

The Future of Car Repair

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Report 2023

Shaping the future of car repair

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Foreword

Shaping the future of car repair

In this exciting automotive landscape, the only constant is change. As our cars get smarter, we have to get smarter too — that means more cooperation across the board, and tapping into the potential of AI and other digital tools. Gone are the days of old school methods. Now, we're seeing the rise of platforms, marketplaces and specialized services just to keep up with these high-tech vehicles.

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And it's not just about keeping up, it's about making sure our efforts have a positive impact. That's where Fixico comes in. We're investing in automating processes, connecting more stakeholders across the chain, offering more services for EVs, and building products that support businesses in adopting sustainable practices. We're not just watching the future of car repair unfold, we're in the driver's seat.





Mark van Laar, COO and Cofounder of Fixico



Introduction

Chapter 1

Welcome to the second report of our two-part series on the Future of Car Repair. Laying the groundwork, the first report in this series provided an in-depth look at the current state of the European automotive aftermarket, highlighting both the unique challenges it faces and the potential opportunities within reach.¹

The European Automotive Aftermarket

On the challenges front, the report highlighted the increasing backlogs and decreased fleet utilization, resulting from parts shortages and geopolitical conflicts which prolong repair times. This is also caused by the widening skills gap, as older technicians/mechanics retire and younger individuals show less interest in this profession. Furthermore, the complexity of modern vehicles demands more advanced and time-consuming repairs, requiring service providers to make significant investments in new equipment and training.

The first report also explored the opportunities emerging from these trends, such as how new Original Equipment Manufacturers (OEMs) are increasingly viewing aftersales as a crucial differentiator. It also addressed the growing importance of electrification and specialization, which necessitates smarter service allocation. Lastly, it explored the shift in car ownership patterns, with a growing preference for sharing and leasing, thereby leading to shifting business models across the industry.

	Aftermarket Transformation			
Challenges	Opportunities			
Adapt & Invest	Growth & Innovation			
onger repair times decreasing	Emergence of new OEMs looking to			
fleet utilization	manage aftersales services			
Re-shaping and re-educating	Switch to car sharing and private			
the workforce	leasing (shifting business models)			
Advanced vehicles require	Smarter service allocation based on			
service providers to invest in	advanced vehicles and specialized			
new equipment and training	service providers			

Looking into the future

Building upon that foundation, we present this report as our vision for how the automotive aftermarket will evolve over the next 5–10 years. We believe that as a result of the trends outlined in the previous report, combined with the increasing relevance of AI and other digital technologies, the future of car repair will be characterized by specialized, connected and sustainable solutions.

The automotive industry is set to experience significant transformations that will fundamentally redefine our approach to fleet management and car servicing. As modern vehicles become increasingly complex, the traditional 'one size fits all' strategy has become obsolete. Repair shops will begin specializing in specific brands, vehicle types, and repair techniques, which may prove challenging for drivers, fleet and claims managers when it comes to identifying suitable service providers. Connected ecosystems, such as digital platforms and marketplaces, will become key in sourcing and managing a service network. The report also addresses the escalating relevance of sustainability in the industry, discussing the reusability and recyclability

of parts, as well as the economic and environmental benefits of repairing versus replacing parts.

By exploring these topics in depth, we aim to provide helpful predictions for the future of car repair and the broader automotive aftermarket in Europe. To provide clarity, Fixico's historical expertise has primarily revolved around vehicle body repair, which is why it remains a primary focus, yet we are committed to expanding our solution to tailor to the unique demands of the businesses in a transforming industry. Moreover, we're consistently engaging with external industry experts, making this report a valuable resource for anticipating trends across the entire European automotive aftermarket.

The future of car repair is within reach, and by embracing the digital revolution, fleet and claims managers, manufacturers and service providers can position themselves to thrive in the years to come.



Specialized services for modern vehicles

Chapter 2

With constant developments across the automotive industry, and new OEMs emerging around the world, cars will continue to look and operate differently from each other in the coming years. As a result, repairs and other services become far more complicated as you can no longer bring every vehicle to the same shops.

Now, in addition to having to find new ways to prevent higher costs and increased cycle times, fleet and claims managers have to recognize whether or not a repair shop is equipped and certified to be able to repair the vehicle in the first place.

Today's vehicles, especially electric vehicles (EVs), come with advanced, highly sensitive technology and materials that aren't suitable for traditional repair methods. These vehicles are equipped with Advanced Driver Assistance Systems (ADAS) that need meticulous calibration, and lightweight, fragile sensors that require careful handling. Any repair work not handled by qualified repairers could compromise the safety of the driver or pedestrians.

This is compounded by the ongoing labor shortages within the industry. In a survey conducted by Fixico last year, 52% of repair shops indicated that labor

The true challenge in the automotive aftermarket lies in nurturing the next generation of skilled technicians. Today's and tomorrow's vehicles demand a higher level of expertise, and we must invest in the training and development of our young talent. Not only must we recruit them, but also empower and retain them, as they are the driving force behind the exciting possibilities within our evolving industry.

Johan Alkema, Co-owner – Altac Coating Group

shortages were their top concern for the future [Figure 1]². This issue has been primarily caused by senior technicians either retiring or struggling to adapt to new technologies and methods.

This gap in the workforce is not being filled by younger talent due to a lack of industry appeal which has been viewed as 'old-fashioned' when compared to conventionally high-tech industries. This image is prevalent despite the continuous technological advancements happening within the aftersales industry.

The industry is also witnessing a significant shift towards service shops that specialize in specific brands, types of vehicles and distinct technologies/ techniques. These specialized shops are increasingly choosing to work with a few selected brands as each requires a heavy investment (between \$100,000 to \$250,000) to receive the necessary training, certifications and equipment to cater to them. By focusing on a specific brand or type of vehicle, they become experts in those vehicles, guaranteeing a higher level of service quality.

[Figure 1]



EV OEMs offering single-brand service journeys

Contributing to this trend of specialized service shops, is the increasing pressure on new EV OEMs to offer a complete, seamless brand experience throughout the vehicle's lifecycle. This idea, wellunderstood in the traditional automotive sector, gains even more importance in the EV space due to its unique challenges.

New EV OEMs face a difficult balancing act. They need to quickly scale to new

New EV OEMs will not just compete with legacy brands in obtaining market share in the EV market, but will set new standards for the automotive aftermarket. Sustainability will be embedded throughout the entire vehicle lifecycle, designing cars with easyto-repair and recyclable materials, prioritizing over-the-air updates, enabling aftersales personalization like performance upgrades and mobile servicing on demand. These actions create strong brand experiences for the customer of tomorrow and lead to a more efficient, connected, and environmentally friendly future.

Boris Koster, Business Development Director — Fixico markets while simultaneously setting up reliable and consistent services. This includes creating a unified brand experience, even in external repair shops. Legacy automakers such as Mercedes and Renault led the way in offering branded service centers in Europe, setting a high bar for new entrants. Tesla, though initially navigating the same hurdles, is now a benchmark in the EV sector. To compete not only with Tesla but also with legacy automakers introducing EV models, new EV OEMs need to strategically focus on aftersales services, without the early adopter advantage Tesla had.

Modern consumers have high expectations. They want every interaction they have with a brand to be smooth and consistent. With a growing number of repair shops specializing in certain vehicle types and brands, it's vital for OEMs to carefully choose and thoroughly train their network. This ensures every service experience matches the high standards customers now expect.

By setting up an in-house solution or partnering with a trusted white-label provider, OEMs can streamline the customer journey within one brand identity. This approach to single-brand journeys is becoming the new normal in the automotive industry. It's being adopted not just by established players, but also by new EV OEMs entering Europe from Asia and the US. Looking ahead, it's clear that the race for success in the highly competitive EV market will hinge





on two key factors: strong branding and customer experience. As we look to the future, it's clear that these factors will determine success in this competitive landscape.

With the growth of these specialized establishments emerges a crucial question: how do vehicle owners and fleet and claims managers find the best service center for their specific car?





Connected ecosystems to find and manage services

Chapter 3

As the aftersales industry becomes increasingly specialized, we will soon rely on connected ecosystems — such as digital platforms and marketplaces to become the bridging infrastructure for the industry. These ecosystems will help identify which service providers are qualified to take on the job at hand. By connecting stakeholders digitally, these ecosystems improve collaboration and lead to smoother service journeys and higher customer satisfaction.

Additionally, ecosystems create the potential to house full-service management on a single platform. As a result, fleet and claims managers and service providers can leverage valuable data insights to evaluate their operations and make strategic business decisions. This is the new blueprint for the future of car repair.

Another pressing need for connected ecosystems is driven by the introduction of self-driving cars. There are differing opinions regarding when self-driving cars will be available and the level of autonomy they will possess. However, one thing remains certain – a strong, connected network will be essential to ensure smooth operations when these vehicles become a reality. This ecosystem will leverage advanced telematics and machine learning capabilities to have vehicles autonomously detect performance issues and subsequently schedule their own service appointments. Particularly as service providers specialize in certain vehicle brands, types, and technologies, these digital platforms will link the car directly with suitable service providers.

The automotive industry is undergoing rapid transformation, with a multitude of innovative technologies and companies advancing at an impressive rate. In the future of car repair, the key to a seamless customer experience lies in a marketplace that unites niche players and experts. Fixico aims to harness its own expertise and knowledge with the proficiency of specialized players, creating the platform that fosters collaboration and shapes a truly connected future.

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Joris van Poppel, Chief Product Officer — Fixico

Smart matchmaking required to identify the best service solutions

The ability to intelligently match damaged vehicles with the most suitable repairer is called smart matchmaking. Fleet and claims managers that adopt smart matchmaking will be able to select service providers based on what's best for the specific vehicle, damage and/or priorities of their business. For instance, specific brand certification, specialization, costs, availability, distance and carbon footprint.

Traditionally, fleet and claims managers create a network of service providers through contractual agreements, of which they typically send a damaged vehicle to the closest repair shop within that network. These long-term contracts with repair chains and dealers seem cost efficient and convenient at first, but if we consider the 'total cost of repair', it paints a different picture. The total repair cost encompasses more than just the mechanic's bill. It includes the lost business benefits while the vehicle is waiting in the repair shop, the cost of hiring a replacement car, and for insurance providers, the risk of losing customers who are unsatisfied with the repair process.



Soon, the majority of fleet and claims managers or car owners will be using AI throughout all stages of the process to manage the total cost of repair. This includes digitally recording and uploading vehicle specifications and damage reports, efficiently scanning through suitable repair solutions, and making more informed decisions based on this readily available data. Companies such as Inspektlabs, Tractable, Ravin, and Bdeo are already leveraging the capabilities of AI in this context. Their approach aims to alleviate common process bottlenecks and increase operational efficiency throughout the service journey.

In order for these AI models to deliver truly intelligent matchmaking capabilities, they rely on access to a connected ecosystem. This is essential to provide the necessary information and data required for accurate decision-making. By leveraging a comprehensive network of service providers and their capabilities, Al systems can effectively match repair cases to the most suitable experts. The integration of this network-wide information is a vital component that will drive future growth of Al in the industry.

Al-driven damage tagging is catalyzing transformation in the car repair industry. Al models excel not only in discerning the type of damage, but also in making repair recommendations. Soon, we'll see the extensive utilization of this technology in a range of downstream repair activities. For instance, it will guide vehicles to the most suitable workshops based on the nature of damage (e.g., directing cars with windshield cracks to the nearest glass repair shops), and it will ensure rigorous quality control both before and after repairs to guarantee the comprehensive rectification of all damages.

Devesh Trivedi, CEO & Cofounder — Inspektlabs





Data insights bringing transparency to all parties

Digital platforms and marketplaces have long been revolutionizing industries, bringing transparency to users by providing them with the ability to find and compare options online. Consider the example of Booking.com in the hospitality industry. The booking process was made much simpler by being able to compare various hotels and other accommodations, check prices and read reviews. As a result, the entire hospitality industry had to adapt and align their business models to succeed in an increasingly digital marketplace.

The automotive aftermarket is undergoing a similar transformation, where accessing comprehensive data plays a crucial role in increasing industry transparency. For example, the ability to streamline service management across markets provides rich data insights. These insights include information on costs, cycle times, driver satisfaction, and the performance of service providers.

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With digital platforms coming more into play, competition among service providers is bound to increase. The key to survival will be offering something unique. Providing transparency and fairness in prices, quality, and speed of service will certainly help win over and keep customers.

Michael Krikken, Director Fleet Operations — Europcar Mobility Group This information enables fleet and claims managers to make strategic decisions and select the service providers that align best with their specific requirements. Optimizing the service process not only saves time and money but also ensures the highest standards of quality and thus driver safety.

Repair shops also stand to benefit greatly from this increased transparency. A marketplace for automotive services can allow them to showcase their quality track record, certifications, and



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specializations, attracting customers based on merit rather than traditional, outdated marketing tactics. This shift towards transparency fosters healthy competition in the industry, pushing repair shops to continuously improve their service offerings.

Overall, connected ecosystems represent a significant shift in the automotive aftermarket, bringing together all stakeholders involved in the repair process through digital environments. This transformation will foster collaboration, enhance efficiency, improve service quality, and increase transparency. As the industry moves towards this future of connected ecosystems, businesses should be open minded and adapt their strategies to leverage the capabilities of digital platforms and marketplaces.





Investing in sustainable practices

Chapter 4

The evolving landscape of sustainability has been causing a significant market shift within the European automotive aftermarket. As society continues to become more conscious of their environmental impact, businesses across the industry, from OEMs to service providers and fleet and claims managers, are being encouraged to adopt sustainable practices.

The advancement of technology in car repair will enable a more efficient and cost-effective process, especially in the case of EVs. By reducing the complexity of repairs, lowering salvage rates, and fostering a network of certified service shops, we can create a sustainable ecosystem that encourages repairing EVs over replacing parts, or worse selling the vehicle for scraps.

Quin Garcia, Founder and Managing Director — Autotech Ventures Adopting sustainable practices and focusing on corporate social responsibility (CSR) are more than simply moves to enhance brand attractiveness – they are pragmatic long-term strategies. It cultivates employee pride in their workplace and fosters customer loyalty towards brands that value sustainability. Moreover, as environmental regulations tighten, early investment can help companies stay ahead of the curve and maintain their resilience regardless of additional shifts or trends within the industry.

The circular economy of vehicle handling

The concept of circular economy, as outlined in Fleet Europe's report on "Sustainable Procurement", has gained prominence in fleet management discussions, urging a rethinking of the vehicle lifecycle from procurement to retirement.³ A critical element of this transformation is the design of vehicles that promote longevity, ease of repair, and modular assembly. In alignment with this approach, the EU directive requires new vehicles to have a minimum of 95% recyclability or recoverability by weight.⁴ To meet this requirement, lease agreements are being modified to include incentives for maintenance, repairs, and component replacements, further emphasizing the importance of reusability and recyclability.







Another sustainable shift gaining traction in the automotive industry is prioritizing repairs over replacements. Research conducted by the Fraunhofer Institute indicates that repairing vehicle parts results in a significant reduction of CO₂ emissions, with numbers ranging from 40% to 60% less compared to replacement [Figure 2]⁵. By opting for repairs, companies not only reduce their carbon footprint but also make a more cost-effective choice. It becomes imperative to assess the expertise of repairers for specific parts, as some may specialize in repairing particular components, ensuring high-quality repairs and prolonging the lifespan of the vehicle.

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Embracing sustainability isn't just a choice; it's a responsibility in today's automotive aftersales industry. Companies should track their CO₂ footprint diligently. One example: repair invoices could display not just the financial cost, but also the environmental cost of the repair in terms of CO₂ emissions.

Al Pijnacker, Managing Director Fleet Automotive — Aon

Sustainable solutions across the service journey

The future of the automotive aftermarket also sees the integration of digital damage intake as a means of reducing steps in the overall repair process and minimizing CO₂ emissions. Digital damage intake allows customers to submit information and photos of vehicle damage remotely, eliminating the need to bring the car to the shop for inspection. This not only improves customer convenience but also reduces the number of journeys



made by both customers and repair shop personnel, thus decreasing CO₂ emissions associated with transportation.

Furthermore, repair shops are also taking steps to become carbon neutral in order to reduce their impact and attract sustainability-conscious customers. This involves implementing eco-friendly practices such as using energy-efficient equipment, minimizing waste generation, and adopting renewable energy sources. When repair shops commit to sustainable practices, they become more appealing to consumers and shareholders who actively look to support environmentally responsible businesses.

In line with the increasing popularity of EVs, the automotive aftermarket is also adapting its aftersales processes to accommodate EV owners. Making the repair and maintenance of EVs a smooth and seamless experience is crucial in encouraging wider adoption of these sustainable vehicles. This includes ensuring that repair shops have the expertise and necessary equipment to handle EVs, providing efficient and reliable servicing options, and offering tailored solutions for EV owners.

For real progress in reducing carbon emissions, the entire industry must align to the cause – from manufacturing, through operation and repair, down to end-of-life component recyclability. As the general society embraces sustainability, it will no longer be an option, but a crucial business strategy.





Concluding statements on the Future of Car Repair

In conclusion, specialized service shops will increase to address the needs of advanced vehicles. To determine the best destination for your vehicle servicing needs, you'll require connected ecosystems such as digital platforms and marketplaces. These platforms facilitate better collaboration between various industry players, making services simpler, more efficient and transparent for all participants. Finally, it should be noted that sustainable practices in the automotive industry are not just important, but essential, and their significance will only continue to grow.

How Fixico is shaping the Future of Car Repair

Fixico is at the forefront of shaping the future of car repair by investing in the expansion of our product to support fleet and claims managers, insurers, new EV OEMs and service providers to optimize the aftersales service processes and customer experience.

We are actively incorporating more AI into our product to automate processes and revolutionize the service journey, making it faster, smoother, and more accurate for our customers. With the assistance of AI, our platform will provide unmatched vehicle inspections, automatically coordinating the procurement of parts, paint, and repairs, all while keeping all relevant stakeholders fully updated. To address the growing demand for responsible practices, Fixico is committed to encouraging repairs over replacement of parts. We can achieve this by featuring sustainability initiatives and carbon impact of service providers as key data points in our marketplace. By advocating for a more sustainable approach to car repair, we not only contribute to a greener future but also offer cost-effective solutions for our customers.

Overall, we strive to provide utmost efficiency, empowering fleet and claims managers to maintain complete control over their vehicle fleets, and allowing service providers to focus entirely on offering the highest quality service. Fixico is committed to shaping a future where the automotive aftermarket operates at its most optimal level, solving the needs of drivers, businesses, and service providers.

Envision a future where there's no more friction with car repair, and instead it's a seamless, digitally driven experience. A world where our vehicles find their perfect service match through the power of AI, and repairs are efficient, precise, and tailored to meet the unique needs of each vehicle owner. Imagine a process so connected, it knows what you need even before you do.

That's the world Fixico is building. Our technology brings supply and demand together, ensuring that every vehicle and owner receives the optimal service experience without delay. Our vision is clear: a future where car repair is specialized, connected, and sustainable- all at the click of a button.

Derk Roodhuyzen de Vries, CEO and Cofounder — Fixico



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About Fixico

Fixico is the digital car repair management platform on a mission to shape the future of car repair by creating a smarter, better and digitally connected marketplace for everyone. Fixico enables fleet operators, insurers and OEMs to fully optimize and control the repair process and customer journeys.

Over 3,000 repairers and 250 businesses, including industry leaders such as Aon, SIXT, VinFast and Arval, are leveraging Fixico across ten countries. To find out more, visit <u>fixico.com</u>.







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