

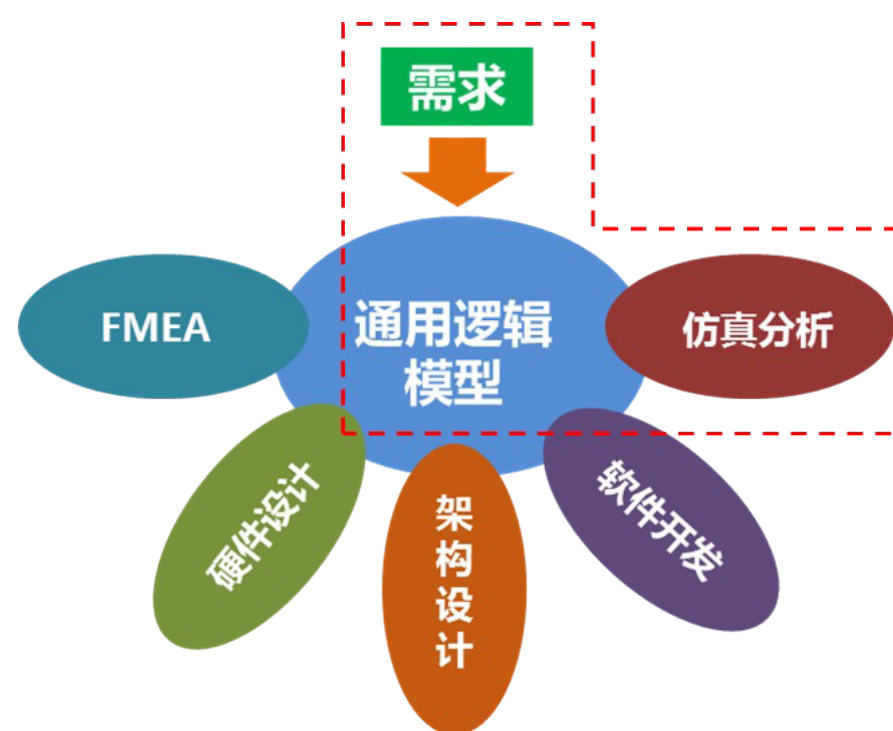


Project Case: CAE and CFD

Context:

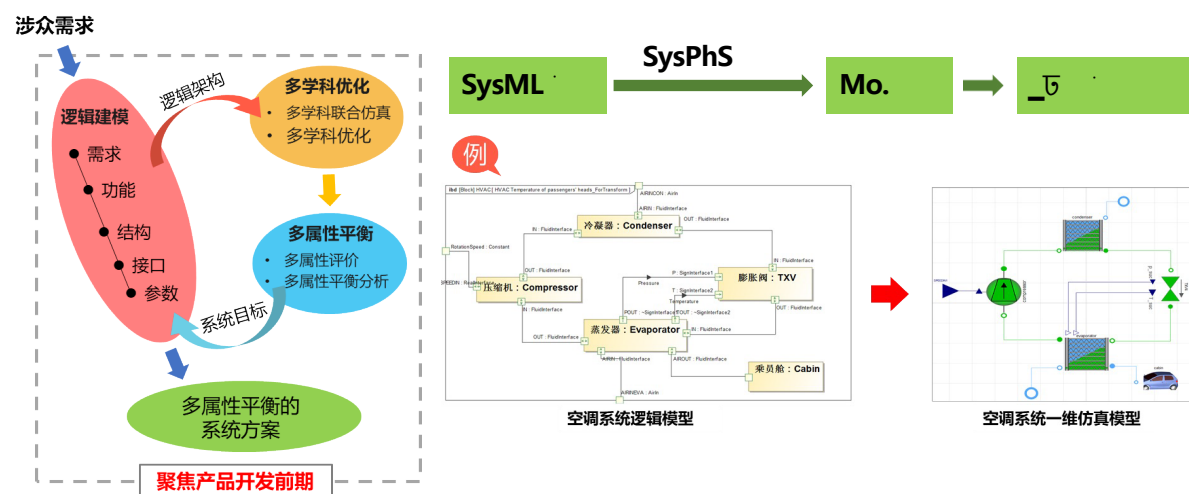
The CFD team of a Chinese automotive company would like to implement for the first time a MBSE approach that covers the logical architecture and domain specific simulations.

The CFD team is performing domain-specific simulations within a silo-approach that are disconnected from the system architecture. This create problem of consistency and poor quality.



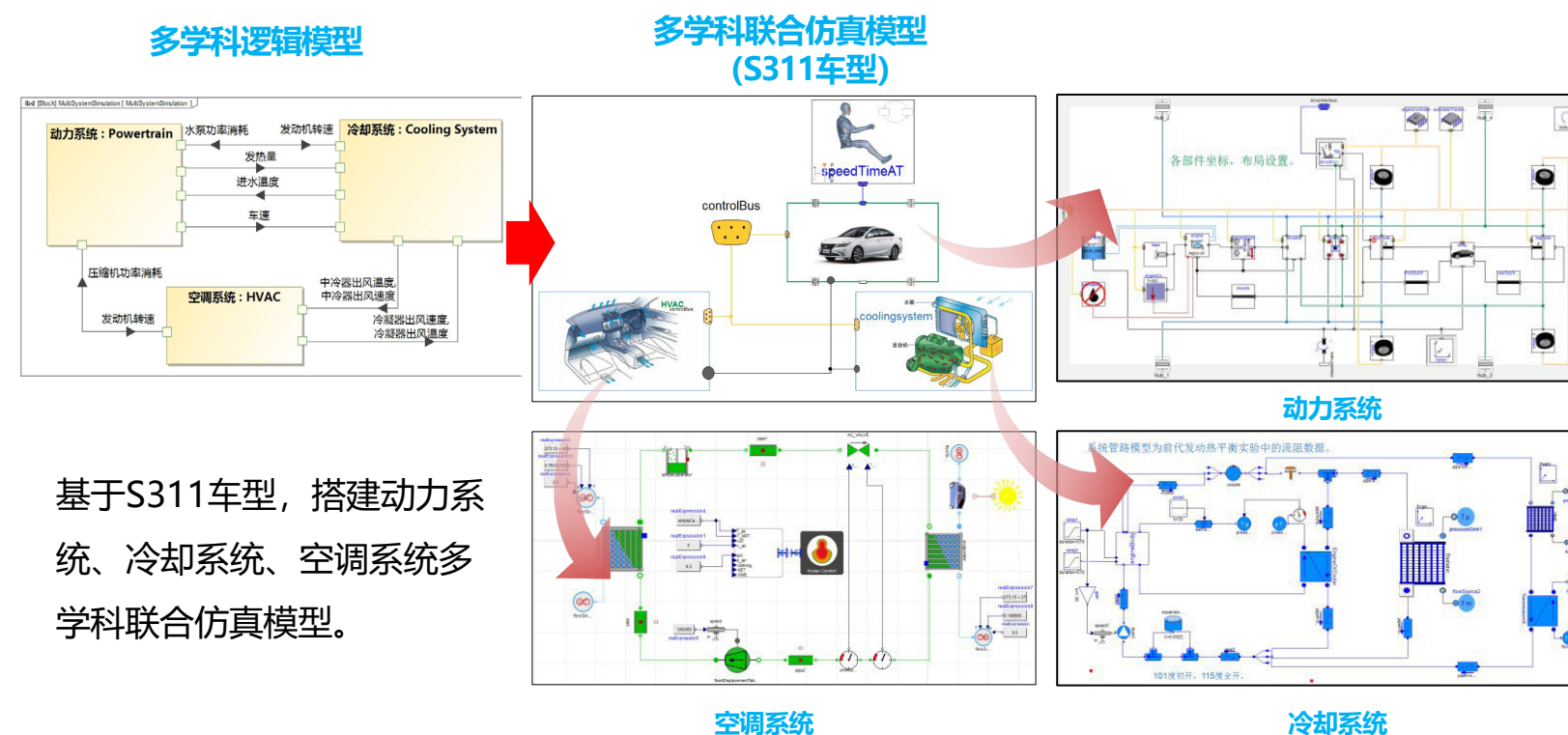
Approach:

The designed approach consists in a simple framework to apply MBSE together with Modelica and eventually Simulink Simulations:



Results:

- 01 | Development of a tailored MBSE approach to integrate the system architecture with domain-specific simulations
- 02 | PoC for SysML-Modelica integration
- 03 | V&V approach to verify requirements of the performed simulation
- 04 | Coaching and Training up to 250 engineers and SW developers on the new approach
- 05 | MBSE adoption plan and best practices



基于S311车型，搭建动力系统、冷却系统、空调系统多学科联合仿真模型。