

Technical challenges for Connected Car Services

By leaving of a use-case, we will clear 6 technical domains to explain the stakes which we have to raise to connect our Product to the world of the Connected Services



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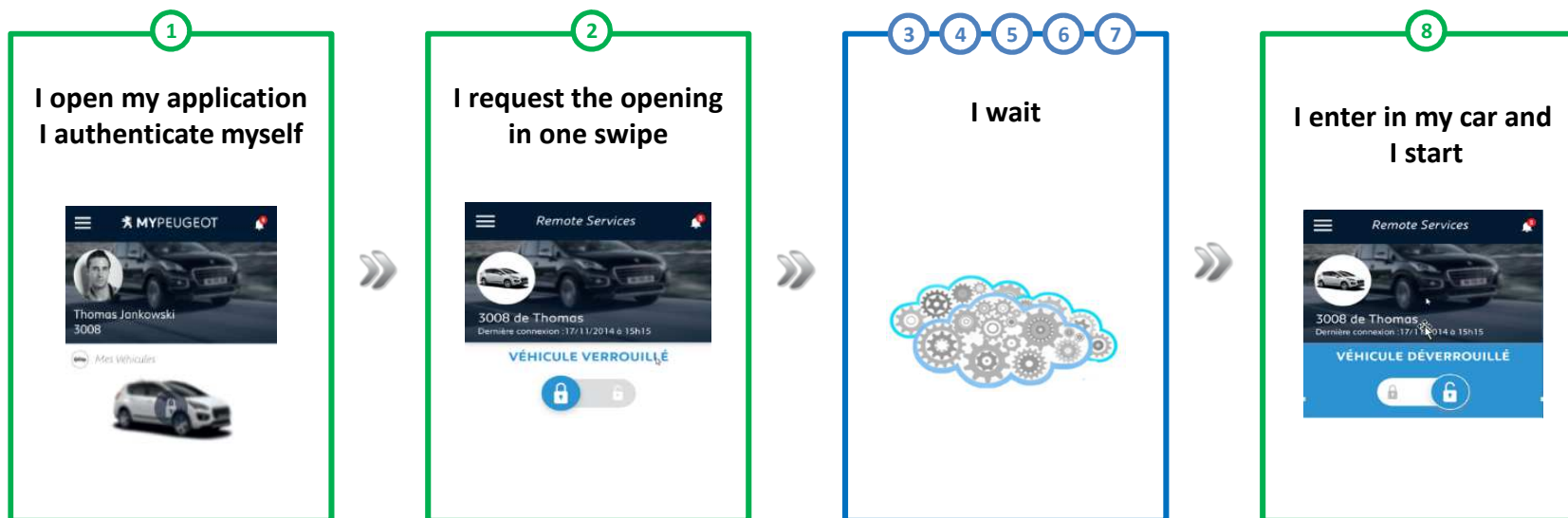
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IoT & CVMP - Connected Vehicle Modular Platform

*Genivi All Membre Meeting
27th April 2016*

A simple UX provide through a complex end-to-end journey



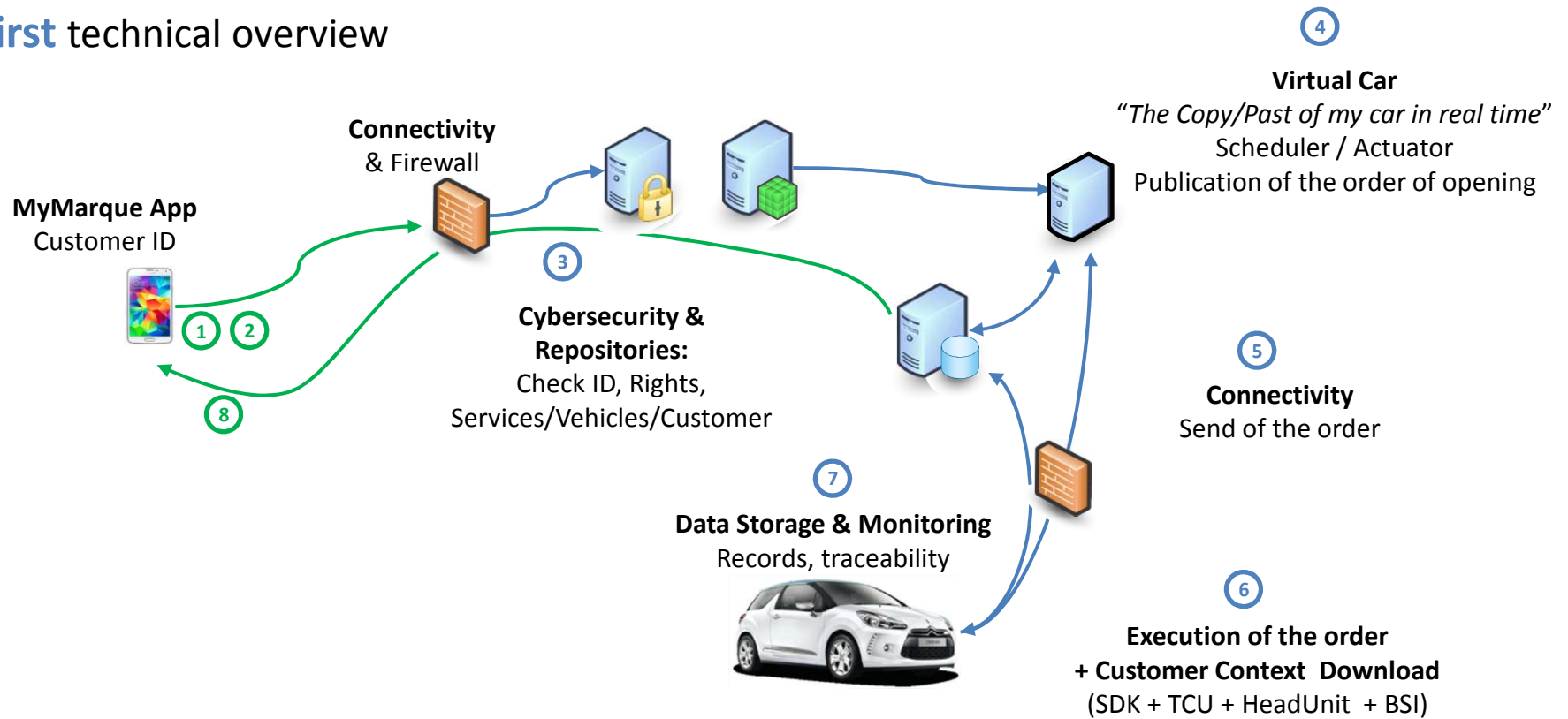
The use case « I start my car with my smartphone »



A simple UX provide through a complex end-to-end journey



An first technical overview



A simple UX provide through a complex end-to-end journey



Here is a more complete end-to-end Journey



The brand DS deploys a new service in a country for the new DS N°3

Marketing Training Legal
Sales
compatibility availability



A Customer purchase this service, for his leased car and chooses to pay per month

CRM application
authentication financial flow
compatibility assistance
activation information



The customer's spouse also used the service

authentication CRM+
compatibility application
assistance



A customer's friend ask to use the car just for one day

authentication-tmp
compatibility application-tmp
assistance CRM ?



The customer changed bank without making the follow-up

Deactivating ?



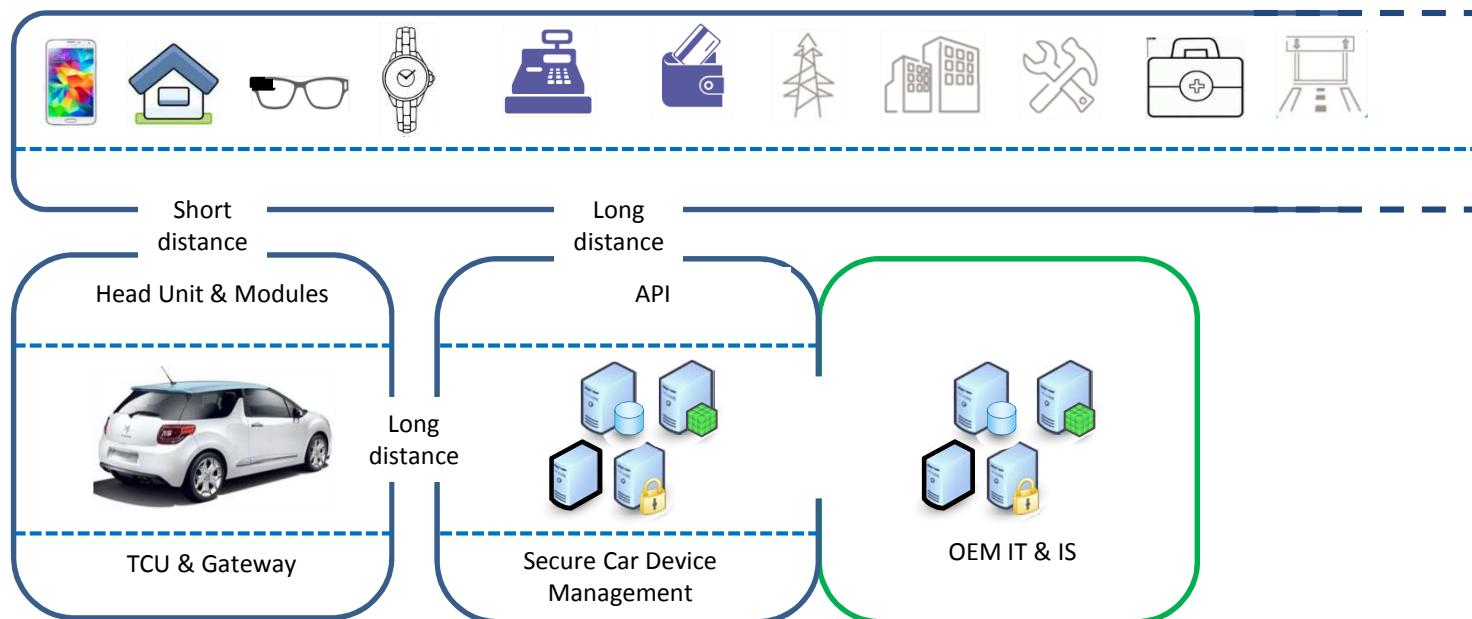
After 2 years, the leasing period is ended. The car is sold in North Africa

Help

IoT Automotive linked to a world of services



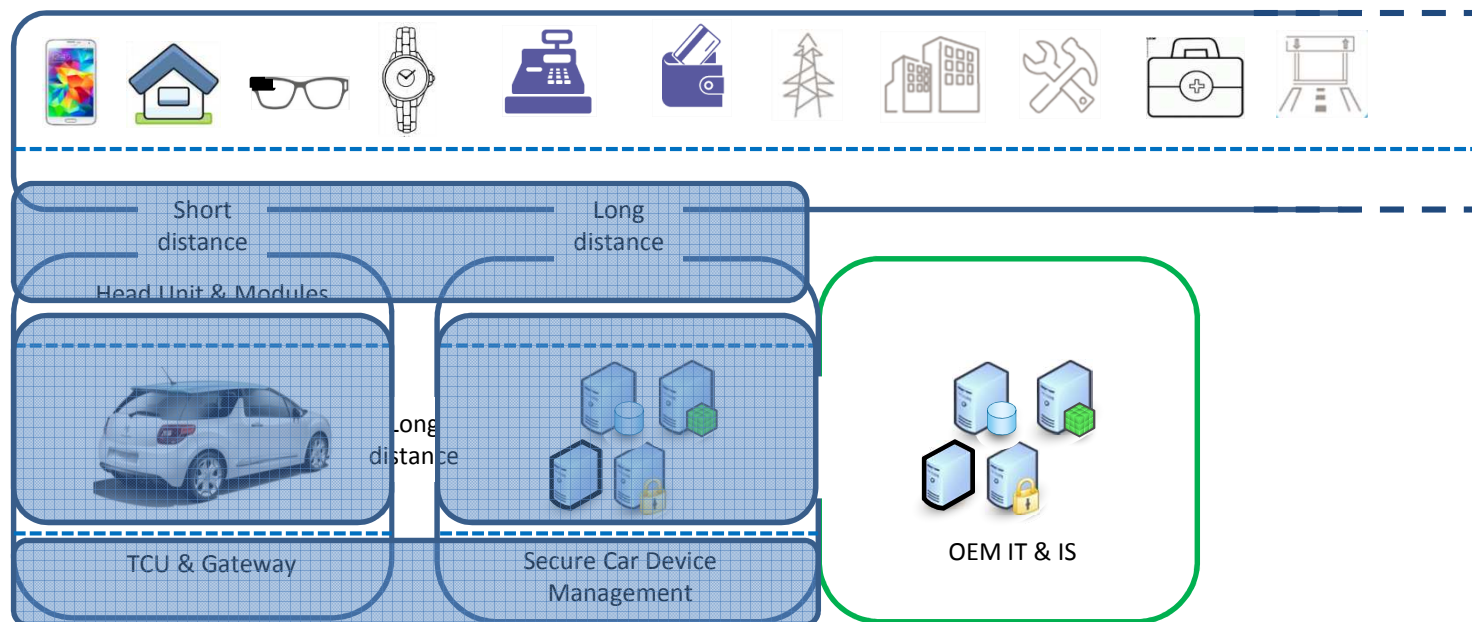
An IoT Automotive functional overview



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From an IoT Automotive functional overview



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To a IoT Automotive technical platform

To Download a software update file (Head Unit, Module, ECU)

To Send/ Receive information coming from vehicles - Identify workflow

To Create, Manage SDK, Framework, Frame Work,

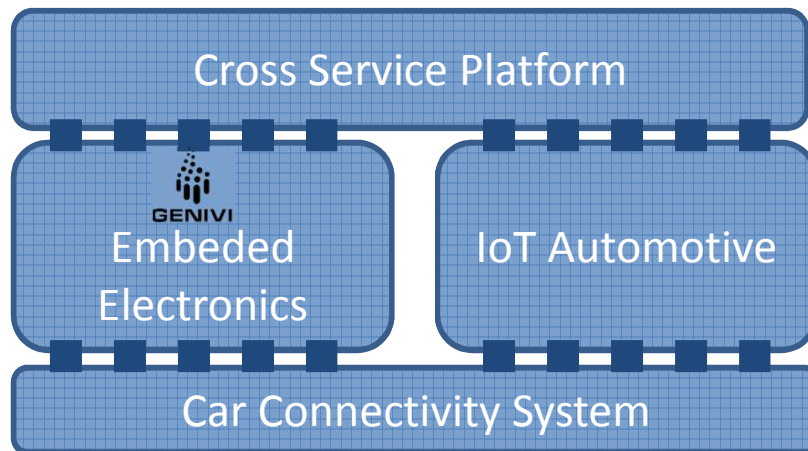
To Create, Manage SDK, Framework, Frame Work,

To Secure communications Create and manage certificates, keys, an update

To Share the onboard connection , Data to our clients, our partners

To Qualify, Host

To Develop an application, on portal, mobile



To Return Data to our clients, our partners

To Maintain a portal, an application, an IHM

To Control The use of Data, the services access

To Collect, Refine, Stock Data in our Data Factory

To Publish APIs, Web Services Develop links for IS

To Sell, pay, bill Online payment, stores, B2B

To Identify Presenting offers, Directory Services, Vehicle Compatibility/Services

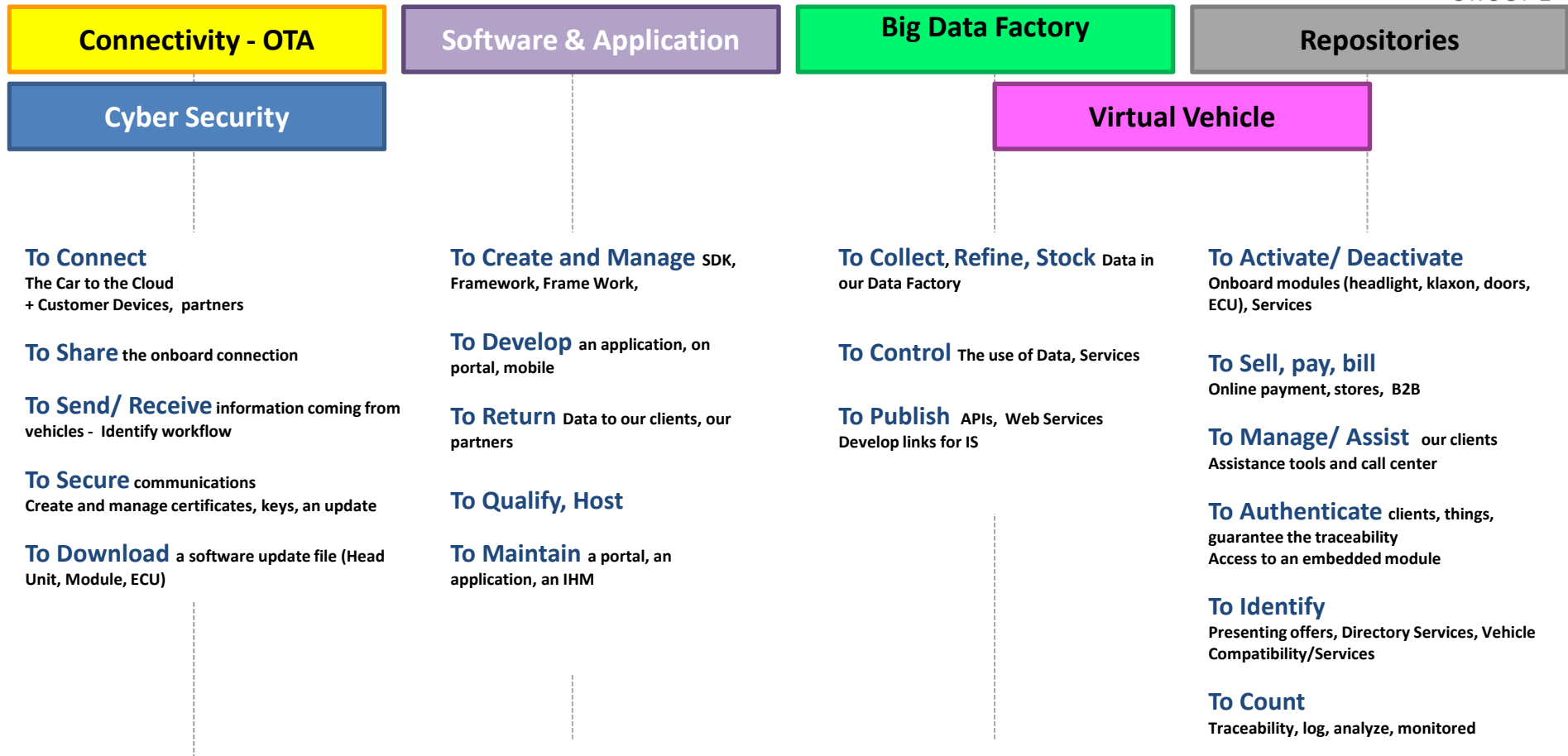
To Activate/ Deactivate Onboard modules, Services

To Count Traceability, log, analyze, monitored

To Manage/ Assist our clients Assistance tools and call center

To Authenticate clients, things, guarantee the traceability

IoT Automotive linked to a world of services



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Big Data Factory

Production line to refine, normalize, standardize, publish the data collected for each car

Repositories

Data base reference for all modules, devices, and services per car subscribes for each customer

Connectivity – OTA Up Grade

Protocols, Modem, eUICC, OTA, Device Management , Awakening solution

Software & Application

Protocols, Software Development Kit, API to reach the car in read or write, all module include the Head Unit

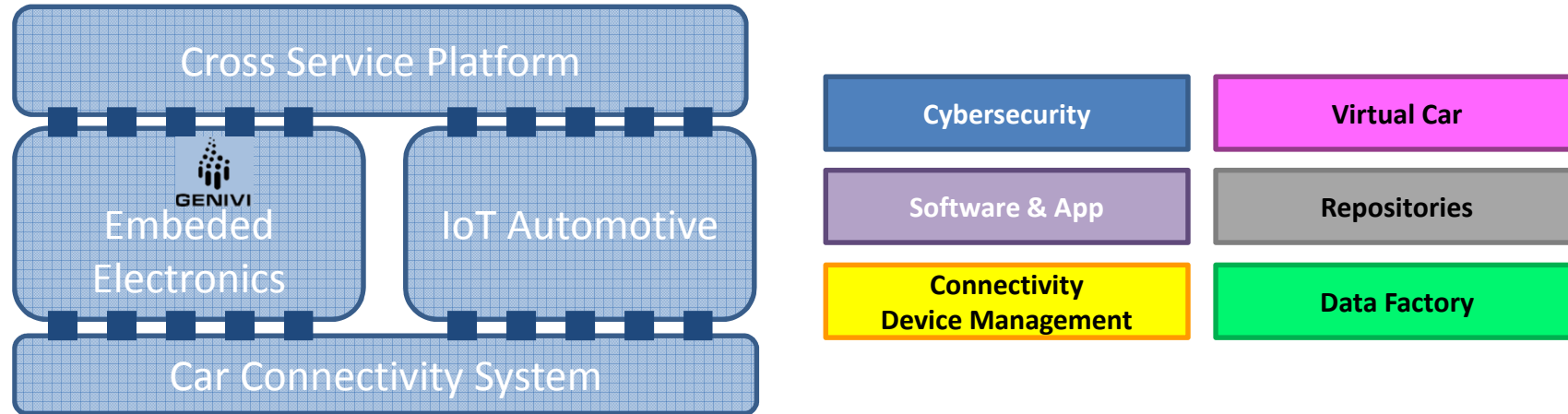
Cyber Security

All the rules / protocols / mechanisms for authentication of customers, module, file, application, flow, event, fully qualified, tested, monitor by PSA

Virtual Vehicle

Virtual representation of the customer vehicle, stored in real time in the IoT Automotive platform with its options and its services

IoT Automotive linked to a world of services



Should Genivi widen it's scope and build IoT Automotive Standards?