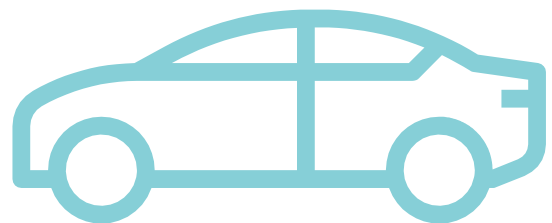




THE AUTOMOTIVE DIGITAL TRANSFORMATION AND THE ECONOMIC IMPACTS OF EXISTING DATA ACCESS MODELS



Preface

This research paper is a collaboration between the management consultancies QUANTALYSE and Schöenberger Advisory Services. It is a study written upon request from Fédération Internationale de l'Automobile - Europe, the Middle East and Africa (FIA Region I). The purpose is to provide an assessment of the economic impact of vehicle data access models on the European automotive aftermarket over the short to mid term. A consumer survey; analysis of aftermarket insights and of technological and legislative trends; more than 20 interviews with experts, senior executives; and quantitative modelling experience serve as the foundation for findings presented in this paper.

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The information and views set out in this report are those of the authors and do not necessarily reflect the opinions of FIA Region I. Neither the companies, nor any person acting on their behalf, may be held responsible for the use which may be made of the information contained therein. QUANTALYSE and Schöenberger Advisory Services wish to express their gratitude to all the individuals and their organisations that were contacted during the preparation of this report for sharing their insights.

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Executive Summary

The European aftermarket, the segment of the automotive value chain that keeps the vehicle on the road after it has been sold, serves around 320 million passenger vehicles and light commercial vehicles. Generating a value of over €240 billion per annum, it is a significant contributor to the European automotive industry, which is facing major transformational challenges in the next decades.

The sector is experiencing disruption from (i) the shift from traditional internal combustion engines to electrified powertrains; (ii) the integration of connectivity capabilities; (iii) new tech players entering the business with advanced skills; (iv) mobility as a service; and (v) autonomous driving solutions. These forces, together with an uncertain economic climate, are increasing competitive pressures on auto makers. In turn, this is raising the ambitions of vehicle manufacturers to gain more control over the relationship with the car driver/owner and monetize vehicle generated data. Here, it can be expected that the automotive sector will further move towards contraction and that this will subsequently lead to further price pressures both in the primary market as well in the aftermarket.

Vehicle manufacturers are developing their own data access models including the preferred “extended vehicle” model (and “neutral server”) where in-vehicle data can only be accessed via an external backend server under their governance. However, strong concerns have been raised about this approach over recent years due to shortcomings from a technical, legal and competition law perspective.

Firstly, this study examines the position and arguments of key (independent) actors and experts in the value chain, reviews technical assessments of this and alternative approaches, presents the latest activities of vehicle manufacturers, draws parallels to other technical developments and summarizes the relevant legal frameworks.

The gathered evidence confirms that the treatment of in-vehicle data access - similar to general data access - does not follow a clear roadmap shared by all stakeholders and that there is insufficient consideration of pan-European regulation developments such as the Digital Single Market or PSD2 in Open Banking. Valuable lessons can be learned from more mature and data-driven businesses such as the software or the telecommunications industry.

A second important element of this study is the voice of the European consumer which has been assessed by means of thorough market survey in four key European countries. The survey in turn clearly confirms a strong price elasticity of consumers for the choice of repair, maintenance and insurance providers and a high interest in service quality, speed and connectivity services.

While consumers are open to new data-based services, they maintain a strong interest in being able to choose their service provider rather than being steered based on data they do not control nor have full transparency about. They value the customer centricity and quality of services of independent garages and want to continue to see them as a credible alternative to franchised garages also in the future.

Thirdly, the study attempts to quantify the economic impact of unregulated in-vehicle data access on the independent aftermarket in Europe. We identified likely domains of impact, like paying manufacturers for necessary vehicle data, prognostics for repair/maintenance in garages, or the competitive advantages due to one-sided monitoring of data traffic of the independent operators by manufacturers. The impact analysis takes into consideration the serious shortcomings from a technical, legal and competition law perspective including:

- Costs - Service providers are being charged to access vehicle data which has been generated by motorists;
- Restrictions - Independent service providers are facing restricted access to certain data streams which prevents provision of services;
- Delays - Car data is not being communicated in a timely manner to independent service providers which prevents provision of services;
- Monitoring - There are strong concerns that the server-based data access models are allowing for business monitoring.

The results of the analysis indicate potential impacts that are expected to take gradual effect depending on the degree of connectivity of the car park. By 2025 a potential loss of €15 billion for independent stakeholders; or 12% of their current annual market volume will occur. A further increase of the loss is expected by 2030 when all vehicles are connected, and the independent market will have eroded to such an extent that €33 billion is potentially lost. In addition, consumers would have to carry the burden of a spend increase by €15 billion in 2025 or an additional 9% compared to today. A further increase to €32 billion annual loss for consumers is expected by 2030.

These outcomes reveal that if the current data access models are utilised in the long term, the negative impacts on independent aftermarket service providers will allow for OEMs to further integrate themselves into the aftermarket themselves, and in turn offer them much stronger control over relations with the end consumer. This would have the effect of ultimately reducing consumer choice, reducing competition and ultimately meaning for lower societal benefits to be accrued.

The strategy to reach critical mass for unlocking the full connected services potential in the sector with maximum innovation and benefit for European citizens is: (i) to safeguard a level playing field by having a robust regulatory framework regarding data read/write and driver access; (ii) to make technical connectivity future-prove, avoiding mistakes already made in other sectors; and (iii) to involve the consumer and independent organisations in standardization efforts.

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