



**memko**



**AUSTRALIA**



**INDIA**



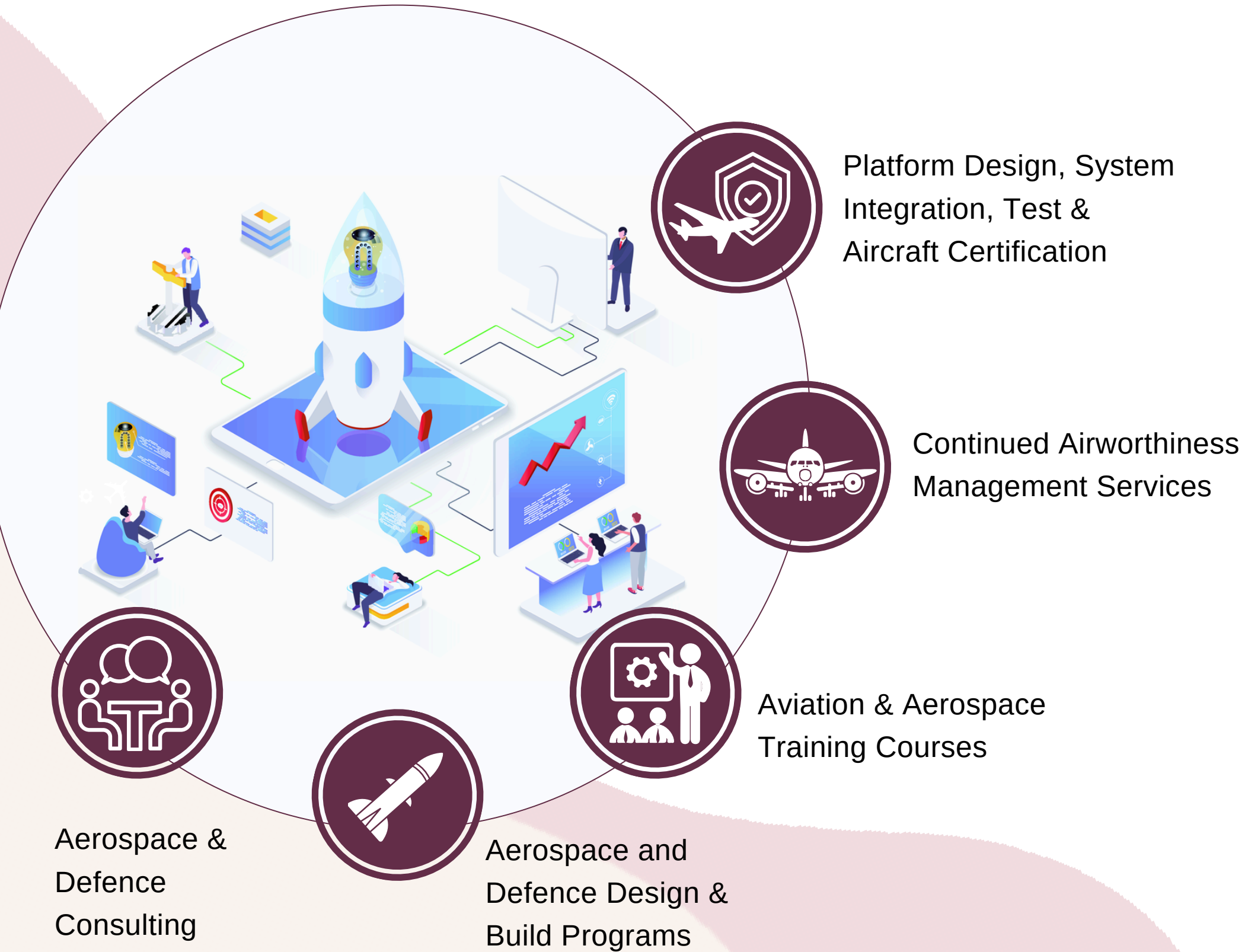
**SINGAPORE**

MEMKO.COM.AU

# ENGINEERING TECHNOLOGY TRAINING



# MEMKO MAAD



## PRODUCTS

### **NIFTI**

Non Intrusive Flight Test Instrumentation

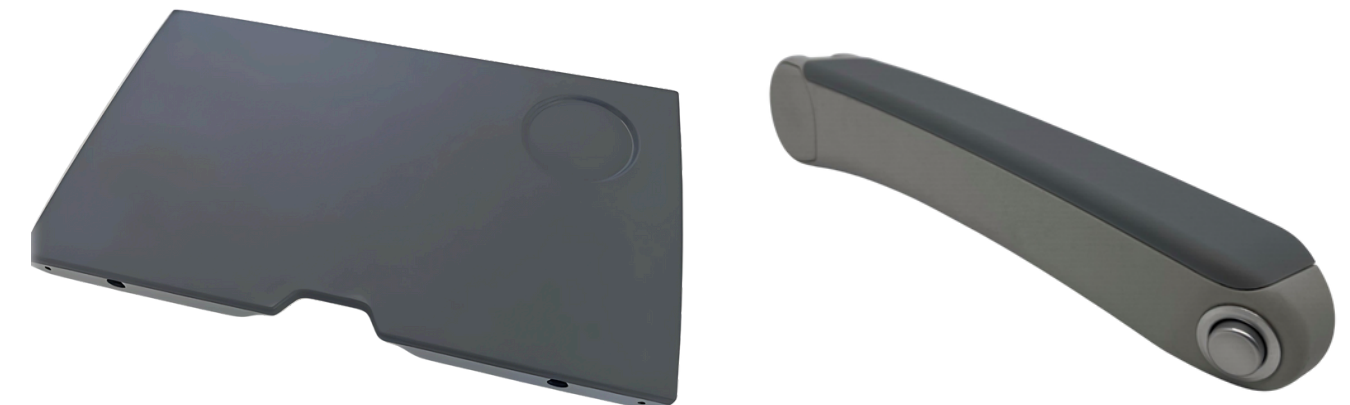


### **MEACAT**

Modular Electronic Attack Capable Air Target



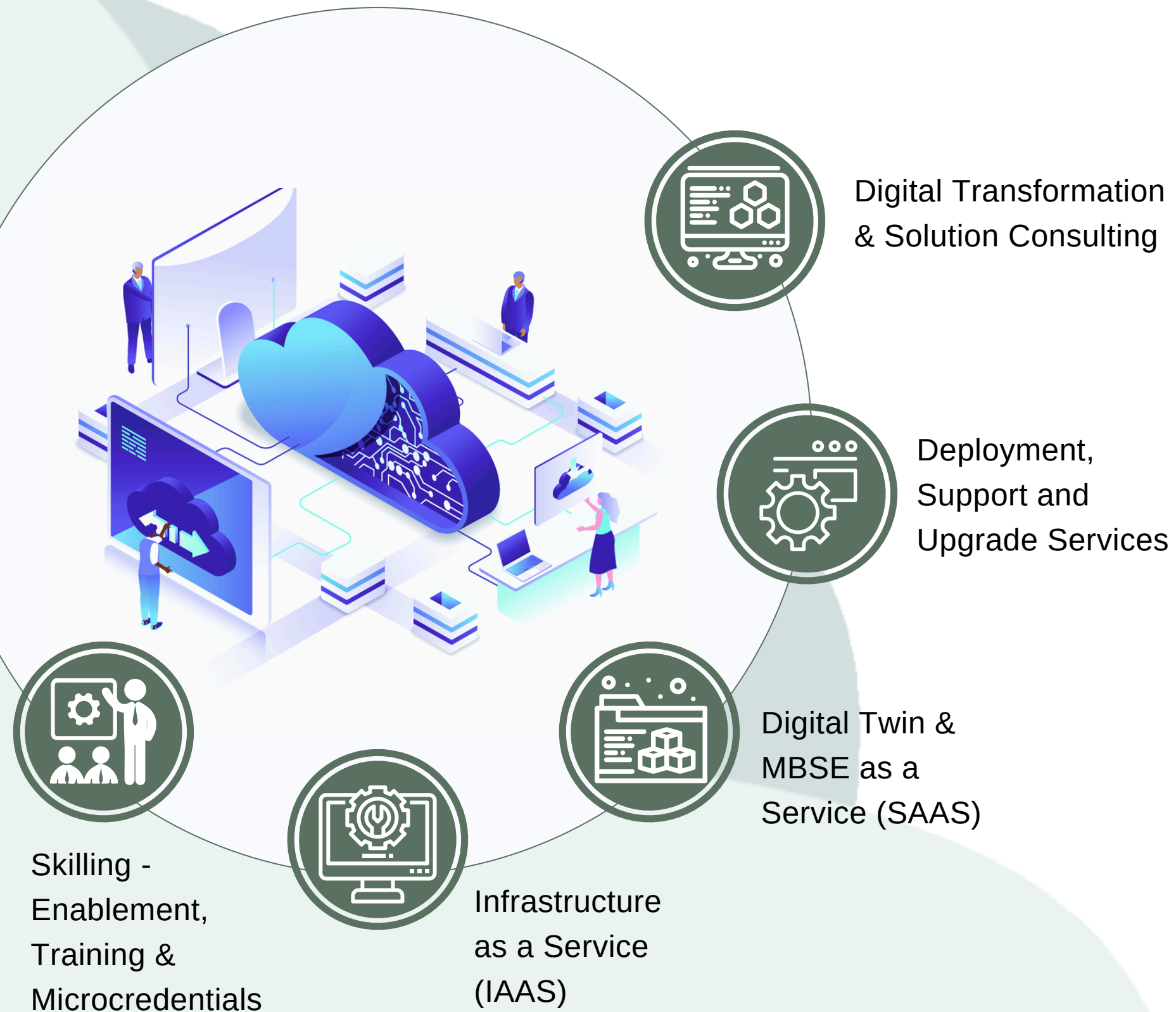
### **3D PRINTED AIRCRAFT INTERIOR PARTS**





# MEMKO SYSTEMS

## SOLUTIONS



*DS* CATIA

*DS* SIMULIA

*DS* ENOVIA

*DS* DELMIA



3DEXPERIENCE®



# KEY CLIENTS

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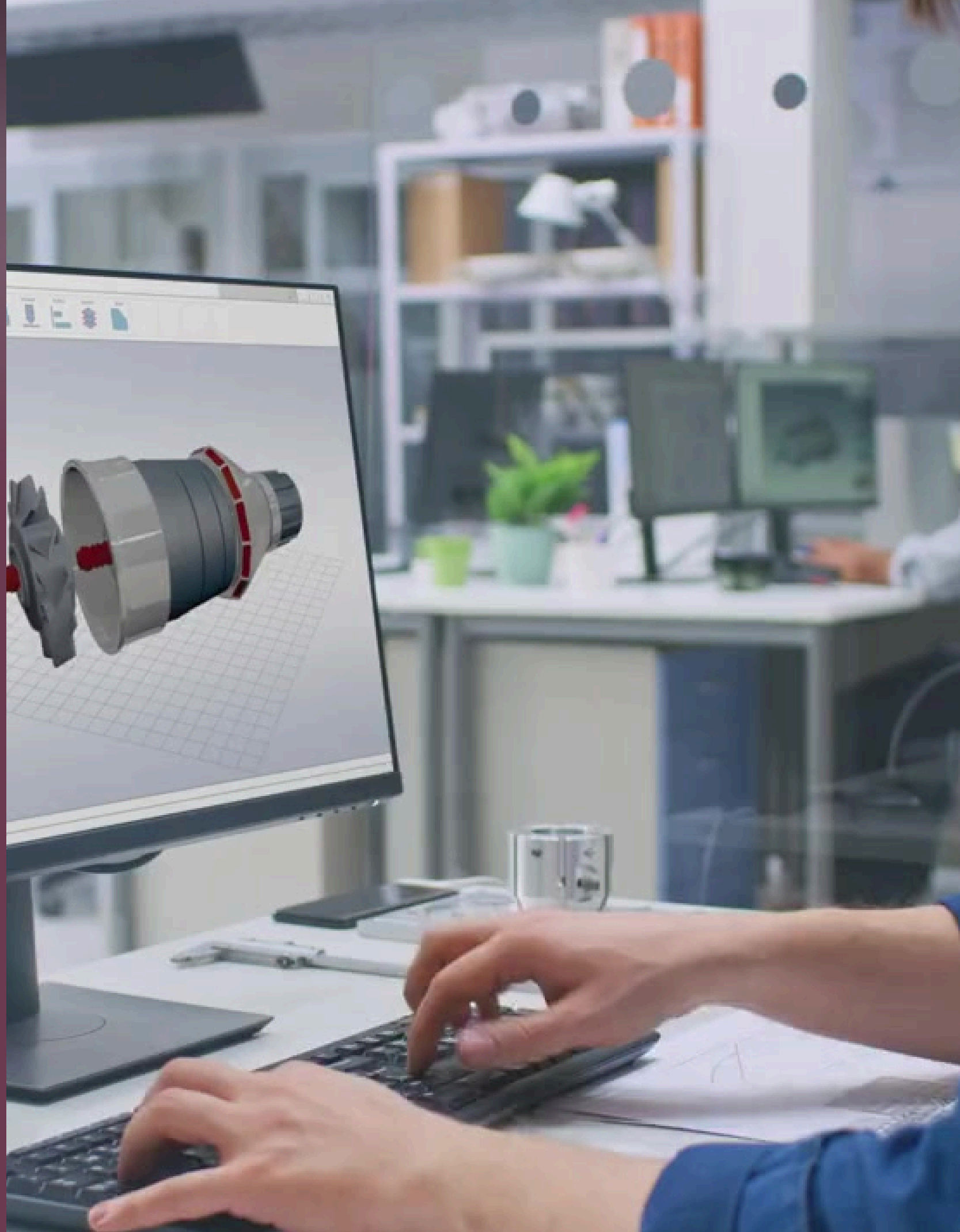
**AIRBUS**

**BAE SYSTEMS**



MEMKO.COM.AU

# Aerospace & Defence Services



# DESIGNED, INTEGRATED, TESTED, CERTIFIED

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- Requirements Definition
- Design
- CAD Modelling
- Analysis
- Digital Simulation
- Test & Evaluation





# AIRCRAFT REPAIRS & MODIFICATIONS

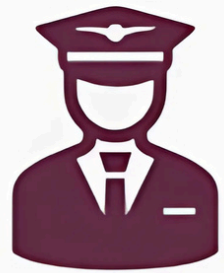
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## CASA Sub Part 21M Design Approval

- Aircraft Structures
- Systems and Equipment  
(Mechanical, Electrical & Avionics)
- Compliance to Regulatory  
Airworthiness Standards



# Aviation Services



Fleet Technical  
Management



Procurement  
Services



Service  
Literature Review



Airworthiness  
Management



Aircraft Design, Analysis  
and Certification



Configuration  
Management



AD/SB Review &  
Assessment



Line Maintenance  
Planning



Technical Records  
Management



Reliability  
Management



End of Lease &  
Entry into Service



Defect Analysis



Technical  
Publications



Weight &  
Balance



Electrical Load  
Analysis



TRAX MRO System  
Services, Support &  
Training



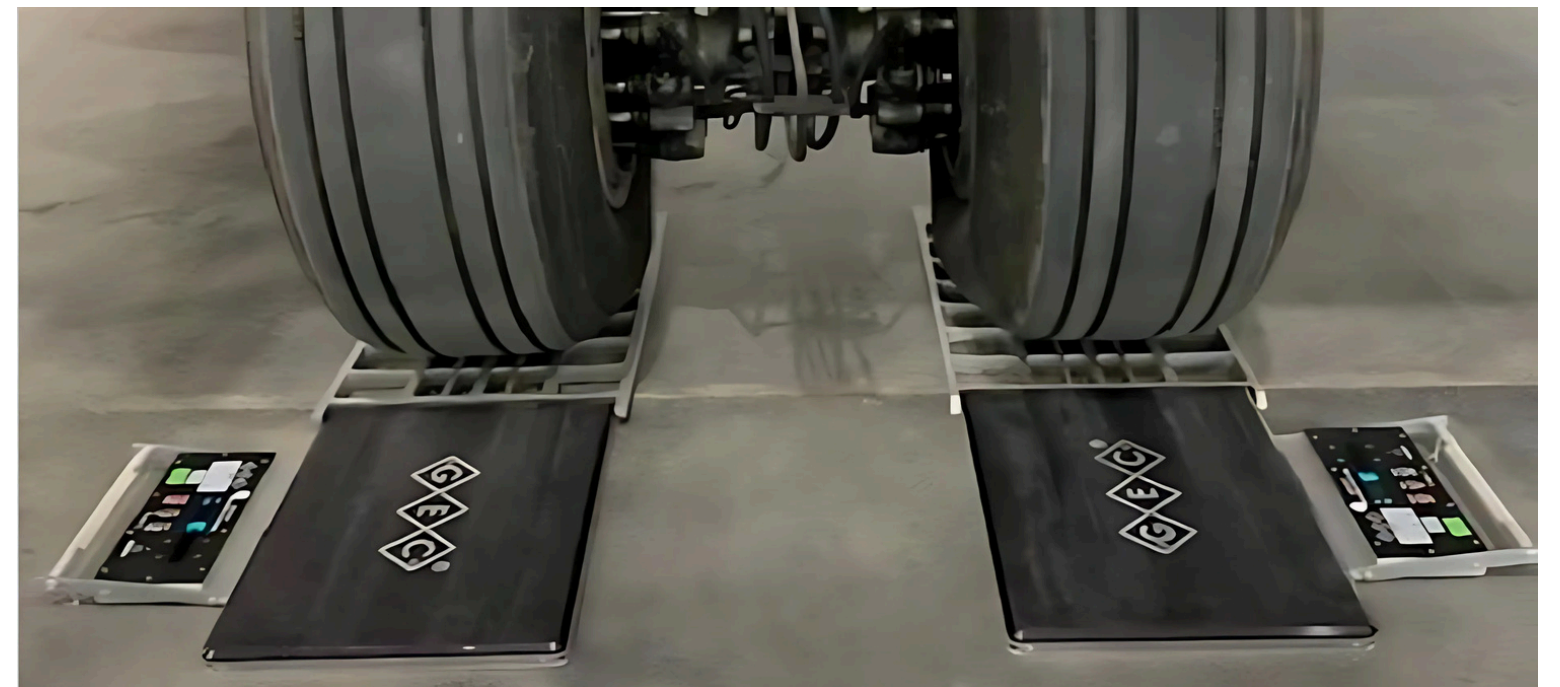
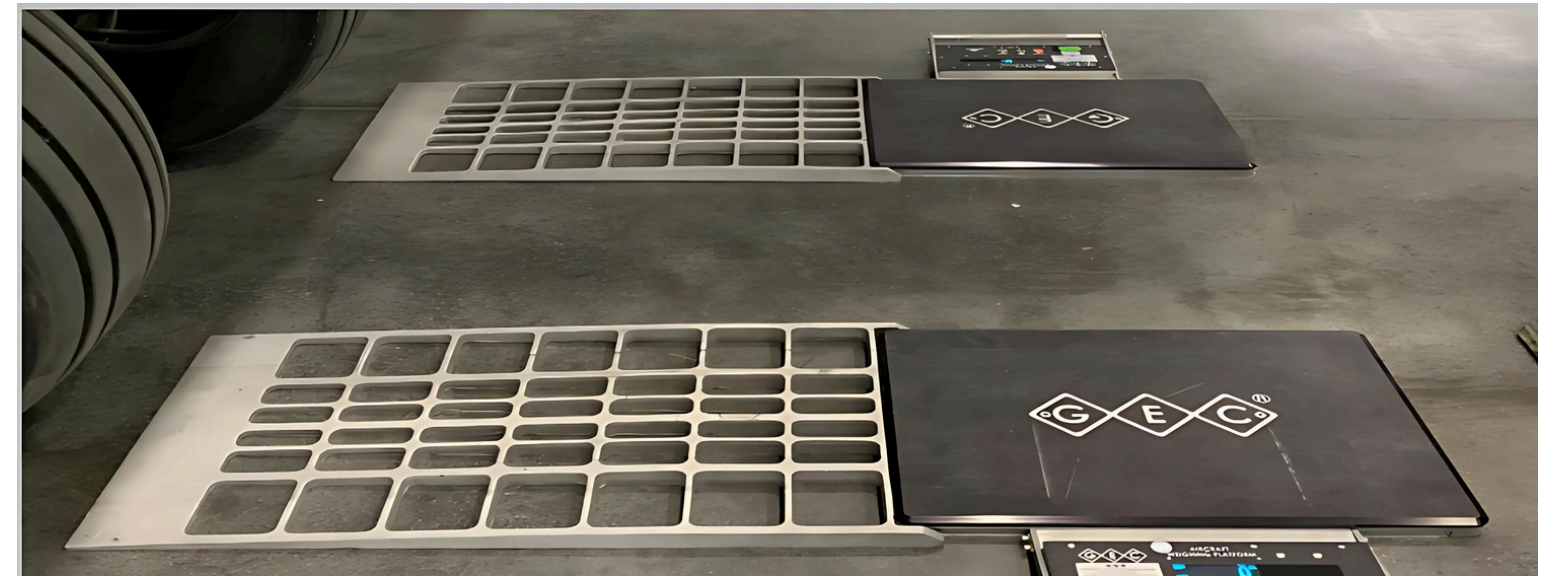
Part 21M Design,  
Repair &  
Modification  
Approval & Support



# Weight & Balance Services

MEMKO offers reweighing services for aircraft up to the size of an Airbus A320 and Boeing 737

The latest technology aircraft scales





# DEFENCE CLIENTS

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**AIRBUS**  
GROUP

*AstroAero*

**BAE SYSTEMS**

 **BOEING**



**Australian Government**  
**Department of Defence**

**NORTHROP  
GRUMMAN**

 **Hanwha**  
Defense Australia

**ASC**

 **RHEINMETALL**  
GROUP

# MEMKO Systems

**PLATINUM  
PARTNER**



**Platinum Partner of  
Dassault Systèmes**

**Preferred Education  
Partner for AU/NZ**





# SOLUTIONS

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*3D* CATIA

*3D* ENOVIA



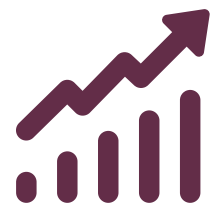
*3D* SIMULIA

*3D* DELMIA

**3DEXPERIENCE®**

# 3DEXPERIENCE

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## Maximise Investment in Existing Technology

Retain what you need - replace what you don't



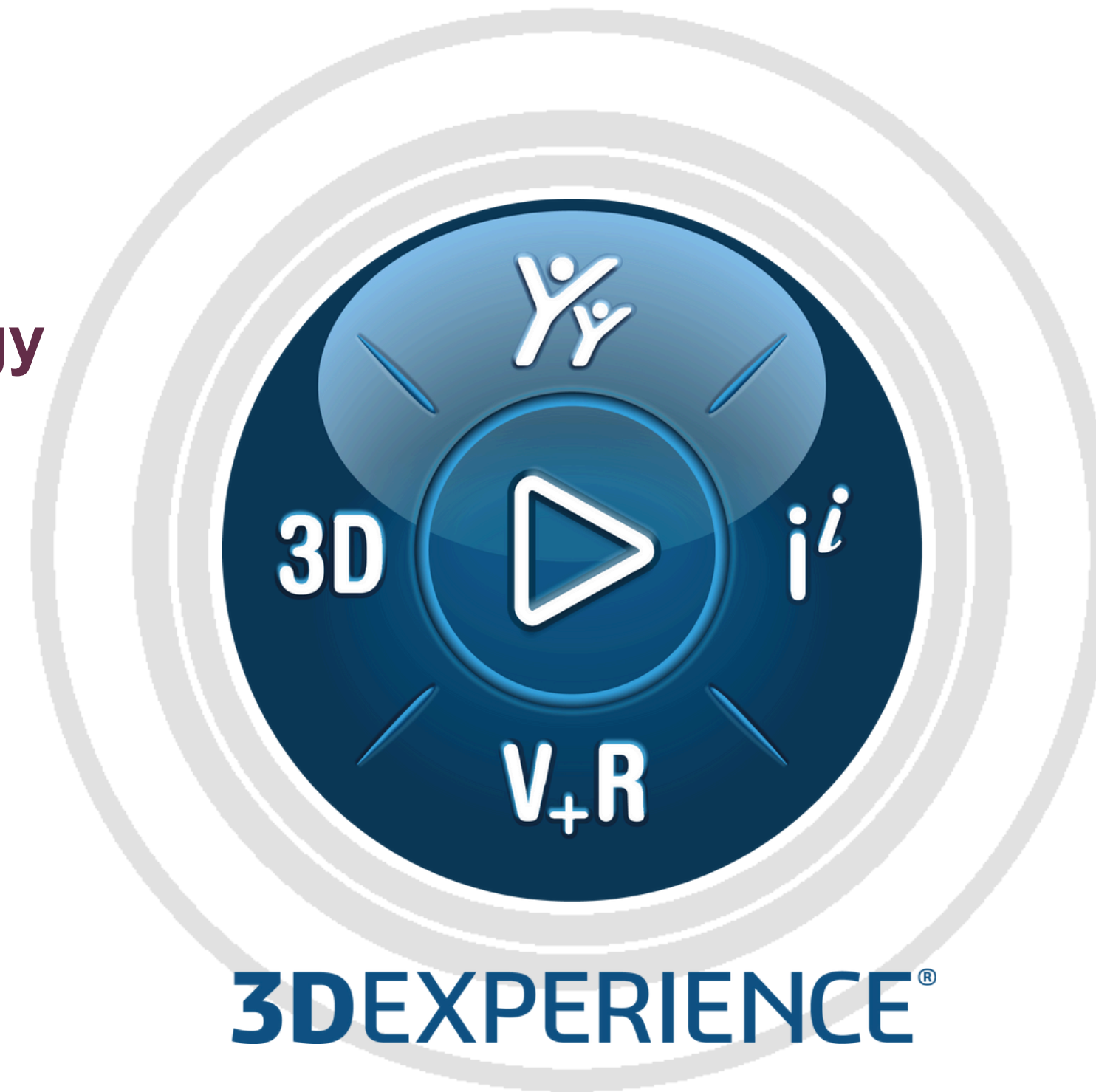
## Reduce Lead Times

Access to the most recent information in real time



## Improve the Customer Experience

Deliver with increased quality





## Engineering Excellence

Accelerate the engineering process by 40% to 50%



## Design & Modelling

Design, styling & surfacing workflow, from industrial to Class A



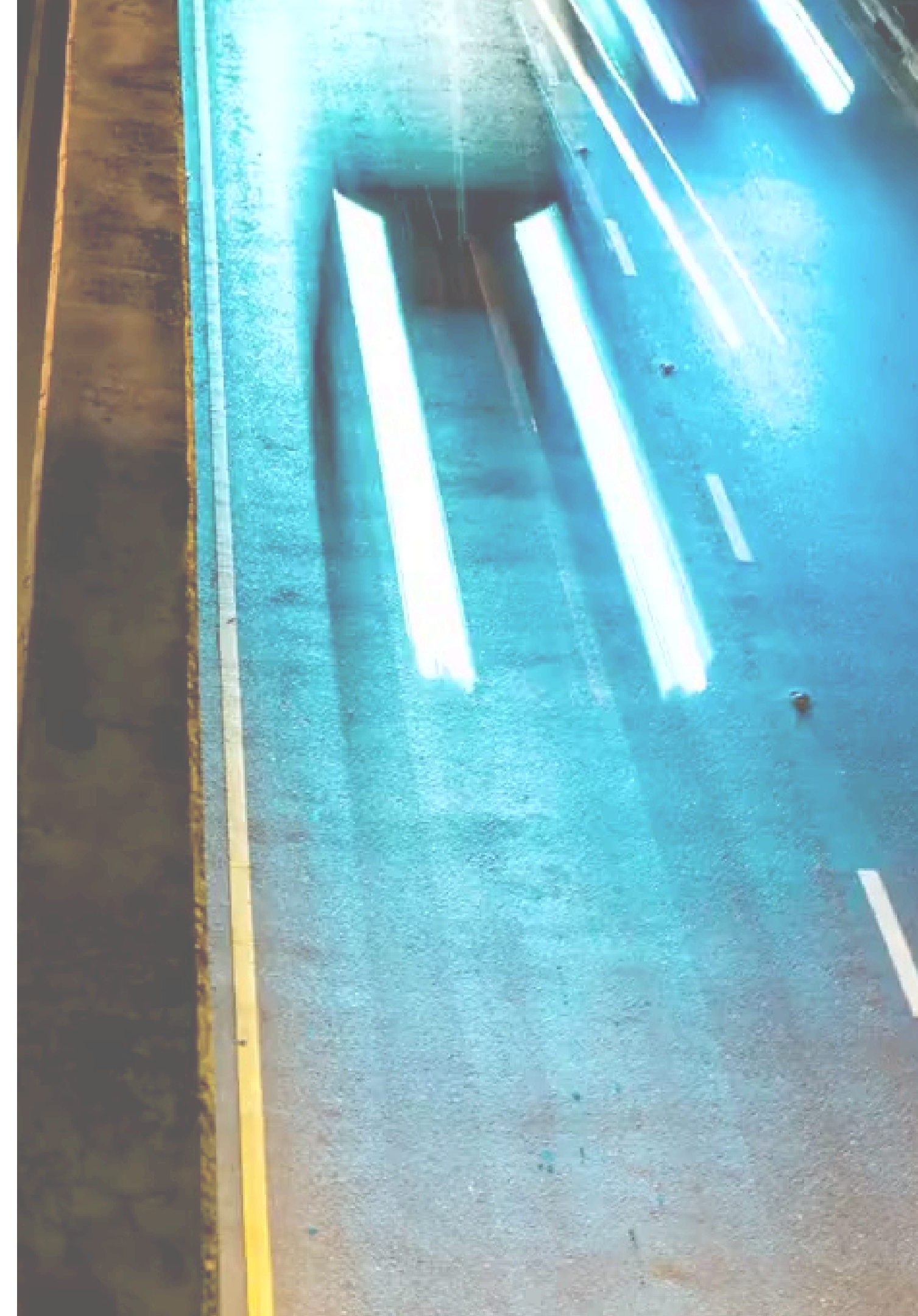
## Systems Engineering

Systems definition to modelling, simulation, verification & business process management



## Electrical & Fluid Systems

Optimise electrical wire harness & cable system design, alongside piping, tubing & HVAC system







## Accurate Predictions

Gain precise real-world structural insights of products



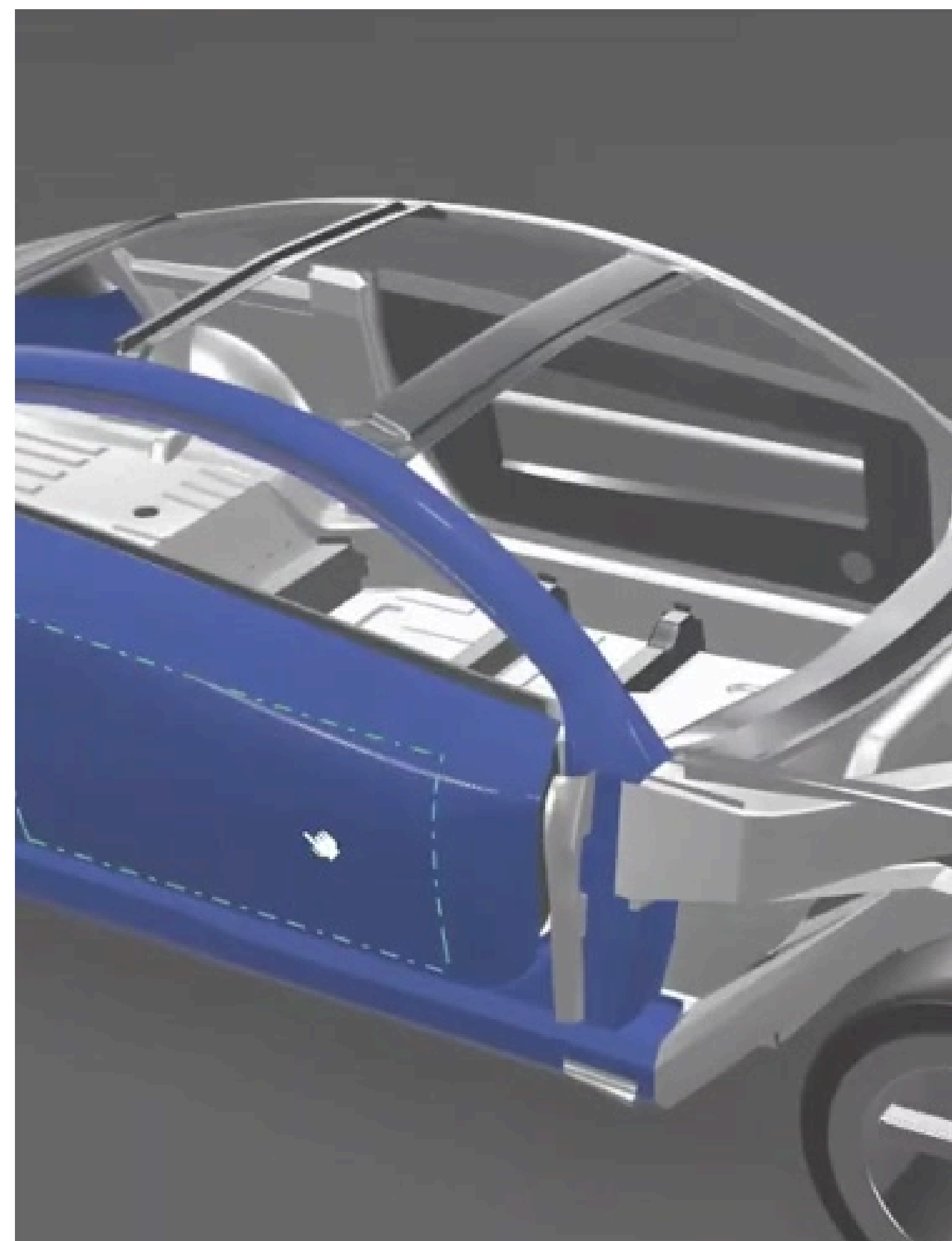
## Enhance Product Quality

Achieve cost-efficiency and design issue prevention



## Cost Efficient Prototyping

Save costs and expenditure time-to-market





## Social

Foster innovation through collaboration



## Speed

Improves productivity by streamlining communication



## Single Source

Entire enterprise can access accurate and up-to-date information



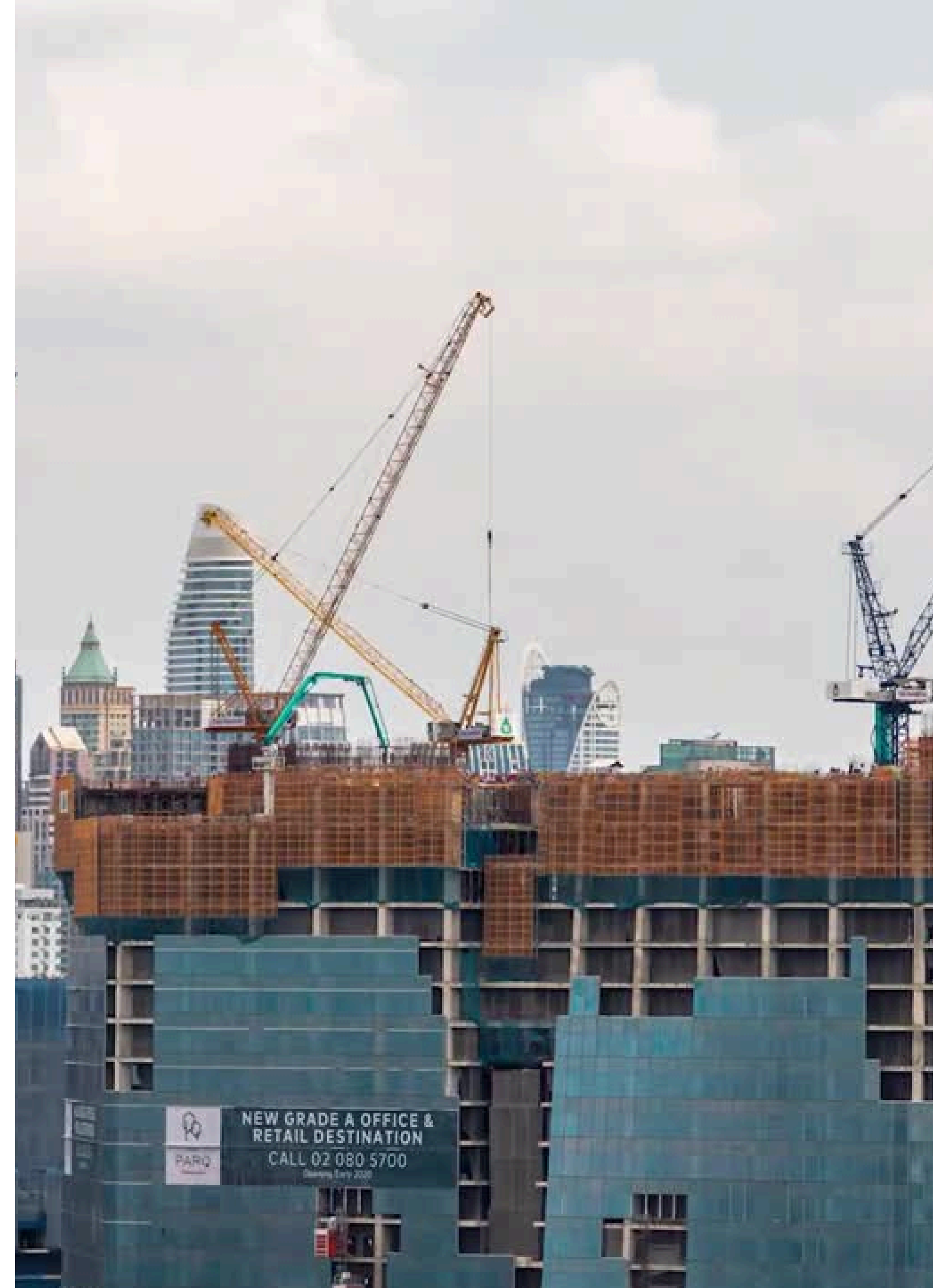
## Smart

Use a data-driven approach to respond faster



## Sustainable

Combine invisible governance and PLM analytics for real-time insights





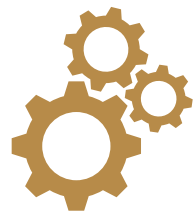
## Process Planning

Build-to-order and lean production manufacturing systems



## Collaborative Manufacturing

Optimise manufacturing assets concurrently with planning



## Robotics

Program and simulate industrial robotics



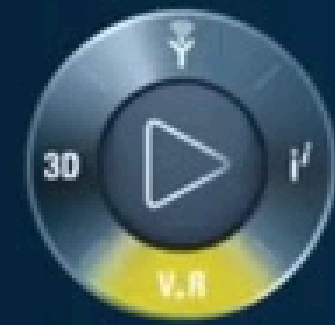
## Fabrication

Program and simulate machining and additive manufacturing



## Ergonomics

Design human-centred environments with virtual twins



Enable y

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# MEMKO Products





# MEACAT

Modular Electronic Attack Capable Air Target



# **A high-performance air-launched gliding threat emulator**

## **Electronic attack capabilities**





**Fieldable from any JDAM cleared platform**  
**Can be repackaged to fit a diverse range of small air vehicles**



# NIFTI

Non-Intrusive Flight Test Instrumentation



# NIFTI

## Non-Intrusive Flight Test Instrumentation

NIFTI is a small rapidly configurable, aircraft independent, wireless sending system that collects acceleration, strain and environmental data using adhesively mounted sensor nodes



DESIGNED & MANUFACTURED  
IN AUSTRALIA



ADHESIVELY  
MOUNTED

INTERNAL OR  
EXTERNAL MOUNTING

WIRELESSLY TIME  
SYNCHRONISED



# NIFTI

NIFTI Non-Intrusive Flight Test Instrumentation



Wireless, time-synchronised flight test system for in-service aircraft



Mounts adhesively on locations of interest for rapid installation and removal



Sensor Nodes available in accelerometer and strain gauge variations



Developed in close collaboration with DST Group and the RAAF Air Warfare Centre





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# ADDITIVE MANUFACTURING





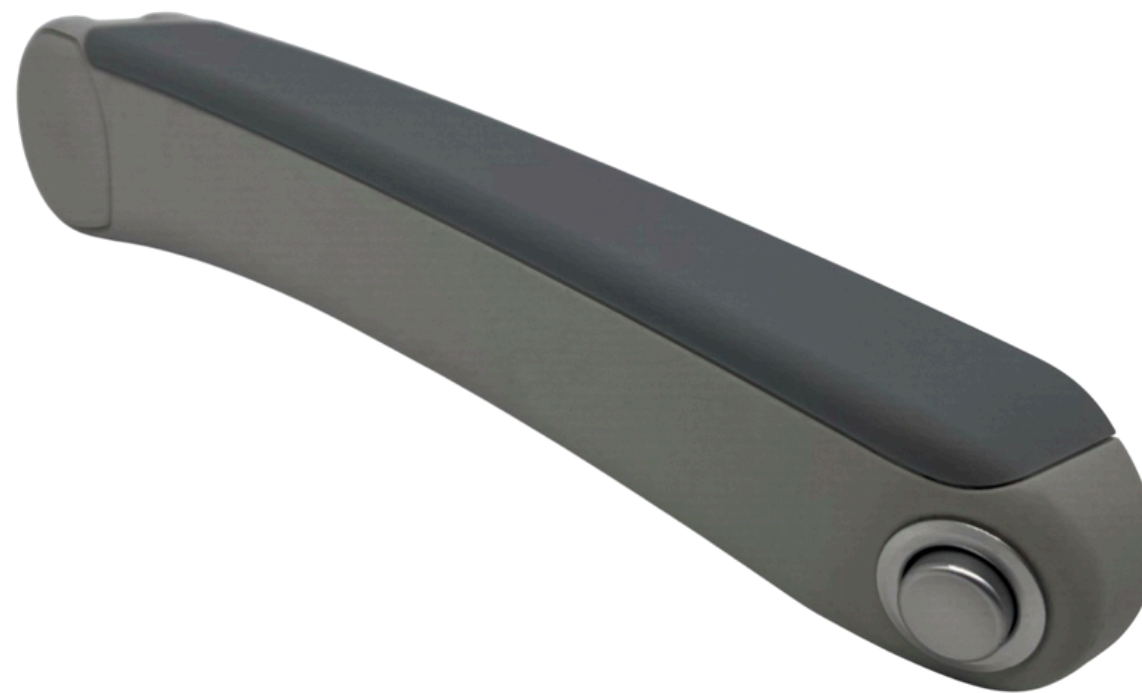
# 3D PRINTING

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Aircraft Interior  
Replacement Parts  
certified by CASA for  
fitment to aircraft

CASA Sub Part 21G  
Production Approval Certificate

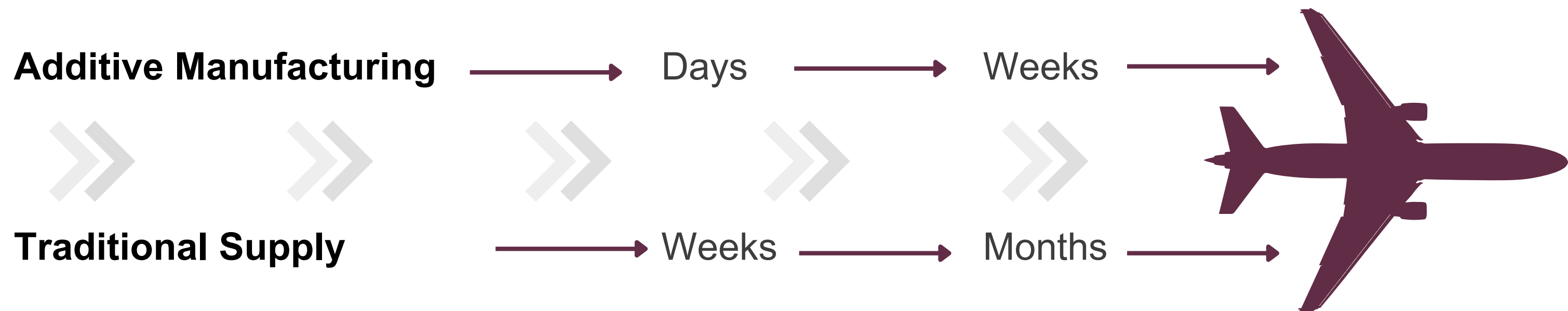
Multiple surface finish options



# 3D PRINTING

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Reduced turn-around time compared to traditional parts supply



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# TRAINING COURSES



# Aviation Courses

Design &  
Airworthiness  
Approval  
Regulations

Aircraft  
Weight &  
Balance

Fatigue &  
Damage  
Tolerance  
Analysis

Aviation  
Safety  
Investigation

Electrical  
Load  
Analysis

Aircraft  
Composite  
Structures

# Microcredentials

Digital Twin  
and Digital  
Continuity

MBSE  
Excellence

CATIA  
Design

Additive  
Manufacturing

Digital  
Manufacturing

PLM  
Excellence  
for Engineers

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# ACADEMIA



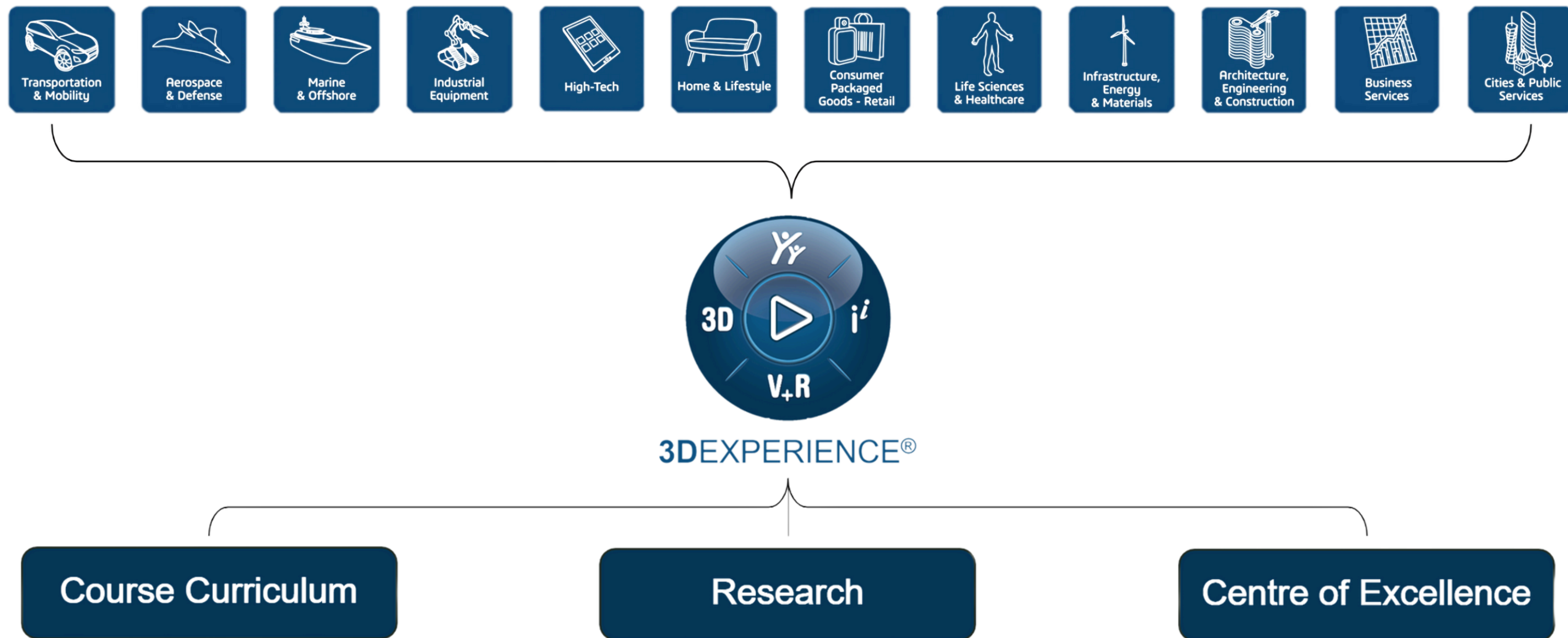


# INDUSTRY

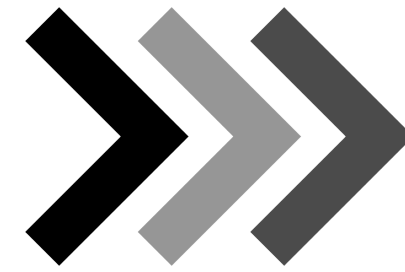


# ACADEMIA

Transforming 12 industry verticals through 3DEXPERIENCE

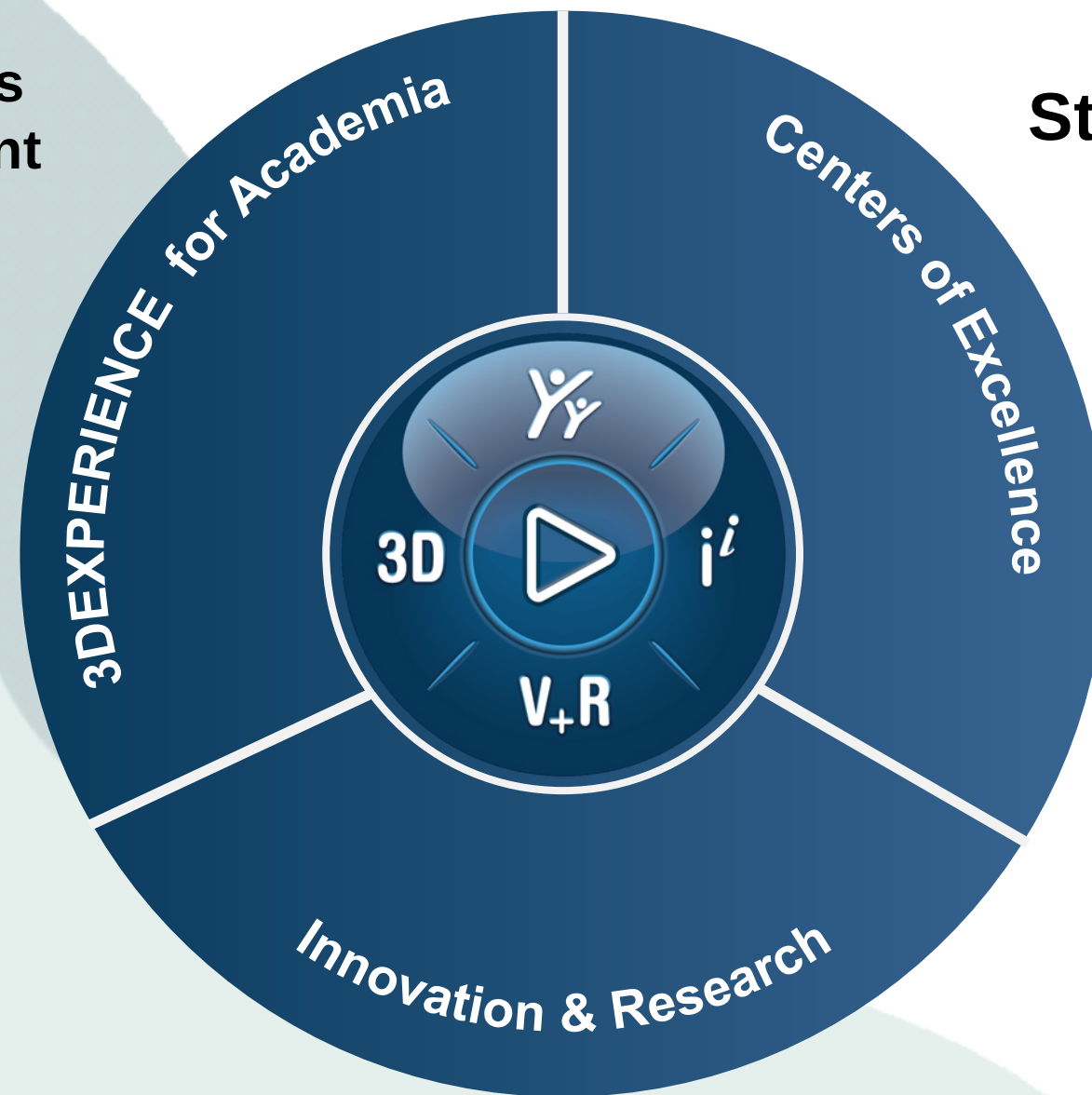


# INDUSTRY



# ACADEMIA

Industry tools  
driving student  
learning



State-of-the-art  
facilities

## Partnering with leading universities

By connecting education, research, and innovation, 3DEXPERIENCE ensures that students are equipped with real-world skills and that research initiatives remain at the cutting edge, fostering an innovation ecosystem.

Collaboration

# ACADEMIC CLIENTS

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# CONTACT US

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**FIND OUT MORE**