BCG

A Faster Path to Value from AI in the Commercial Vehicle Aftermarket

MARCH 2026

Across the value chain, the top reported challenges point to three main imperatives in 2026 and beyond

Most significant challenges for suppliers

Navigating trade and tariff challenges	80%
Demand volatility or forecasting difficulties	80%
Rising material, energy, or logistics costs	56%
Supplier delays or input shortages affecting production schedules	40%
Inefficient processes or production bottlenecks	40%

Most significant challenges for distributors, dealers, and ISPs

Difficulty sourcing parts or dealing with suppliers' long lead times	53%
Rising service and labor costs impacting profitability	50%
Increasing customer expectations for faster delivery or response times	44%
Pressure on pricing and margins due to competition	44%
Skill gaps among counter staff, sales teams, or technicians	38%

Core imperatives

Controlling costs and margin pressure

Improving forecasting and predictability

Increasing service quality and reliability

Sources: BCG's Commercial-Vehicle Aftermarket Survey, 2025; interviews with industry leaders.
Note: ISP = independent service provider.
Survey question: Specific to your commercial-vehicle aftermarket parts production or remanufacturing operations, what are the most significant challenges you face today? Select and rank the top five.

The ten highest-value AI use cases can help address the industry's core imperatives

Controlling costs and margin pressure

- 40% — Smarter pricing and cost modeling (suppliers, distributors, and ISPs)
- 28% — Process and production optimization (suppliers)
- 27% — Warranty and return analytics (distributors and ISPs)

Improving forecasting and predictability

- 68% — Demand forecasting and inventory optimization (suppliers)
- 38% — Demand forecasting and inventory optimization (distributors and ISPs)
- 38% — Predictive service scheduling (distributors and ISPs)

Increasing service quality and reliability

- 56% — Automated parts cross-referencing (distributors and ISPs)
- 38% — Customer-support automation (distributors and ISPs)
- 32% — Intelligent order processing and automation (distributors and ISPs)
- 32% — Marketing- and product-content creation (distributors and ISPs)

Sources: BCG's Commercial-Vehicle Aftermarket Survey, 2025; interviews with industry leaders.
Note: ISP = independent service provider.
Survey question: Which of the following areas represent the highest-value opportunities for AI within the part of the value chain you primarily serve? Select the top three.

Implementing the highest-value AI use cases can unlock significant value for the commercial vehicle value chain

Overall commercial-vehicle aftermarket value chain is $50 billion

	Wholesale parts		Distribution		Retail parts
Market	$26B	→	$40B	→	$50B
COGS	$19B		$26B		$40B
Average margin	**27%**		**35%**		**20%**

Focusing on the right AI use cases can unlock transformative cost efficiencies for the total value chain, resulting in

$3.5B in cost efficiencies

plus incremental benefits to top lines and service records for first movers

Sources: MacKay & Company, 2025; BCG analysis.
Note: COGS = cost of goods sold. Calculated based on a company with $500 million in revenue: $15 million impact at the wholesale parts level, $29 million impact at the distributor level, and $45 million impact at the retailer level.

First movers have the opportunity to capture significant advantages

	 KPIs	 Suppliers	 Distributors	 Retailers
Smarter pricing and cost modeling	Revenue	**~$8M**	**~$15M**	**~$22M**
Demand forecasting and inventory optimization	Inventory cost	**~$7M**	**~$9M**	**~$15M**
Automated parts cross-referencing	Administrative cost	NA	**~$4M**	**~$7M**
	Total impact	**$15M**	**~$28M**	**~$45M**

Sources: MacKay & Company, 2025; BCG case experience and analysis.
Note: Illustrative. Calculated based on $500 million in sales per year. NA = not applicable.

Most companies are increasing their AI investment, but only a small fraction are unlocking meaningful value from it

70%

Share of respondents who are investing in AI

14%

Share of respondents who have generated value from existing investments

Sources: BCG's Commercial-Vehicle Aftermarket Survey, 2025; interviews with industry leaders.
Survey question: How would you characterize the business impact of your organization's AI initiatives so far?

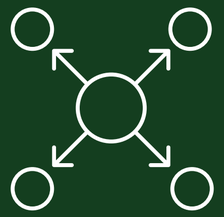
AI-driven precision, speed, scale, and predictability make new outcomes possible for the commercial vehicle aftermarket's top use cases

Smarter pricing and cost modeling

Builds a **predictive and self-optimizing price elasticity engine** that balances growth, margin, and customer context

Demand forecasting and inventory optimization

Enables transforming reactive, averages-based processes into **predictive models that anticipate demand shifts and geopolitical factors and optimizes** to locations, products, and more



Automated parts cross-referencing

Scale beyond tribal knowledge to **unlock faster and more accurate service for parts ordering**, with lower costs and reduced return rates

Source: BCG interviews with members of the Motor & Equipment Manufacturers Association and industry leaders, 2025.

AI-driven pricing and cost modeling enables first-mover companies to increase revenue and profits

Smarter pricing and cost modeling

Execution pain points	AI-driven improvements
Manual cost and vendor inputs	Continuous optimization that incorporates real-time costs and market shifts
Limited competitive price scraping	Always-on competitor intelligence across long-tail SKUs
Low maturity of price modeling capabilities	Advanced predictive modeling to analyze elasticity
Simple cost-plus for long-tail SKUs	Autonomous pricing using volume mix analysis to optimize for individual SKUs

Source: BCG interviews with members of the Motor & Equipment Manufacturers Association and industry leaders, 2025.

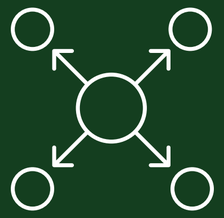
AI-driven demand forecasting and inventory optimization improves accuracy and scalability

Demand forecasting and inventory optimization

Execution pain points	AI-driven improvements
Input data quality and completeness issues	Automated data compilation and cleansing across first-party and third-party sources
Difficult to integrate macroeconomic factors	Integration of market-level trends and geopolitical factors
Highly manual processes using spreadsheets	Analysis completed by AI, leveraging human expertise for strategic refinement
Limited ability to drive predictive modeling	Automated predictive model continuously optimizes to complex variables and unique context

Source: BCG interviews with members of the Motor & Equipment Manufacturers Association and industry leaders, 2025.

AI-driven automated parts cross-referencing enables faster and more accurate parts ordering



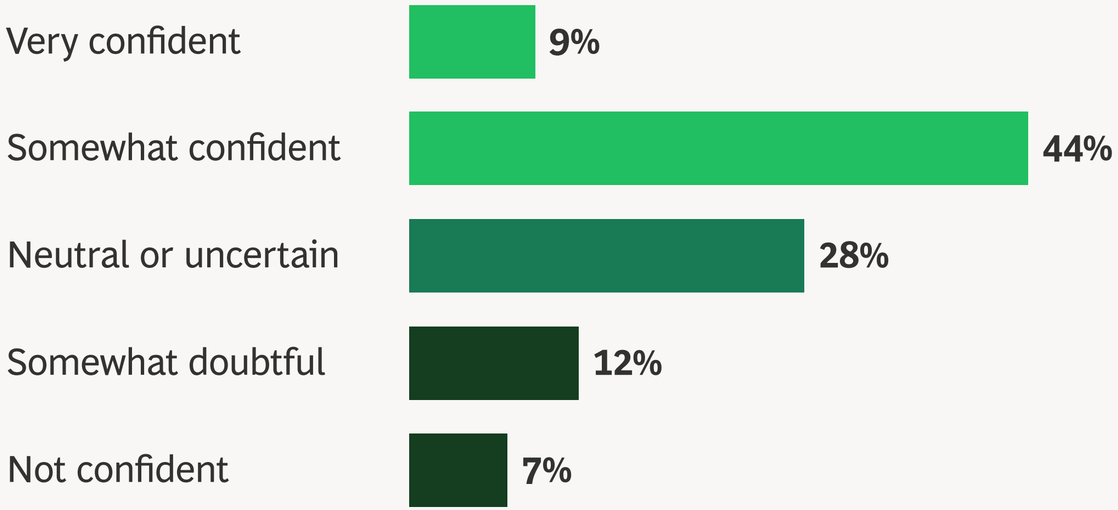
Automated parts cross-referencing

Execution pain points	AI-driven improvements
Incomplete parts data catalog across independent aftermarket and OEM supersessions and discontinuations	GenAI standardizes attributes and fills gaps from supplier feeds and part supersessions
Compatibility data often depends on expert knowledge	AI lookup tool and agents complete real-time, accurate lookups across systems

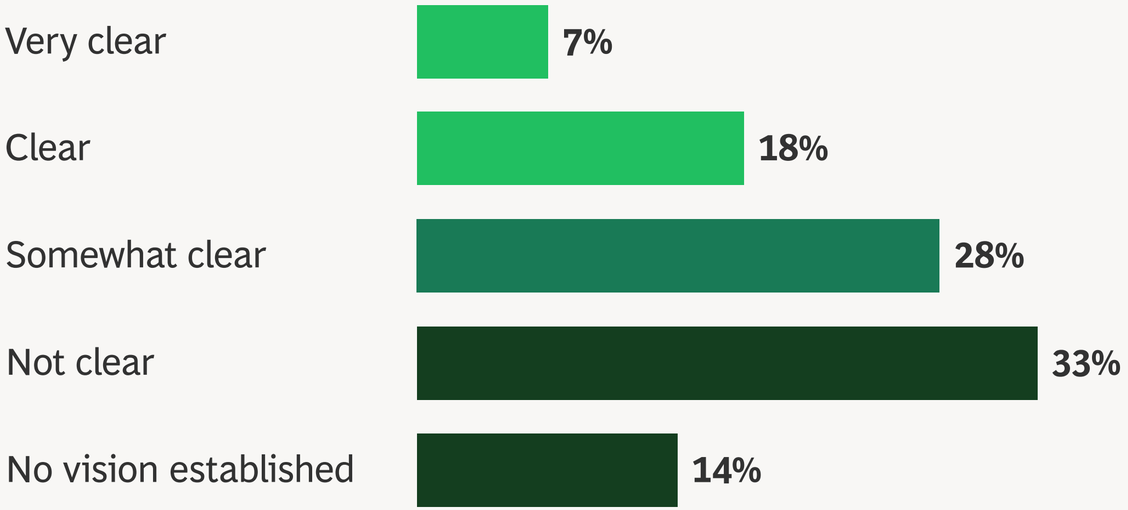
Source: BCG interviews with members of the Motor & Equipment Manufacturers Association and industry leaders, 2025.

Most companies are certain about scaling AI in the near term but less clear on their long-term vision or AI's connection to business value

RESPONDENTS' CONFIDENCE IN SCALING AI OVER NEXT THREE YEARS (%)



RESPONDENTS' VIEW OF COMPANY'S LONG-TERM VISION FOR HOW AI WILL CREATE VALUE (%)



Companies need to link AI to business challenges, objectives, and strategy to generate value from it

Sources: BCG's Commercial-Vehicle Aftermarket Survey, 2025; interviews with industry leaders.
Survey question: How confident are you that your organization has the capabilities needed to scale AI successfully over the next three years? Select one.
Survey question: How clear is your organization's long-term vision for how AI can or will create value for your business? Select one.

Technology is only a small driver of success; 70% of a company's focus must be on enabling people and redesigning processes and workflows

10% Algorithms and insights

20% Tech and data platforms

70% People and processes

Key success factors

- Predicting demand, inventory needs, prices, and cross-referenced parts maps on the basis of real constraints and costs
- Unlocking data (enabling, for example, inventory feeds and smarter pricing)
- Modernizing for performance (including runtime environments and product and customer data pipelines)
- End-user training and adoption (in areas such as pricing and assortment)
- Investing in the right talent in data, analytics, and AI product management
- Building a culture of experimentation (test and learn)
- Reimagining workflows and teaming for delivery
- Deploying AI responsibly, with clear guardrails to enable users
- Accelerating with the help of external partnerships

Source: BCG's Global Study on AI and Digital Maturity, 2024; n = 1,000.
Survey question: What is your company's maturity across 53 capability questions covering strategy, innovation, customer experience, operations, tech, data, operating model, and people?

Four priorities can help aftermarket players address their core challenges and realize value from AI

Four priorities

Value-driven strategy and planning

Define clear outcomes

- Identify strategic priorities and value drivers
- Select targets
- Zero in on two to five AI use cases that support strategic priorities

Prioritize AI use cases

- Select the highest-value area for a pilot
- Establish a baseline to track use case impact

Implementing for success

Launch a pilot to validate value

- Start with a small pilot
- Measure the impact and collect feedback
- Refine the pilot before scaling

Scale up using the 10-20-70 approach

- Focus 70% of the effort on people and processes
- Launch a change management program
- Report the impact and optimize over time

Respondents' top challenges

- Prioritizing the right use cases (**50%**)
- Understanding the costs of solutions (**40%**)
- Lacking clear success criteria (**40%**)

- Limited skills or expertise (**37%**)
- Quality and accuracy of AI outputs (**33%**)
- Difficulty proving ROI (**32%**)

Sources: BCG's Commercial-Vehicle Aftermarket Survey, 2025; interviews with industry leaders; BCG analysis.
Survey question: What types of strategic and planning decisions about AI are most difficult for your organization right now?
Survey question: Please denote what, if any, of the following implementation-related challenges have arisen as your organization has undertaken recent AI initiatives. Select all that apply.