**Topic:** Risk and opportunity study towards a concept for an after-market specific supply chain solution in civil aviation

The current thesis investigates risks and opportunities of deviating from the serial supply chain solution and implementing spares specific sourcing.

A four step approach towards a “make or make-buy” decision of spares specific sourcing is established.

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**Step 1:** Adapted Kraljic Portfolio Matrix

- A new y-axis has been introduced, instead of business impact which is often low for spares, potential savings vs internally calculated targets are measured.
- Quadrant “Non-critical” has been renamed to “Fasle Trail”, representing simple part without savings potential.

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**Step 2:** Updated Product Lifecycle

- Stage 5 “Customer Service” has been added to the well-known Product Lifecycle to include parts after the end of serial manufacturing.
- y-axis measuring the relative fleet size has been added as additional dimension.

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**Step 3:** Simplified Risk Assessment Grid

- Airbus Customer Services Risk Assessment Grid has been simplified and adapted to measure the possible impact of spares specific sourcing on:
  - Transfer Effort
  - Delivery Performance
  - Quality

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**Step 4:** Buy or Make-Buy Decision

- Scoring of steps 1-3 is calculated using a formula.
- Result is mapped in decision portfolio to derive a buy or make-buy decision for spares sourcing:
  - buy: independent spares sourcing
  - make-buy: maintain link to serial sourcing