan of Freightliner truck assembly project (1996),
   Supplier day Common V6 engine and Common Axle (2006)
- France, USA, Belgium,
   Netherlands: IT Manager
   standardisation software and data
   centers of wholesale companies
   and car retail dealers (1987-91)
- Iran: Manager planning for the modernisation of plants and products and account manager manufacturing planning for the

- Iran (continued)
   engine-, bus- and truck-license manufacturers;
- first concept for new project commercial vehicles axle plant VAMCO (1995/96, 1998/99)
- Japan: Manager planning build-up data center and IT systems of new MB Japan sales company (1989)
- Philippines: Feasibility study van ckd production (1996)
- Russia: Feasibility study of the conversion of Air Force Base Taganrog in a ckd car assembly plant (1996; result: no viable economics)

"...if you could make it there, you will make it everywhere...!"

VALUE CHAIN
AUTOMOTIVE INDUSTRY

CONCEPT, PROJECTSTRATEGY

CORE SPECS, DETAIL SPECS, PRODUCT
ADVANCED DESIGN

DESIGN

DETAIL SPECS, PRODUCT
RELEASE

LAUNCH, SALES & MARKETING, VEHICLE REMARKETING

AFTERSALES
(SPARE PARTS, SERVICE), SERVICE), RECYCLING