

Case Study: Accelerating Prototype Vehicle Launches

A North American OEM were averaging 75% part availability on MRD for their prototype builds, leading to late vehicle delivery, late vehicle testing and delays to production timing. We turned this around with a single engagement on a major new vehicle program (6500 End Items, and a 480 Vehicle Prototype Vehicle fleet).



AUTOMOTIVE



DEARBORN USA



40 WEEKS



12 PEOPLE

Our Approach

Two workstreams to develop value

Consulting

1. Regular governance established to find complete program bottlenecks and priority areas
2. Data visualization for part-level prioritization
3. Part-level Cost Attack
4. Plant Capacity tool

Tactical Support

1. BoM Validation
2. Change Management
3. Lead times
4. Supplier event to share information and processes
5. Ongoing supplier engagement
6. At build launch support

Our Impact

Parts available at MRD

75%

Avg. Then

>95%

Avg. Now

Material Cost Savings

\$21 million

20% reduction in average program material spend

BoM Issues

21%

Avg. Incorrect
Build BoM Then

0.3%

Avg. Incorrect
Now

Vehicle Delivery Delay

21

Avg. Days Late To
Customers Per
Vehicle Then

-2

Avg. Days Late To
Customers Per
Vehicle Now

"This whole build event wouldn't be possible without QR_"

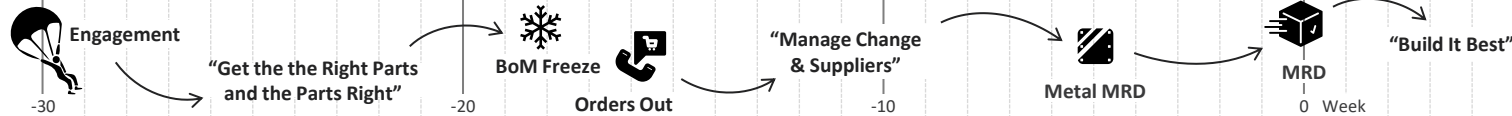
Program Manager

Engagement Cost

£878,000

Tactical Support: £406,000
Consulting Support: £472,000

1. Challenge & How We Resolved It



Consulting - 3 people

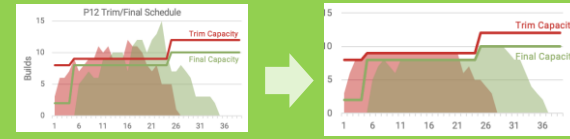
Regular governance established to find complete program bottlenecks and priority areas

Data Visualisation for part level prioritization – built a single a single plan to follow to replace siloed offline data sets.

Part Level Cost Attack – tool and process made to run material cost negotiations based on savings opportunity. Repeated on future programs.

"Trail of Construction" for next programs

Plant Capacity – tool built to optimise build schedule and capacity, find risks, and drive action.



Tactical Support - 7 people

Lead Times – for program prioritisation & immediate at risk part ordering

BoM Validation – "At Elbow" to engineering teams, authored on their behalf. BoM correction, issue resolution

Change Management – prioritised and accelerated, all change mapped to the fleet and supplier support plans confirmed. Was 15 days average per change, reduced to 3 days.

Supplier Event – in person for 250 suppliers: share information & processes, confirm all parts orders individually, issue resolution and escalation on the day



Ongoing Supplier Engagement – "Green" rather than "Red" flags for continual engagement with entire supply base.

"Hope is not a strategy": constant lines of communication. Openness and transparency of Program and any upcoming changes.

At Build Launch Support – build prioritisation, issue resolution, rapid change management.

2. Our Impact

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Team Size

10 Person

SWAT Team

Engagement Cost

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