



Solving at scale PI breaches and transparency of data practices in automotive

Presentation to the Department of Commerce's IoT Board of Advisors

Andrea Amico Founder and CEO Privacy4Cars



About Privacy4Cars



- First and only privacy-tech focused on data captured, stored, transmitted, and leaked by vehicles
- Mission: "Driving Privacy" = free tools for consumers and robust tool for auto businesses
- We focus on problems that affect today millions on consumers
- We bring solutions that can be pragmatically implemented today and are backwards compatible with the installed base of 273 million vehicles in the US
- Accomplishments: clear thought and market leader in the space, multiple patents, hundreds of businesses rely on our services to protect millions of consumers













Volkswagen Financial Services











LAMBORGHINI FINANCIAL SERVICES



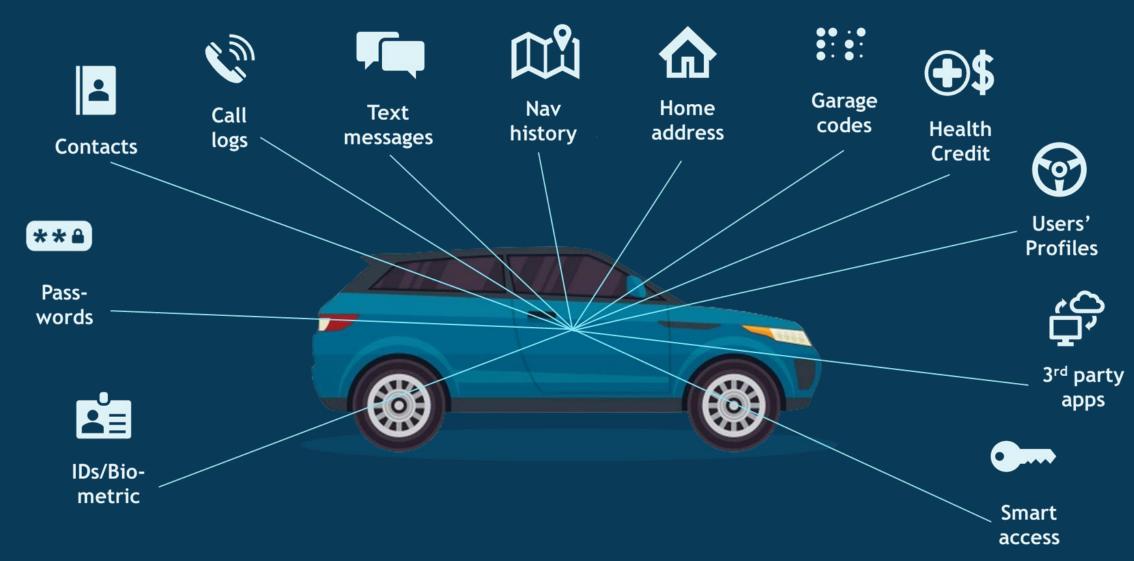






Vehicles are Unencrypted Databases of Personal Information





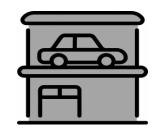
The ugly facts on the ~40 million used vehicle sales



2 out of 3 dealerships told mystery shoppers they have a process to delete PI prior to reselling...



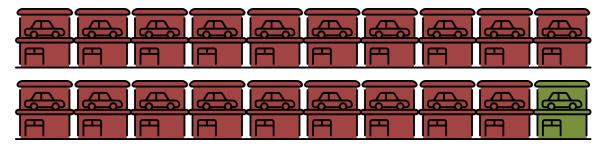




Consequently, more than 4 out of 5 cars are resold still containing the unencrypted personal information of previous occupants (incl. minors)...



...however, less than 5% of all dealerships have a robust and documented process to do so

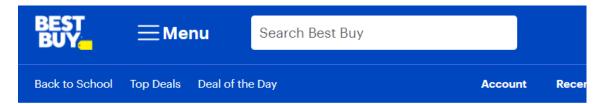


...and 9 out of 10 mystery shoppers reported finding data of prior users just by test driving one or two random cars at those dealer lots!



Established Best Practice For Computers and Smartphones





Best Buy > Customer Service > Help > Privacy Policy

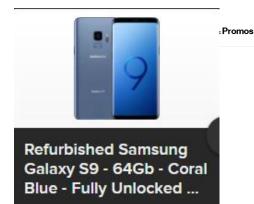
How Best Buy interacts with your devices.

We know you entrust us with your confidential and personal information when you use Best Buy to provide service and support on your device. And while you should always remove your data from any device you choose to dispose of, we also work to protect your confidential and personal information through appropriate handling, safe storage, and high standards for wiping your data. We know that, as our customer, you expect us to safeguard your data at all times and in all of these situations.





Support



Shopping with Verizon Wireless

verizon^v

Device Return Instructions

Returning a device to Verizon Wireless only takes a few minutes.

Mv Verizon

This page will take you through the steps needed, which are especially important for Apple® devices with iOS 7 or newer.

You must turn off Find My iPhone before sending it back. We'll show you how, even if you don't have the device anymore.

I am looking for

We'll show you how to erase your device too.

FTC + OEMs: delete in-vehicle PI at sale





Please note that the information stored in your Audi vehicle may be accessible to others who use your Audi vehicle or mobile device, and thus may be deleted, altered, or transferred. Please see your vehicle's owner's manual for information about how to remove the information stored in your Audi vehicle.



If you sell or otherwise transfer your vehicle, it is your responsibility to delete all information (such as contacts, address look-ups, saved map addresses, or preferences) from the vehicle and contact us to transfer or cancel your account. If you do not delete this information, it may remain in the vehicle and may be accessible to future users of the vehicle. For instructions on how to delete information from your vehicle, please refer to your vehicle owner's manual.



Home / Business Guidance / Business Blog

Business Blog

- The FTC has issued guidance on the need to delete in-vehicle Pl three times
- However, zero enforcement, little changes in practices

Be discreet when you delete your fleet

By: Lesley Fair

August 27, 2018







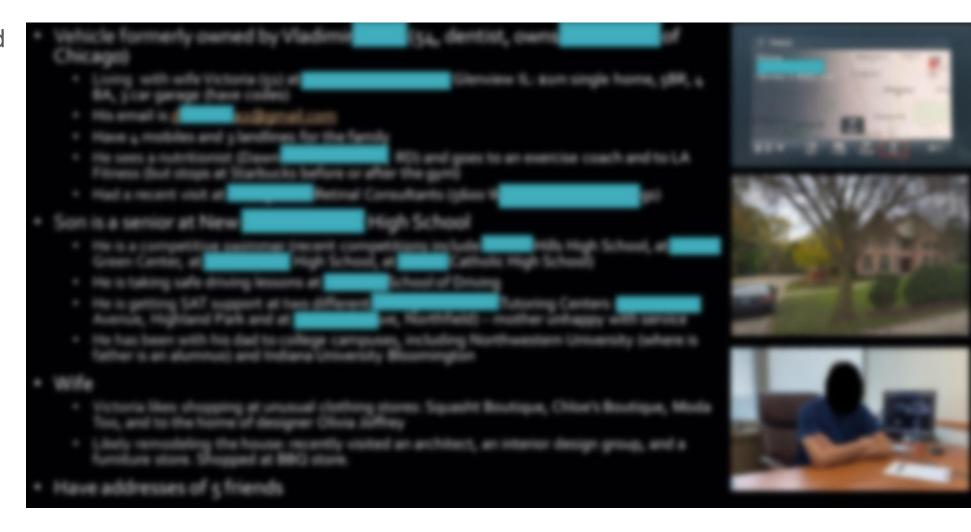
Thinking about replacing a company car or truck? Unless you take some security steps before selling the vehicle, you could be leaving behind a water bottle or two, some change under the seat – and a massive amount of corporate and personal data.

privacy4cars.com Proprietary & confidential 6

36 million families experience this without knowing



- Real example of used vehicle for sale
- Shot a 30-second video during a test drive
- Fully reidentified previous owner, wife, and son (a minor)
- Have received multiple reports from new owners of vehicles previously owned by celebrities, wealthy individuals, politicians



The ugly facts about automotive data practices transparency



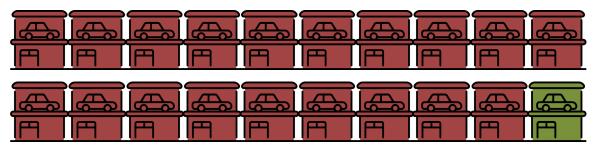
Most "big tech" privacy policies and TOS can be read in 15-25 minutes ...



...for automotive manufacturers, it takes an average of 2.5 hours (and up to 6 hours)



In mystery shops, <5% of dealership salespeople correctly represented that (a) cars collect PI, and (b) OEMs have the rights to sell and share this PI



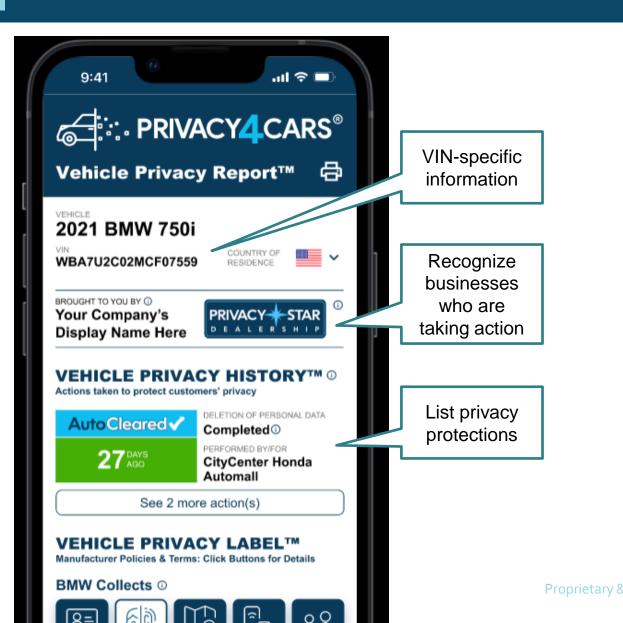
...and we could not find any evidence of collateral manufacturers make available to simply explain their data practices, and no salesperson was able to provide complete or accurate information





COMING SOON: VehiclePrivacyReport.com





VEHICLE PRIVACY LABEL™ Manufacturer Policies & Terms: Click Buttons for Details **BMW Collects** ① Synched User Profiles Biometrics Location BMW Shares/Sells to ① 3 益 43 60 Service Data Insurance Providers Brokers UNCLEAR UNCLEAR REVIEW COMPLETED, LAST UPDATED BY PRIVACY4CARS ON Reviewed Public Documents* UNIQUE DOCUMENTS WORDS READ TIME** 66,743 144 min 40.124 43 min Main PP Last Updated: 11/11/22 Reading Level: 12th Grade*** 12.023 27 min Main TOS Reading Level: 11th Grade*** Last Updated: Same As Main PP 27 min 12.023 Owners' PP Last Updated: 11/11/22 Reading Level: 12th Grade*** Same Owners' TOS Same Last Updated: 11/11/22 Reading Level: 7th Grade***

7,432

9,957

Reading Level: 12th Grade***

18 min

20 min

Connected Car PP

Last Updated: 11/11/22

Connected Car TOS

10 easy-to understand and standardized icons:
a) 5 categories of data collected by automakers
b) 5 categories of who they share/sell information to

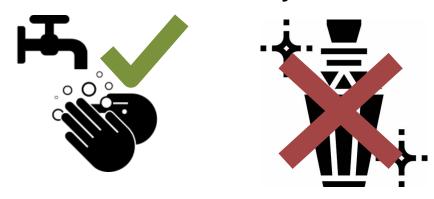
Each button can be clicked for more details and specific quotes from public docs

Sources for full disclosure and independent read

Clear government guidance and support is needed



Focus on problems we can solve now for the vehicles that are currently in circulation!



Vehicle retailers and renters must be told they have to follow the same basic hygiene rules that are commonplace for other consumer electronics



Privacy must become a visible attribute: fair and transparent disclosures prevent market distortions and incentivize companies to improve practices



PRECEDENT: IIHS's publication of the first crash tests sparked changes in consumer shopping behavior and unlocked investments in better safety





Complying with FTC's Updated Safeguards Rule

Deleting Consumer PI Stored in Vehicles: Dealership Guidelines



Thank You!

Download the free whitepaper at https://privacy4cars.com or ask for a copy at info@privacy4cars.com