



In-Car Payments.

Cybersecurity Vehicle Forum.





Making innovation possible.



*We work strategically to help our clients **turn ideas into reality**, swiftly take products to market, and achieve competitive advantage.*

Lionel Grosclaude. Fime CEO

Our markets

- Payment schemes
- Banks and fintechs
- Retail
- Card and terminal vendors
- Public Transport Operators (PTO) and Authorities

Our offering



Consulting

Understand and capitalize on the changes that are shaking up your market and make the best choice.



Testing Tools

Benefit from our comprehensive testing tools with local laboratories to validate your product and get ready for launch.



Testing Services

Accelerate payment solution validation with our one-stop services.

450+

Experts & employees

3000+

Customers

9

Fime laboratories

18

Locations

40+

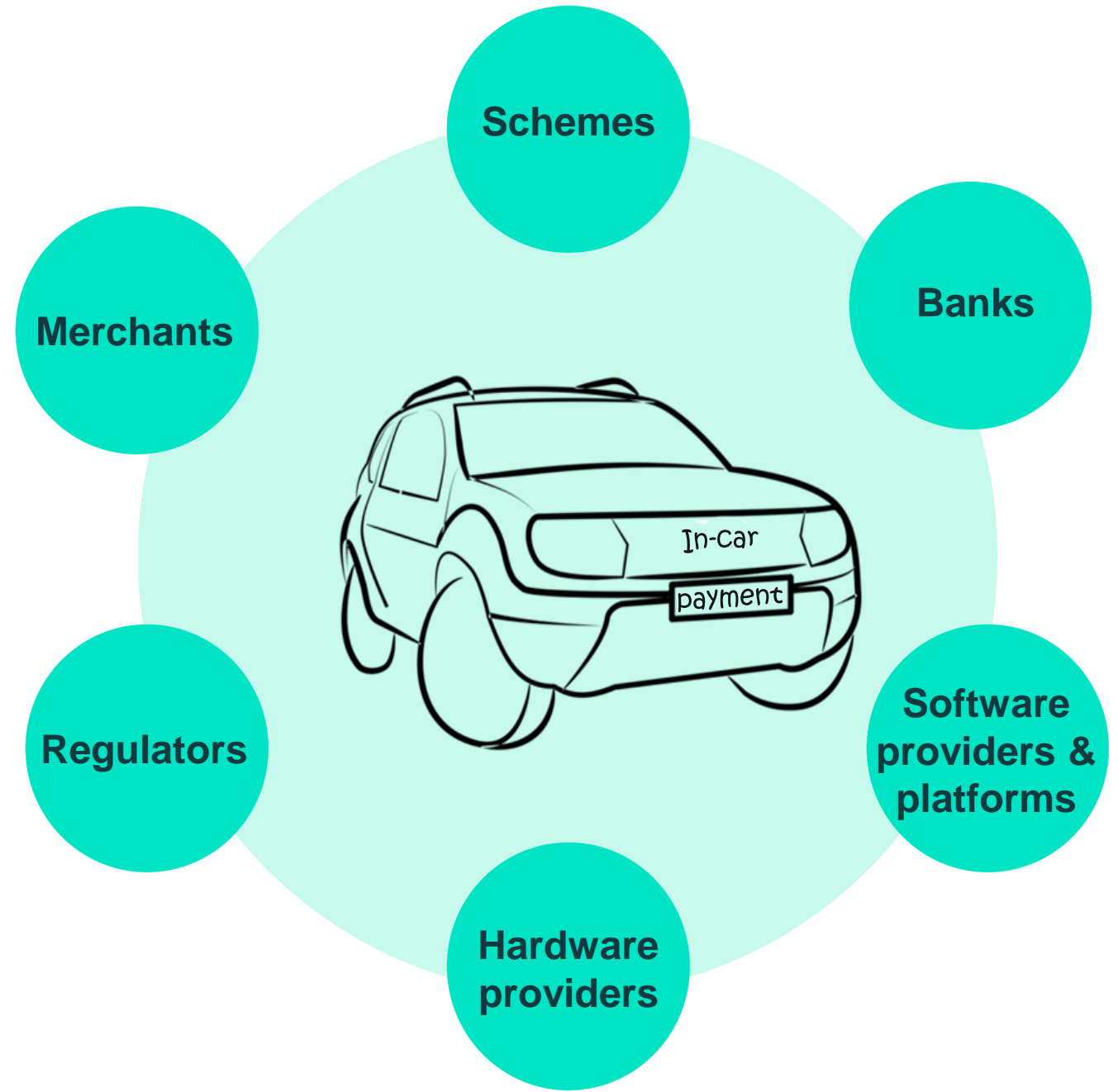
Accreditations



In-Car Payment ecosystem.

In-car payment system allows the driver to make purchases from the car without using a smartphone or other devices.

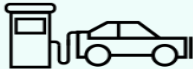




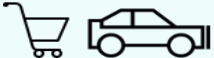


The vehicle can make the payment itself, allowing the driver to stay **safe** and **focus on the road**.





Understand the In-Car Payment environment.

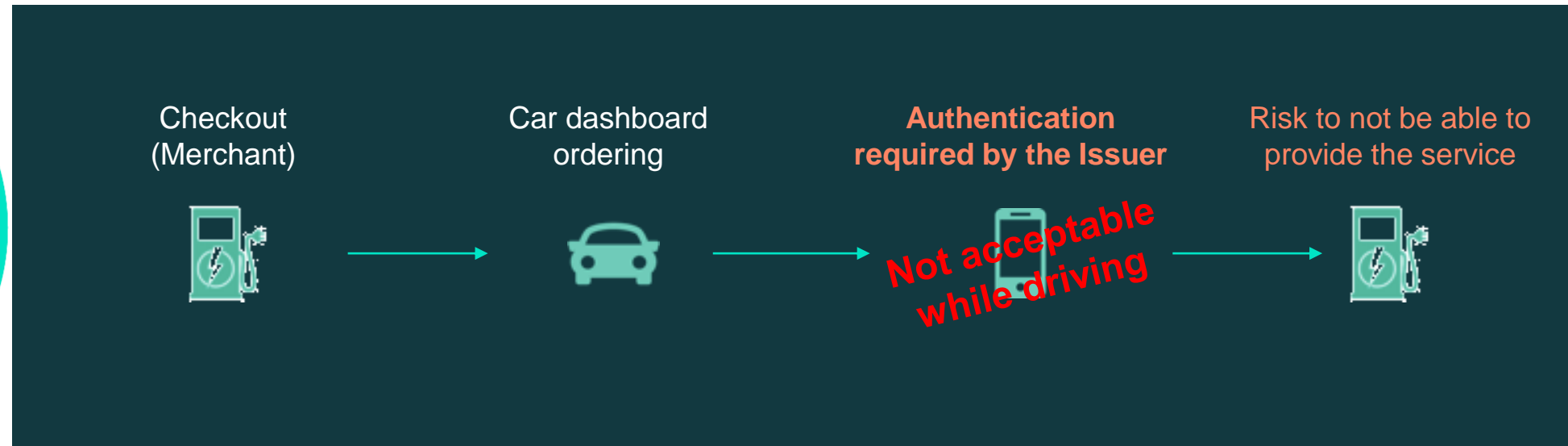
	End users	Merchants	ICP partners	Auto OEM
Demand	<ul style="list-style-type: none">• Convenient and innovative in-car experience.• Quick and safe payment transactions.	<ul style="list-style-type: none">• Additional revenue streams.• Large user network.	<ul style="list-style-type: none">• Technology for seamless payment experience.• In-car payment services evangelization.	<ul style="list-style-type: none">• Enhanced services.• Customer data.

Services	Paying at the pump 	Parking 	Tolls 	Food 
	Entertainment 	Drive pick up 	Digital assistants 	Car washes 



User experience is a key step for In-Car Payments.

It is important to take into account the specific context of in-car payments, especially while driving.





Key considerations for In-Car Payments.

Long life cycle of automobiles

- Hardware upgrade / update deployment.

Regulation

- Europe: camera system in car for safety.
- PSD2 SCA.

User interface

- In-car dashboard / mobile application.

Payment flow

- Online / in-store.
- Standards adaptation.

Authentication method

- Hands free / multi-factor / options.
- Standards adaptation.

On-boarding

- Card profiles (family, fleet)
- Fleet management
- Token storage (in-car SE or TEE, in the cloud)





Leveraging embedded biometrics for seamless authentication.

- Already used for other car services.
- Leveraging for **in-car payment experience**.
- Smooth experience with **low distraction levels**.





The use of biometrics in cars introduces several considerations.

Solution type

- Identification vs. authentication.
- Biometric template storage (in-car SE or TEE, in the cloud).
- Which modality or multi-modality.
- User management (enrollment process, number of people enrolled).

Bias

- Demographics.
- Different light conditions.
- Positions.
- Background conditions (e.g. backseat passengers).
- Accessories (e.g. sunglasses, glasses, hat).





Main standards involved.



WPSIG / WPWG

- Secure Payment Confirmation
- C-TAP



FIDO Authentication

- Authenticator
- Biometric component
- FIDO Device Onboard (FDO)



Card-Not-Present payment

- 3-D Secure
- Secure Remote Commerce
- Payment tokenization



Security

- Secure Element
- Trusted Execution Environment
- SESIP



Steps to an In-Car Payment deployment.



Market understanding.

Market study, authentication, biometric domains, and local requirements such as SCA.



Standards.

Select the best fit solution, adaptation of industrial requirements or standards depending on the use cases.



Testing strategy.

Depending on the implementation technology selected, define a testing approach which can include building the test plan and develop the test solution.



Evaluation.

Perform testing and evaluation based on the test strategy defined to ensure the functionality of the solution provides expected quality and smooth user experience.



Thank you

