An ITEA Smart engineering project

# DEFAINE

Advanced exploration in early design phases



#### **Project summary**

Front-loading significantly reduces the inefficiencies of the current engineering approach by enabling large-scale design exploration early on or even before the start of a project. To this purpose, the DEFAINE framework enables fast generation of distributed, re-configurable multidisciplinary engineering workflows, built on design automation solutions, largely based on Knowledge Based Engineering. DEFAINE delivered a Design Exploration Framework able to reduce recurring cost in design by 20% and lead-time for design updates by 75%.



### **Project duration**

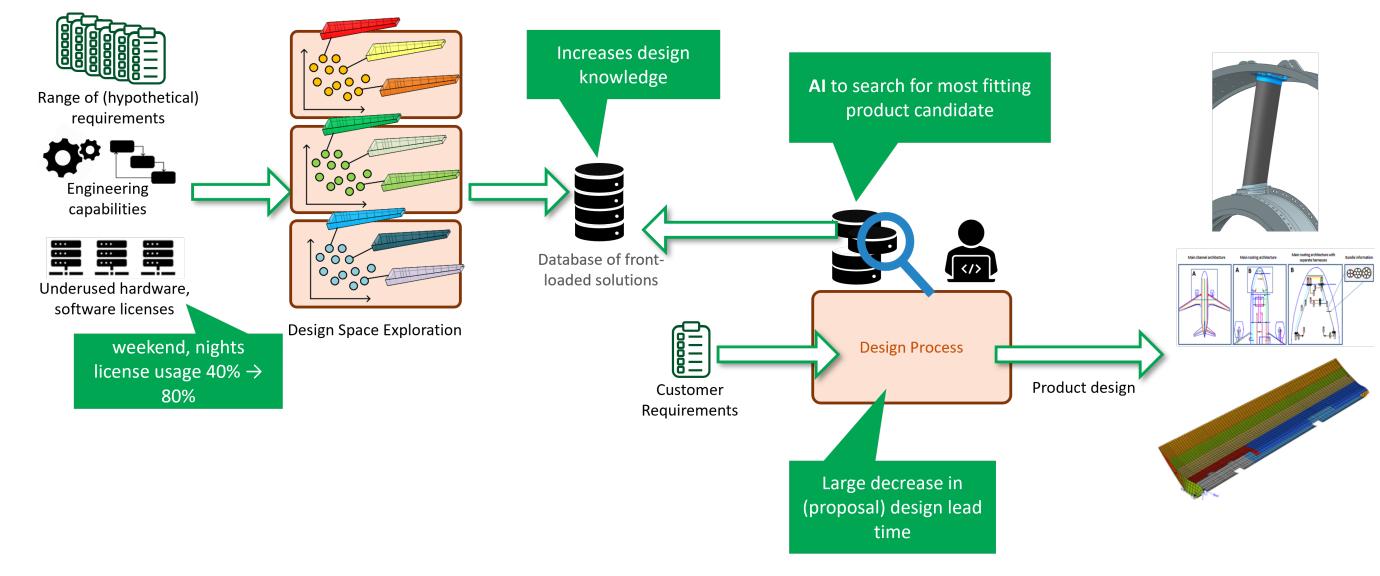
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itea4.org/project/defaine.html



#### **DEFAINE Framework**



## Unique advantages

Automated front-loading, enabling companies to:

- > Win more proposals
- Obtain more cost-effective solutions
- Increase program profit margin
- Decrease program financial risk

The DEFAINE framework supports scenarios for both OEMs and suppliers:

- A OEM leverages front-loaded design solutions for technology assessment on product level
- A supplier leverages front-loaded

design solutions to rapidly provide component level design to an OEM for a given request



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