

From service ambition to service orchestration

Copperberg Aftermarket Power of 50 | Idea Blitz Roundtables

During our Idea Blitz roundtables at Copperberg's Aftermarket Power of 50, we tested a hypothesis: **As OEMs shift toward outcome-based services, the gap between product information and service execution grows increasingly important.**

The maintenance system gap

PLM and ERP typically manage product, engineering and material information. ERP and FSM support commercial transactions and plan and execute field work. However, across these domains, OEMs must manage the as-maintained asset structure, maintenance plans, and the maintenance tasks that underpin their service agreements.

Our question was whether this "maintenance system gap" is currently being addressed, and whether existing practices are sufficient for the service models OEMs want to develop.

The percentages below reflect directional observations from the roundtable discussions. They are not statistically representative research findings.

Ambition is ahead of current service maturity

The discussions confirmed a context that was familiar to both participants and Pragma.

60 - 80%

of current service activity, participants estimated, remains concentrated in parts and reactive service and fixed-rate annual inspections.

5 - 10%

is the small share participants estimated more advanced service models generally represent.

The ambition to move towards availability, utilisation or output-based agreements is clear. However, the appropriate model depends on the asset, customer, geography and the OEM's ability to manage the associated risk.

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Three challenges consistently accompanied this ambition

01

OEMs are uncertain whether outcome-based services can replace the parts and labour income associated with reactive service.

02

Larger customers appear more likely to consider utilisation- or output-based agreements.

03

Customers are reluctant to share the as-maintained and operational information OEMs need to manage performance risk.

This confirmed the context for our hypothesis: service organisations want to move towards outcomes, but many are still operating with information and maintenance processes developed for reactive service.

The discussions then produced three more specific observations about the maintenance system gap.

01 Condition-based maintenance means different things

One of the clearest findings was that Pragma and many OEM participants do not use the term condition-based maintenance in the same way.

Common OEM definition

A general inspection

1. For many OEMs, condition-based maintenance means sending a service engineer to the site to perform a general inspection.
2. The engineer assesses the machine and determines the necessary follow-up.
3. That follow-up is then initiated manually.

Pragma's definition

A structured process

1. A predetermined inspection task defines what must be inspected and how the condition should be assessed.
2. The observed condition triggers a predefined maintenance response.
3. The follow-up task is linked to the relevant spare part or parts, resources and work requirements.

The difference is therefore not whether an inspection takes place. The difference is whether the inspection is part of a repeatable and orchestrated maintenance process. A generic inspection depends heavily on the judgment and follow-through of the individual field engineer. A structured condition-based process converts an observation into a controlled sequence of decisions and tasks.



This directly supports our hypothesis. When inspection criteria, follow-up tasks and spare part requirements are not formally connected, the maintenance logic sits in the gap between engineering information and service execution.

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02 Maintenance plans exist, but are not managed as living service assets

Participants recognised a gap in the development, storage and ongoing management of maintenance plans. They also acknowledged that as-maintained asset information is often incomplete.

Most participants reported that maintenance plans are not systematically validated after they are created. A service technician may identify a problem and pursue a change, but there is generally no consistent system or procedure for:

- Reviewing whether the maintenance plan remains effective.
- Converting field feedback into an approved change.
- Updating maintenance tasks and associated parts.
- Controlling versions of the plan.
- Applying an improvement across comparable machines.
- Feeding service experience back into machine design.

This means that the maintenance plan can remain static while the machine configuration, operating conditions and available field knowledge continue to change.

That may be manageable in a reactive service model, where the OEM responds when a problem occurs. It creates greater exposure when the OEM commits to availability or output.



Under an outcome-based agreement, the maintenance plan becomes part of the logic by which the OEM intends to deliver the promised outcome. It must therefore be treated as a governed operational and commercial asset, not only as a technical document.

03 The need is recognised, even when EAM is not

Most participants were unfamiliar with Enterprise Asset Management, or EAM, as a distinct system category. Many were also unfamiliar with EAM platforms used by their customers. Participants therefore did not initially describe their challenge as an EAM challenge. They did, however, recognise the underlying need:

01 A reliable representation of the installed and as-maintained asset

02 A controlled location for maintenance plans

03 Structured maintenance tasks and activities

04 A way to connect inspection findings to follow-up work and parts

05 A feedback mechanism for validating and improving the plan

The starting point is not the need for another software agreement.



EAM is relevant because it can provide a structured environment for that orchestration. It should not be positioned as a replacement for PLM, ERP or FSM.

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The potential role of EAM

The discussions reinforced the need for a maintenance control layer between product information and service execution. In this operating model:

Product information

PLM Remains the source of product design and engineering information.

ERP Continues to support commercial, financial, material and transactional processes.

EAM Manages the as-maintained asset structure, maintenance plans, and tasks that translate the maintenance strategy into executable work. Maintenance Control Layer

FSM Supports the planning, dispatching and execution of field service work.

Service information

Supports the planning, dispatching and execution of field-service work.

A well-defined task can connect:

- The relevant asset or component.
- The maintenance objective.
- The inspection or intervention to be performed.
- The applicable condition or trigger.
- The required follow-up task.
- The spare parts, skills and resources required.
- The feedback needed to validate and improve the plan.

This creates a traceable connection between the service agreement and the work required to fulfil it:

Service promise → Asset structure → Maintenance plan → Resources & parts → Work execution → Feedback and improvement

EAM's potential value is therefore not simply the storage of maintenance information. Its value lies in governing the maintenance logic that connects the OEM's service promise to field execution.

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Start small and test the value

The discussions also confirmed that most OEM service portfolios remain predominantly reactive. Moving immediately to a broad outcome-based model would introduce commercial and operational risk before the underlying assumptions have been validated.
A more practical approach is to start with a small Proof of Concept.

A focused test could be applied to

- **One** machine type
- **One** customer
- **One** maintenance plan
- **One** condition-based service scenario
- **One** availability or performance agreement

The Proof of Concept should test two related questions.

Question 1

Does structured maintenance orchestration create operational value?

The test should determine whether connecting the asset structure, inspection tasks, follow-up tasks, spare parts and execution feedback results in:

- More consistent service decisions
- Better preparation of field work
- Clearer parts and resource requirements
- Less dependence on individual knowledge
- A more reliable feedback loop into the maintenance plan

Question 2

Does a different contract model create value for both parties?

The same test can assess whether a planned, condition-based, or outcome-oriented agreement delivers meaningful benefits to both the customer and the OEM.

For the customer
This might include greater predictability, fewer unnecessary interventions or better machine performance.

For the OEM
It may provide insight into delivery cost, risk, resource requirements, customer value and the commercial viability of a different service model.

This evidence can then inform whether the approach should be refined, scaled or reconsidered.



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Our conclusion

The roundtables confirmed that OEMs want to progress towards more advanced and outcome-based services, but that current service activity remains largely reactive.

They also revealed that maintenance plans, tasks and feedback are not always systematically governed between product information and service execution.

Closing the maintenance system gap is not primarily about introducing another system. It is about creating the information, task orchestration and governance needed to connect service agreements to reliable execution.

EAM can provide this maintenance control layer alongside PLM, ERP and FSM. But given the current maturity of most service portfolios, the most credible next step is not a large-scale system programme.

It is a focused Proof of Concept that tests whether better maintenance orchestration creates measurable operational value and whether a new service agreement produces a real benefit for both the OEM and the customer.

Let's talk about your next steps.

Book a conversation about your maintenance gap and the first steps that would make the biggest difference with one of our team members.

- Thom Nuyens
- Henk Wynjeterp
- Stefan Terblanche

Book an appointment

