

# BMW 7-Series Project A Harvard Case Solution & Analysis

**Case Problems**

- Low quality launch as compared to competitors → customer complaints
- Decisions over the Cockpit Design (i.e.: Hand Crafted vs. Automated Production)
- Ways to improve operation objectives (quality, flexibility)

## 2 a. Recommendations concerning the 7-Series prototypes



**2b. Recommendation Regarding Future Development Projects**

**Strategic Objective Enhancement**

- SO 1: considering and applying lean production/manufacturing
- SO 2: decreasing the development lead time
- SO 3: competitive benchmarking (lower customers' complaints per car)

**Adopt concurrent engineering**

- Expanding the relationship with the third party logistic.
- Promoting the interaction, communication among departments and suppliers
- Having specialists and experts participate in the production process.
- Manufacturing capacity extension
- Collaborating with potential vendors, suppliers and universities.

THANK YOU!!



### Limitations for recommendations



**Question 1**

- What are the causes and consequences of BMW's quality problems with newly launched products?
- What should be done to improve "launch quality"?

**Question 2**

- What are your recommendations to Carl Peter Forster concerning the 7-series prototypes?
- What should he do regarding future development projects?

**Question 3**

- What changes would you recommend to the way BMW develops new models?
- What attributes of newly launched products would you expect to improve as a result of these recommendations?

## 1a. Causes and consequences of BMW's quality problems with newly launched products



## Question 4

**1b. Ways to improve its launch quality ???**

Make sure: Performance ✓  
= Customers' expectations in each of critical dimensions:

- Durability (life-span)
- Reliability
- Defects per unit
- Scrap level

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Limitations for recommendations



Question 4



## 2b. Recommendation Regarding Future Development Projects

### Strategic Objective Enhancement

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### Adopt concurrent engineering

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## 2 a. Recommendations concerning the 7-Series prototypes



### Question 1

- What are the causes and consequences of BMW's quality problems with newly launched products?
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### Question 2

- What are your recommendations to Carl Peter Forster concerning the 7-series prototypes?
- What should he do regarding future development projects?

### Question 3

- What changes would you recommend in the way BMW develops new models?
- What attributes of newly launched products would you expect to improve as a result of these recommendations?

### 3. Recommended for changes in developing new models and expected improvement



## 1a. Causes and consequences of BMW's quality problems with newly launched products



## 1b. Ways to improve its launch quality ???

- Make sure: Performance >/ = Customers expectations in such of critical dimensions:
- Durability (life-span)
  - Reliability
  - Defects per unit
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# Question 1

- What are the causes and consequences of BMW's quality problems with newly launched products?
- What should be done to improve "launch quality"?

# 1a. Causes and consequences of BMW's quality problems with newly launched products



**Cause 1:** using different tools and materials in the prototyping process as compared to the production models

**Consequences:**

- Current results obtained from materials used in prototype testing may not conform with desired results in final production models

**Cause 2:** used part designer's drawings and clay models rather than pre-production tools in the first prototyping stage for all parts

**Consequences:**

- Masked many design and manufacturing problems
- Lowers their opportunity to discover and fix quality problems
- Require more highly skilled craftsmen to take care of the hand-built prototype => labour cost and more time taken





# Limitations for recommendations



#### Limitation for question 2a

- The initial investments: high, costly
- Constrain company's flexibility and creativity to introduce a completely new design
- Leak of innovative ideas and trade secrets

#### 2b. Objective 1: limitation (for individual customization strategy)

- Costs and wastes can increase if lean manufacturing is not successful
- Productivity would be lower
- Risk of losing their position and customer

#### Objective 2: limitation (Decrease the development lead-time)

- Hard to keep the quality of product perfectly right
- Difficult to make bold and attractive changes in design



#### Limitation for question 3a

- Doing specified production tasks => higher cost
- Taking longer procurement time to purchase the right materials to do prototypes and production
- Increasing in company's expenditure for other materials
- Delayed time-to-market is possible

#### Limitation for question 4

- Requiring ultimate changes in organization
- More time and heavy investment to enter and build a presence in a well-established market
- Negative customer's perception on BMW branded cars

