



#642



Connected & Mobility Services

Connected Car Data

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627 – Data Monetization Strategies

SBD's Data Monetization Strategies for the Connected Car Report provides a summary of the strategies and partnership types that automakers can pursue to generate revenues from vehicle data.

The Report highlights the competencies of partners, lays down a blueprint for 'data monetization success' and discusses the effect of data privacy and data access legislation.

Many OEMs have, or are looking to implement, data sharing strategies in place for major markets around the world such as Europe, China, and the U.S. These strategies often vary in size and scope, spanning from in-house APIs to integrations with third-party data marketplaces. At the same time, this offering can vary similarly between regions – with each supporting a unique set of implementations.

However, with connectivity becoming an increasingly important part of the automotive user experience, so too is the data generated from connected features and systems. Today, the range of use cases and data types supported by OEMs globally varies significantly. Evolving with this ecosystem are the steps OEMs are taking to ensure that this data is governed and commercialized appropriately for each region. With this landscape evolving so rapidly in a number of different ways, tracking data sharing strategies can quickly become a difficult task.

This report analyzes these differences and details the best data sharing practices for stakeholders. In it, current data sharing use cases are identified alongside the most popular data types among third party developers. The OEMs at the forefront of this ecosystem are profiled alongside the partners supporting their strategies to aid the planning of new data commercialization strategies.

COVERAGE



GLOBAL



NA



CHINA



EUROPE

FREQUENCY



ANNUALLY



QUARTERLY



ONE-OFF

PUBLICATION FORMAT



PDF



POWERPOINT



EXCEL



ONLINE

PAGES



100+

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Key questions answered

- > How are tech partners supporting OEMs?
- > How are car makers evolving their data governance and commercialization strategies?
- > What are the most in-demand types of data among 3rd party developers today, and how will that change in the future?
- > What data sharing use cases do car makers currently support and how are they enabled?

This research supports



PRODUCT PLANNERS



IT



MARKETING



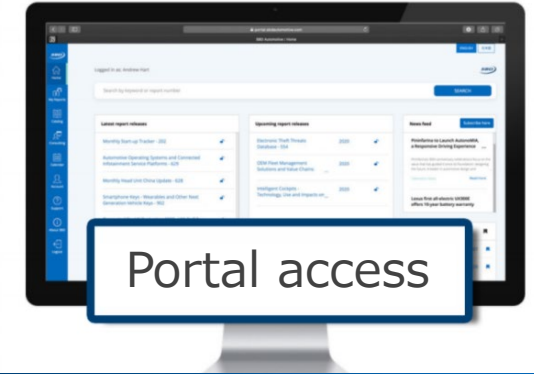
Engineering

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Connected Car Data


Building a sustainable governance & commercialization strategy



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Connected Car Data: Building a Sustainable Commercialization & Governance Strategy

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Connected Car Data
Building a sustainable governance & commercialization strategy



Example slides from the report

The example slide features a background image of a city skyline at night with binary code (0s and 1s) overlaid. In the bottom left corner, there is the SBD logo. To its right, the text reads "Connected Car Data" followed by "Building a sustainable governance & commercialization strategy" in a smaller font. At the bottom of the slide, there is a blue button with the text "Request price" and a white right-pointing chevron symbol.



Drivers & barriers affecting connected car data

Drivers

Barriers

Drivers			Barriers			
Potential return on investment, both monetary and non-monetary	Consumers are open to share their data for tangible benefits	Growing connected car fleet	 Drivers and Barriers	Data privacy regulation	Consumer demand for data privacy	Right to repair & data sharing legislation
<ul style="list-style-type: none"> Some data types may be worth \$10 or more per use, yet most are worth fractions of a cent Non-monetary uses can bring greater value. 	<ul style="list-style-type: none"> 64% of consumers surveyed answered they are likely / somewhat likely to share their data for automotive use cases² 	<ul style="list-style-type: none"> By the end of 2022, there will be at least 217 million connected vehicles on the road in major markets¹ More than 2 petabytes of data generated per month 		Recommended Actions	<ul style="list-style-type: none"> Increasing number of data privacy regulations across the world Biometrics data processing specifically sensitive 	<ul style="list-style-type: none"> Increasing number of consumers express their concerns in sharing their personal data² Low trust in companies' data handling²
<ul style="list-style-type: none"> Anonymous customer will have little value compared to personal data. OEMs should consider what value-added services and features could be created by leveraging their connected car data. 	<ul style="list-style-type: none"> OEMs should investigate what types of use cases their customers are interested and willing to share data for Data sharing consent must be implemented in a way consumers easily understand 	<ul style="list-style-type: none"> The compounding data volumes will quickly overwhelm an unprepared organization. Ensure an ideal structure, budget, and strategy are in place The entire fleet should be connected as soon as possible to meet expectations 		<ul style="list-style-type: none"> OEMs must comply with the strictest data privacy regulation Data lake & processing must be local in some regions, i.e., Data Act in EU, China 	<ul style="list-style-type: none"> OEMs must clearly explain to their customers how and why their data is being collected OEMs must provide customers with complete control over what data is shared and to whom 	<ul style="list-style-type: none"> Prepare your back-end platform for the possibility of mandated 3rd party data access, including direct communication with the vehicle Become involved in the government discussions and ensure that your voice is heard

1) Source: SBD Automotive's Connected Car Forecast 2021 (Report 536)
 2) Source: SBD Consumer survey 2022. 771 respondents in China, Germany & US



OEMs pursue both internal and external data use cases

Internal Use Cases - OEMs can extract direct and indirect value and revenues from connected car platforms

Using digital channels to co-ordinate CRM activities to enhance the customer lifecycle experience and increase loyalty in sales and service

Repeat purchase from data driven CRM & Insight



Using connected car data to identify the optimal vehicle residual value to move a customer to a new vehicle at the right time and increase pre-owned vehicle profits

Residual/resale value optimization



Using vehicle fault data to avoid warranty claims across a fleet by drastically reducing the time to countermeasure parts at the factory and in the field

Warranty avoidance



The potential revenues for customer-paid connected car subscriptions, and keeping connected services active for longer

Subscriptions



Using vehicle data to identify product improvements through customer utilization

Product improvement



Using connected services to improve the experience for "customer pay" (as opposed to warranty) work at dealerships and increasing the revenue in after-sales

After-sales servicing



Using vehicle utilization data and digital service records to prove the value of a pre-owned vehicle, rewarding sellers for careful treatment of their vehicle

Maximising retail transactions



3rd Party Use Cases - 3rd parties may seek to gain value from data collected by connected cars



Remote Disable Support

Vehicles that need to be recovered after owners default on payment plans can be located and remotely disabled by connected car platforms. This would be of interest to leasing companies.



Crash/Incident Reconstruction

Insurers and data analytics companies are interested in purchasing vehicle data that can help build a picture of why a vehicle collision/incident has occurred.



Usage Based Insurance

Insurers want to access driving behavior data to better assess the risk of a given driver so that they can more accurately price premiums. Therefore, access to data from embedded systems is of interest.



Predictive Maintenance

Predictive and preventative telematics solutions can provide fleets and rental/leasing companies with insights on when a vehicle is likely to have a fault or need maintenance attention.



In-vehicle Radio Advertising Analytics & Targeting

By collecting data from the head unit, it opens up an in-vehicle advertising and communication channel that can be personalized.



- The evolution towards better connected architectures ensures that more data-of-value is available to off-car stakeholders in order to generate value
- More advanced implementations will see only data insights needing to be shared off vehicle with no need to transmit large amounts of raw data



Countries continue to move towards data localization

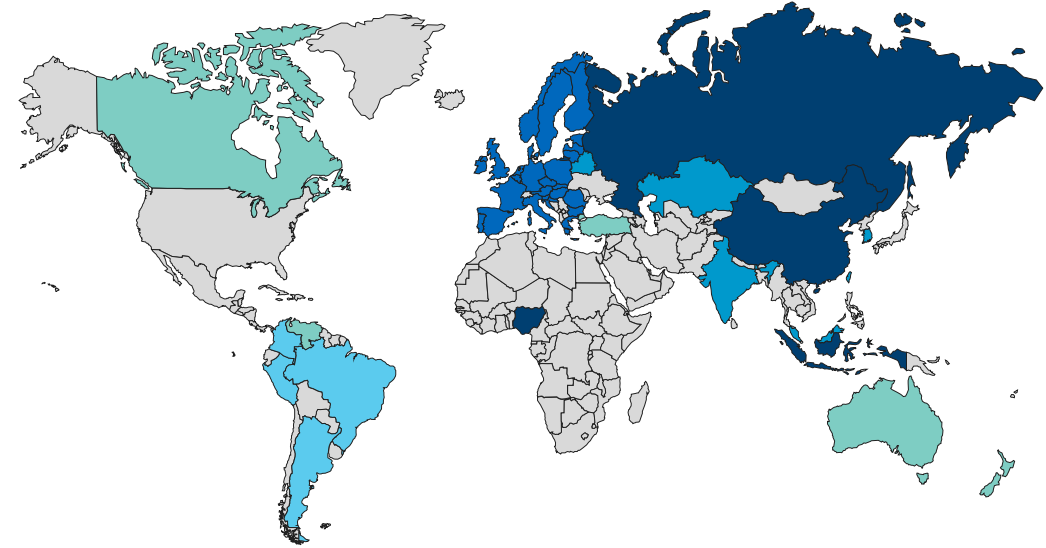
Background

There is a growing demand by governments to prevent cross-border data flows, mostly due to privacy concerns. Countries are increasingly considering data localization laws that will require businesses to store data within the country and require special permissions for export. In 2017, 35 countries had implemented data localization policies. As of 2021, 64 countries have enacted a total of 144 measures, with dozens more under consideration.

Key points to the automotive industry

The impact to the automotive industry is already being witnessed. For example, in China, automakers Tesla, BMW, and Mercedes-Benz have set up facilities to store data generated locally by passenger vehicles. The Cyberspace Administration of China released a draft proposal, *Outbound Data Transfer and Security Assessment Measures*, for public comment. The draft goes beyond current localization laws but, as written, its broad scope and lack of clear definitions for terms such as “important data” allow the Chinese government to yield a lot of discretion in allowing cross-border data transfers.

It is likely we will continue to see data sovereignty as a major area of regulation in 2022.



Strong	Explicit requirements that data must be stored within the country
De facto	Result of a culmination of other restrictive policies that make it unfeasible to transfer data
Partial	Range of measures and regulations that require the consent of individual before data transfers
Mild	Restrictions on international data transfers under certain situations
Sector-specific	Regulations that pertain to specific sectors

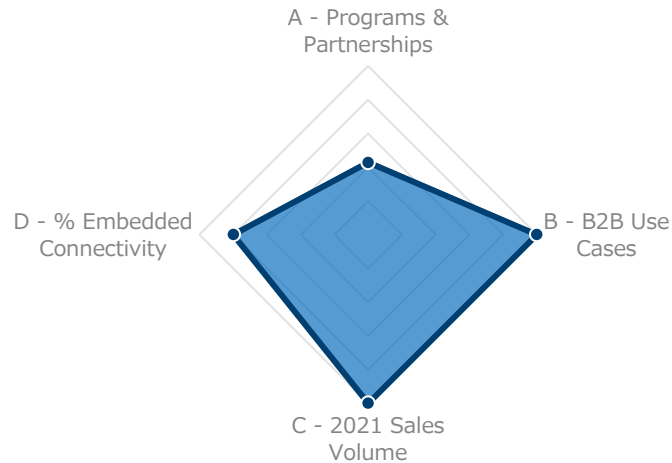
Country	Type of Policy	Type of Data							
		Personal Data	Financial Data	Payment Data	Mapping Data	Health & Genomic Data	Gov't Records & Cloud Services	Telecom Data	Public Local Cloud
China	Direct and Explicit Localization	✓	✓	✓	✓	✓	-	✓	-
EU	Indirect and De Facto Localization	✓	-	-	-	-	✓	-	-
USA	Indirect and De Facto Localization	-	✓	-	-	-	-	-	-



BMW Group	Chang'an Group	Ford Group	Geely Group	General Motors	Honda Group	Hyundai Group	Jaguar Land Rover	Mercedes-Benz	RNMA	SAIC	Stellantis (Europe)	Stellantis (N.A.)	Toyota Group	VW Group
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Toyota
(Toyota, Lexus)



SBD's Insight on Data Usage

In the second half of 2018 there was a surge in news in this area. The Toyota Connected team opened a London office, focused on mobility services & data analytics. In Asia, it acquired ride-hailing company, Grab and launched Japan's first-ever UBI scheme, employing a revenue share model between Toyota and an insurance carrier. In Feb 2019, the company released its central "Connected & MaaS Strategy". This has manifested itself in efforts through MONET Technologies and its new brand for mobility services, Kinto. Toyota continues to explore B2B partnerships for fleet & insurance use cases. Sept 2020 saw partnership for build data with Swiss Re – a emerging area of interest for the industry

Recent News & Activity

August 2021 – [Toyota](#) acquires Carmera to bulk up U.S. mapping and road data

July 2021 – [Toyota](#) partners with Fleetsu to offer connected fleet management solution

April 2021 – [Toyota](#) is working with other Japanese OEMs on developing technical specifications for vehicle communication devices

September 2020 – [Toyota](#) shares build data with DataOne (US)

September 2020 - [Toyota](#) & Lexus vehicles to be compatible with Swiss Re's ADAS risk scores. (*Europe*)

Significance

Carmera will give Toyota access to real-time, high-definition maps and crowdsourced inputs that allow for autonomous vehicles to locate and navigate themselves.

Toyota Australia and Fleetsu, a software provider that assists in the collection and analysis of connected fleet data, are collaborating on a new connected fleet management solution.

Part of the stated goal of the partnership is to use connected car technologies to promote the advancement of certain use cases including big data.

The agreement sees DataOne access trim, colors, and options. This data can be useful by third parties for various applications, including vehicle comparison as well as valuation.

Through the new partnership with Toyota Insurance Services, ADAS risk scores are set to be made available for Toyota and Lexus vehicles, ultimately allowing for a better assessment of their safety performance.

Programs and Partnerships (contribution to score)

1. Data Marketplace	(+0)	
2. In-House Private API	(+1)	Toyota Connected (Global)
3. B2B Partnership	(+3)	Aioi Nissay Dowa Insurance (Japan & US), Avis Budget Group (US), Fleet Complete (US), Grab (SE Asia), Nationwide (US), Ridecell (Sweden), Swiss Re (Europe), Wheels (US), Fleetsu (Australia)
4. Third Party API Partnership	(+1)	DataOne
5. Commerce Platform	(+0)	
6. Non-Profit Data Sharing	(+0)	
7. Cross-Industry Collaboration	(+1)	MONET Technologies (Japan), Car Connectivity Consortium (Global)
8. Other		NTT Data (Global), Toyota Blockchain Lab (Global), SoftBank (Global), Weathernews (Japan)



Establishing a data governance framework

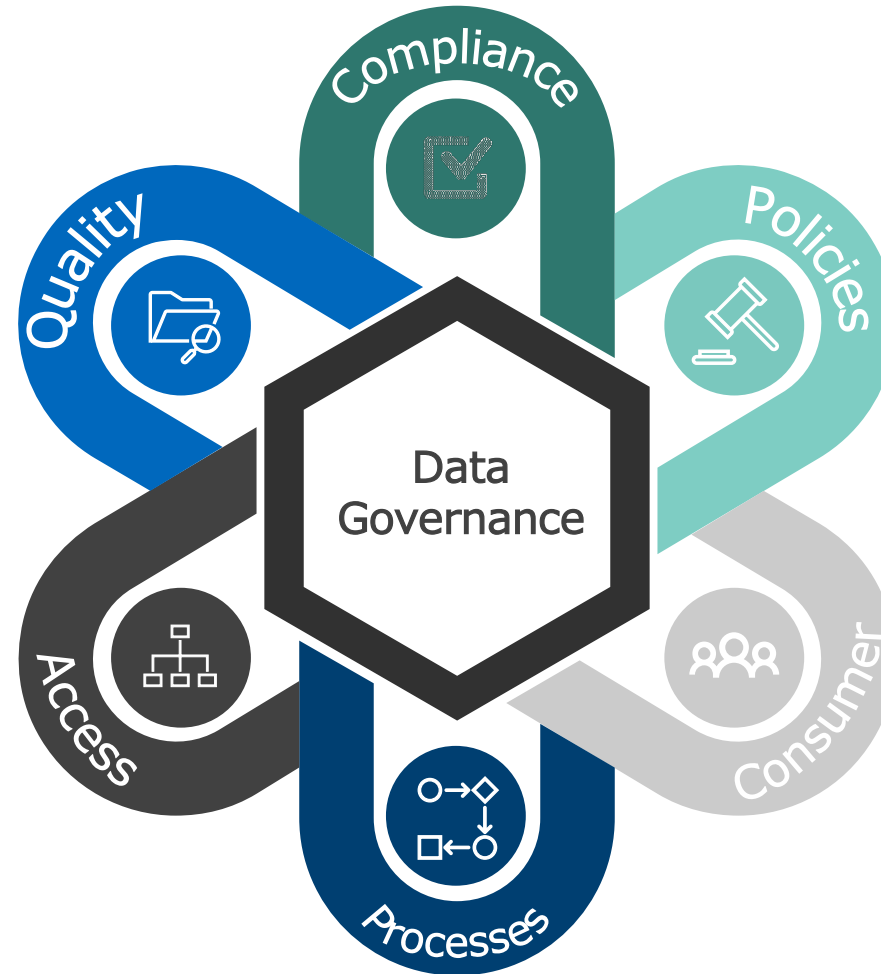
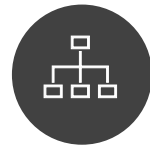
Compliance
Ensure legal compliance of data handling. Respect regional requirements



Quality
Where does the data come from, how is its journey mapped, how is its integrity preserved



Access
Who in the organization can access which data elements and for what purpose. Conditional access control



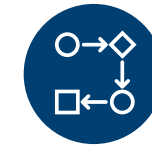
Policies
Uses of data must support strategic goals, values, ethics.



Consumer
Transparency of data collection & uses. Consent management & right to access/edit/erase



Processes
Define how stakeholders can create use cases and seek approval for data use



Data governance enables innovation & stakeholder access/use while respecting policy, compliance, & security. Ideally the framework should be designed centrally & administered regionally with optimal pre-approval to streamline decisions around data access and use case development.



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Contact SBD Automotive

Do you have any questions?

If you have any questions or feedback about this research report or SBD Automotive's consulting services, you can email us at info@sbdautomotive.com or discuss with your local account manager below.



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USA

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Garren Carr
North America
garrencarr@sbdautomotive.com
+1 734 619 7969

Luigi Bisbiglia
UK, South & West Europe
luigibisbiglia@sbdautomotive.com
+44 1908 305102

SBD China Sales Team
China
salesChina@sbdautomotive.com
+86 18516653761

Andrea Sroczynski
Germany, North & East Europe
andreasroczynski@sbdautomotive.com
+49 211 9753153-1

SBD Japan Sales Team
Japan, South Korea & Australia
postbox@sbdautomotive.com
+81 52 253 6201