

Perspectives on multiplying value

Shape the future with confidence

Navigating the automotive value shift: How to drive your business transformation

Evolving customer demand, emerging technologies and tightening regulations are driving massive change in the global automotive industry. This is the great automotive value shift. It's creating an imperative for business transformation - and it will redefine the future of the industry.

Traditional value pools grounded in manufacturing and transactional sales are giving way to new revenue opportunities across the vehicle lifecycle. In response, automakers have to ask fundamental questions to ground their approach to business transformation and maximize value from major shifts in the industry:

- Where is the greatest future value?
- How quickly will it materialize?
- How do we prepare now to make the most of it?

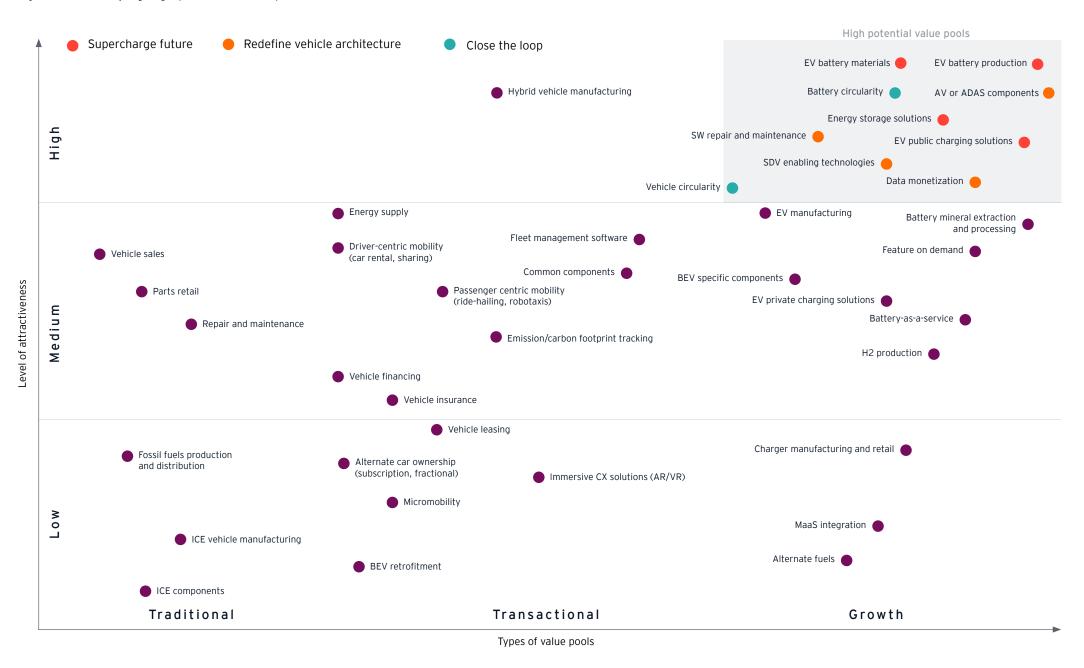
A detailed analysis of automotive value pools

To answer critical questions like these, we analyzed the evolving automotive value chain, identifying two new categories of revenue streams beyond traditional value pools. Transitional opportunities are most adjacent to traditional revenue streams and represent the first wave of the great automotive value shift. Growth opportunities are the next wave of adjacencies shaping the new economics of mobility.

Of the 40 value pools identified, six are traditional, 14 are transitional and 20 are growth opportunities. To assess the attractiveness of these value pools, we used a proprietary framework across four broad parameters (and 16 subparameters) – scalability, technological maturity, investor attractiveness and customer expectations. Ten value pools emerged as the most promising (top right, Figure 1).



Figure 1: Identifying high potential value pools across the automotive value chain



Three of these 10 value pools are megapools.

Representing the greatest opportunity for growth, they are projected to reach US\$660 billion market value by 2030.

MEGAPOOL 1

Supercharge the future

What does it include?

Electric vehicle (EV) battery production, active materials and components, EV public charging solutions and energy storage systems

What's the value potential?

Expected to reach about

US\$405 billion

by 2030 at a CAGR of 14.8% between 2023 and 2030.

Key transformation takeaways

EV growth has moderated due to the impact of high ownership costs, reduced subsidies, range anxiety, slowerthan-expected rollout of charging infrastructure and the increased interest in hybrids. To recharge growth, EVs with greater range, reliability, safety and lower costs are key. That's why batteries have so much differentiating potential.

A reliable, convenient and affordable, fast-charging network is the other key to wider EV adoption. What's more, EV charging data will spur new opportunities in real-time monitoring and managed EV charging services.

MFGAPOOL 2

Redefine the vehicle architecture

What does it include?

Software-defined vehicle technologies, advanced driver-assistance system (ADAS)/autonomous vehicle components, data monetization and software-based repair and maintenance

What's the value potential?

Expected to reach about

US\$169 billion

by 2030 at a CAGR of 18.8% between 2023 and 2030.

Key transformation takeaways

Centralized architectures and standardized platforms are becoming more common, and significant opportunities are arising across the vehicle tech stack, from ADAS/ autonomous driving components and chips to new operating systems and user interface controls.

Legacy infrastructure must also evolve to seamlessly integrate hardware and software (via OS), facilitate data exchange between OS and applications (via middleware) and accelerate agile development (via standard processes or toolchains).

MEGAPOOL 3

Close the loop

What does it include?

Battery and vehicle circularity aimed at reusing and recycling materials

What's the value potential?

Expected to reach about

US\$88 billion

by 2030 at a CAGR of 16.2% between 2023 and 2030.

Key transformation takeaways

The increased demand for electric mobility and the resulting need for batteries has created significant opportunities in battery circularity. Spent EV batteries can be repurposed and reused – for stationary power storage applications or in vehicles with lower capacity requirements - or they can be recycled to recover scarce minerals.

The increasing lifespan of EV batteries may result in limited recycling feedstock, creating potential headwinds to meet regulatory targets.

Transformation fundamentals: from seeing value potential to seizing it

Industry players are already making strategic moves to transform their businesses and become leaders in the great automotive value shift. To use this industry turning point as a springboard for lasting competitive advantage, focus on these fundamentals as part of your business transformation.

Build a culture of innovation

The shift from traditional automotive systems to advanced technologies naturally demands a strong focus on innovation. But this doesn't mean pursuing innovation as it's always been done. You need to innovate with speed, at scale and sustainably in areas that are adjacent to your traditional scope. This means targeting R&D investments, recruiting people with different skills and turning to strategic partners to quickly rev up product and service innovation.

Make IT transformation a priority

The weight of legacy infrastructure becomes even heavier as automakers compete for leadership across nontraditional value pools. Data is at the core of every value play. That's why you need user-centric and modern, cloud-based architectures that support advanced analytics, agility and scalability. As generative artificial intelligence (GenAl), machine learning and quantum technologies advance, an IT strategy and systems that flex fast with change will become non-negotiable engines of competitive advantage.

Rethink customer experience

A car is more than a machine that gets people from here to there. For many, it reflects who they are, what they value and how they live. Making the most of any value pool means grounding strategies in a deep understanding of customers. Advanced technologies will continue to make it possible to mine incredible customer insights from driver, behavior, vehicle use and customer preference data. You can hyper personalize the purchasing, financing and driving experiences in completely new ways.

Thread sustainability through everything

This can be a defining moment for automotive companies to make sustainability commitments that go beyond what regulators require or what competitors do. Ensure that sustainable supply chains and the circular economy factor heavily into your approach to future value pools. In addition to large goals that guide a more fundamental transformation, you can make meeting sustainability goals less overwhelming by weaving into day-to-day operations, making sustainable mobility the new standard.



How should we innovate our approach to innovation so we can deliver successfully in new value pools?

What quick wins can we pursue to make our IT infrastructure more flexible without months of waiting for results?

Are we truly making the most of the data we have to understand our customers' needs and wants in the moment?

Can we develop simple sustainability practices that together create momentum toward becoming a sustainable mobility company?

How will you shift gears to transform your business?

At EY organization, we don't just talk about transformation, we can help you make it happen. We understand the automotive industry and are ready to be your trusted partner in business transformation—helping you to future proof your technology landscape, deliver breakthrough customer experiences and realize a powerful sustainability agenda.

Let's go beyond together.

Contact us to learn more:



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This article was adapted from the EY article Reframe your strategy: The great automotive value shift.

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