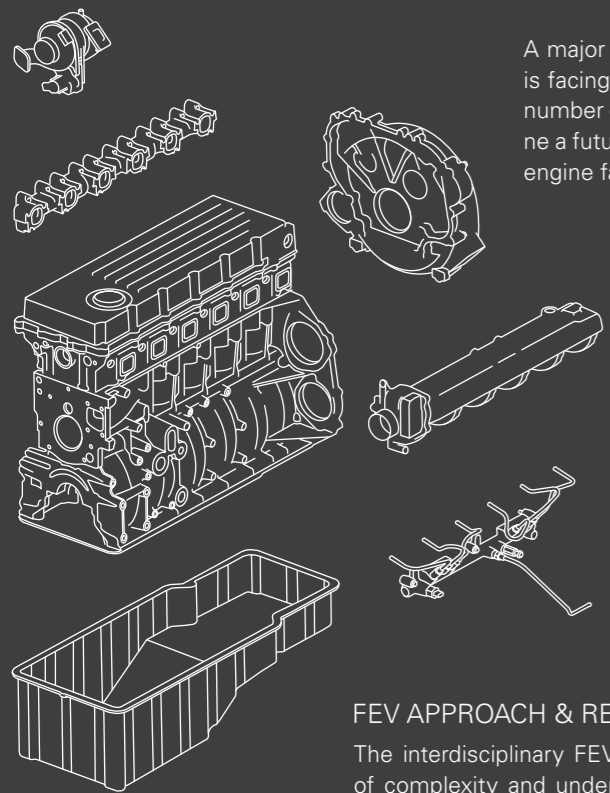


SITUATION AND OBJECTIVE

A major manufacturer of commercial vehicles is facing high complexity due to an increasing number of engine variants. Objective is to define a future modular toolkit covering all existing engine families.



REDESIGN OF HOT ENGINE SIDE

10%
REDUCTION OF
MANUFACTURING
COSTS

30%
REDUCTION OF
DESIGN EFFORTS

40%
LESS VARIANTS

FEV APPROACH & RESULTS

The interdisciplinary FEV expert team identifies main drivers of complexity and understands the client's current situation. Upcoming engine requirements and cost analysis results regarding development, production and assembly define the basis for the future modular toolkit.

CONTACT

FEV Consulting GmbH
Neuenhofstraße 181
52078 Aachen · Germany
Phone: +49 (241) 5689 - 9992

Frankfurter Ring 127
80807 München · Germany
Phone: +49 (241) 5689 - 6403

FEV Consulting, Inc.
4554 Glenmeade Lane
Auburn Hills,
MI 48326-1766 · USA
Phone: +1 (248) 724-1600

consulting@fev.com
modularization-strategies.com
www.fev-consulting.com



ABOUT FEV CONSULTING

FEV Consulting combines top management consulting expertise with the technical capabilities and know-how of the FEV Group. Our deep industry knowledge enables us to create pragmatic solutions to some of the most pressing and complex issues facing today's enterprises.

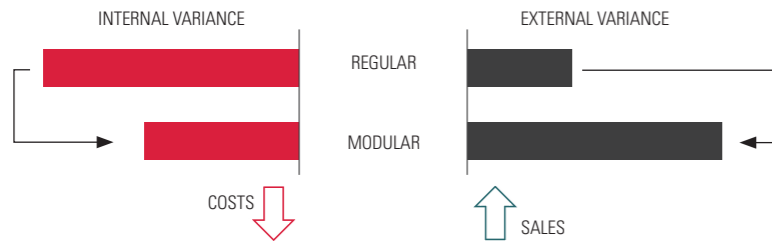
Our team consists of experienced strategy consultants with deep industry knowledge and the backing of FEV's extensive technical expertise to provide solutions that are both practical and sustainable.



Reducing complexity for sustainable powertrain solutions

COMPLEXITY CHALLENGE

Today's automotive industry is forced to deliver high quality products at reasonable costs whilst facing an increasing degree of complexity. Several market players introduce modular toolkits to master these challenges and to prepare themselves for the future. FEV Consulting supports both powertrain manufactures and suppliers to define a tailored sustainable modular toolkit strategy.



BENEFITS FOR YOUR BUSINESS

- Reduction of one-off development and running manufacturing costs
- Transparency of complexity cost drivers
- Enabling of external variance to meet customer needs, while minimizing internal complexity
- Quality improvement through decrease of total variance
- Sustainable variance management and toolkit controlling

POWERTRAIN MODULARIZATION STRATEGIES

Reducing complexity for sustainable powertrain solutions

FEV POWERTRAIN MODULARIZATION STRATEGIES

FEV Consulting offers a four step approach to create a common understanding of modularity principles, develop a sustainable toolkit and support the implementation.

- I. As a stand-alone service, FEV Consulting will prepare a customized study on general modularity principles, competitor benchmarks and best practices.
- II.-IV. The toolkit development phase is based on a detailed analysis of individual boundary conditions, limitations and the cost structure. The initial analysis is key for the modular toolkit concept definition and derivation of an individual modularization strategy. To ensure a sustainable variance handling after implementation, FEV Consulting offers a set of dedicated tools and processes.

