

# PACMAN

Prognostics And Computer Aided Maintenance

## Prognostics for Engine's Hydro-Mechanical Unit

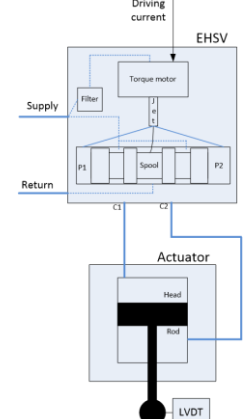
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### Challenges for Prognostics Development

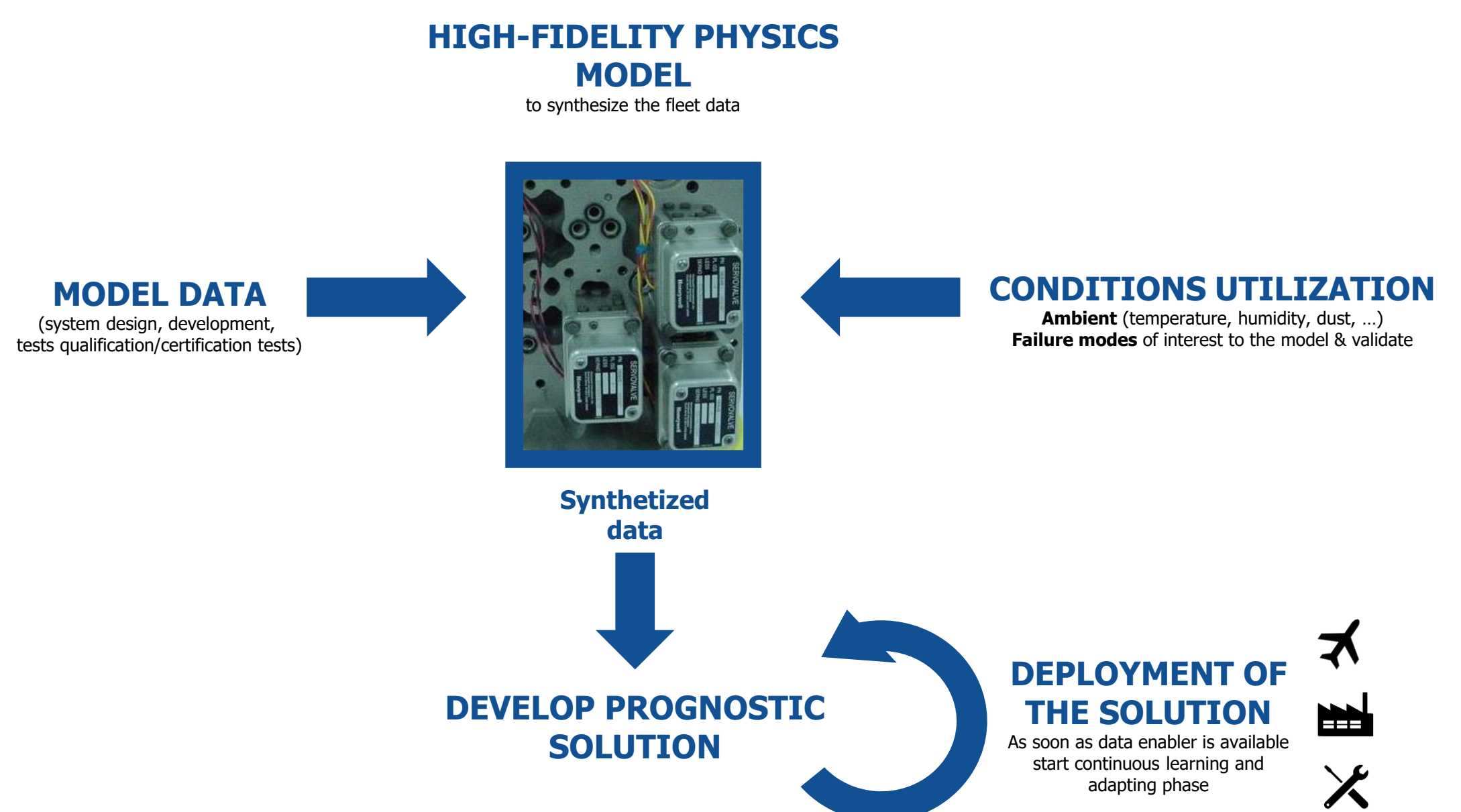
1. **Identify** data collection specification for aircraft systems where no measured data are available and identify its **benefits**
2. **Develop** prognostic solution that will be **ready to deploy**, when no current or historical measured data exist
3. **Develop** prognostic solution for failure modes that **occur rarely** but have high impact (limited measured data for development)

### Use-case System

**Electrohydraulic Servovalves (EHSVs)** of engine's **Hydro-mechanical Unit (HMU)**



### Concept & Approach



### Results

- ➔ Data synthesized by high-fidelity model **validated** by means of hardware seeded experiment
- ➔ Concept of prognostics for Electrohydraulic Servo valves in place and ready to deploy & test in real environment



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