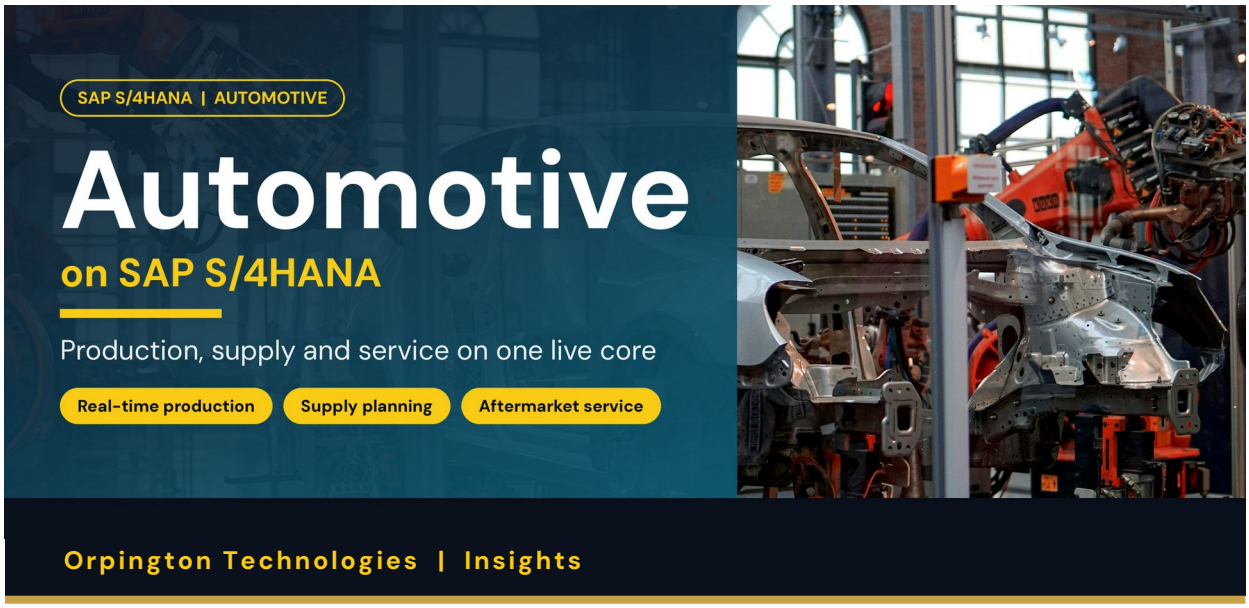
SAP S/4HANA INSIGHTS

SAP S/4HANA for Automotive: Benefits and Use Cases

A car plant stops when one part is late. SAP S/4HANA ties production, supply planning and the ledger to the same live data, so you can see the gap before the line does.



In short: SAP groups its automotive solutions into six areas: research and development, manufacturing and logistics execution, responsive supply networks, sales and marketing, aftermarket services, and smart mobility [1]. For a maker or a supplier, the S/4HANA benefits show up in production planning, where MRP runs faster and planners see material coverage on live data [2], and in finance, where one journal holds financial accounting and controlling data [3]. SAP's automotive learning pages name no products and give no figures for the six areas, so ask for the product mapping early.

A modern car has thousands of parts from hundreds of suppliers. If one part is short, the line either slows down or stops. The plant manager hears about it when the line is already waiting. The supplier hears about it when the call comes in. Everyone then spends the day on the phone.

SAP's automotive material talks about the same pressure in business terms. It describes real-time manufacturing excellence, which gives real-time production visibility to reduce risk, and supply chain optimization with demand-driven planning and Just-In-Time manufacturing to handle disruptions [4]. The core of that is data that is current. S/4HANA blends transactions and analytics, so operational reports can run on live transactional data [5].

Orpington Technologies, an ERP advisory firm, starts automotive conversations with one question. When a part is short, how many hours pass between the first signal and the moment your planner can act on it? The answer shows you how much a live view is worth.

Key takeaways: SAP S/4HANA for automotive

Six areas. SAP lists research and development, manufacturing and logistics execution, responsive supply networks, sales and marketing, aftermarket services and smart mobility [1].

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Faster planning. The MRP run is faster than in SAP ERP and ECC, and Fiori apps show material coverage on live data [2].

Supply visibility. SAP describes enterprise-wide visibility into supply, production, inventory and demand [1].

Aftermarket. Workforce scheduling, mobile apps for field technicians and central asset data are part of the aftermarket area [1].

One ledger. The Universal Journal keeps finance and controlling on one set of line items [3].

The condition. Live planning only helps if bills of materials, supplier data and lead times are right.

1. Why automotive is a good fit for SAP S/4HANA

Automotive is a high-volume, tight-margin, long-chain business. A part moves from a sub-supplier to a supplier to the assembly line and finally to a dealer and a customer. Every handover has a delivery date, a quantity and a cost. When these live in different systems, someone has to reconcile them, and that work is slow.

SAP's industry page describes the value in operational terms. It talks about greater agility, cost optimization and margin protection, and improved operational transparency, efficiency and resilience [6]. It also names an industry network for standardized supply chain collaboration [6]. One thing to note is that this page refers to SAP Business Suite and does not mention S/4HANA by name [6]. The suite is the umbrella, and S/4HANA is the ERP core that runs the plants and the ledger.

SAP's learning page adds that the supporting offerings include SAP S/4HANA for Automotive, SAP Business AI, SAP Signavio, SAP Returnable Packaging Management and SAP Quality Issue Resolution [4]. So the picture is a core with specialized solutions around it. Know which is which before you budget.

2. How SAP S/4HANA helps automotive companies

Production planning that keeps up with the line

SAP Learning says the MRP run in S/4HANA is much faster than in SAP ERP and ECC and uses less storage. Because of that, MRP can run more often during the day [7]. The reason, as SAP PRESS explains, is that MRP Live runs the planning logic inside the SAP HANA database [8]. SAP PRESS also notes that Fiori apps for material coverage and internal and external requirements replace the old routine of checking stock first and running MRP afterwards [2].

For this example, a supplier warns that a shipment of brackets will arrive a day late. If MRP can run several times a day, the planner may see the effect on the work orders in the afternoon, and not the next morning. That is more time to move work to another line or to ask for an expedited shipment. Neither SAP Learning nor SAP PRESS gives a speed figure, and SAP PRESS notes that classic MRP can still be faster for a few simple materials [8]. Test with your own materials.

Visibility across supply, production and demand

SAP describes manufacturing and logistics execution as connected production monitored through integrated business and manufacturing systems, with enterprise-wide visibility into supply, production, inventory and demand and standardized plant KPIs [1]. It describes responsive supply networks as sales, inventory and operations planning to anticipate demand

and risk, optimized warehouse management, lower transportation costs and real-time order commitment [1]. These areas reach beyond the ERP core, so ask which products deliver each one.

Aftermarket and mobility

SAP's aftermarket area covers workforce scheduling and mobile apps for field technicians, service monetization and planning, and central asset data to reduce operating and capital costs while improving safety. The smart mobility area covers business models for autonomous, connected, electric and shared vehicles, software-defined vehicle capabilities and management of charging networks [1]. For a supplier, the aftermarket part matters because spare parts and service revenue run on the same master data as production.

The ledger behind the plant

The Universal Journal holds financial accounting and controlling data together, and SAP says no reconciliation between them is necessary [3]. For a plant with thin margins, one set of line items means the product cost that engineering discusses is the cost finance posts.

Exceptions and processes

Situation Handling alerts the responsible users when a defined business situation occurs, for example a quantity shortfall in a supplier's delivery [9]. SAP Signavio process mining uses event logs from enterprise systems to show how processes run, including bottlenecks and variances [10]. SAP's page gives no quantified results, so the gain depends on your data [10].

A short example: one late shipment, four views

Take the late bracket shipment again. The buyer is the first to know, because Situation Handling can flag a delivery that falls short of the ordered quantity [9]. The planner then looks at material coverage and sees which work orders are affected [2]. The plant manager asks which vehicles are at risk, and the supply and demand view gives an answer [1]. Finance asks what the delay will cost, and the Universal Journal holds the cost data with the postings [3].

Four people, four questions, one set of data. The saving is not in any single screen. It is in the hours nobody spends reconciling four versions of the same shipment.

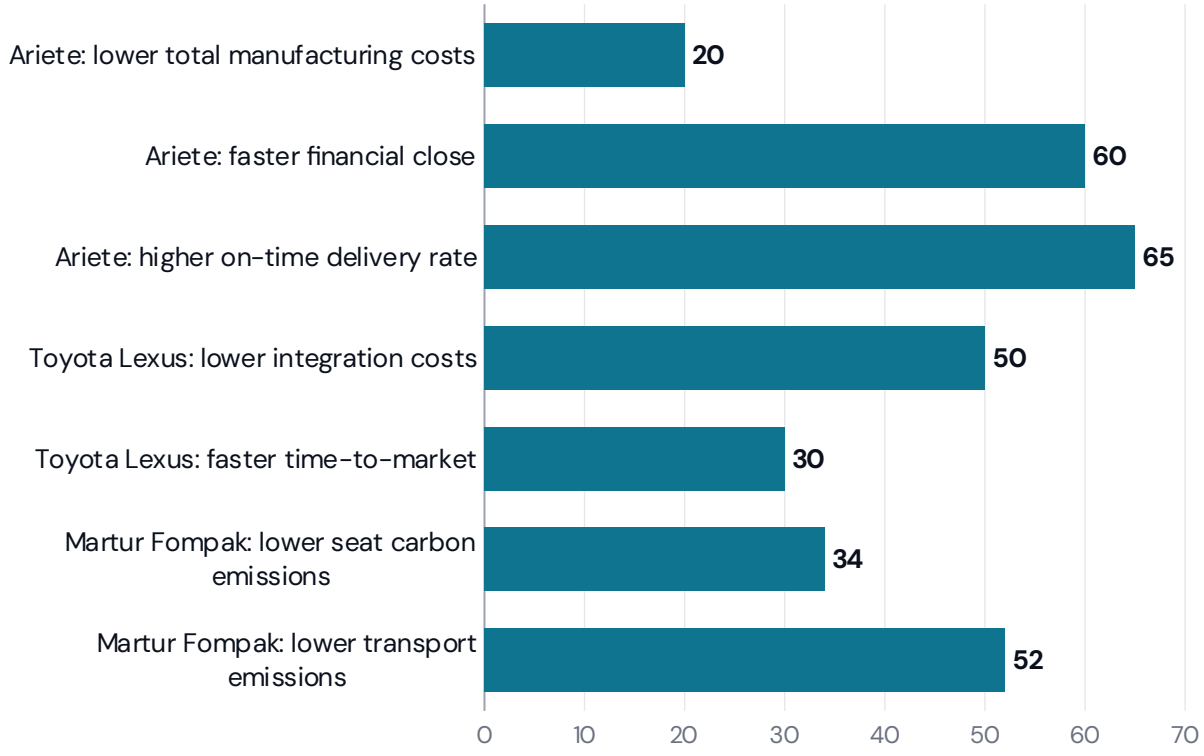
Table 1. Where SAP S/4HANA helps an automotive company

Question in the business	S/4HANA capability	What you can see
Do we have the part?	MRP Live; material coverage apps	Coverage and requirements on live data [2], [8]
Will a supplier be late?	Situation Handling	Delivery shortfalls sent to the buyer [9]
Where is supply, stock and demand?	Manufacturing and logistics execution	Enterprise-wide visibility [1]
Can we promise the order?	Responsive supply networks	Real-time order commitment [1]
Who services the vehicle?	Aftermarket services	Field technician scheduling and mobile apps [1]
What does it cost?	Universal Journal	Finance and controlling on one set of postings [3]
Where is the delay?	SAP Signavio process mining	Actual flows, bottlenecks and variances [10]

3. SAP S/4HANA for automotive: customer results and how to read them

SAP's automotive value page lists three results. Ariete implemented SAP S/4HANA and Extended Warehouse Management with robotics and AI and reports 20 percent lower total manufacturing costs, a 60 percent faster financial close and a 65 percent increase in on-time delivery rates. Toyota's Lexus loyalty program reports 50 percent lower integration costs and 30 percent faster time-to-market using SAP Business Technology Platform. Martur Fompak reports 34 percent lower seat carbon emissions and more than 50 times faster carbon footprint calculations using sustainability tools with SAP Business AI [4]. These are SAP's own customer stories, and SAP does not say how the figures were measured. Only the Ariete story is about S/4HANA itself. They show what is possible. They do not promise a result for your plant.

Figure 1. Results SAP reports for three automotive customers (percent)



Source: SAP Learning, "Explaining How SAP Creates Value for the Automotive Industry." SAP's own customer data; only Ariete is an SAP S/4HANA story.

4. SAP S/4HANA for automotive: reality check and limits

Table 2. Claims worth reading carefully

Claim	What the source says	How to read it
Six solution areas	SAP's learning page describes them and names no products [1]	Ask SAP which product delivers each area
S/4HANA scope	SAP's industry page refers to SAP Business Suite [6]	S/4HANA is the core, and several areas come from other solutions
Faster MRP	SAP says it is much faster and gives no figure [7]	Test on your own materials
Customer results	Ariete, Toyota and Martur Fompak stories [4]	SAP's own data, and only one is S/4HANA

Table 3. Questions to put to SAP and your integrator

Topic	Question to ask	Why it matters
Product mapping	Which product delivers each of the six solution areas?	SAP's learning page names areas, not products [1]
Scope	What is in the S/4HANA core, and what sits in other solutions?	The industry page refers to the wider Business Suite [6]
Planning	What does embedded PP/DS add, and what does it cost?	SAP PRESS says it needs an additional license [2]
Supplier data	Who owns supplier lead times and delivery data?	Live shortage views depend on it
Cutover	How will planners work during the move from net change planning?	Net change planning is not available in MRP Live [2]

A live system also shows bad data as fast as good data. If a bill of materials or a supplier lead time is wrong, the new apps will show the wrong shortage sooner. Orpington Technologies' view is that master data ownership needs as much room in the plan as the technology does.

5. SAP S/4HANA for automotive: your first 90 days

Days 1 to 30: find the late numbers

List the five planning or supply reports that your plant and purchasing leaders rely on most. Next to each, write how old the numbers are when they arrive. Pick the two where age costs you most, for example the shortage list or the supplier delivery status, and give each a business owner and a data owner. Check the bills of materials and lead times behind them.

Days 31 to 60: build one live view

Choose one view, such as material coverage for one plant or one product family. Build it with the SAP Fiori apps that S/4HANA provides [2], and agree who acts when a part turns critical. Run MRP on a copy of your own data and compare the result with your current run [8].

Days 61 to 90: measure and extend

Measure the hours between a supplier delay and the moment the planner sees its effect, before and after. Retire the spreadsheet that the live view replaces. Then pick the next view. Ask someone with no stake in the project to review the plan before more money is committed.

6. How Orpington Technologies supports automotive companies on SAP S/4HANA

An independent first look. The free Implementation Confidence Diagnostic takes about 15 minutes and needs no sign-up. It gives you a confidence score with the top three risk flags [11].

Evidence-based review. The Full ERP Diagnostic Report checks every self-reported answer against real evidence, and a certified platform expert reviews the result [12].

Delivery, oversight and skills. Orpington can lead an S/4HANA migration as the accountable delivery partner, or provide independent oversight of an integrator you have already chosen [12]. It also supplies credentialed candidates through **ERP staff augmentation** [13].

For more guidance, read the **SAP S/4HANA migration and ERP insights** from Orpington Technologies.

Before your next production meeting, ask one thing. Which three parts caused the most stoppages last quarter, and how early could we have seen them?

7. Frequently asked questions about SAP S/4HANA for automotive

What are the main benefits of SAP S/4HANA for automotive?

Faster MRP, live material coverage, enterprise-wide visibility into supply, production, inventory and demand, and one ledger for finance and controlling [7], [1], [3].

Does SAP S/4HANA suit automotive suppliers?

Yes, in the sense that SAP lists SAP S/4HANA for Automotive among its supporting offerings and describes a core with specialized solutions around it [4].

Does SAP S/4HANA support just-in-time manufacturing?

SAP's automotive value page lists demand-driven planning and Just-In-Time manufacturing under supply chain optimization [4].

What is MRP Live?

MRP Live runs the planning logic inside the SAP HANA database, and SAP PRESS says it runs almost entirely as stored procedures [8].

Which automotive companies report SAP results?

SAP cites Ariete, Toyota's Lexus loyalty program and Martur Fompak [4].

Do I need clean master data first?

Yes. Bills of materials, supplier data and lead times drive every shortage view, so clean them before you rely on it.

Sources & Further Reading

[1] SAP Learning – "Identifying Key Capabilities of SAP Solutions for the Automotive Industry"

[2] SAP PRESS – "How Does Production Planning Differ Between SAP ERP and SAP S/4HANA?" updated September 2025

[3] SAP Learning – "Discussing the Universal Journal"

[4] SAP Learning – "Explaining How SAP Creates Value for the Automotive Industry"

[5] SAP Learning – "Reporting in SAP S/4HANA"

[6] SAP – Automotive industry solutions

[7] SAP Learning – "Outlining Functions and Innovations in SAP S/4HANA Manufacturing"

[8] SAP PRESS – "What Are the Differences Between MRP Live and Classic MRP?" updated November 2025

[9] SAP Learning – "Deploying Situation Handling," Purchasing in SAP S/4HANA

[10] SAP – "Process mining with SAP Signavio"

[11] Orpington Technologies – Implementation Confidence Diagnostic

[12] Orpington Technologies – Services overview

[13] Orpington Technologies – "ERP Staff Augmentation"

[14] Orpington Technologies – SAP S/4HANA and ERP Insights