SOVEREIGN CAPABILITIES AND SERVICES

Australian trusted partner for building sovereign manufacturing capability

Simplified access to Defence ready Australian Industry Content (AIC)

Approved Research Institute Status = Agile access to research funding and extensive R&D expertise

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SERVICES AND CAPABILITIES

How can we help you?

We offer a range of services to manufacturers.



INDUSTRY ENGAGEMENT

Simplified access to Universities

Network of Defence ready SME's

Build collaborative partnership to tackle specific challenges

TECHNOLOGY SOLUTIONS

Product Development

Production Automation

AI and Machine Learning

Robotics

LEVERAGED FUNDS, INVESTMENT

Coordinate grants including:

ARC

CRC-P

SICP

DIH

AC

CAPABILITIES:

Artificial Intelligence and Machine Learning

Data Science and analytics

Robotics, Cobotics, and industrial automation

Computer vision

Industrial design, human centered design, and design for manufacture

Material science, cybersecurity, supply chain innovation.

KEY CUSTOMERS AND PARTNERS

RESEARCH PARTNERS

AusIndustry Cooperative Research Centres Program

CSIRO

Queensland Government

All Queensland universities are members of ARM Hub, and we have links to all Australian universities.



KEY INDUSTRY PARTNERS

Gilmour Space

wisk

Young Guns Container Crew

Orrcon Steel

Valiant Space

Australian Droid and Robot

BIAS

Verton

Cook Medical

PWR Advanced Cooling Technology

InfraBuild Building futures through sustainable steel

UAP

DISCRIMINATORS

SIMPLIFIED, DE-RISKED ACCESS TO ADVANCED MANUFACTURING AND INDUSTRY 4.0

Independent not-for profit, with approved research institution status, access to all Australian universities, and in-house engineering, data science and design for manufacture capabilities.

RESEARCH AND COMMERCIALISATION CAPABILITY

From research projects to late-stage product commercialisation, and full production automation.

WORLD LEADING EXPERTISE - BUILT FOR INNOVATION

Secure infrastructure, leading roboticists, expert teams.

ASSOCIATION, AWARDS AND ACCREDITATIONS

Defence Teaming Centre
Connecting • Developing • Advocating

City of Townsville

Partner of The North Queensland Simulation Park (NQ SPARK)

ARM ADVANCED ROBOTICS FOR MANUFACTURING HUB

Approved Research Institute (ARI)

Winner – 2022 Women in AI Awards Australia and New Zealand for AI in Manufacturing

Scan for more Information & contact details

ARM HUB CASE STUDIES

Australia's trusted partner for building sovereign manufacturing capability, through development and adoption of AI and robotic technologies across the supply chain



Consolidated Linen Services | Agile AI in Laundry

Consolidated Linen Services (CLS) partnered with ARM Hub to address an area of the system that no business had previously offered a solution for. They created a system for automated towel folding with robotics and agile AI.

One of the last manual operations left within the laundry facility; high volume towel folding is a repetitive job in a hot, humid environment, where workers have to take regular hydration breaks.

Tackling this challenge provides a breakthrough in production, addresses a major safety concern and commercialises cutting edge research in machine learning and robotic handling.

In the future, this project will look at the commercialisation opportunities for the business and the robotic outcomes. The technology developed has broad impact for the manufacture of diverse, soft tissues, membranes and materials.

Verton | AI and IoT enabled remote-controlled load-management system

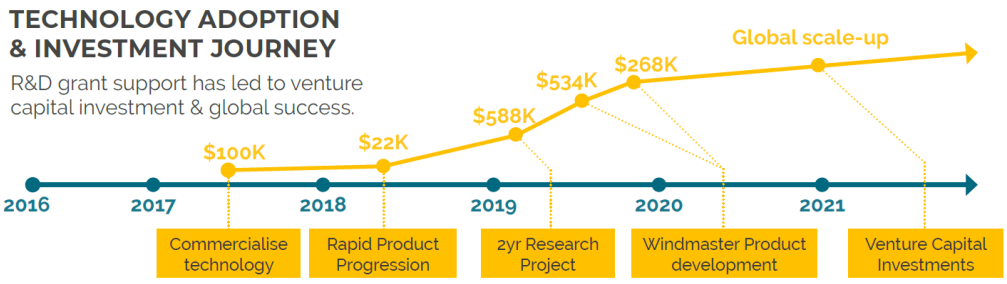
In 2017, Verton engaged ARM Hub, the Innovative Manufacturing CRC and QUT to further product development of their first remote-controlled, load-management system.

Verton became a resident company in ARM Hub's Northgate Learning Factory to access expertise on the integration of software, robotics, control systems and artificial intelligence. Technologies applied included inertial sensing systems; closed-loop control systems; and computer modelling and simulation.

The innovations within the heavy lifting industries captured the interest and investment of global venture capitalists, increasing the value of their products, and contributing to the industry's technology uptake. Eight countries are now using Verton technologies, with 17 Verton R-Series deployed globally.

These successes paved the way for further innovations to meet the unique demands of wind energy infrastructure, resulting in the development of a new product, The Windmaster. This new system contributes to both the erection of wind turbines and maintenance, increasing the longevity and safety of sustainable energy infrastructure.





UAP | Computer-vision, AR and VR, Design for Manufacture

UAP is a Brisbane-based design studio, manufacturer and foundry delivering public art and large-scale creative projects across the globe. The company has design studios and workshops in Brisbane, Shanghai and New York, making them one of the largest public art manufacturers in the world.

UAP with universities and ARM Hub staff, invested significant budget, and leveraged grants to pioneer and apply research that has enabled the adoption of robotics and assistive technologies, including augmented and virtual reality for customised product manufacture.

In 2017 UAP imported 32% of all works destined for Australian sites.

Imports shrunk to 8% in 20 19 due to the Brisbane team's adoption of advanced technologies and improved processes. During COVID-19, UAP brought business back to Australia through four re-shored projects. Re-shoring and on-shored work led to the on-boarding of 43 additional Australia-based employees to meet demand.





LOW INVESTMENT | QUICK WINS

SCANNING + ROBOTIC TECHNOLOGY	VR PATTERN-MAKING	AR INSTALLATION	LINISHING	ONSHORING
50 hours of robotic mould cutting onshored 800 man hours from global workshops to Australia	Virtual pattern-making decreases costs of materials and increases complexity of output	Time on-site reduced from 8 days to 4 days via use of augmented reality	144 labor hours reduced to 48 labor hours via use of collaborative robot to linish	During COVID UAP on-shored: >$1.5M projects in FY20; >$2.0M projects so far in FY21