系思迈 CESAMES
各行业客户实例
Case Studies - Clients of All Sectors

Aeronautics Sector – Training & Coaching on Product Line

Define a product design in regards of the management and market constraints

A Training & Coaching Mission for an Aeronautics Group

- ### CONTEXT

This client is a Chinese aeronautics major actor. The difficulties faced by the client are described by questions as below:

- How to design a product that reaches **performance and costs** targets?
- How to define a product that can address **several markets**?
- How to ensure to identify all the **functions** to cover **needs** and **safety requirements** and build the associated **architecture**?

- ### CESAMES's APPROACH

The customer context led CESAMES to focus on 2 kinds of support: **Training courses** (definition of the architecture key concepts and the description of the architecting process steps & deliverables) and **Architecture case counseling** (online live sessions to provide guidance & converge towards architecture maturity).

Here are the 2 kinds of contents built and provided by CESAMES's architects:

1. **MBSE Method Training** by visio (videos and Q&A live exchanges) and supports PDF in English and Chinese

2. Architecture Case Coaching by live sessions (online for this mission) to provide guidance & converge towards architecture maturity

- ## CREATED VALUE by CESAMES

A **product macroscopically structured** and assessed with CESAMES's assistance regarding its **maturity** allowed:

- Have defined precisely the performances of the target system,
- Have identified the internal and external interfaces and their constraints on the system design,
- Have succeeded a blueprint design for future reuse when environment constraints and needs changes through time.

- ## TRAINEES' FEEDBACKS

Q1: Your personal experience where systems architecture could have avoided an issue?

R1: The MBSE helped to define MVP (minimum valuable product): The product prototype implemented the main functions that allowed the most valuable use cases for the MVP.

Q2: What are in your opinion the key methods that were the most useful (valuable during the design process)?

R2: The interaction diagrams were very useful. It helped to express the interaction outside the system as well as the interaction inside the system.

Q3: What did you like about this MBSE with CESAM Training & Coaching?

R3: a) The training was realized in details on MBSE, good for any newcomer in the subject,

- b) At all stages, the hierarchy chart is frequently sorted out, such as the stakeholders' hierarchy chart and the functional decomposition hierarchy, which made it easier for the team to understand the architecture and to design it from simple to complex.
- c) The method decomposition was more logical and the content format allowed to use it later. For example, when writing needs, the format of needs included the life cycle, which was then used when sorting out the life cycle.