

# 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\_"*

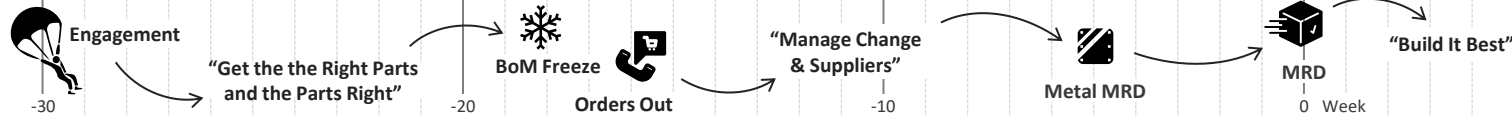
**Program Manager**

### Engagement Cost

**£878,000**

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

## 1. Challenge & How We Resolved It



Consulting - 3 people

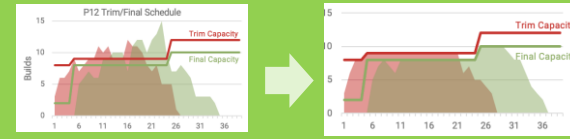
Regular governance established to find complete program bottlenecks and priority areas

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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Vehicle Delivery Delay

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Avg. Days Late To Customers Per Vehicle Then

-2

Avg. Days Late To Customers Per Vehicle Now

Team Size

10 Person

SWAT Team

Engagement Cost

£878,000

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