

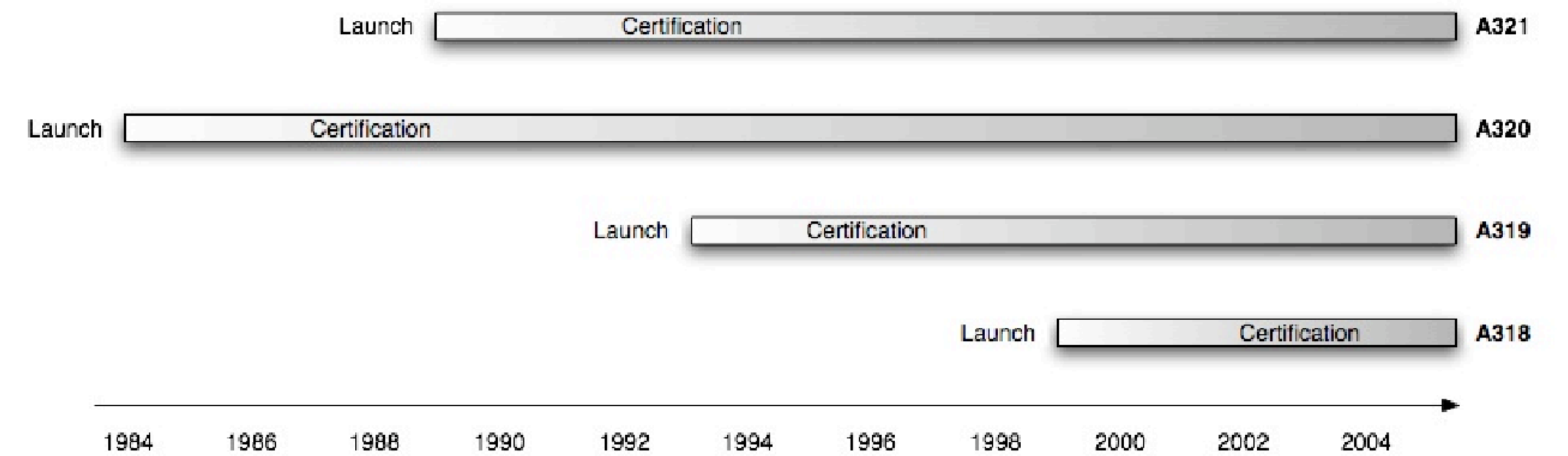
Platform Issues in Aircraft Companies

Interest of Product Families	Specificities of Aircraft Industry
<p>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.</p>	<p>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.</p>

Aircraft Industry Preliminary Benchmarking:

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

A successful product family: Airbus A320 and derivatives



Metrics Propositions:

Functional	Organizational
<p>Aircraft training savings. Maintenance productivity increase. Spare parts investment savings.</p>	<p>Production tools and machines savings. Lead time reduction for derivative aircrafts. Percentage of elements reused.</p>



External point of view



Internal point of view

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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+)?