

The EU Data Act

What transformations and prospects lie ahead for automotive manufacturers?



Executive sumary

The Data Act is a landmark European legislative proposal that aims to unlock the potential of "industrial data" to foster competition and innovation. The goal is to make using, reusing and sharing data from connected devices and products easier, while ensuring fair and equitable data access to all parties.

Automotive manufacturers generate and collect massive volumes of data both from their plants and from the vehicles they manufacture. While sharing this data with third-party service providers and suppliers could be a game-changer for consumer services, what will the Data Act mean for automotive manufacturers? Will it be a smooth drive or a bumpy road ahead?

This paper explores the main provisions of the Data Act and how this proposed legislation will enable automotive manufacturers to build successful partnerships that broaden their services, generate new revenue streams, improve the customer experience and advance sustainability objectives. But only if they're willing to take the necessary steps now to prepare for this new open data system.

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A promising new European data regulation

The Data Act is a new European legislative proposal that aims to make "industrial data" increasingly accessible to an ecosystem of players to boost data-driven innovation and stimulate competition. The potential for the European Union (EU) is enormous. A key reason is that the EU's connected objects (i.e., Internet of Things) value and services market is estimated to reach €5-11 trillion by 2030¹. The Data Act has the potential to help unlock the enormous value of the data generated by these objects.

The EU has conducted several studies to help chart a route forward and build a regulatory framework that addresses the challenges ahead. Three main obstacles have been identified in exploiting data from connected objects:



Technological barriers caused by proprietary data formats or a lack of standardization.



Denial of access to the data for intellectual property reasons that, for example, prevent data subjects from changing their maintenance provider.



Contractual barriers with excessively restrictive operating conditions could potentially limit the data's use.



The Data Act, currently under consideration in the European Parliament, was drawn up to provide a set of harmonized rules to overcome these challenges. The proposed regulation will give legal entities and individuals greater control over the portability, copying and transfer of the data generated by their connected objects. It strengthens users' rights regarding the use of their data while also providing a clear framework to protect manufacturers' interests, such as contractual conditions, limits for potential beneficiaries, and compensation to be paid.

¹ Digital-strategy.ec.europa.eu/en/library/data-act-factsheet

At this stage, there are four main provisions of the Data Act:

- "Data holders" must share the data
 generated through the connected devices
 they maintain and used by consumers to other
 companies to develop new services that benefit
 consumers. This is subject to two conditions:
 the payment of fair and equitable compensation
 and the guaranteed prevention of illegal access
 (by governments of third countries, for example).
- 2. European public bodies can access and use the data companies hold, provided they prove an exceptional need exists.
- Moving to a different data processing service provider must be simplified by providing a framework for contractual relations between service providers and gradually eliminating any charges to the consumer for the change.
- 4. Data interoperability and reuse within and between sectors must be strengthened by implementing data governance and standards.

The Data Act is a horizontal regulation that provides a clear framework and direction for data sharing. Nevertheless, it must be supplemented by vertical (industry-specific) regulations that define specific product data access standards and conditions (which data is shared, in which format, etc.). This European standard must be closely monitored internationally, as experience with the General Data Protection Regulation (GDPR) has shown that European standards tend to be emulated by other countries. Non-EU companies should work toward achieving compatibility with EU product data standards to ensure future compliance and generate new data partnership opportunities.

Opening up product data will be gradual—the standards are yet to be defined, and there are technological barriers to overcome. However, several industries, including transport, energy, health systems and automotive diagnostics, have already begun this standardization journey.



Striking a necessary balance for data access

Let's examine what the Data Act means for automotive manufacturers. Traditionally, **vehicle design does not support easy data access and sharing**. While several data recording systems coexist, each has to be accessed separately and receives, stores or sends specific data associated with a different purpose. For instance:

- The "black box" stores driving data for analysis if an accident occurs. Regulations governing access to this data differ by country.
- The OBD (on-board diagnostic) unit records vehicle status data mainly for diagnostic purposes, and a special device is required to access this data. Special regulations govern this data.
- The telematic control unit (TCU) stores the vehicle's driving data to improve driving performance.
- The smartphone or e-sim installed in the vehicle provides connectivity with the external environment, feeding the vehicle with information (e.g., car parks, restaurants and service stations) or services (calls and video on demand (VOD) services for passengers).

Most systems used to collect, process, store and use this data are not designed to share large volumes of data externally.

This poses a serious challenge for service providers who require access to vehicle data to provide services to customers. In response, service providers have long called for principles-based legislation supported by technical and legal requirements to ensure fair and reasonable access to the vehicle's data and functions and to communicate with users. They are also asking for a standard to be established to make it possible to provide services between different manufacturers and cross-reference other sectors (energy in particular).



The Gaia-X initiative, a digital security and sovereignty project aimed at creating the framework for a wholly European data infrastructure, means to create this standard. Within Gaia-X, an automotive alliance for secure and standardized data, called Catena-X, of which CGI is part launched related services in 2022.



How the Data Act supports the future of mobility

The Data Act enables customers to transfer their vehicle's data to different service providers to derive a benefit (financial or practical). Although some use cases already exist, the Data Act will make it possible to:

- Rent out vehicles more easily by providing mobility operators (rental companies, etc.) access to rental-related data, making it easier for them to manage the rental vehicles (remote unlocking, real-time localization, etc.). Autonomous driving offers new prospects for extending the current self-rental model offered by longstanding players in the passenger car rental industry, such as Getaround.
- Make better use of EV battery capacities by facilitating smart charging for end users and energy providers at off-peak times.
- Optimize the vehicle's energy consumption and minimize its environmental footprint by monitoring emissions and exploring retrofitting possibilities.
- Connect vehicles to their ecosystem to find the safest and cheapest parking space and pay for it automatically, find a charging station, automate drive-ins, etc. This is also known as V2X or vehicle-to-everything communication.

- Protect/secure vehicles by providing access to surveillance cameras.
- Revise the financial terms of insurance contracts by transferring driving data to the vehicle's insurer so the contract can be revised based on the data.
- Improve vehicle maintenance by enabling maintenance/repair companies to offer a more comprehensive and predictive service using real-time data and the vehicle's life and service history.
- Tailor mobility offerings by allowing data to be used to provide more personalized offerings (short- or longterm rental, leasing, vehicle change, etc.).
- Maximize the vehicle's resale value by allowing operators to provide the official maintenance history (certified maintenance providers and OEM parts) without having to rely on the manufacturer.

Turning (potential) risk into a growth opportunity

At first glance, it may appear that this new regulation doesn't favor automotive manufacturers. After all, traditionally, they provide a range of services such as insurance, after-sales, etc., and sharing vehicle data with providers of the same or similar services is likely to increase competition. However, sharing this data offers manufacturers several opportunities to benefit from, including:

- Creating and leading a new digital channel for long-term customer communication – providing a catalog of available services and data will improve manufacturers' ability to identify and respond to new requirements generated by new mobility habits.
- Identifying potentially useful data and profitable services – aggregating data can help manufacturers understand which data is the most valuable and build the most profitable services or partnerships based on those insights. Manufacturers are still in a strong position to dictate the product data standard and associated compensation model.
- Leveraging customer knowledge gained from the user journey – the rich information gathered during and after the sales process can help manufacturers support the direct sales model shift by offering customers more personalized services such as carsharing, electric mobility, etc.
- Retrieving data from other mobile devices –
 installed eSIMs will allow for greater interoperability
 with smartphone data and enable manufacturers to
 consolidate and monetize the data.
- Directly monetizing unusable data manufacturers will receive legitimate compensation for opening up the data and can continue to protect their most sensitive data (recharging performance, etc.), directly related to competitive advantage.
- Guaranteeing customers' ePrivacy manufacturers can retain control over their ecosystem of partners, ensuring they use the data entrusted to them within the proper framework.



The Data Act will also help manufacturers optimize:

- R&D and reduce TCO (total cost of ownership) - a data catalog will provide easy access to key information on a larger scale.
 For example, "wear and tear" data can be used to optimize parts for future vehicles or plan the production of certain replacement parts
- Procurement and production lines access to more complete and uniform information on machines and assets in production plants can help optimize plant utilization rate.
- Fleet management easier data access can help to optimize vehicle availability, TCO, insurance costs, CO₂ footprint, etc.

8 recommendations to prepare for an open data system

It is critical for automotive manufacturers to prepare before switching to a system that opens up data access to service operators. This involves rethinking your strategy, adapting your data governance and changing the way data is used.

- Assess the impact on your activity and draw up a list of key data produced and associated use cases. Each data item and use case must be governed through a technological, competitive and regulatory (GDPR, Data Act, Service Act, etc.) lens to manage current and future standards effectively.
- Develop an open data strategy to assess the current and potential ways of opening access to data, the resulting IT transformations, associated costs and the revenue model of the services involved.
- Create a list of data already shared and its compliance with the Data Act to assess the short-term risks and the resulting actions/ opportunities (revised contracts, etc.).
- Draw up a governance policy and framework for open data decisions (protection, sharing and use) regarding the data's monetization potential and capabilities.
- Adapt data platforms and data factories to share and promote data and services, organize data management activities and provide a direct user interface similar to that of mobile service operators.



- Revise data security policies to provide open data access within a controlled framework, including security, confidentiality and traceability guarantees to counter unauthorized data transfers.
- Work together to build the standard of tomorrow by organizing your internal and external ecosystems to be integrated into European governance structures. Ideate and innovate to maximize the data asset's value by continually developing new services and associated partnerships.
 - Draw up an asset management strategy and identify potential cost savings to be achieved by changing the maintenance model or by sharing the data with other departments, such as R&D.

Conclusion

The Data Act strengthens a fundamental trend toward a data-driven future pursued by several industries. It is a horizontal (multi-industry) regulation intended to be complemented by more specific vertical (industry-specific) regulations. Each industry must take ownership of these changes by implementing industry-specific governance and incorporating strategies that leverage data across value chains.

Automotive manufacturers need to stay on top of this trend to remain competitive. The most open (data) products are the ones the players of the future are most likely to choose. In addition, open and trusted data ecosystems will enable manufacturers to stay connected with their customers to maintain and extend their existing service activities.

Organizations can optimize operations (R&D, manufacturing, supply chain, etc.) using the new data available. They also can achieve efficiencies and cost reductions by changing the maintenance model or sharing the data produced for use by other players.

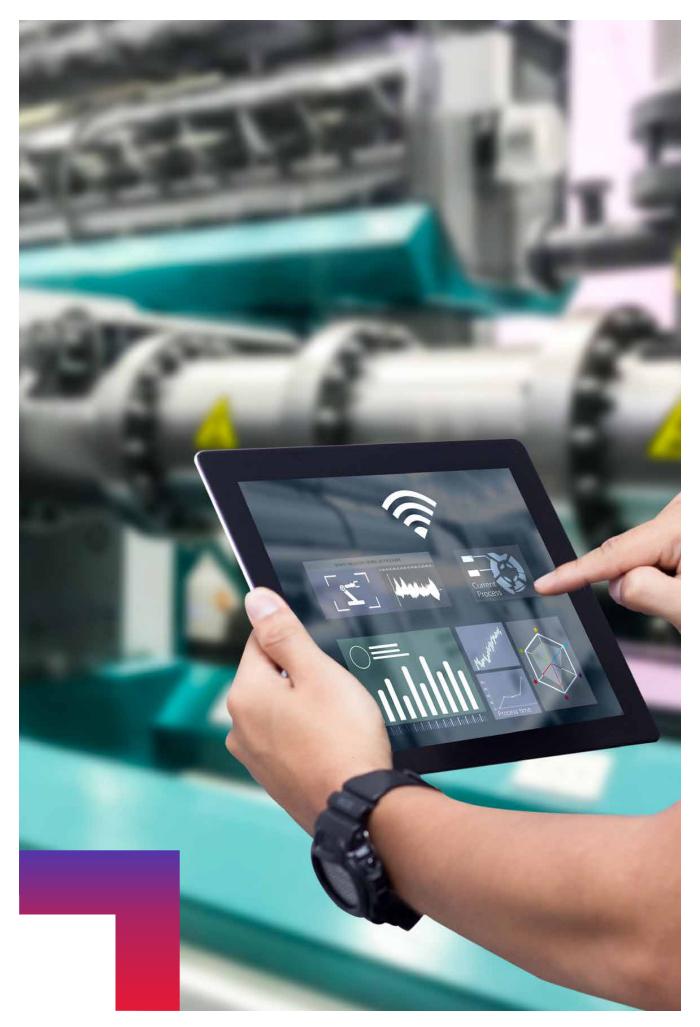
Ultimately the Data Act can help to build a more open and trusted data ecosystem that will help manufacturers develop successful partnerships that broaden their services, generate new revenue streams, improve the customer experience and advance sustainability objectives.

A partner in your data journey

For manufacturers seeking to become data-driven organizations, CGI provides a holistic approach that helps unlock the transformative power of data to address new market realities and drive smart, sustainable and resilient operations.

We provide a powerful combination of industry, data, technology and change management expertise, building a relationship with you locally while providing you with the scale of a truly global partner.

Contact us to learn how we can collaborate to advance your data-driven transformation: manufacturing@cgi.com





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