

E-MOBILITY SERVICES

New economic models for transport in the digital economy

Claire Weiller

Institute for Manufacturing
University of Cambridge

NEMODE

Case Study Presentation

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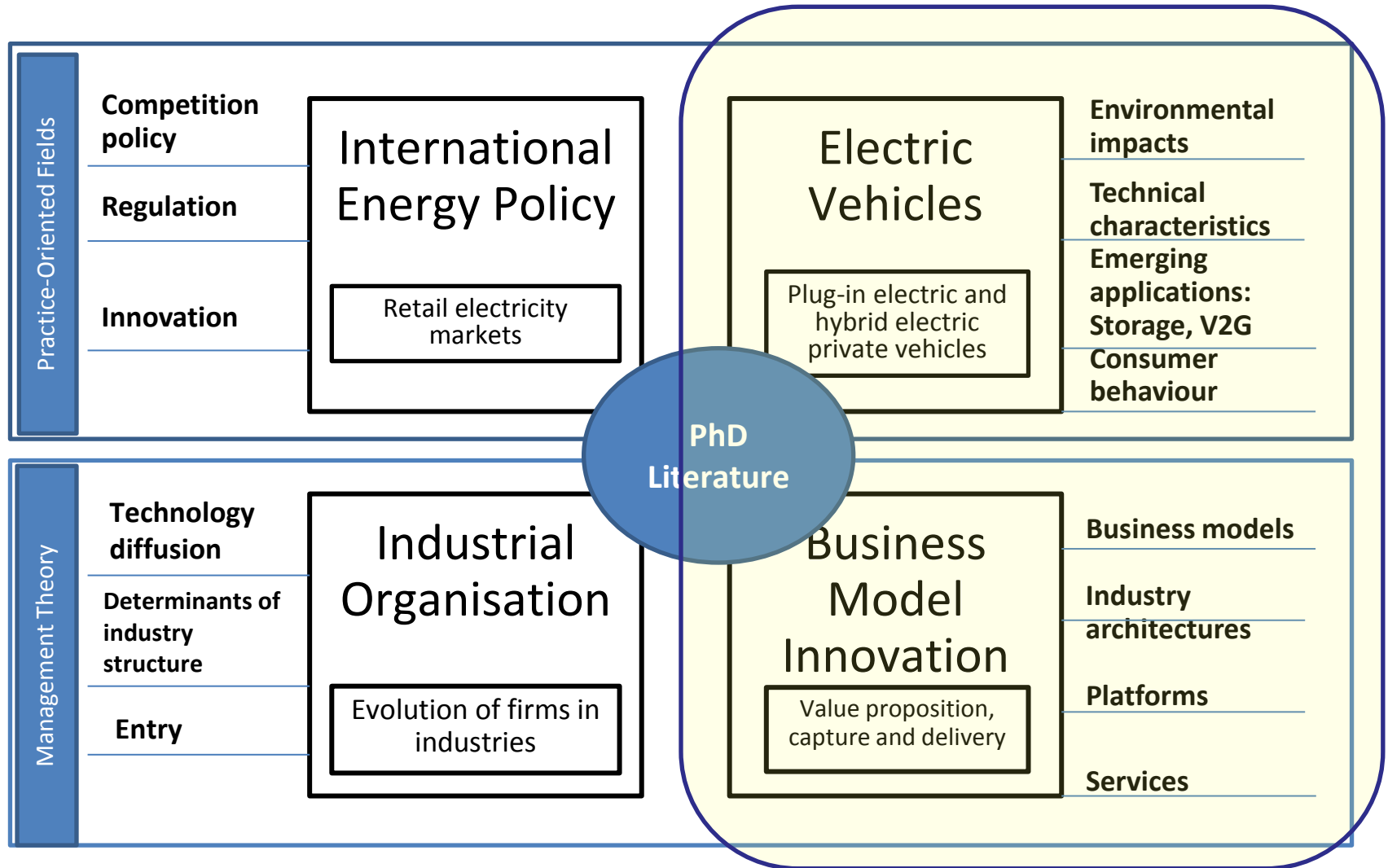




Outline

1. Literature
2. Case: Autolib' service
3. A multi-sided platform
4. The role of ICT
5. Opportunities
6. Conclusion

Theoretical perspectives



Autolib'

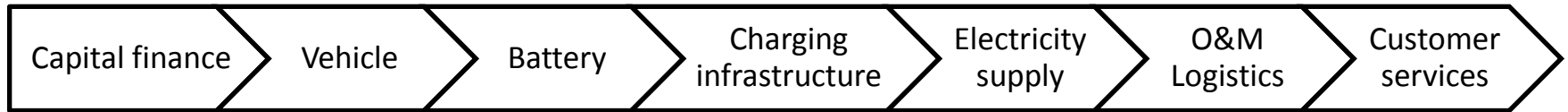
- 1740 cars
- 729 stations
- 47 municipalities

- 53,911 subscriptions
- 19,134 annual
- 147 “recharge-only”



	Year	Month	7 Days	24 Hours	Shared subscription for 4 users (16h/month)
Subscription	€ 12/month	€ 30	€ 15	€ 10	€ 165/month
1st half hour	€ 5	€ 6	€ 7	€ 7	€ 7,5 beyond the 16h
2nd half hour (pre-June 2012)	€ 4	€ 5	€ 6	€ 6	-

Supply ecosystem



SYNDICAT MIXTE AUTOLIB'



pininfarina

Bolloré

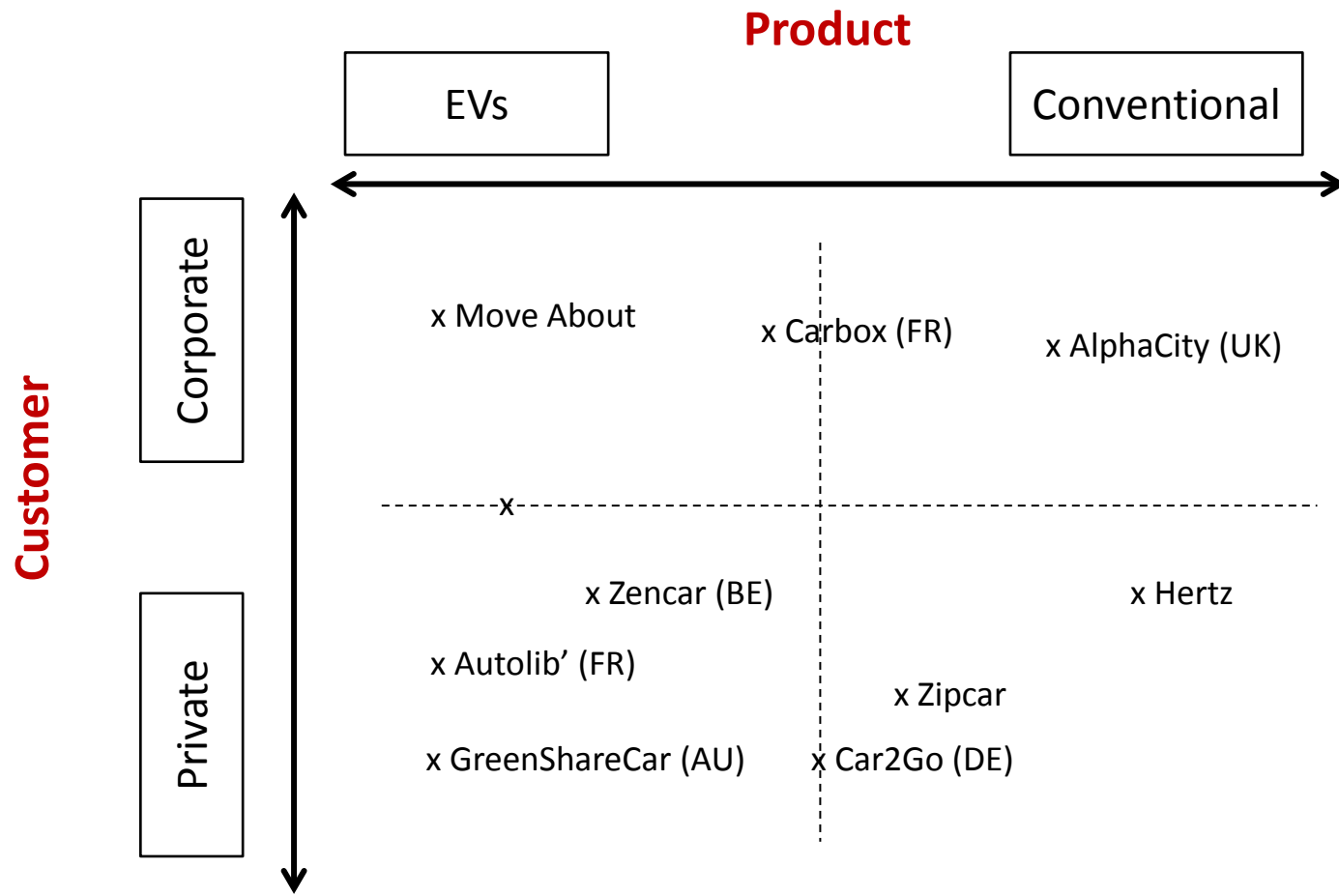


MAIRIE DE PARIS





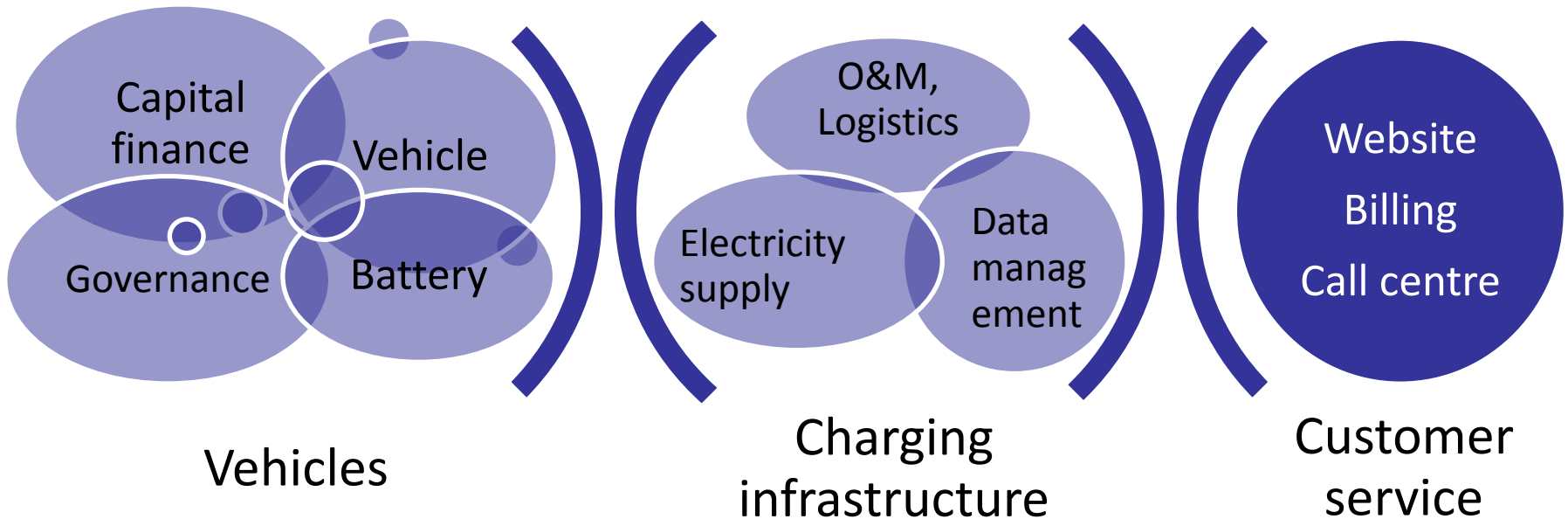
Competitive space



Bolloré's platform

A “platform”, or multi-sided market:

- End-users & municipalities
- Potentially others



A “network” market

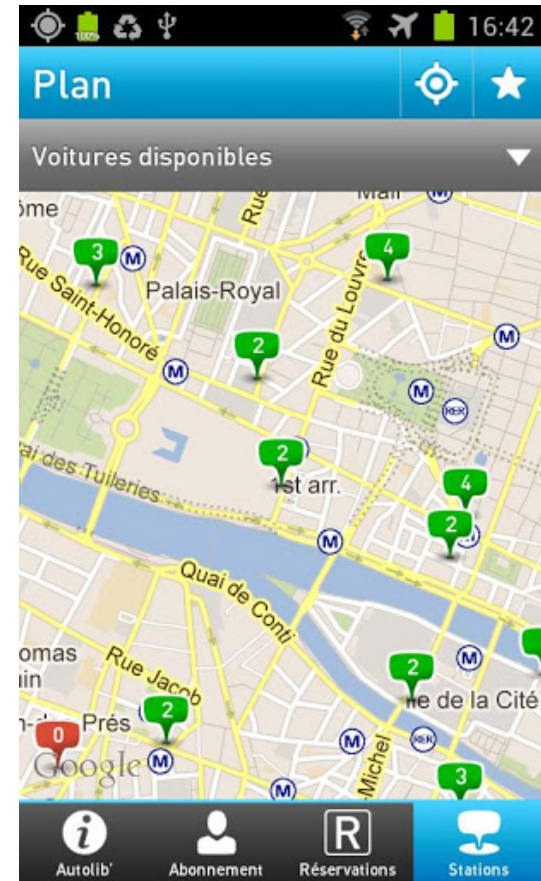
- High sunk costs
- Limited replicability
- Vertical integration
- Monopolistic
- Undifferentiated product
- Single provider
- Positive consumption “network effect”
(Geographic expansion)

Without:

- High switching costs (?)
- True competition: public service!

ICT 1: Value proposition

- In-vehicle
- Parking reservation
- Online reservation
- Smart-phone app



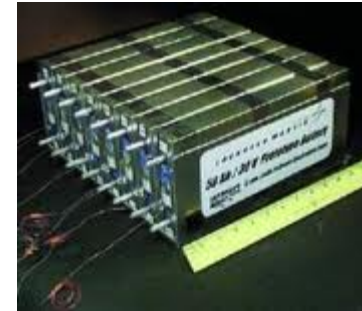
ICT 2: Value creation and capture

- Data management and optimisation
- User data
- Smarter energy applications?



Strategic opportunities

- Battery technology
 - Energy storage
 - R&D synergies with other uses
 - IP/ Licencing value (OEMs)
- Commercialisation of their EV
- Knowledge and experience



Electricity storage

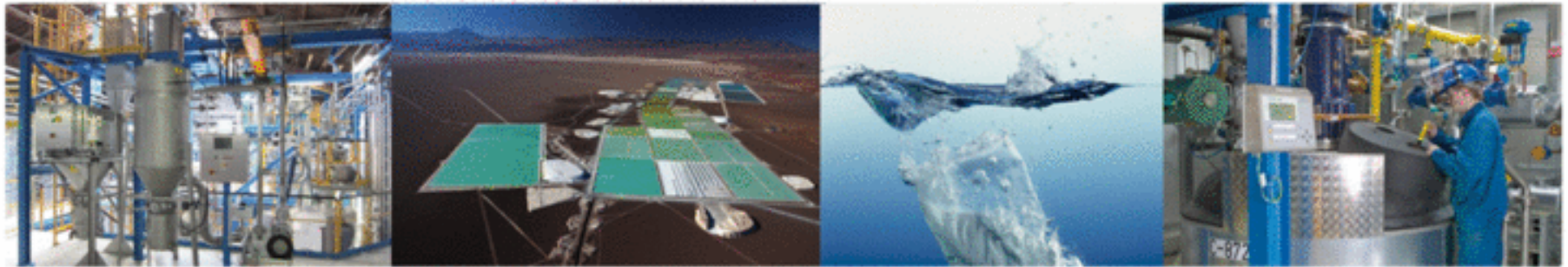
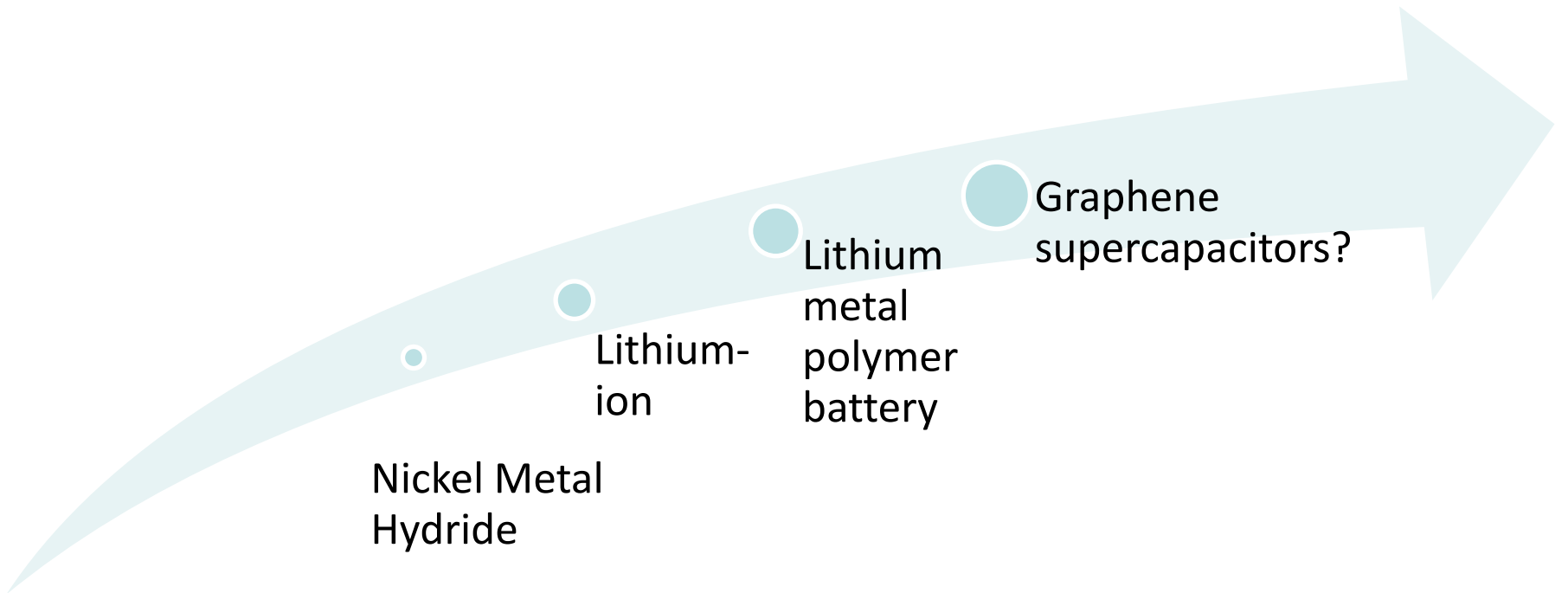
“The market for energy storage is estimated at \$500 bn.”
(Managing Director, Autolib’)



“EVs could have the role of a load controllable on demand, that could uptake the extra energy to stabilize the grid”

(David Newbery, Prof. of Economics, Cambridge)

Synergies for battery R&D



Conclusions

- E-mobility services example of an ICT-enabled business model
- Long-term strategic opportunities in the EV sector incited Bollore to enter a loss-inducing project
- The service as designed in Paris exhibits characteristics of a network market. But to become a true “platform”, the system would have to enable competition in vehicle supply/access

Implications for theory

- Business model innovation for complex service
- Shift to mobility services must be complemented with value-added propositions
- New technology introductions facilitated by government and single-provider platform economics

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