PRODUCT DATA IS PROGRAMME LIFEBOLOOD, FROM DESIGN TO LINE

WE HAVE MADE THIS OUR PROFESSION
### Quick Release: Key Facts

<table>
<thead>
<tr>
<th>Company</th>
<th>Founded in 2003, Acquired by Alten 2019</th>
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<tbody>
<tr>
<td>Team</td>
<td>&gt;200 Full time PDM Experts, all with a strong academic background, ground up experience &amp; continuous development</td>
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<tr>
<td>Clients</td>
<td>Worldwide Automotive OEMs and their suppliers</td>
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<tr>
<td>Training</td>
<td>Becoming a Product Data Professional: BootCamp, induction plans and development programs for QR &amp; our clients’ people</td>
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<tr>
<td>Knowledge</td>
<td>PDM experts, systems and processes, approvals, analysis and evaluations and making it work sustainably</td>
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<tr>
<td>Applications</td>
<td>SAP iPPE, PTC Windchill, Dassault Enovia, TeamCenter, WERS, openPLM, Oracle, …</td>
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<tr>
<td>Offices</td>
<td>Cologne (DE), Essex (GB), Woking (GB), Warwick (GB), Detroit (US), Melbourne (AUS), Munich (DE), Valencia (ES)</td>
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</tbody>
</table>
WE ARE NOT...

- AN ENGINEERING SERVICES PROVIDER
- SUPPLY CHAIN MANAGEMENT SPECIALISTS
- SYSTEMS PROVIDERS
- SYSTEMS IMPLEMENTERS
- GENERALIST MANAGEMENT CONSULTANTS
- RECRUITMENT AGENCY

We partner with OEMs and Suppliers who, like us, understand the value of high quality product data management and believe it deserves specialist attention.
THE SYSTEMS PROMISE
The Reality
when people, process, complexity and variation are accounted for

- Time losses and delays on programme
- Process gaps and broken links
- Overspends or consequential costs
OUR SUPPORT

Level 1:
Project Execution
With a background of bespoke training, our product data professionals fulfil roles for our customers, especially during peak times, ramp ups or as a service with SLAs guaranteed.

Level 2:
Oiling the Process Gears
Using a wealth of earned knowledge and lightweight toolsets to make processes work, resolving issues and providing clarity within the teams and to management about where focus needs to be applied.

Level 3:
Unlocking Programme Performance
Working with senior management teams to sustainably tackle the biggest impact data issues between design & line. Benchmarking & Analysis, Implementation & training and ongoing support & advisory.

“I can’t praise the QR_ team enough. If I ran the business I’d hire you all.”

EV BoM Manager

“This is the best reporting we’ve ever seen in a steering group meeting”

EV Programme Manager

“We’re now getting our prototypes built weeks earlier across the globe. We wouldn’t have got there without your support”

Global Head of Vehicle Testing
Major OEM
**OUR TOOLBOX AND WHERE IT IS APPLIED**

- **LEVEL 1**: PDM Experts in direct roles, Specialist Recruitment & Training
- **LEVEL 2**: Reporting & analytics tools: System agnostic, delivery focused
  - Training, mentoring & ‘at elbow’ support
  - Milestone events (e.g. supplier conference)
- **LEVEL 3**: Benchmarking & Industry best practice
  - Research, Diagnostics & Continuous Improvements

**ALL OUR WORK IS UNDERPINNED BY A DEEP UNDERSTANDING OF THE INDUSTRY’S REAL-LIFE PRODUCT DATA CHALLENGES**
EXAMPLE ENGAGEMENT SPECIFICS: OEM PROGRAMME SUPPORT

CUSTOMER: Global OEM
PROGRAMME: Full New vehicle
STAGE: Initial Release to Job 1

1. PDM Experts in direct roles
   - Engineering Team co-ordinators
   - Programme ‘right hand’
   - Key supplier integrators
   - Cost & Weight owners
   - Change Manager
   - Supplier interface (both sides)

2. Reporting & analytics tools: System agnostic, delivery focused
   - QRonos programme timing toolset
   - Cost & weight reporting suite
   - Supplier interface toolset

3. Training, mentoring & ‘At elbow’ support
   - ‘My role in the information pipeline’ training for Engineers, Procurement, Finance, Programme etc.
   - Programme chief’s insight & mentoring
   - At elbow support, floor walkers at key milestones & new process implementations

4. Milestone events (e.g. supplier conference)
   - Data led, memorable events to assist communication at key stages
   - These include supplier conferences, stage launches, New process launch

5. Benchmarking & Industry best practice
   - Benchmarking from a range of OEMs & suppliers
   - Lessons learnt sharing from other OEMs

6. Research, Diagnostics & Continuous Improvements
   - PDM Diagnostic
   - Tracking the most valuable problems
   - PDM Advisory
   - Continuous Improvement and Team Development
ALL OUR WORK IS UNDERPINNED BY A DEEP UNDERSTANDING OF THE INDUSTRY’S REAL-LIFE PRODUCT DATA CHALLENGES
Differing Organisational Demands

**Initial process design, setting up appropriate PDM, avoiding early pitfalls**
- Scaling & enabling a growing team to be effective
- Single to multi-programme

**Introducing PLM, ERP & making it work within customer specific environment**
- Specific support for difficult gateways & peaks in workload

**System**
- Basic, flexible, not fit for scale
- Still flexible, support the processes, not fit for large scale
- Robust, scalable, standardised

**Process**
- Minimal, often unwritten
- Captured, clear & mostly understood
- More refined, robust & detailed

**People**
- Smart, driven, adaptable
- Increased specialisation, consistent & solid
- Well trained, efficient, specialists

**Scaling & enabling a growing team to be effective**
- Single to multi-programme

**Freeing up engineers to engineer through reduction in data handling effort**
- Training, developing (sometimes recruiting) client teams to be their own product data professionals

**Shortening Programme Durations and increasing product quality**
- Freeing up engineers to engineer through reduction in data handling effort
- Training, developing (sometimes recruiting) client teams to be their own product data professionals

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**Quick Release**
THE 4 BOX MODEL: WHY IS PDM STRATEGIC?

- Successful Start Ups
- Future Winners
- Start Ups and New Suppliers
- Traditional OEMs and Tier 1s

Start ups and new entrants have scaled but only at great cost. Effective PDM enables earlier, cheaper scalability.

Current PDM approaches and pace do not support more modern ‘agile’ development required for future competitiveness.
CASE STUDY 1: RAMP UP AT SMALL TO MID SIZE OEM

Client: Sportscar OEM  
Project Length: 20 weeks

**Project Support:**  
Management of Design Studio C&T data and creation of documentation for downstream departments.

**Configuration Management:**  
Translating the increased complexity of product definition into the SAP Data Model to support BoM Coding/Sales Orders/Marketing.

**Engineering Support:**  
BoM authoring & Engineering Change Management coordination to free up engineer’s time for core engineering activities & support on the line.

**Logistics Process Mapping & Improvement:**  
Handling of parts past point of fit identified as causing delays to final sign off of vehicles. Existing process analysed and then improved process designed, rolled-out and measured.

**Lineside Team:**  
Responsibility for clearing and root causing stock consumption issues which prevent final sign off of vehicles.

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**CONCEPT**  
**DESIGN & ENGINEERING**  
**SUPPLY CHAIN & LOGISTICS**  
**PRODUCTION**  

*Case study 1: ramp up at small to mid size OEM*
CASE STUDY 2: FORD OF EUROPE

Client: Ford Motor Company
Engagement Length: 15 Years

C-Car
Focus, C-Max, Kuga – Interior
BoM & Change Control, BoM recovery
Next Gen – BoM Control, Platform Deployment, P-Release recovery

CV
Transit – BoM & Digital Process Deployment, X-Functional BoM Authoring, Change control, CAD management, Program Management

Powertrain
Tool & Process Deployment
BoM Analyst team
Part Tracking & Delivery
BoM Authoring
Powertrain Cost Attack

B-Car
Fiesta – Interior BoM & Change Control, X-Functional BoM Authoring, Change Control, Cost Management
B-Max – Digital Tool & Process Deployment, Production Leadership
CASE STUDY 3: OPTIMISING PDM FOR AN ELECTRIC VEHICLE MANUFACTURER

Client: EV OEM
Project Length: 16 weeks

Step 1: Engineering Support Team Time Study
- OR, Resource Monitoring
- Weekly snapshots
- Time Analysis & Grouped Deliverables

Step 2: Optimise & Standardise Delivery
- Lightweight Excel
- BoM System
- Automated Engineering Issue Reminders
- Global Release Schedule Tracker
- Data Transmittal Process & Tool
- PLM Input & Output Toolset

Step 3: Understand and Agree SLAs
- How can we measure it?
- What is the current performance?
- What should the target be going forwards?

Step 4: Measurably Demonstrate the Benefits
- Continuous resource monitoring to understand the impact of the improvement initiatives
- Difference in time pre & post deployment of initiative shows impact of the improvement
- Visibility and control allow transition of PO from Head-based to an SLA-based
- Continual measurement of performance as part of SLA agreement

Addressed programme risk
- 21% increase in work output
- 25% reduction in headcount

QUIT RELEASE
**Case Study 4: Global Prototype Builds**

The client, a major automotive OEM, was unable to fully realise the benefits of their prototype builds. We quickly deployed a team working on a pilot and, alongside this, identified the main issues: part availability, BoM quality, process understanding and a lack of a single prioritised plan for every part. The combination of immediate expert support to address an ‘in flight’ problem, and then the ability to build solutions towards a world class future vision, were key in this situation.

<table>
<thead>
<tr>
<th>Tactical</th>
<th>Improvement</th>
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<tbody>
<tr>
<td>Early BoM Validation&lt;br&gt;At-elbow support for engineering teams to deliver a quality BoM for the builds</td>
<td>Payment by Results&lt;br&gt;Our fees are covered by the reduction in consequential costs to the program</td>
</tr>
<tr>
<td>Supplier Visibility&lt;br&gt;Personalised supplier packs to allow supplier’s to identify errors in the OEM’s data</td>
<td>Agile/Scrum Methodology&lt;br&gt;Improvements are deployed onto batches of programs based on build date</td>
</tr>
<tr>
<td>Data King&lt;br&gt;Collation of data from multiple systems to give a true part by part status</td>
<td>Data Driven&lt;br&gt;Which problems, and how to tackle them, driven by real data, not assumptions or committee view</td>
</tr>
<tr>
<td>Globally Supported QR&lt;br&gt;product data professionals mobilised across EU, APAC &amp; NA</td>
<td>Collaborative Approach&lt;br&gt;We’re working within the client’s teams to create embedded solutions that stick</td>
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**Results:** Part availability at build MRD is **94%** compared to a historical average of less than **70%**.
### Our Work Split: Customer & Phase

#### Concept
- **Major OEM**
  - Ford
  - GM
  - Jaguar
  - Land Rover
- **Mid Size OEM**
  - Aston Martin
- **Challenger**
  - Rivian
  - LEVC
  - Arrival
- **Suppliers**
  - Valens
  - Production
  - Brose
  - Recaro
  - Tata

#### Development
- **Major OEM**
- **Mid Size OEM**
- **Challenger**
- **Suppliers**

#### Prototypes
- **Major OEM**
- **Mid Size OEM**
- **Challenger**
- **Suppliers**

#### To Job 1
- **Major OEM**
- **Mid Size OEM**
- **Challenger**
- **Suppliers**

#### Production
- **Major OEM**
- **Mid Size OEM**
- **Challenger**
- **Suppliers**

#### In Service
- **Major OEM**
- **Mid Size OEM**
- **Challenger**
- **Suppliers**
OUR VALUES

QUALITY RELEASING

QUICK RESPONSE
It is comforting to have someone take care of you, give you time and help you on the spot. In short, we enjoy supporting people.

QUICK REFRESHING
Doing things that are inspiring and make us laugh is part of our drive. We dare to be different. Everything is designed to make life more enjoyable for everyone involved.

QUALITY RELATIONSHIPS
It’s about people, customers, teams, friendships, laughter, trusting communication, understanding. We love the human side of working.

QRIOUS
We are continually looking for ways to improve PDM in the industry and find new technologies and ideas to apply to it.
WHY
To help automotive companies get better products to market faster and more efficiently to meet the growing, evolving demands of the world.

At a time of huge disruption, product development is being hampered by poor quality data and automotive professionals are being asked to spend half their time translating their wishes into system-speak.

We take a Quite Refreshing approach to the challenge of increasing complexity. We believe automotive professionals must be put back at the centre: and that systems and outsourcing are just a part of the solution.

WHAT
We are the product data professionals.

We work with automotive OEMs, suppliers and engineering companies to improve programme performance through better quality, speed and efficiency of PDM. We work on 3 levels:
1. Providing professionals to execute your PDM
2. Taking on your PDM challenge as a service
3. Solving the root problems to deliver quantified results,

HOW
By proudly building a profession that’s dedicated to product data management, with an approach that’s quite Refreshing.

By immersing professionals who see beyond systems into companies, with innovative tools and a hands-on approach to solve data challenges and to future-proof processes.