# Platform Issues in Aircraft Companies

## Interest of Product Families
- Reduce the overall development cost of products portfolio.
- Reduce lead time of derivative products.
- Integrate new technology faster through module improvements.
- Increase standardization of the development process.

## Specificities of Aircraft Industry
- Long lead time - Few development projects at the same time.
- Few new projects - Increasing specialization of aircraft engineers.
- Long product lifecycle - Sequential evolution of products.
- Complexity of products - Intricate development process.
- Specific requirements - Constraints on integrality / modularity trade-offs.

## Aircraft Industry Preliminary Benchmarking:

### Boeing
- Recent focus on commonality.
- Extreme differentiation across aircraft models.
- High integration level of enterprise transformation.
- Top-down strategy.
- Specialized knowledge scattered across the enterprise.

### Airbus
- Historical concern about product families.
- Commonality central to its success.
- More emphasis on product innovation than on enterprise-level improvements.
- Production system dispersed across Europe.

## Metrics Propositions:

### Functional
- Aircraft training savings.
- Maintenance productivity increase.
- Spare parts investment savings.

### Organizational
- Production tools and machines savings.
- Lead time reduction for derivative aircrafts.
- Percentage of elements reused.

## Methodology:
- Short case studies (2/3 interviews) among major stakeholders of recent commercial aeronautics programs (10-15 enterprises).
- In-depth case studies (15/20 interviews, on-site visits) concentrating on the most interesting projects (2-3 enterprises).

## Future Research:
- How platform strategies should be tailored to the aircraft industry? Current initiatives of main companies (Boeing / Airbus)?
- What metrics could be best assess the efficiency of aircraft platforms? How is it possible to implement them?
- What is the integration of platform strategies in current overall Product Development transformations (ex: Boeing Lean+)?