

Reach Robotics: Achieving Real-Time Production Visibility and Traceability with Business Central and Insight Works Apps

Summary

Customer

Reach Robotics Pty Ltd
reachrobotics.com



Industry

Advanced Manufacturing and Robotics

Location

Glebe, New South Wales, Australia

Employees

50

Business Central Version

Business Central online

Partners

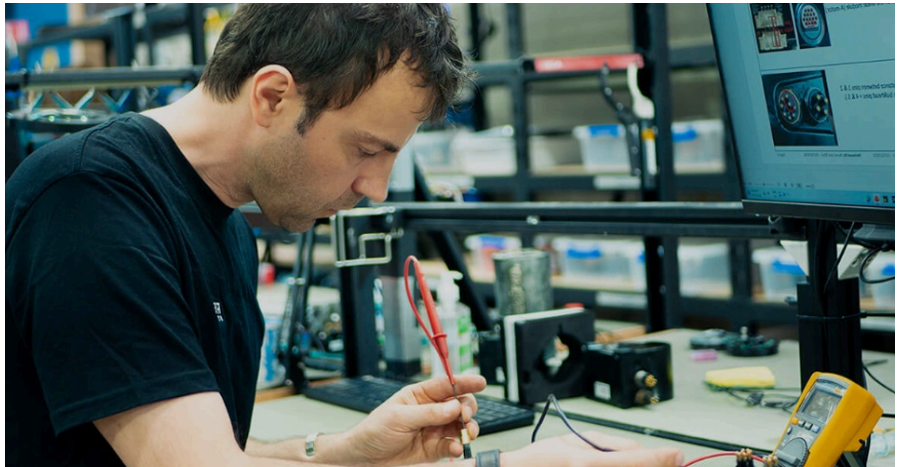
[Dynamic Aspect](#) (Microsoft Partner)
Insight Works (ISV)

Solution

- Microsoft Dynamics 365 Business Central
- Enhanced Planning Worksheet
- Multi-Level BOM Viewer
- Shop Floor Insight
- Routing Analysis

Results

- ERP payback within 12 months
- Manual processing cut by 35–45%
- Reporting from days to hours
- Inventory optimized by 15–25%
- Real-time labor and production status
- Shop floor lot and serial traceability
- A single source of truth



ABOUT REACH ROBOTICS

Reach Robotics designs and manufactures advanced robotic manipulation and perception systems for harsh environments, headquartered in Sydney, Australia, with sales operations in North America and Europe. Its systems support defense and commercial applications including maritime infrastructure, underwater inspection, law enforcement, marine science, mining, and autonomous robotics.

SPREADSHEETS AND DISCONNECTED DATA: WHY REACH ROBOTICS MOVED TO BUSINESS CENTRAL

As Reach Robotics took on more complex defense and industrial programs, its fragmented systems and spreadsheets began to strain. Production tracking and labor time were recorded in manual spreadsheets, so production status was never current, and visibility across manufacturing and projects was limited.

Planning and procurement ran through disconnected workflows, and finance and operations data did not always agree. Reporting depended on manual reconciliation that took days, and the reliance on spreadsheets created operational risk as the business grew.

The goal was a scalable, integrated platform with real-time visibility and control across manufacturing, inventory, planning, finance, and projects, while meeting the governance and traceability expectations of the defense industry.

SOLUTION: ONE BUSINESS CENTRAL PLATFORM FROM PLANNING TO THE SHOP FLOOR

Working with Microsoft Partner, [Dynamic Aspect](#), Reach Robotics implemented [Microsoft Dynamics 365 Business Central](#) with four Insight Works apps covering planning, bill of materials review, shop floor execution, traceability, and process analysis. About 15 staff use the apps every day.

1. Purchase and Production Planning on One Screen: Planning and procurement had run through disconnected workflows. Planners now use the [Enhanced Planning Worksheet](#) to see supply, demand, availability by location, and vendor information in one place, and to create purchase orders directly from the worksheet. The Enhanced Planning Worksheet gives the team a more disciplined, visible purchasing process.

2. Clear Visibility into Complex Bills of Materials: Reach Robotics builds multi-level assemblies, which are hard to review in a flat list. The

Multi-Level BOM Viewer shows each bill of materials as a hierarchy or tree, with supply and demand for every component and feasibility checks that flag potential shortages. Planners can spot component gaps before they hold up production.

3. Real-Time Shop Floor Execution and Traceability: Labor time and production progress had been recorded in manual spreadsheets. Production staff now use **Shop Floor Insight** to record labor, production progress, and quality events with barcode scanning on mobile devices. Shop Floor Insight also captures lot and serial numbers at the point of production, providing the traceability that defense audits require.

4. Process Insight from Actual Production Times: With actual times now captured on the shop floor, the team uses **Routing Analysis** to compare the operation times recorded on finished production orders against each routing's expected times. Routing Analysis flags operations that vary widely, even when the average looks acceptable, so the team can correct routings and standardize processes.

MAPPING SPECIALIZED MANUFACTURING TO A SINGLE PLATFORM

Reach Robotics manufactures specialized systems for highly regulated industries, so the team's main task was mapping those manufacturing workflows to finance, planning, quality, and reporting processes. Strong stakeholder alignment was part of that work.

Dynamic Aspect designed and delivered the Business Central solution and deployed all four Insight Works apps, aligning the platform with Reach Robotics' manufacturing, defense, and business process requirements. The rollout caused minimal disruption to day-to-day operations.

RESULTS: FASTER REPORTING, LEANER INVENTORY, AND A FAST RETURN

Reach Robotics reported measurable improvements across planning, production, and reporting, including:

- Return on the ERP investment achieved within 12 months, supported by a project structured for early operational value.
- Manual processing reduced by 35–45% across the solution, cutting re-keying and reconciliation work.
- Reporting cycles shortened from days to hours, giving leaders current information sooner.
- Inventory optimized by 15–25%, with the planning apps a major contributor through stronger procurement discipline.
- Labor time and production status available in real time, replacing manual spreadsheets.
- Lot and serial traceability captured on the shop floor, supporting defense audit and compliance requirements.
- A single source of truth across finance, manufacturing, procurement, inventory, projects, and quality, with improved reporting accuracy.

"This solution delivered a platform capable of providing accurate, real-time visibility across finance, manufacturing, supply chain, and operational planning while supporting the governance and reporting expectations associated with defense industry participation." **Nathan King, Head of Operations, Reach Robotics Pty Ltd**

A DEFENSE-READY OPERATING PLATFORM BUILT ON BUSINESS CENTRAL

By extending Business Central with four Insight Works apps, and working with Dynamic Aspect, Reach Robotics replaced spreadsheets with one connected platform. The result is reporting in hours instead of days, 15–25% inventory optimization, and lot and serial traceability captured on the shop floor.

About Insight Works

Insight Works is a Microsoft Dynamics 365 Business Central ISV (independent software vendor) specializing in warehouse management, manufacturing, and productivity solutions. With a portfolio of apps available on Microsoft Marketplace, Insight Works helps distributors, manufacturers, and wholesalers extend Business Central to fit the way they actually work. Learn more at insight-works.com.



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