McKinsey&Company

MCKINSEY CENTER FOR FUTURE MOBILITY READY FOR INSPECTION – THE AUTOMOTIVE AFTERMARKET IN 2030

June 2018

MCKINSEY CENTER FOR FUTURE MOBILITY READY FOR INSPECTION – THE AUTOMOTIVE AFTERMARKET IN 2030

CONTENTS

Staggering facts about changes in the aftermarket	6
Executive summary	8
Introduction	11
1. Key figures and characteristics of the aftermarket	13
2. Ten trends and their disruptive effect on the ecosystem	17
2.1 Changes in customer expectations and value generation	17
2.2 Emergence of next-generation vehicles	21
2.3 Shifts in competitive power	26
2.4 The compound effect of these trends on the aftermarket ecosystem	27
3. Recommendations for aftermarket players	35
3.1 OEMs to secure core business and strengthen their independent aftermarket position	36
3.2 Suppliers to explore alternative sales, branding, and pricing strategies	39
3.3 Parts distributors to intensify their digital service offerings	41
3.4 Workshops to build capabilities to cope with increasing complexity	44
4. Getting started on your aftermarket journey	47
Authors	49

STAGGERING FACTS ABOUT CHANGES IN THE AFTERMARKET

Cars will recommend location for servicing –

58%

of customer in the US, Germany, Brazil, and China

would obey



Modern high-end car software has

100 million

lines of code and will double to

300 million

lines by 2020, making software capabilities in the aftermarket increasingly important



Online B2C sales of automotive parts and accessories in North America and Europe are expected to account for

10-15%

of the overall aftermarket by 2020



The Chinese automotive aftermarket will grow much faster than new-car sales, with

~8% CAGR

until 2030 vs.

~4% CAGR

for new-car sales

The proliferation of electric vehicles will have a

negative growth effect of

2-110/ on German aftermarket revenues by 2025

10%

of aftermarket experts expect new digital players (e.g., Google, Amazon, and eBay) to gain a significant share of revenues and profits of the automotive aftermarket by 2030

Over the last 5 years, the North American market saw more than



in the automotive aftermarket, and

160 in 2016 alone

0of the000000100</t

activities during the past 5 years

EXECUTIVE SUMMARY

The global automotive aftermarket has a current business value of approximately EUR 800 billion and is expected to grow 3 percent annually, to about EUR 1,200 billion by 2030. In the next few years, ten trends will fundamentally change the industry:

Changes in customer expectations and value generation

- 1. Digitization of channels and interfaces
- 2. Big data and analytics becoming new sources of value generation
- 3. Increasing importance of professionally managed fleets
- 4. Rise of emerging markets and a new service mindset

Emergence of next-generation vehicles

- 5. Electrification shrinking the profit pool
- 6. Increasing importance of software requiring new competencies
- 7. Autonomous driving leading to fewer accidents but shorter maintenance intervals
- 8. Connected vehicles enabling predictive maintenance

Shifts in competitive power

- 9. New players entering the market
- 10. Further acceleration of industry consolidation and integration.

These changes have three major effects: disruption along the value chain, a change in end customer access, and a shift in profit pools.

Disruption along the value chain will not only be driven by existing industry players, but also by new entrants. Software and electric vehicle (EV) component manufacturers will enter at the beginning of the chain. In addition, e-commerce and digital players will disrupt the traditional parts distributor business, and workshops will witness the proliferation of specialized players (e.g., EV or fleet maintenance). Start-ups and incumbents will fulfill roles as intermediaries, seizing opportunities to connect customers and services in new ways.

The new value chain design will translate into higher price transparency for the customer across the entire value chain. New touch points will be created, giving new entrants access to end customers and threatening to reduce end customer access for other players. Furthermore, customers will increasingly rely on automated systems and recommendations. Lastly, there will be a shift from private to business needs due to the increased share of professional fleet operators in the aftermarket.

As a consequence, profit pools might shift significantly between whole value chain steps. Based on the estimated impact of trends such as EV, connected cars, and e-commerce, over EUR 100 billion, or 30 to 40 percent, of aftermarket profits could be subject to redistribution along the value chain in 2030. The shifts will be bidirectional for each stakeholder group, and the new distribution will depend on how the respective stakeholders manage to position themselves in the new aftermarket ecosystem.

8

We believe these disruptive effects present each stakeholder with a clear mandate for change. We suggest that all major players take pragmatic action to help them prepare for the new industry landscape and take full advantage of the opportunities.

OEMs to secure core business and strengthen their independent aftermarket position. In order to protect market share and sales volume, OEMs need to become more customercentric and enhance their approach to customer segmentation and experience. Additionally, the introduction of multichannel strategies will help defend the top line against entrants with digital genes. Shifting focus to the aftermarket in emerging markets is another lever that needs to be pulled. As the share of older vehicles grows, OEMs need to look further beyond new-car sales and become more involved in the traditional playing fields of the independent aftermarket.

Suppliers to explore alternative sales, branding, and pricing strategies. Suppliers can develop additional sales channels to increase direct customer access. Successful industry examples include the introduction of a second price line with a differentiated brand, forward integration along the value chain, or providing garage concepts to a broad range of workshops. At the same time, suppliers should also actively respond to competitive pressure and consolidation through, for example, partnerships with the strongest distributors or digital players, or by following multibrand strategies.

Parts distributors to intensify their digital service offerings. Embracing digital and analytics is one important commitment that will ensure incumbent parts distributors do not get edged out by new players with digital genes. For distributors, a digital and analytics focus can include an optimization of their own online platforms, tapping into big data analyses, and participating in the platform game for customer data. Distributors are also advised to choose a suitable growth strategy: smaller players may occupy profitable niches while large players need to focus on organic and inorganic growth to achieve the necessary scale and maintain high entry barriers.

Workshops to professionalize to cope with increasing complexity. Investing in recruiting, training, and equipment will be key for workshops in developing their ability to manage the increasing technological complexity of next-generation vehicles. On the customer-facing side, they should invest in enabling a digital customer journey and, at the same time, consider a brick-and-mortar makeover to build on a new customer service mindset. Finally, workshops should explore ways to clearly position themselves versus competing networks.

* * *

The impact from these trends will significantly affect the future landscape of the automotive aftermarket industry. It is now time for all value chain players to take action to shape the future industry landscape, ensure their competitiveness, and perhaps even expand into untapped profit pools.

INTRODUCTION

Dramatic changes are ahead for the automotive aftermarket, a segment that has been a major and stable profit contributor to the automotive industry in general. These include changing customer expectations, accelerated adoption of new technologies, and shifts in competitive power. Thus, value creation and business models in the automotive aftermarket will also be fundamentally reshaped by these changes.

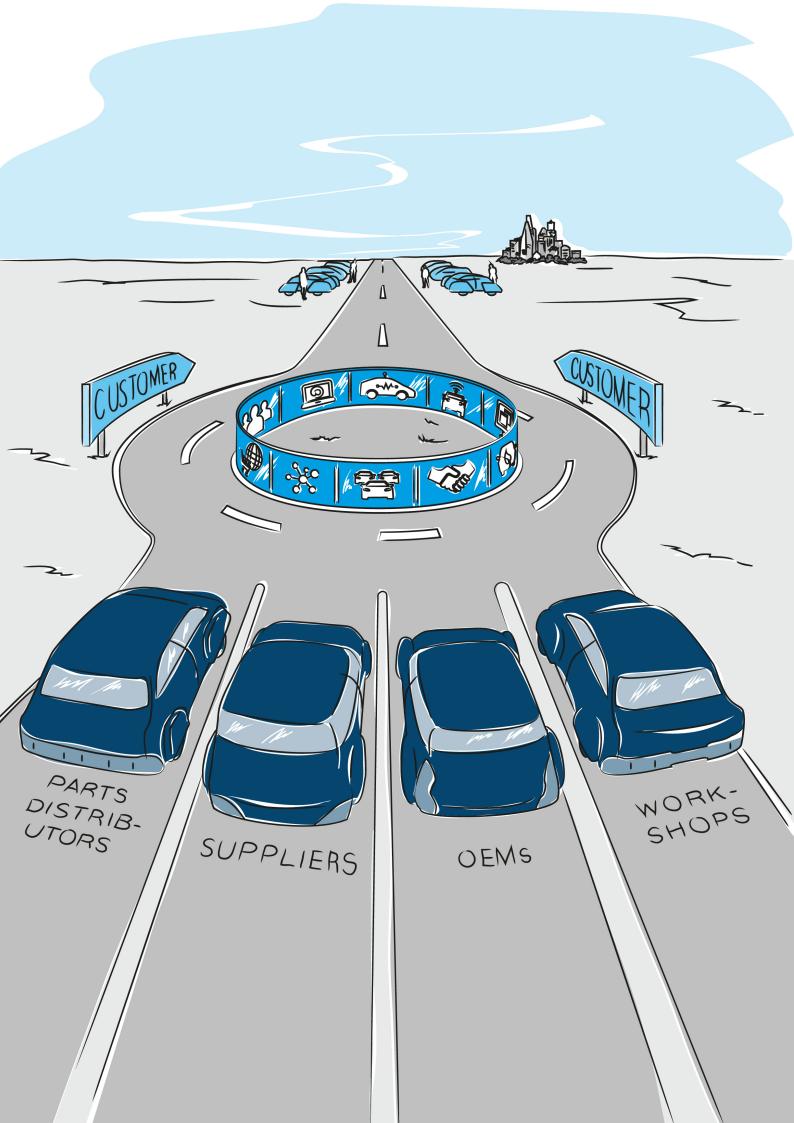
In the mature markets of North America and Europe, the pace of consolidation will accelerate, and competition will arise from unexpected players – for instance, digital natives pursuing opportunities to move into the automotive aftermarket space. In emerging markets, whole new areas of consumer needs will arise and pressure aftermarket companies to respond.

The advent of new technologies and the market shifts that accompany them are compelling aftermarket players to assess their positions and be strategic about maintaining positions of strength in a fast-changing environment. Learning from past disruptions in other industries, we know that not having the requisite strategies to cope with these disruptions can lead to decline not just for individual, established corporations but for whole subindustries. But as much as experts agree that significant changes are ahead, a big picture of all trends and ideas to face them still needs to be developed.

This McKinsey report aims to illuminate the changes and disruptive trends that the automotive aftermarket is going to face in the coming years and provide answers to some of the key questions that these trends pose to all players:

- Which trends will impact the automotive aftermarket and how will the aftermarket value chain be disrupted?
- How will customer involvement and the customer journey change?
- How will the profit pools shift along the value chain?
- What are the initial steps aftermarket players should take in order to be prepared?

In discussing the current situation (Chapter 1), the trends (Chapter 2), and recommended pragmatic actions (Chapter 3), we rely on our various McKinsey project experience, analyses, industry expertise, and insights derived from interviews with more than 40 experts and executives in the automotive aftermarket.



1. KEY FIGURES AND CHARAC-TERISTICS OF THE AFTERMARKET

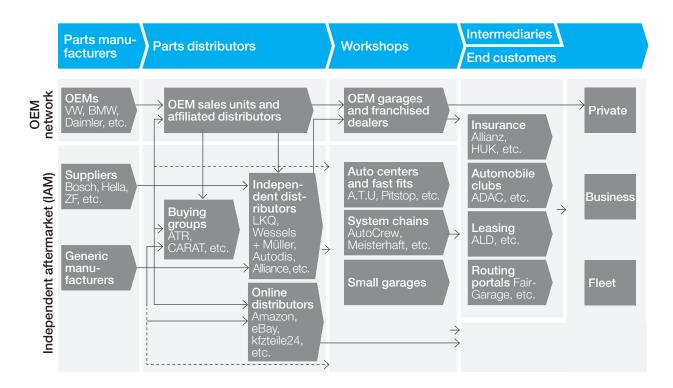
The automotive aftermarket is facing major disruption in the coming years. Not having a comprehensive perspective or fully understanding the consequences of this disruption can lead to the decline of whole sub-businesses, as we have witnessed in other industries such as print media, mobile phones, and cameras. This report aims at proving a comprehensive perspective on the disruptive trends and giving initial action recommendations for the key stakeholders. For the purposes of this report, the aftermarket is comprised of all postsales businesses. The two segments of service (i.e., maintenance and repair) on one side and the retail and wholesale parts business on the other are pretty evenly split in terms of value. Beyond these basics, the aftermarket has a few other key characteristics:

Market structure

At its most fundamental level, the set of aftermarket companies is split between two categories – the OEM network and the independent aftermarket (IAM). Within each of these categories, five distinct but interacting stakeholder groups are represented: parts manufacturers, parts distributors, workshops, intermediaries, and end customers (Exhibit 1).

Exhibit 1

The automotive aftermarket comprises a diverse set of established and new players Example – Germany



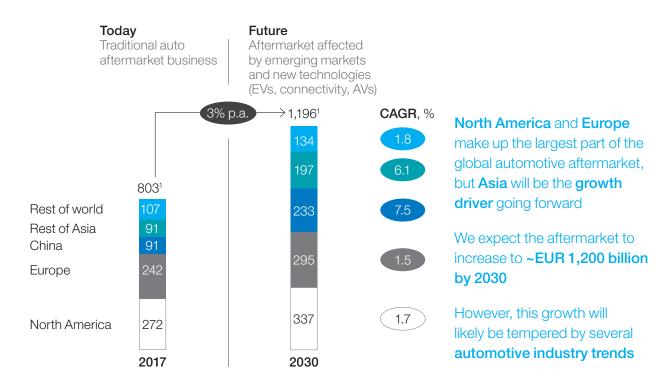
Market size

McKinsey estimates the aftermarket value in 2017 to be approximately EUR 800 billion. Business in North America accounted for approximately 270 billion of global revenue, Europe was second at approximately EUR 240 billion, and business in China generated approximately EUR 90 billion (Exhibit 2).

Exhibit 2

McKinsey's proprietary modeling of the automotive aftermarket imputes a total value for 2017 of ~ EUR 800 billion

EUR billions



Market development

We expect the overall automotive aftermarket to grow at roughly 3 percent p.a., reaching approximately EUR 1,200 billion by 2030. A few disruptive trends, however, will have strong and opposing influences on the development of this market and the distribution of value across players. Shared mobility will be one of the factors increasing the annual maintenance spend for shared vehicles due to a higher annual distance driven. On the other end – limiting the market's growth – EVs will likely require lower maintenance efforts, and crash repair spend on autonomous vehicles (AV) is also expected to potentially decrease by up to 90 percent per vehicle by 2030. We expect these opposing trends to result in a net decrease in the aftermarket value per vehicle due to the dominance of EV and AV.

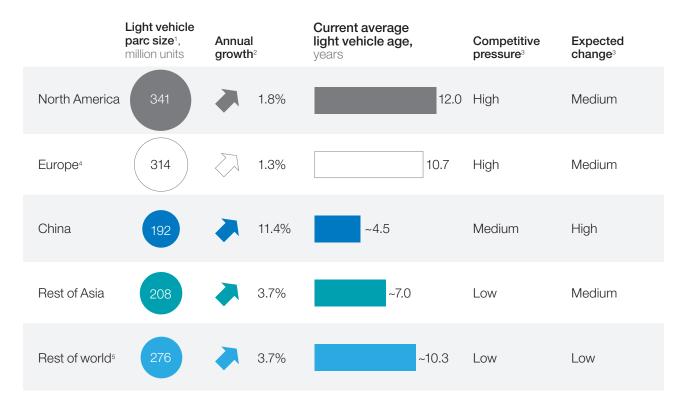
1 Inflation-adjusted, including all services and parts (e.g., also tires)

Regional growth

Differences in aftermarket growth by region are largely a function of market maturity (Exhibit 3). Specifically, emerging markets will see growth rates that exceed those of consolidated markets. It is the skyrocketing rate of car ownership in China that will increase Asia's share of the global automotive aftermarket to more than a third (EUR 430 billion) as early as 2030. Between service and parts, it is the service market that will exhibit stronger growth as the age of the average vehicle in China increases.

In mature markets, growth in the aftermarket was only in the 1 to 2 percent range over the last decade. This modest growth is expected to continue, leading to revenue of approximately EUR 340 billion in North America and approximately EUR 300 billion in Europe in 2030. As the average car age increases in these consolidated markets as well, aftermarket players here will also need to address the needs of the older vehicle segment.

Exhibit 3



Global aftermarket dashboard

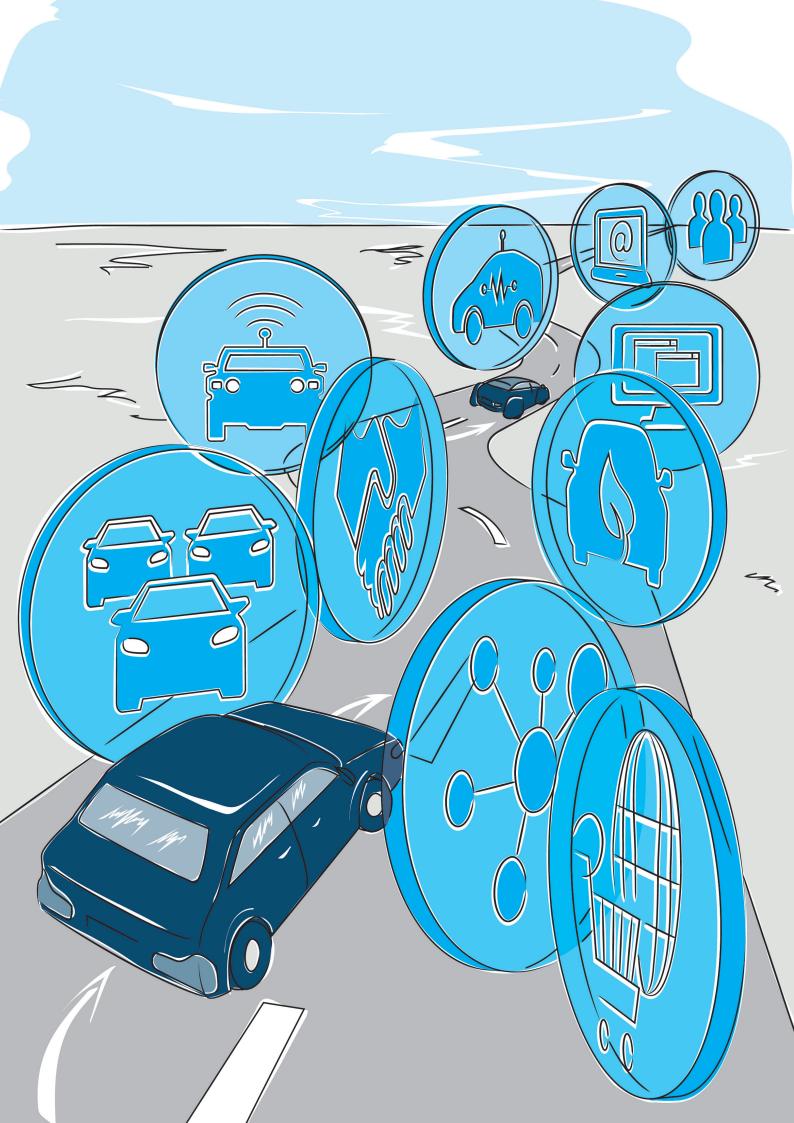
1 Year end 2017

2 Annual growth 2010-25 (expected)

3 Based on expert interviews

4 Western and Central Europe

5 CIS states, Turkey, Oceania, Middle East, Africa, South America



2. TEN TRENDS AND THEIR DISRUP-TIVE EFFECT ON THE ECOSYSTEM

Based upon our own analyses and industry expertise as well as on insights from leading aftermarket experts, we have identified ten distinct disruptive trends that can be expected to significantly impact the automotive aftermarket (Exhibit 4). These trends can be traced back to three main developments: 1) changes in customer expectations and value generation, 2) emergence of next-generation vehicles, and 3) shifts in competitive power. Depending on the region, market segment, and players, these trends may vary in their manifestation and importance.

In the following, we discuss the trends and then describe their compound effect on the aftermarket's ecosystem, i.e., value chain, customer involvement, and profit pools.

Exhibit 4

Top 10 disruptive trends of the automotive aftermarket



Digitization of channels and interfaces (e.g., e-commerce) reduces information asymmetry

and customer data, allowing

for use cases on both

differentiated service

Shifting market growth

of service mindset to new

and size to emerging markets requires adaption

offerings

customers

revenue and cost sides

Increasing importance of

fleet customers requiring

and increases price transparency for customers Big data enables



of powertrain and shifting aftermarket requirements

> Increasing importance of software impacts service needs and requires an updated or entirely

Autonomous driving reduces accidents, but increases product complexity and leads to shorter maintenance intervals

Connected vehicles enable predictive intelligence maintenance services

3. Shifts in competitive power

Entry of new players (e.g., digital players, intermediaries) increases competitive pressure by occupying profitable businesses

	די
d	

Industry consolidation and integration forces all aftermarket players to extend their value

Impact of respective Ο trend varies across regions and stakeholders



2.1 Changes in customer expectations and value generation

2.1.1 Digitization of channels and interfaces

With the aid of online comparison engines and reviews, customers are more informed and more empowered than ever. Whether the aftermarket is reshaped in ways similar to other industries (e.g., tourism and retail banking) remains to be seen (Exhibit 5). However, the evolution of Internet-empowered, informed customers will likely change the automotive aftermarket in two key ways:

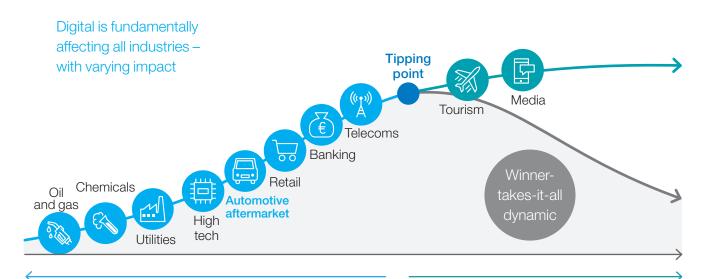
2. Emergence of nextgeneration vehicles Green consciousness leads to electrification

new skill set

Exhibit 5

18

Multiple factors might affect speed and "steady state" degree of digitization in automotive aftermarket



Factors reducing likelihood of digitization

- Large B2B clients relying on long-term relationship with aftermarket parts manufacturers for economic growth
- Risk of retaliation from relevant traditional distributors in developed markets
- Limited understanding of products and installation by consumers

Factors increasing likelihood of digitization

- Multiple distribution layers provide opportunity to shorten the value chain
- New logistics models and players appearing in the market (e.g., online pure players, massive-scale online merchandisers)
- Aggressive new entrants with no fixed costs willing to provide trading platforms
- Increasing digital usage across B2B and B2C users

Price transparency

Large numbers of customers are using digital channels to gain a clearer picture of cost and quality. More than a quarter of aftermarket customers in the UK, France, and Germany use online channels to evaluate workshops, and more than a third use digital tools to inform their purchase of car parts.

Online sales

Today, workshops almost exclusively turn to traditional channels to buy car parts, with 85 to 95 percent of all purchases happening on their B2B platforms or through physical channels. Looking ahead, however, workshops are expected to increase their e-commerce activity on distributor-independent B2B platforms and shop less via traditional parts distributors' physical channels. This B2B-heavy distribution model, however, may also change as end customers increasingly use digital platforms to purchase parts online (e.g., via Amazon or kfzteile24).

Together, these disruptions invite new opportunities for the aftermarket industry to directly address end customers. OEMs, distributors, and workshop chains are already increasing their online participation and opening new platforms. Some OEMs even offer a fully digital customer journey, starting from online booking of service appointments through push notifications on the status of service to vehicle pickup and payment.



2.1.2 Big data and analytics becoming new sources of value generation

A massive wave of new data is creating. A connected vehicle today already generates 25 GB of data per hour, including the collection of telematics and driver behavior data. Combined with the right analytics capabilities, this level of data opens the door to competition-differentiating insights. At the intersection of big data and advanced analytics are several game changing opportunities for the aftermarket industry that hold the potential to increase revenue and/or make operations more efficient:

Deeper consumer insights

Big data analytics has the power to help aftermarket players understand their customers' behaviors, preferences, and needs. This microlevel information can help them tailor their offerings, leading to higher revenues and increased customer satisfaction.

THE POWER OF BIG DATA AND ADVANCED ANALYTICS IN VALUE CHAIN OPTIMIZATION

Big data and advanced analytics will allow aftermarket players to store and process vehicle, customer, and vehicle usage data to optimize the value chain end-to-end based on predictive maintenance.

Customer data provides important information about the standard maintenance intervals and predictions for the probability of nonstandard maintenance visits in case of vehicle errors or exceptional damages. Vehicle data provides information about degree of wear and tear as well as mileage. If enough of the right information is pooled and processed, big data statistics linked with customer-specific analytics can lead to precise prediction of the next customer visit and the associated parts and services.

Based on such precise predictions, workshops, parts distributors and suppliers, and OEMs can optimize their logistics. First, more precise knowledge of the next maintenance requirement can decrease the return rate of failed deliveries. Second, increased on-time delivery can decrease the amount of average inventory. Lastly, better medium-term predictions can even lead to more optimized parts production cycles.

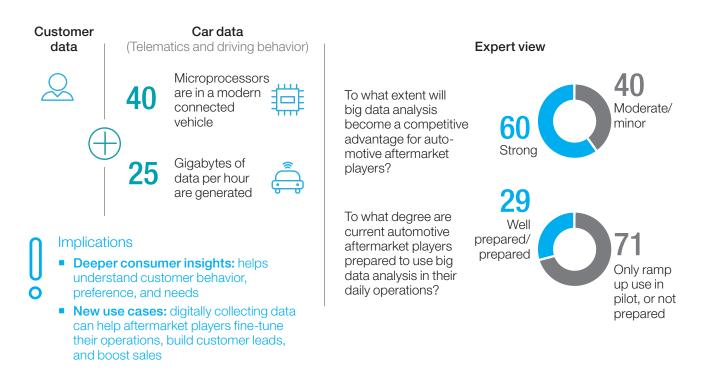
New use cases

Digitally collecting data on, for example, parts inventory/warehousing and car and fleet activity can help aftermarket players fine-tune their operations, build customer leads, and boost sales.

Aftermarket experts expect big data and advanced analytics to become a great competitive advantage in the future. Today, however, the general conviction is that most automotive aftermarket players are not sufficiently prepared to take advantage of the big data opportunity: in fact, over 70 percent of aftermarket experts believe that aftermarket players are, at best, only in the ramp-up phase or, at worst, not prepared at all (Exhibit 6). Those who are able to move quickly and effectively in this space have the potential to differentiate themselves from the competition.

Exhibit 6

Big data enables analysis of customer and car data, allowing predictive maintenance and optimized steering of parts logistics





2.1.3 Increasing importance of professionally managed fleets

The current uptake of shared mobility could mean that nearly one out of ten cars sold in 2030 will be a shared vehicle. Additionally, new corporate fleet customers will enter the market, such as Uber with their large fleet of vehicles. This development would mean a smaller share of individually owned cars and greater demand for professionally managed fleets, with specific aftermarket implications:

Higher utilization

Fleet vehicles typically spend more time on the road, and with this comes additional wear and tear. Utilization is key to the bottom line of mobility providers, giving downtime new importance for aftermarket players. Therefore, advanced aftermarket concepts ensuring high utilization and competitive TCO need to be developed.

B2B emphasis

As the share of business customers grows, service management becomes more centralized. Together, these developments bring about new needs, such as professionalized purchasing processes and service operations. In addition, total cost of ownership shifts into focus and needs to be considered in service offerings and pricing policy.



2.1.4 Rise of emerging markets and a new service mindset: example from China

China's vehicle population is currently equivalent to about 60 percent of Europe's but is expected to equal that of Europe as soon as 2025. As this large volume of relatively young vehicles ages, China is expected to become much more important in the global aftermarket industry. Combined with the insight that Chinese consumers regard customer service as a comprehensive experience and are willing to pay a premium for it, aftermarket players will want to look at two elements of the customer experience:

Tailored offerings

Several "needs-based" customer segmentations across regions in China show that a onesize-fits-all approach will most likely not work. Here, aftermarket customers require tailored and premium service offerings. Examples for tailored offerings include customized road rescue services, doorstep services, and car washing.

Customer retention measures

To satisfy the needs of China's aftermarket, industry players will need to increasingly leverage differentiated customer retention measures (e.g., loyalty programs).

More than 40 percent of the industry experts we surveyed expect that China will experience the greatest market changes over the next ten years in the automotive aftermarket industry. Industry players hoping to rise to the occasion will need to adapt their approaches to product, sales, and retention to the market's unique outlook on service.



2.2 Emergence of next-generation vehicles 2.2.1 Electrification shrinking the profit pool

Increased electrification of the powertrain is one of the biggest manifestations of the growing concern for the environment that will have very specific implications for the automotive aftermarket:

New technical competencies

With increasing electrification comes a growing set of new car components (e.g., battery, electrical engine). A technical understanding of these components will be required of all market players. Therefore, participation in the EV value chain and profit pool will require a new capability set from that required by aftermarket players.

Eco-friendly parts and services

The proliferation of electrified powertrains further reinforces customers' preferences for

sustainability even after their initial purchase of a hybrid or EV. For aftermarket players, there is an opportunity to gain a competitive edge by: 1) making their products and operations more sustainable (e.g., refurbished parts), 2) developing eco-friendly or even zero-emission supply chains, and 3) emphasizing "green" in their marketing communications.

Different service profile

Electric engines have fewer moving parts and, thus, less wear and tear. Overall, aftermarket maintenance costs for battery electric vehicles are expected to be approximately 40 percent lower than for conventional combustion engine vehicles. This phenomenon, however, is not strictly a profit pool "shrinker" for aftermarket players, as opportunities exist in an investment in skill sets, offerings, and messaging that match the growing call for sustainability.

2.2.2 Increasing importance of software requiring new competencies

Software is becoming increasingly central to vehicles. In an extreme scenario – in which software expertise becomes not just one competency but the core competency – conventional, mechanics-based workshops may no longer have a place in the aftermarket ecosystem. Our expert survey shows that more than 50 percent of industry experts expect that aftermarket services will become more important than parts, and 40 percent expect that services will become as important as parts (Exhibit 7). For aftermarket players who start to build their software skill sets, there is significant potential for operations optimization and valuable new use cases in two specific areas:

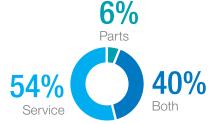
Exhibit 7

5

22

In the future automotive aftermarket industry, service will become significantly more important than parts

What will be more important in the future aftermarket, service or parts?



Maintenance and monitoring

Remote, onboard diagnostics can help OEMs identify technical issues early in the life cycle. This "advance warning" can allow them to quickly intervene with software updates or optimize response time to potential recall campaigns, thus minimizing the risk of recall-related accidents and the cost of brand-damaging litigation. Software can also enable regular, incremental updates to existing product functionality using "over-the-air" flash technology.

Virtual repair support

For service and repair players, greater software competency creates the potential to be able to remotely replace modules or offer "virtually guided" services – both reduce the need for customers to make a physical trip to the workshop. The brand differentiating, revenue generating, and cost saving potential of these software-based functions and services contributes to software's value for the automotive aftermarket.



2.2.3 Autonomous driving leading to fewer accidents but shorter maintenance intervals

Over the last years, global advanced driver-assistance systems (ADAS) volumes grew by 23 percent annually. However, fully autonomous vehicles are unlikely to be commercially available before 2030. Meanwhile, ADAS will play a crucial role in preparing regulators, consumers, and corporations for the medium-term reality of cars increasingly taking over control. In an aggressive scenario, approximately 50 percent of passenger vehicles sold in 2030 could be highly autonomous and another approximately 15 percent fully autonomous. Vehicles' growing autonomy will affect the automotive aftermarket in a variety of ways:

Fewer accidents

AVs will reduce and eventually eliminate the human error element of driving. Decreased human control will be the main driver of a drop in the number of collisions, as more than 90 percent of all crashes in the US, for example, are primarily caused by driver action. This not only impacts the direct aftermarket players (e.g., body shops), but also intermediaries such as insurance companies, which will need to adapt their business model.

Changed service requirements

AVs are designed to operate optimally. Since much of a vehicle's maintenance is related to how it is used (e.g., braking behavior) autonomous cars will experience less wear and tear. On the other hand, these vehicles need to be fully functional at all times and, therefore, will be equipped with more sensitive components (e.g., sensors), which will likely require more frequent diagnostic checks. In addition, the service interaction between customer and workshop will change since the vehicles might drive themselves to the workshop, taking in-person human interactions out of the equation.

Increased liability

As "drivers" become less active in vehicle operation, regulatory frameworks may shift liability more toward OEMs. This has the potential to make OEM-backed service models preferable to independent service and repair models.

With accident repair and usage-based maintenance being central to the aftermarket's current model, our analysis shows that active safety features could remove approximately EUR 30 billion from the automotive aftermarket's revenue pool by 2030 (Exhibit 8). In addition, AVs could remove an additional EUR 10 to 80 billion depending on their adoption within the market.



2.2.4 Connected vehicles enabling predictive maintenance

An array of sensors and Internet-based services (e.g., navigation systems) are enabling new features such as route tracking, park and find, accident and breakdown assistance, dealer search, and vehicle status information. Additional types of data-gathering technology are just now being implemented, such as retrofitted dongles that collect data on driver behavior.

Exhibit 8

ADAS and autonomous vehicles are expected to reduce aftermarket revenues

	Drivers	Directional impact on parts sales	Rationale
Collision-driven replacement of parts	Primary: number of collisions	₽	Decrease in human control will be the main driver behind a decreased number of collisions
	Percentage of vehicles that are human controlled	₽	Autonomous vehicles will decrease and eventually eliminate the human error element of driving
	Number of miles driven by autonomous vehicles relative to nonautonomous vehicles	\Leftrightarrow	More driving due to increase of convenience, less driving due to carpooling and optimized driving routes
	Secondary: severity of collisions	₽	Decrease of accident severity analogous to that seen in active safety systems
	Tertiary: cost of parts	1	Increased use of sensor technology exposed in car crunch zones partially offset by a drop in price
Non-collision-driven replacement of parts	Primary: Amount of wear and tear part driving behavior	ts;	Optimal driving behavior leading to less wear and tear on parts such as tires and brakes
	Number of miles driven by autonomous vehicles relative to nonautonomous vehicles	⁵ ♦	More driving due to increase of convenience, less driving due to carpooling and optimized driving routes
	Secondary: cost of parts	$ \Longleftrightarrow $	Sophisticated autonomous technology to have replacement cycle that outlives car lifetime

For aftermarket players, increasing connectivity delivers the potential of closer, more immediate relationships with customers.

Response recommendations and readiness

An advanced breakdown service will not only call for roadside assistance, but also transmit accident-specific data, helping the responding party deliver the most appropriate service by knowing in advance which car parts are necessary. The service will also recommend a location for servicing, and consumer research indicates that approximately 60 percent of drivers in the US, Germany, Brazil, and China would follow the recommendation.

Predictive maintenance

The continuously sent status data of connected vehicles enable an instant analysis and check of the vehicle. If an actual or potential malfunction is detected, appropriate actions

DATA-GATHERING TECHNOLOGIES IN CONNECTED VEHICLES BUNDLE CAR-RELATED SERVICES

Drivelog (a workshop price comparison and routing portal) bundles multiple car-related services for customers in a Web portal and app. For example, it allows the customer to search nearby workshops (including providing first cost estimates), compares prices at nearby petrol stations, maintains digital documentation of maintenance and repair services, proposes cost saving solutions and offers an online tire shop.

Additionally, Drivelog Connect gives the customer more insight into his own car's data and adds an intermediary to the aftersales system. A Drivelog dongle is directly connected to the OBD port, which then connects to the app on the owner's smartphone. The status and errors of vehicle subsystems are reported to the app and "translated" for the owner into "intelligible anguage." The customer can schedule his service appointments with participating workshops directly through the app.

Effectively, Drivelog provides the customer with more transparency on service prices related to the car. It connects the customer with several workshops simultaneously and increases competition among workshops. Workshops can partner with Drivelog to, for example, receive preferential treatment in search placement for a fee.

can be taken. This possibility for predictive maintenance also allows for continuous vehicle improvement (beyond planned fixes) and for a better workload distribution in workshops.

Remote onboard diagnostics

Instead of vehicle service happening at regular time intervals, preventive service would be based on actual driving behavior and vehicle usage. This type of service could increase in-workshop traffic through maintenance recommendations and targeted maintenance campaigns, especially when the warranty expires and customer loyalty usually drops.

New digital services

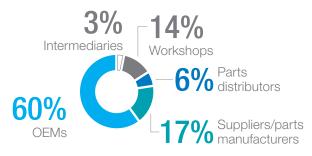
Connectivity enables a new range of digital services, which customers can purchase on demand (e.g., onboard delivery of mobility-related services such as infotainment or concierge services, usage-based insurance, and personalized recommendations).

Connectivity potentially opens the car as a system to aftermarket players. This poses the question: Who will own customer contact in the future? According to 60 percent of automotive aftermarket experts, OEMs will be the key players (Exhibit 9). The degree to which various players will control data and customer interfaces highly depends on future regulatory guidelines.

Exhibit 9

OEMs to control connectivity interface

Which aftermarket player do you expect to control the connectivity interface to the vehicle in the future (e.g., to read out vehicle data or to route the vehicle to a service point in case of technical issues)?



2.3 Shifts in competitive power

As the game changes, so will the players. The landscape of companies occupying key places along the automotive aftermarket value chain is changing in two specific ways: who is playing and how they are playing.



26

2.3.1 New players entering the market

New players will initially focus on a few selected steps along the growing automotive value chain and target only specific, economically attractive market segments. Automotive aftermarket experts believe, however, that new players, particularly digital/e-commerce companies, will expand their value chain footprint and become much more powerful in the future (Exhibit 10). A survey of these experts suggests that players with digital genes (e.g., Amazon) will gain a significant share of revenues and profits in the automotive aftermarket in 2030 and that this group will become the second most important player after OEMs within the next ten years.

Exhibit 10

Entry of new players increases competitive pressure by occupying profitable businesses

What importance/market power do market players ha today?

- 1. OEMs
- 2. Suppliers/parts manufacturers
- 3. Parts distributors
- 4. Workshops
- 5. New digital/e-commerce players
- 6. Intermediaries

What importance/market power will market players have in 10 years?

- 1. OEMs
- 2. New digital/e-commerce players
- 3. Suppliers/parts manufacturers
- 4. Parts distributors
- 5. Workshops
- 6. Intermediaries



2.3.2 Further acceleration of industry consolidation and integration

The more developed an aftermarket, the higher the consolidation of players at the trade level. Most global aftermarkets will follow the same consolidation path as the US and Europe. An example of this is the top four wholesalers in the US, which have a market share of around 50 percent (Exhibit 11).

Exhibit 11

Roughly 600 transactions took place in the North American aftermarket over the last 5 years, leading to increased concentration of the market

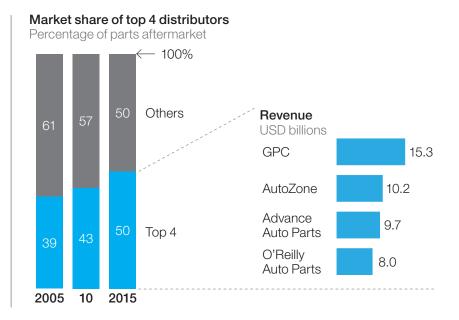
Example - North America



Mavis Tire bought Somerset Tire to create 4th largest independent tire retailer

Advance Auto Parts acquired General Parts (parts and tools distributor), valued at USD 2 billion

LKQ acquired Keystone (distribution of specialty aftermarket equipment), (USD 0.5 billion)



The highest pressure for consolidation is on the parts distributors that need to reach a critical mass and leverage economies of scale. Vehicle diversity, diagnosis, and repair complexity, as well as customer requirements are also putting smaller service shops and repair shops under pressure. Therefore, parts distributors and buying groups are pursuing M&A to increase their size and establish an international footprint. Just in the last few years, the European parts distribution landscape saw several sizable transactions (Exhibit 12).

OEMs also face challenges since their share of the automotive aftermarket drastically decreases as vehicle age increases. This is especially true in emerging markets, due to increasing average vehicle age. OEMs are responding to vehicle-age-driven market share declines by introducing second service formats, second brands (e.g., VW Direct Express), used parts, or remanufactured parts to compete with independent players and keep customers in their network longer. OEMs are also driving customer experience optimization efforts and introducing differentiated service offerings by, for example, leveraging vehicle connectivity to "loyalize" their customers and automate service decision making.

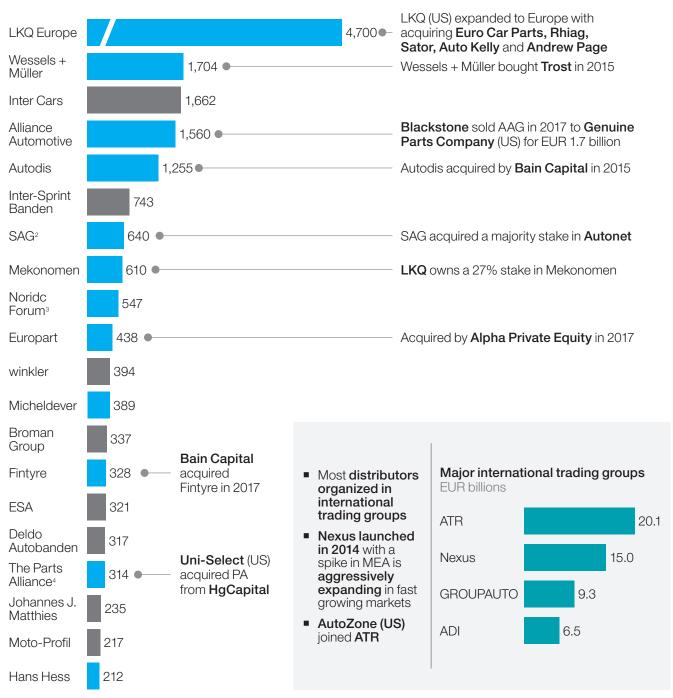
Exhibit 12

The distributor landscape in Europe is changing due to strong consolidation and M&A activities by private equity and industry players

Largest auto parts distributors in Europe

Sales¹, EUR millions

Affected by M&A activities (either private equity or merger)



¹ As of 2016 or latest available FY, partly estimates

² Including sales of Autonet

³ Nordic Forum comprises FTZ, Inter-team, and Hellanor, all owned by supplier Hella

⁴ Excluding revenue from non-consolidated entities

There is a clear trend toward larger and more professionalized workshops to cope with increasing vehicle complexity. Particularly in emerging regions, there is a need for branding and equipment as well as for training/advanced education for mechanics.

Suppliers will move toward providing more complete vehicle subsystems. This will help them establish their own touch points with the end customer to further capture aftermarket spend. Examples include MAHLE Aftermarket Service Solutions division, Bosch Car Service Franchise system in China, and Continental's Connected Technician tablet application, which facilitates diagnosis and repair using augmented reality instructions.

2.4 The compound effect of these trends on the aftermarket ecosystem

Beyond their impact on the business models and operational priorities of individual automotive aftermarket players, the aforementioned trends will profoundly alter the market's core structure in three areas (Exhibit 13):

Disruptions along the value chain

The industry trends described above will affect all players along the aftermarket value chain. There will be threats and opportunities for existing stakeholders as well as points of entry for new players from other industries and newly created start-ups. For example, parts manufacturers will see a shift in product value as software becomes an increasingly critical vehicle element. Parts distributors will compete with players with digital genes, who will gain significant market share over the next years. The rise of vehicle electrification will mean that traditional service and repair shops will come under competitive pressure from workshops that specialize in EVs.

Higher customer involvement

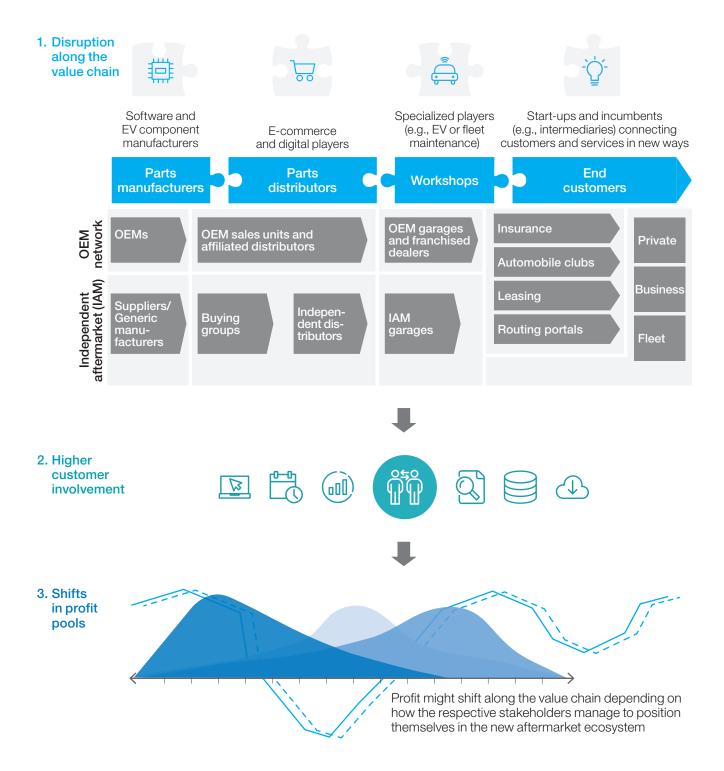
Technological innovation and an increasing number of touch points will empower end customers in the overall structure of the aftermarket. In the future, customers will be able to receive a workshop recommendation from the vehicle itself – complete with cost estimate – and decide whether to follow that recommendation or seek services from an alternative independent maintenance shop based on price, quality, or location. Customers' growing ability to leverage price transparency means that players will need to further differentiate, e.g., compete on price or through exclusive service journeys.

Shifts in profit pools

The final structural change brought on by these trends will be a shift in profits along the value chain. The shift will be bidirectional for each stakeholder group, and the magnitude will depend on how fast the players embrace the coming changes. For example, OEMs and Tier 1 suppliers can capture more value from the automotive aftermarket as connectivity helps them move closer to the end customer. However, with the car becoming a platform for software and applications, profit might shift to tech giants or new software entrants. Traditional parts distributors and workshops could come under pressure as OEMs, intermediaries, and online providers increase their influence on end customers and cut out part of the margin. On the other hand, parts distributors and workshops can seize the opportunity and increase their individual market presence through consolidation, collaboration, and professionalization. Intermediaries, who connect customers and services, will create new profit pools and opportunities. At the same time, intermediaries will see some of their profit at risk from traditional OEMs who are moving closer to their customers, or from digital players entering their markets.

Exhibit 13

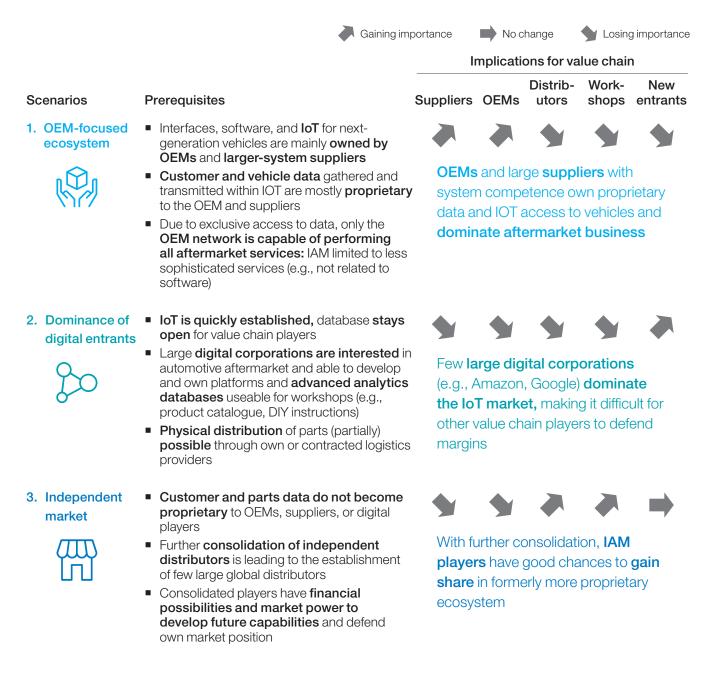
Disruptive trends will alter the automotive aftermarket structure along the entire value chain, causing significant shifts in profit pools



The disruptive trends can change the future automotive aftermarket landscape significantly. But in contrast to the view of 80 percent of the industry experts surveyed that the OEMs are most likely the beneficiaries of these trends, we think that Tier 1 suppliers and other IAM players could also become winners of the profit shift if they react quickly and properly. Three scenarios (Exhibit 14) illustrate the possible magnitude of change as well as the associated profit pool at stake (Exhibit 15).

Exhibit 14

The effect of these scenarios needs to be considered for the respective value chain players

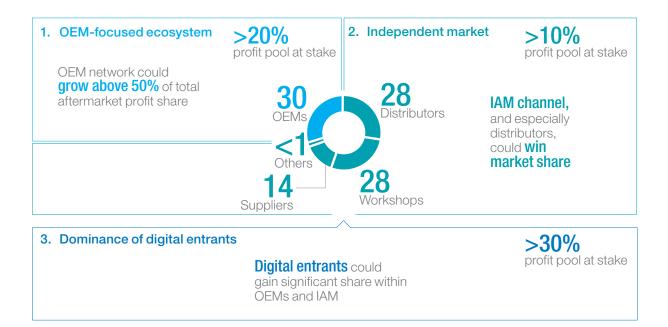


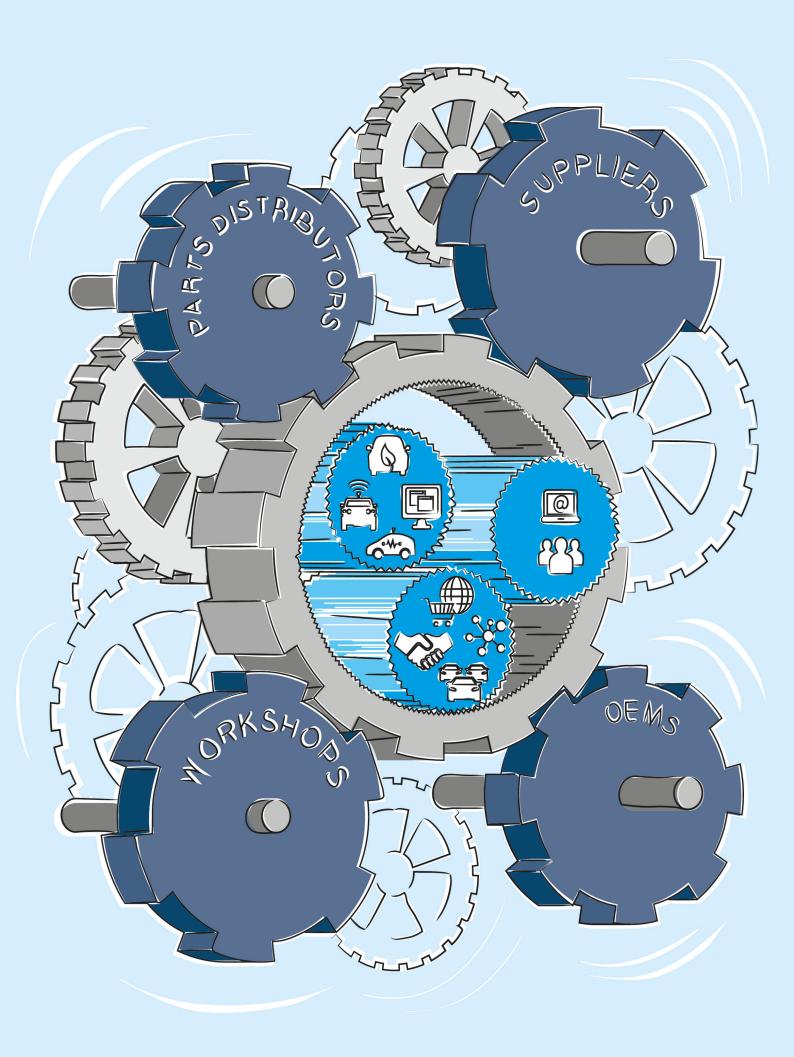
Trends in the automotive aftermarket represent both a threat and an opportunity for established and emerging aftermarket players. Those who are willing to take action today and make strategic decisions will be able to succeed in the long run.

Exhibit 15

We see 3 possible scenarios for significant shifts in profit pools

Current profit distribution automotive aftermarket, percent





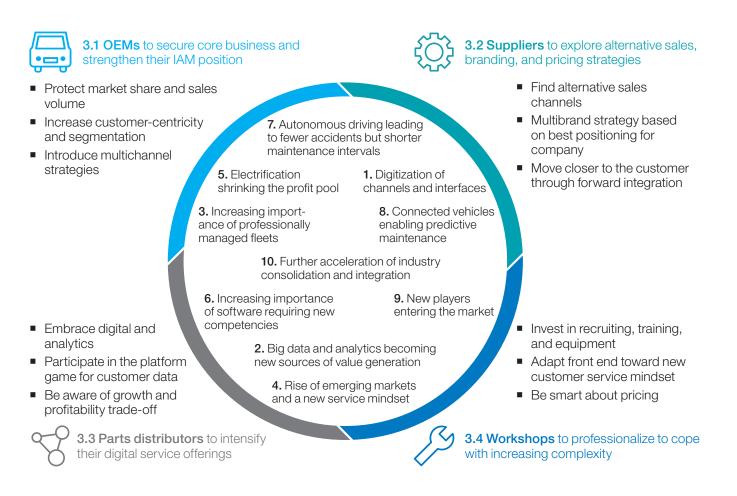
3. RECOMMENDATIONS FOR AFTERMARKET PLAYERS

The trends described thus far will significantly impact all aspects of the aftermarket industry, including the independent aftermarket and distributor businesses. Not only will they influence the strategic positions and outlook of all aftermarket players, but they will also shape the products and influence the end customers who buy them.

In the following, we take a player-by-player approach to discussing the implications of the trends in which we provide an overview of the areas associated with successfully adapting to the future landscape. We then offer a way for each aftermarket player to imagine a shift in orientation that will enable them to act on a concise set of strategy- and operations-focused actions (Exhibit 16).

Exhibit 16

Disruptive trends force automotive aftermarket participants to adapt



3.1 OEMs to secure core business and strengthen their independent aftermarket position

OEMs have a sizable share of the automotive aftermarket today. To protect that market share, having a presence in emerging markets, deepening customer insights, ensuring data sovereignty, and becoming involved in the independent aftermarket will be important success factors.

"OEMs should invest in the software and electronics knowledge of their dealer-based customer service professionals." – automotive aftermarket expert

Emerging markets

Customer needs in these increasingly important regions differ widely from those in North America or Western Europe. Developing a more effective and efficient approach to targeting these customers is a strategic OEM priority area.

Customer experience

OEMs need to distill actionable customer insights from continuously generated big data – via segmentation, for example – in order to deliver suitable customer experiences. This becomes even more important as physical touch points become less critical in the overall customer journey.

Data sovereignty

The entry of new industry players and the rapid growth of vehicle connectivity means OEMs need to focus on securing data and service sovereignty for connected services by developing use cases.

"OEMs should strengthen their grip on proprietary software for certain (core) modules and components in order to keep competitors in the aftermarket segment out – however, [this is] likely to be decided at a congressional level." – automotive aftermarket expert

Independent aftermarket

The increasing share of older cars threatens the business of the OEM. Stronger involvement of OEMs and better brand positioning in segments traditionally belonging to independent aftermarket players will be required to defend sales volume.

OEMs need to ensure their parts and service offering can compete in an increasingly transparent and cost-competitive marketplace. This means that they will need to address each of the areas listed above through the lens of cost effectiveness.

"It is the period immediately after the expiration of OEM warranties that is crucial to generating the next phase of customer allegiance." – automotive aftermarket expert

Strategy and operations refocus

For most OEMs, being effective in the areas described above will require a shift away from current approaches to strategy and operations toward ones that are better suited to the emerging aftermarket landscape.

Standard service packages

Fragmented customer and vehicle data

Dealerships as a major sales channel

Service within warranty coverage and premium price positioning

Customer loyalty through superior brand perception and service contracts

То

Car age dependent and comprehensive customized service packages

Integrated customer and vehicle data approach enabling tailored offerings

Multichannel strategy: online sales, dealerships, and workshop network

Service beyond warranty coverage and flexible price positioning (including second service and parts lines)

Customer loyalty through customer experience, predictive maintenance, and digital assistants, e.g., digital feeds and direct routing to OEM workshops

This reorientation can manifest in several strategic and operational ways. Here are a few pragmatic strategic and operational actions that OEMs should consider taking

STRATEGIC ACTIONS

- Increase long-term customer retention by maintaining or developing a "unique customer experience" and "excellence in service," e.g., CRM, active service marketing, and promotional offers.
- Create a one-stop-shop offering with comprehensive service packages (including financing, leasing, warranty extensions, service and maintenance coverage, and replacement cars) offered during the initial vehicle sale, reducing the opportunity for intermediaries and niche players to enter later.
- Provide value-based services to avoid price-based competition with IAM workshops (e.g., launch branded workshop systems to target conveniencedriven customers).
- Act smart in emerging countries by shifting focus from new-car sales to aftermarket, and focus on local needs, e.g., integrated customer experience in China for premium brands, and exploit network size to establish speed as a differentiating factor.
- Consider defensive acquisitions to protect against the onslaught of newcomers.

OPERATIONAL ACTIONS

- Offer car age dependent and customized service packages from premium packages for new vehicles to price-competitive offers for medium-aged vehicles and current-value fair repair work for old vehicles.
- Introduce multichannel strategies by entering new B2C sales channels, like online platforms of integrated parts and service sales for OEMs, and developing multichannel B2B strategies, including online sales to IAM players.
- Defend current market share by controlling the repair business, assessing the feasibility of establishing multi-make or all-make workshops, and strengthening the remanufacturing position.
- Leverage proprietary systems to route customers to own workshop network – further strengthening the OEM ecosystem ("iTunes for OEMs") and enabled by connectivity.
- Develop comprehensive product data management to avoid potential software version conflicts and enable over-the-air flashing.
- Invest in training and equipment to professionalize by focusing on customer-facing roles (i.e., retail) and counteracting existing competitors and new players' efforts to win market share.
- Benchmark own procurement, operations, and logistics costs to assess competitive position in light of increasing price transparency and competition from new entrants.

3.2 Suppliers to explore alternative sales, branding, and pricing strategies

Many of the major trends are requiring aftermarket players to innovate beyond traditional products and services. For suppliers, in particular, alternative sales channels, new data platforms, and increased competition along the value chain need to be addressed:

Customer and workshop access via digital channels

Currently, suppliers typically have no or only limited direct access to end customers. With the proliferation of online channels, suppliers will have greater access to both workshops and customers. Pushing digital platforms might remedy this historic disadvantage and give suppliers valuable insight into the preferences and buying behaviors of their customers.

Data platforms

OEMs are joining forces in the area of data platforms related to next-generation cars. Access to customer and vehicle data will be key to the success of future tailored offerings to end customers. Suppliers, therefore, should gain a foothold in capturing customer and vehicle data.

Competitive pressure

OEMs, generic IAM parts manufacturers, and players with digital heritage are beginning to expand their offerings. "In-between suppliers" – i.e., those taking on hybrid-like roles – need to define a distinct position for themselves.

OEMs' negotiating power

OEMs are demanding shorter lead times. They also demand parts availability as long as ten years after the end of production or fixed pricing leads on a costly assortment of parts for suppliers.

Distributor consolidation

Consolidation in the parts distributors segment increases the negotiating and purchasing power of buying groups and independent distributors.

"Preferred/exclusive partnerships with distributors can help suppliers keep a foot in the aftermarket door." – automotive aftermarket expert

Branding restrictions

Suppliers occasionally find themselves up against branding restrictions, leading to lower supplier visibility.

From

Large product portfolio and economies of scale

Wide distribution network and access to all major markets

Indirect customer access through collaboration with OEMs to generate product innovations

Mainly transactional business relationship with parts distributors

Focus on positioning of own supplier brand

То

Streamlined product portfolio with reduced complexity

Fast market penetration in emerging countries

Direct access to customer data to reduce dependency on OEMs for product innovations, e.g., by forward integration

Strategic relationships with parts distributors

Multibrand strategies ranging from white-label products to premium supplier brands

Against this background, a few pragmatic strategic and operational actions come to mind that suppliers should consider taking

STRATEGIC ACTIONS

- Expand into alternative sales channels (e.g., online shops, partnerships with digital players) and simultaneously offer private labels to maintain business with the most valuable distributors.
- Develop a clear-cut plan for how to capture emerging markets. Layout detailed strategic plans for key countries, taking into account market differences such as level of brand orientation, car mix, and customer usage behavior.
- Implement multibrand strategy ranging from premium aftersales parts to value parts (potentially sourced from lowcost regions). Suppliers may consider, for example, a postwarranty focus when customers are moving away from branded products.
- Reduce assortment complexity by providing comprehensive product and service solutions packages with premium pricing, or with competitive pricing leveraging low-cost region manufacturing.

OPERATIONAL ACTIONS

- Identify "winning" distributors that show the strongest growth and become a preferred partner for reacting to increasing competitive pressure and consolidation.
- Facilitate a direct link to workshops, for example, through special training or employee certification.
- Move closer to the customer through forward integration into workshops by soft franchising or own workshop concepts and, thus, secure parts demand.

3.3 Parts distributors to intensify their digital service offerings

In the face of aftermarket trends, including ongoing consolidation and internationalization, parts distributors are being required to make clear strategic decisions across several areas:

Scope and scale

Distributors need to decide whether to become a large player in their part of the aftermarket value chain or secure a niche for themselves as a hidden or regional champion.

"Parts distributors should continue to work on scale operations and offer easy-access online systems, which provide industry-leading service delivery." – automotive aftermarket expert

E-commerce adoption

Today, the majority of installers (70 percent) already go online to gather information on distributors. As the propensity for online research and transactions grows, distributors must reconsider their positions in the e-commerce space.

Data sovereignty

The race to dominate the technical data game between parts distributors, OEMs, and potentially also big data companies indicates the need and opportunities for industry collaborations (e.g., among parts distributors, with Tier 1 suppliers) be it offline or online via data platforms such as Caruso. The establishment of knowledge and customer data platforms by OEMs, Tier 1 suppliers, or other dominant information providers could take away the "know-how" advantage that wholesalers currently enjoy. In addition, collaborations among distributors to build a common onboard diagnostics (OBD) database is necessary to keep the opportunity to induce their third-party applications.

"Distributors need to develop and act on their own specific e-commerce strategy." – automotive aftermarket expert

Competitive pressure

There is mounting, bidirectional competitive pressure in the value chain as intermediaries try to increasingly control the market from one side and OEMs try to expand their activities and capture a greater share of the value chain from the other.

White-label products

Distributors should leverage white-label products of suppliers from low-cost regions (e.g., Eastern Europe, China) who are increasingly able to provide quality products.

"Outsourcing some parts to logistics experts while focusing on service may be the strategy that helps distributors optimize their operations." – automotive aftermarket expert

From

Extensive and deep product know-how across the catalogue, including regular updates

Technical process competence, including diagnostic, maintenance, repair, and fitting know-how

Logistics competence with systematic, reliable, and fast deliveries

Aftermarket-specific aggregation competence

Enabler for workshops to provide technical training, business support, and workshop concepts

То

Big data and multichannel competency to anticipate changing product needs and identify new business opportunities

Enhanced process competence across more complex and IT-focused activity landscape

Cutting-edge and streamlined logistics strategy with just-in-time delivery for differentiation from e-commerce businesses

Enhanced aggregation competence by both large-scale and niche players

Strategic partner for continuous and mutual capability building

Against this background, parts distributors should consider a few pragmatic strategic and operational actions

STRATEGIC ACTIONS

- Participate in the platform game for customer data via a collaborative strategy with OEMs and suppliers to form an open as well as scalable data and analytics landscape.
- Assess feasibility of online sales platforms. Develop reach into online channels by collaborating with existing online distributors or launching own online platform. Consider online channels as supplements, as e-commerce is expected not to exceed 20-30% of medium-term sales.
- Occupy profitable niches (smaller players) through region-specific market leadership – e.g., Nordic region wholesaler with ~5% EBIT margin (2014), leading single-country wholesaler with ~9% EBIT margin.
- Continue to pursue organic or inorganic (larger players, potentially with PE involvement) growth initiatives to achieve economies of scale and maintain high entry barriers.

OPERATIONAL ACTIONS

- Reinforce core competency of rapid delivery: rapid delivery is enabled by an efficient and broad logistics network, optimized inventory, and optimized storage locations.
- Establish local networks in China and other emerging markets to exploit high growth rates.
- Embrace big data analytics along entire value chain to analyze market conditions, anticipate changing product needs, and identify new business opportunities (e.g., new features that collect valuable insights on customer behavior).

3.4 Workshops to build capabilities to cope with increasing complexity

For workshops, developments in the aftermarket ecosystem are forcing major changes in the areas of expertise and offerings:

Customized service offerings

Price pressure and increased service expectations from informed customers drive greater transparency and a growing need for customized offerings.

Increasing influence of intermediaries

Increasingly, customers will get routed to specific workshop systems, creating the risk of many workshops being left out.

Capabilities upgrade

The increasing complexity of both components (such as those linked to powertrain electrification, connectivity, and autonomous driving) and services (e.g., software, increasing number of variants) requires a new wave of workshop professionalization, the development of new skill sets for workshop employees, and collaboration with system partners such as suppliers or distributors.

"An increasingly electronics controlled vehicle will require a new skill set, different from that of today's mechanic." – automotive aftermarket expert

Increasing importance of 3-D printing

3-D printing has already taken off in the aftermarket business and will gain momentum. 3-D printing allows parts production to occur locally and just in time, leading to materials, labor, and transportation savings.

New service archetypes

Increasing customer expectations call for a greater separation between client-facing infrastructures (for drop-off and pickup) and actual back-end workshop work and G&A (sized for maximum efficiency).

From

Convenient, near-distance locations for maximum accessibility

Understanding of mechanical product

One-stop-shop approach through broad capability set

Standard service portfolio

Little price differentiation

То

Selected locations for adequate utilization and customer experience

Understanding of new (electronic) technologies, software, and vehicle complexity

More specialized services targeted to selected customer (niche) segments

Differentiated service packages (e.g., private, corporate, and fleet segment)

More price differentiation by customer and vehicle segment

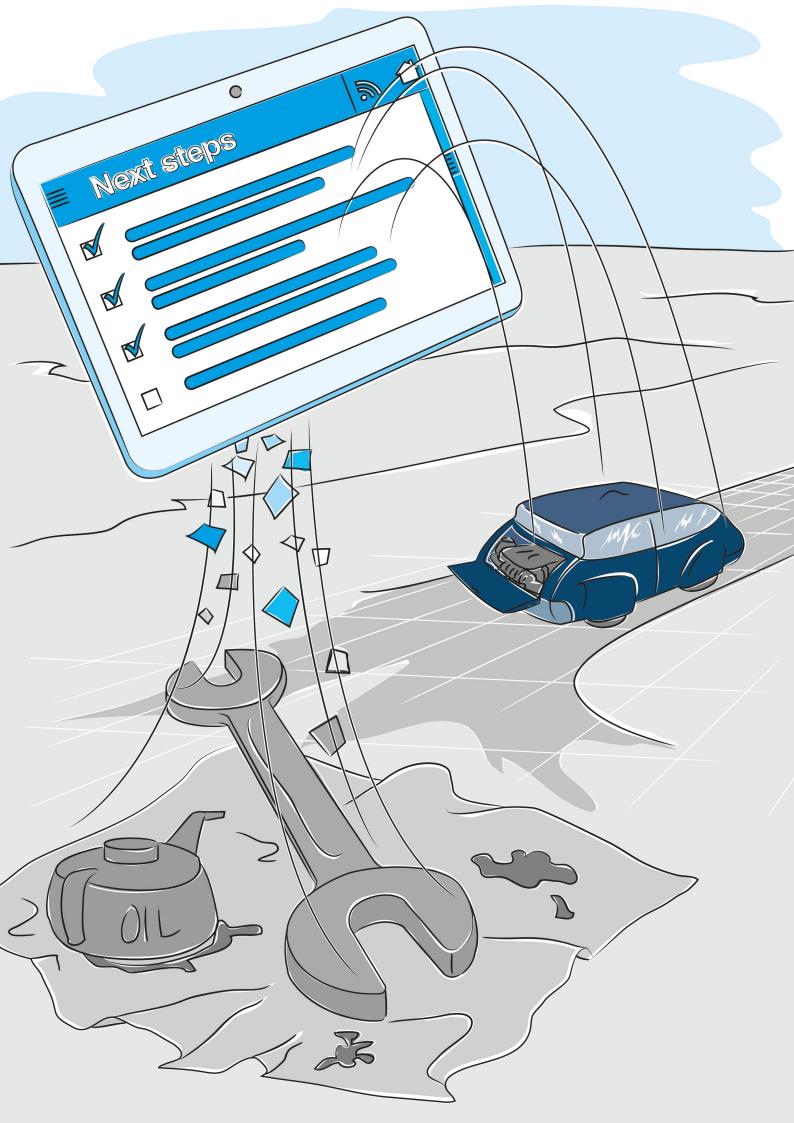
To address the challenges of specialization and product and service offerings, workshops should consider a few pragmatic strategic and operational actions

STRATEGIC ACTIONS

- Offer more differentiated services, taking into consideration the shift from B2C to B2B needs, e.g., assess and exploit possibilities for fleet service packages.
- Find appropriate additional sales channels to ensure optimal positioning of products in an environment of increasing price transparency (e.g., online platforms of integrated parts and service sales for independent players).
- Adapt customer front end. As customer service plays a more vital role and maintenance complexity increases with digitization, workshops need to develop a strong service orientation.
- Build dynamic-pricing ability. Digital players are expected to disrupt pricing. Workshops need to develop a sophisticated and flexible pricing system to capture customers' realistic willingness to pay.

OPERATIONAL ACTIONS

- Redesign the customer experience with quick wins such as service principles for employees, and standards for interior design and cleanliness.
- React to increasing complexity by investing in recruiting, training, and equipment:
 - Recruiting: from mechanical to electrical and software engineers
 - Training: sales and service/customer mindset crossselling, up-selling, and product bundling vs. cost leadership strategies
 - Equipment: acquire/build tools to diagnose electronic components. Augmented reality equipment, for example, supports employees with real-time technical information.
- Operate additional service centers (for fleet operators) to provide assistance to clients in high-density territories.



4. GETTING STARTED ON YOUR AFTERMARKET JOURNEY

Without doubt, there is no one-size-fits-all approach to tackling the challenges that the disruptive trends described in this report present to various aftermarket players. Our findings, nevertheless, reveal some (pragmatic) key actions that OEMs, suppliers, parts distributors, and workshops should immediately take in response to these trends and to adequately address the related challenges and opportunities.

Assess your capability set - and gear up in the right areas

Clearly, adjusting to the fundamental changes in the aftermarket will require companies to update their current expertise and skills to keep up with the new rules of the industry. Are your margins at risk due to a new competitor, technology, or customer behavior? You need to run the diagnostics to determine how well you are prepared to thrive in the new environment. As a first step, we recommend a one- to two-day stress test on site together with industry experts to determine the need for change and identify possible action fields.

Choose your playing field - but don't neglect your core business

Decide which fields you want to play in and where to take action to set yourself up for the future. In a first step, take pragmatic actions to secure quick wins and prepare yourself for pruning your portfolio in the medium and long term. Already today, companies need to start thinking about what parts of their portfolio will remain a source of competitive advantage and which ones need to be replaced by more promising elements.

Design your road map - and start testing prototypes early

Do not underestimate the pace of change. Digitization within the industry is increasing at an unprecedented rate, particularly with regard to e-commerce channels and significantly higher end customer transparency on price. Game-changing technologies such as EVs will become ready for the mass market in the near future, and will render certain products and services obsolete before long. Embrace the disruptions, and do not get caught on the wrong foot.

In sum, the automotive aftermarket will remain a very attractive industry with a complex structure and considerable changes in the medium and long term. Those players who realize that the aftermarket is more than "what naturally comes after the sale" and who are willing to take strategic actions now will be able to outperform their competitors and excel in their respective segments – and maybe even successfully take on new ones.

AUTHORS

Authors

Sebastian Kempf, Partner (contact)

Kennedydamm 24, 40476 Düsseldorf +49 (211) 136-4978 sebastian_kempf@mckinsey.com

Bernd Heid, Senior Partner, Cologne

Co-authors

Asutosh Padhi, Senior Partner, Chicago

Andreas Tschiesner, Senior Partner, Munich

Andreas Cornet, Senior Partner, Munich

Detlev Mohr, Senior Partner, Stuttgart

Gianluca Camplone, Senior Partner, Chicago

Tomas Nauclér, Senior Partner, Stockholm

Thomas Baumgartner, Senior Partner, Vienna

Robert Hanser, Senior Advisor to McKinsey

Content contributors

Geng Wu, Associate Partner, Berlin

Christian Huth, Engagement Manager, Berlin

Christian Begon, Knowledge Specialist, Düsseldorf

Editing and layout Jörg Hanebrink, Senior Communication Specialist, Düsseldorf

Martin Hattrup-Silberberg, Senior Communication Specialist, Düsseldorf

Philippa Håkansson, Senior Media Designer, Stockholm

Contact for content-related requests

Sebastian Kempf, Partner

Kennedydamm 24, 40476 Düsseldorf +49 (211) 136-4978 sebastian_kempf@mckinsey.com

Media contact

Martin Hattrup-Silberberg +49 (211) 136-4516 martin_hattrup-silberberg@mckinsey.com

McKinsey Center for Future Mobility® is a registered trademark June 2018 Copyright © McKinsey & Company Design contact: Visual Media Europe www.mckinsey.com