



Automotive cyber security - opportunity or threat?

NMI Automotive Security Conference

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Connected & Autonomous Vehicles at KPMG

Cyber Security

- Internet of Things (IoT) is a new market with an immature security culture. KPMG is an industry leader in Security Advisory across many sectors.

Innovation / Industry 4.0

- Focus on Start-Ups and Corporate Venturing, acting as trusted advisor across sectors and company size. Our in-house 'Innovation Factory' helps enable organisations to drive and manage agile change.

Data Science

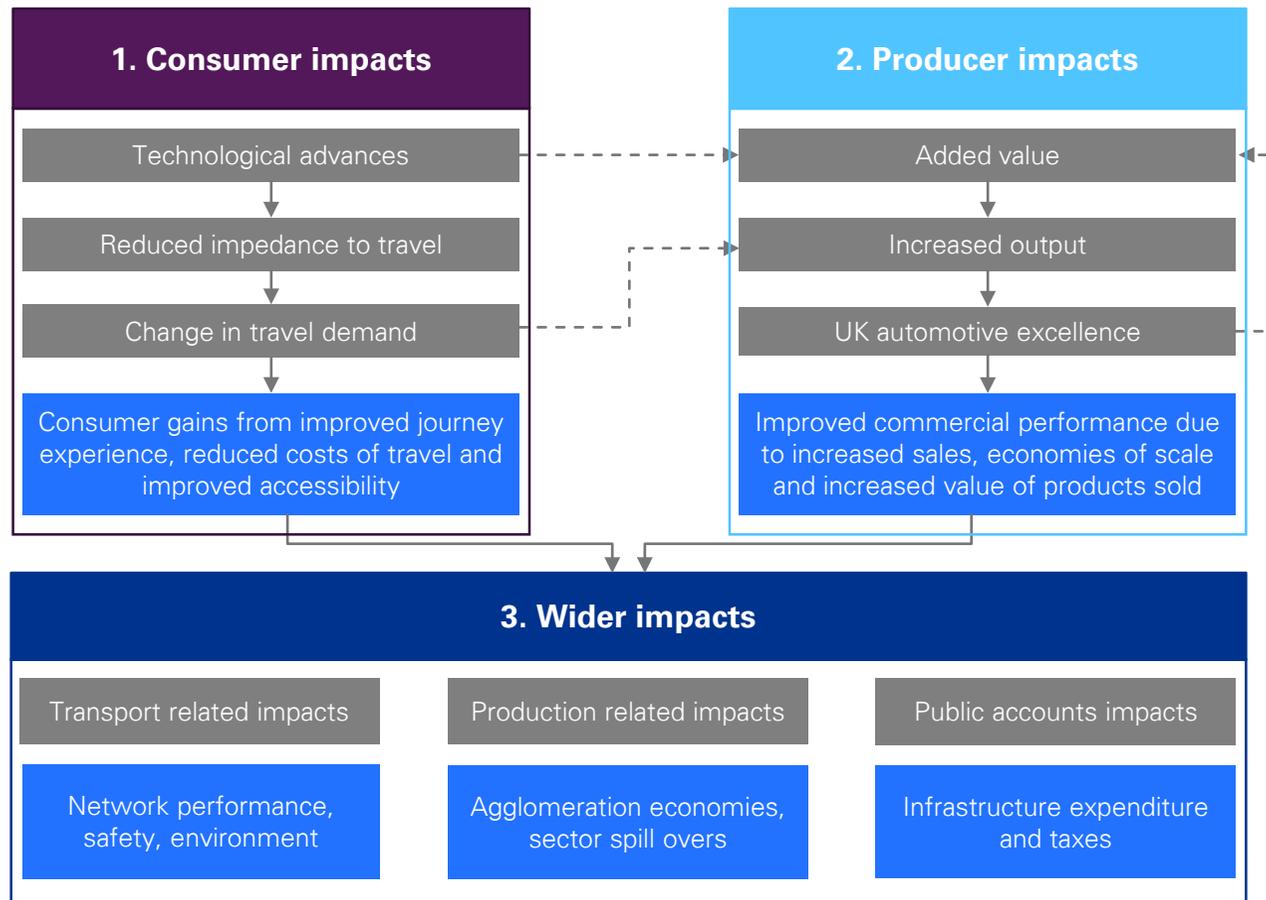
- Strategic alliances such as McLaren Applied Technologies allow KPMG to offer expertise and bespoke services for unparalleled insights and predictive analysis.

Strategy

- Our breadth of expertise allows KPMG to develop methodology drawn from a wide range of industries, with a focus on implementation and execution.



UK Economic impact study - methodology



Source: KPMG 2015

The £51 billion prize

Impact of Connected and Autonomous Vehicles in 2030

+£51bn



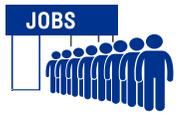
Value added annually by 2030 (at 2014 prices)

+1%



Impact on GDP (2030)

+25,000



Jobs in automotive manufacturing created

+320,000



Additional jobs impact

+2,500

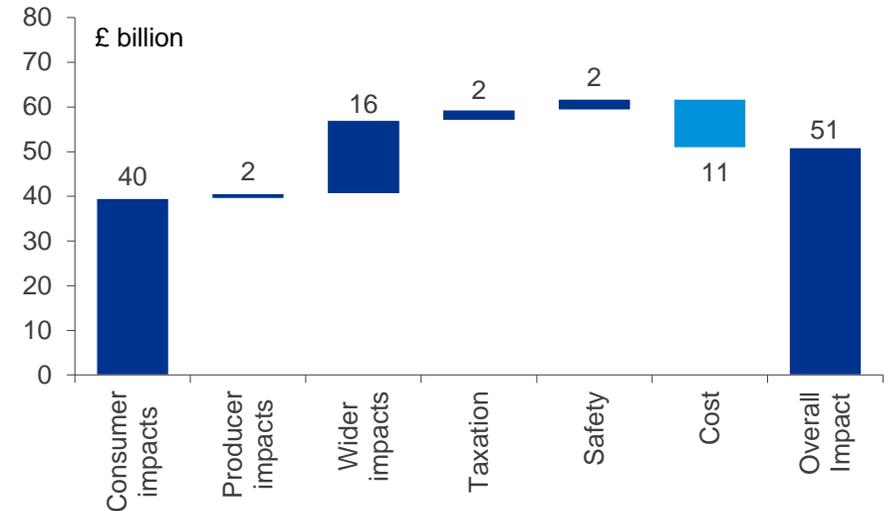
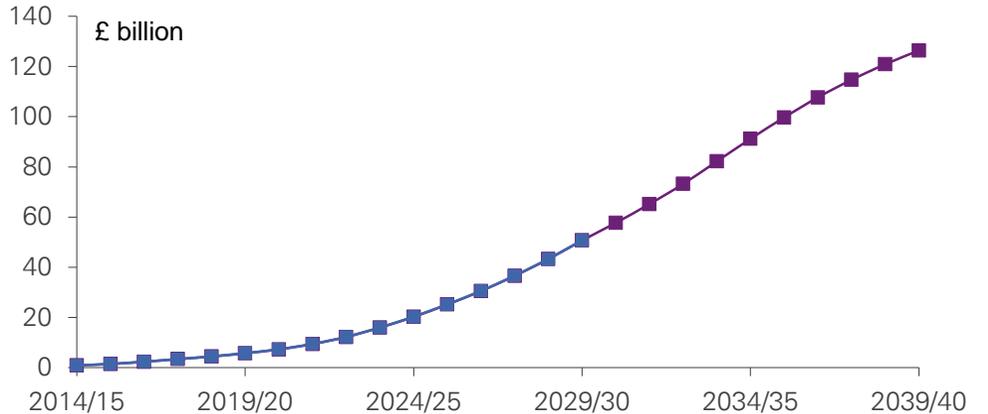


Lives saved (2014-2030)

+25,000



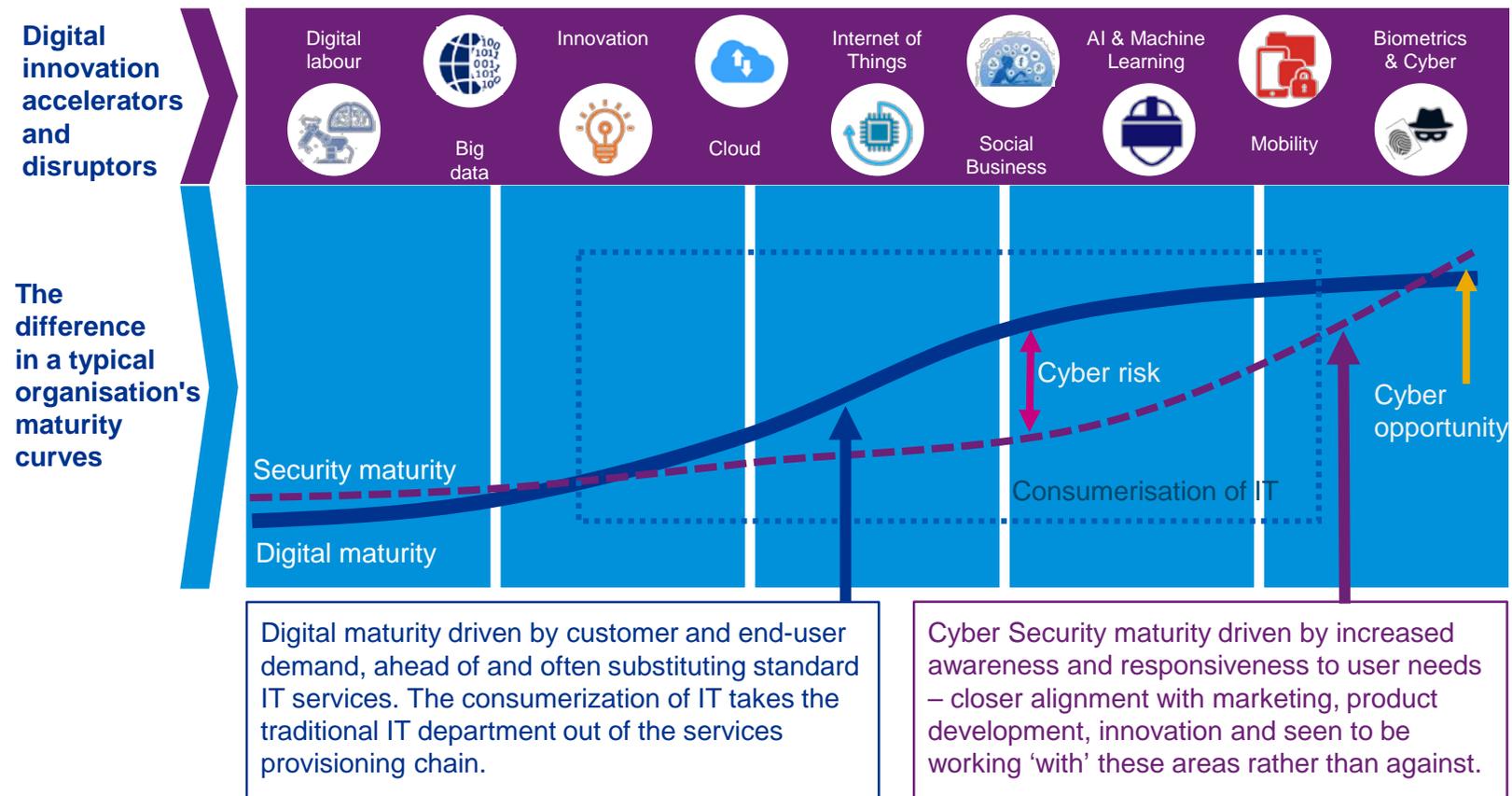
Serious accidents prevented (2014-2030)



Source: KPMG 2015

With all this excitement..

Clients have typically seen faster transformation of their businesses to take advantage of digital opportunities than their security organisations:



Four key threat areas



Motive:
Corporate
humiliation



Motive:
Financial gain/
Terrorism

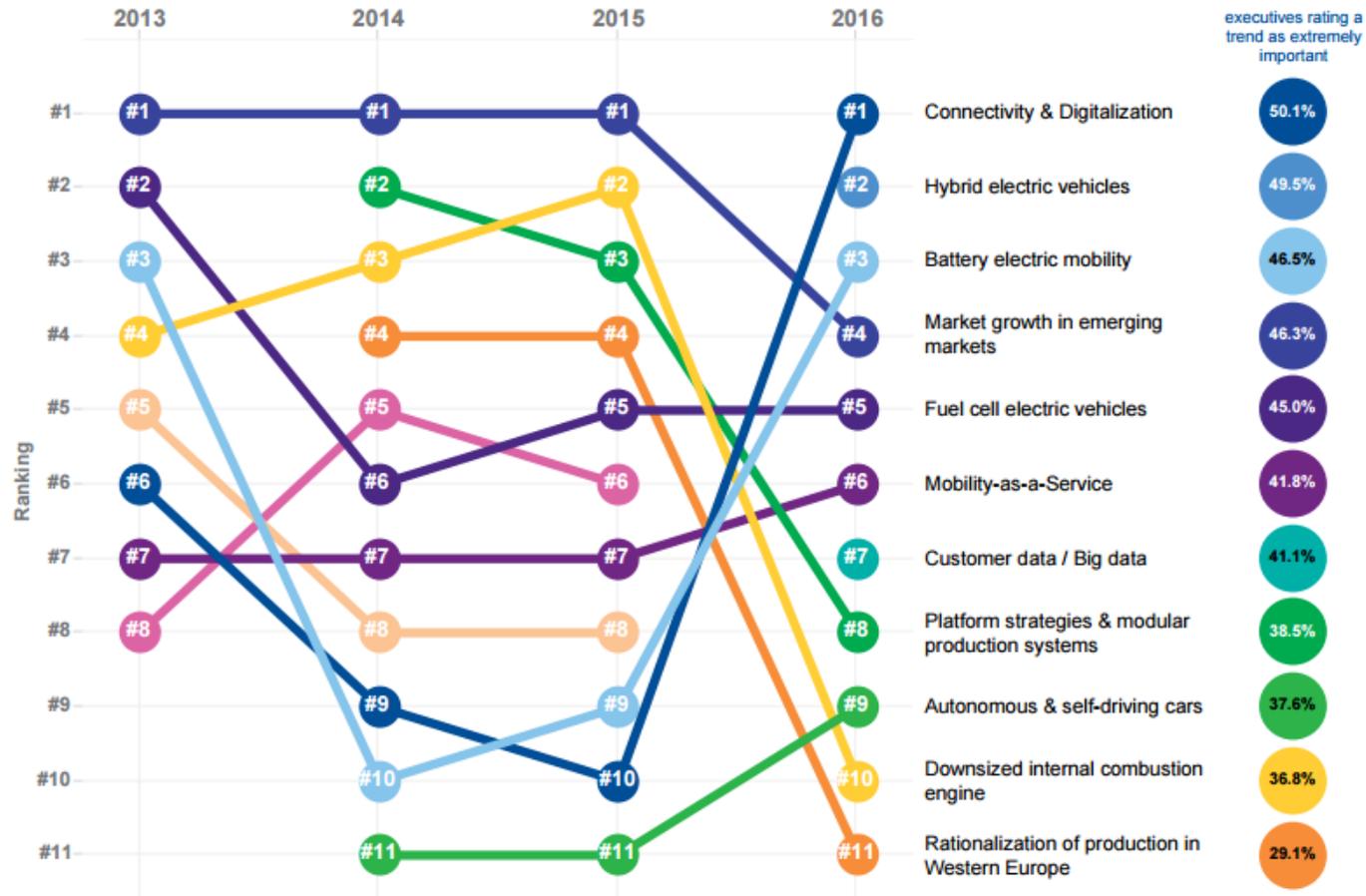


Motive:
Political/
Commercial
advantage



Motive:
Grudge/
Financial gain

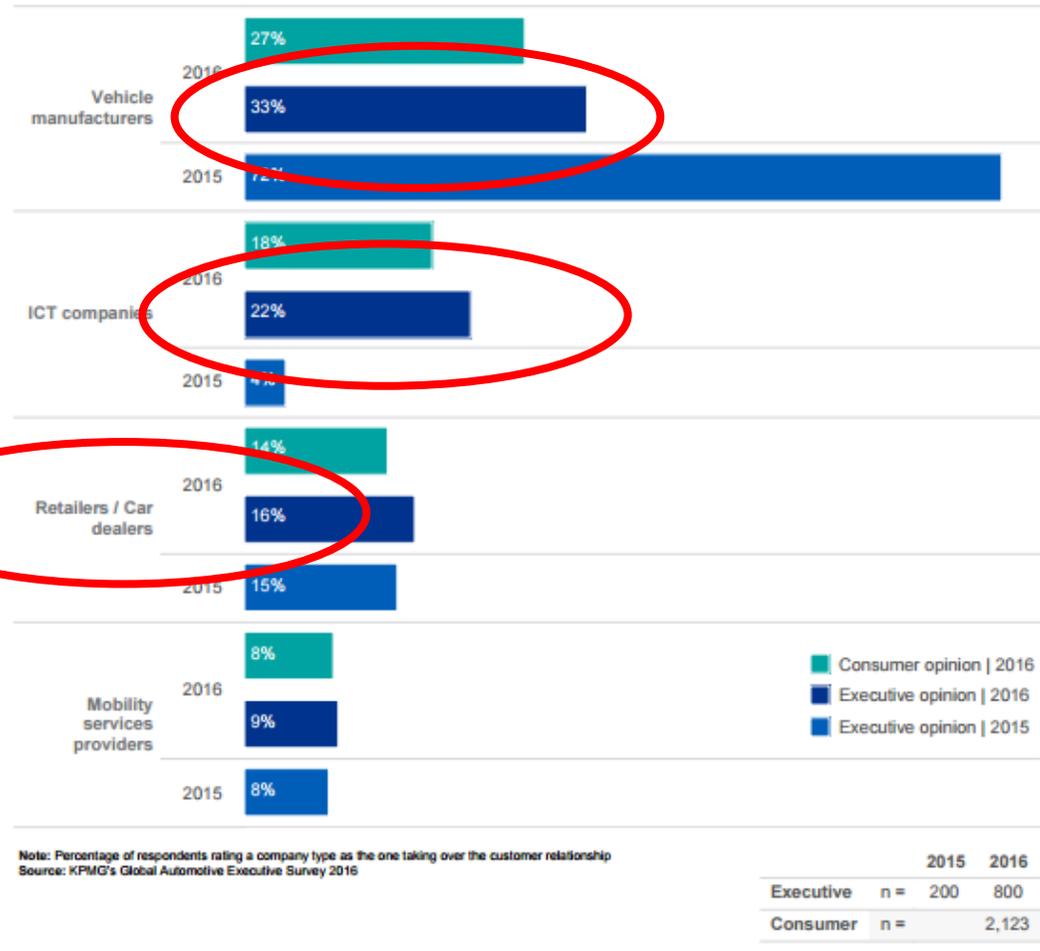
What are the key trends to 2025?



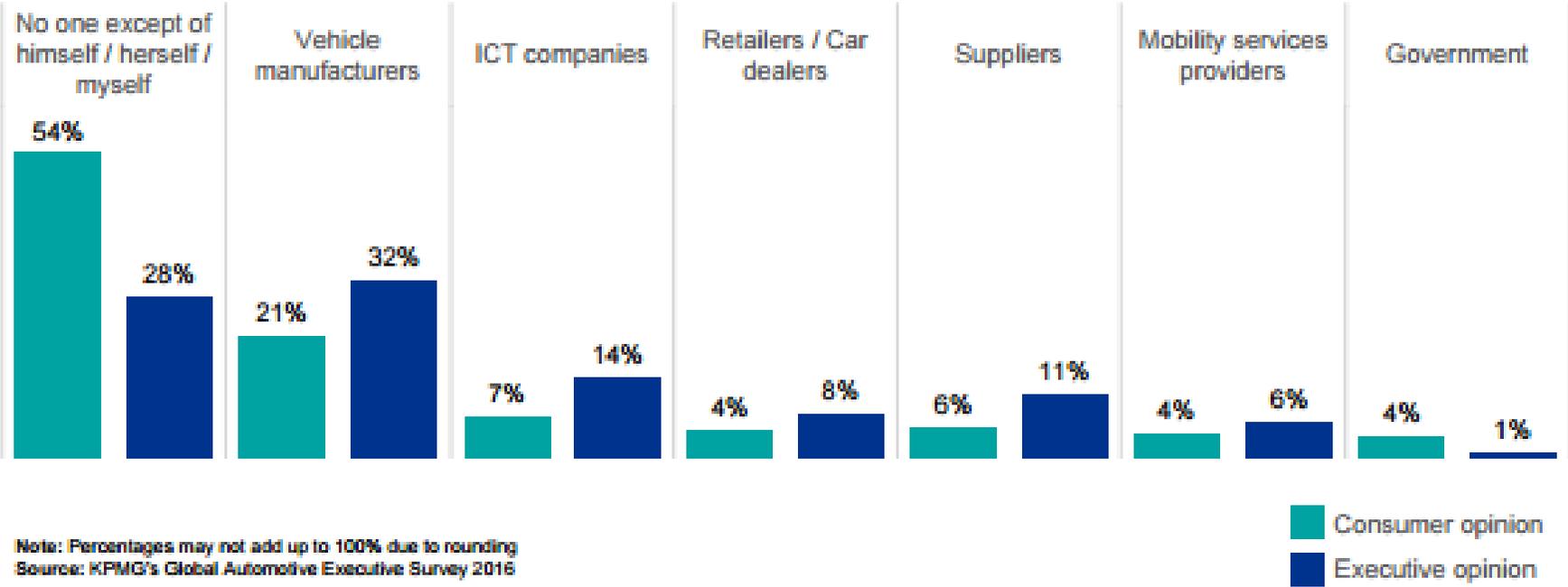
Source: KPMG's Global Automotive Executive Survey 2016

Who will retain the customer relationship?

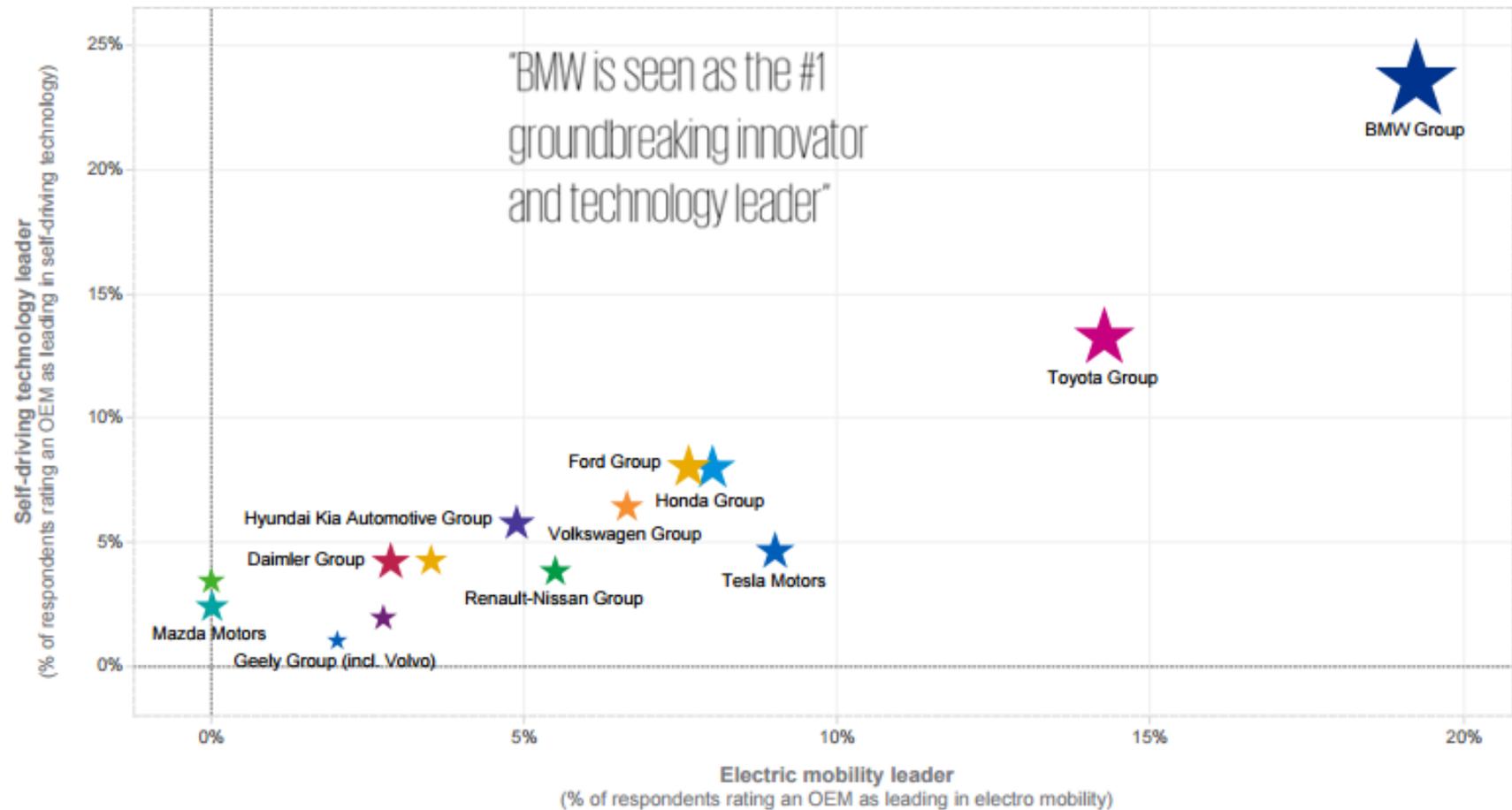
Overlooked?



Who will consumers trust with their data?



Who are the innovators?



Source: KPMG Global Executive Survey 2015

Design for security



Intelligence led



Joint approach



**Cyber security has
no borders**



**Cyber security is not
an IT issue**



**Confidence
ensures trust**

Where are you on the journey?



How your priorities change...

Limited awareness	Discussion of what it means for firm	Investing to improve	Boards demand better risk discussion and MI	Lead as part of the community
Reliance on basic security technology	Reaching out for support/advice	Still adopting point technical solutions	Move towards structured security programmes	Build a cyber ecosystem with clients/suppliers
No controls or compliance process	Policies in place and basic security processes	Strengthening policies and compliance	Build out security operations and TVM	Intelligence led approach linked to business
Seen as a technology issue	Often driven by regulatory concerns	Initial security architecture	Ramp up testing	Cyber resilience
		Education and awareness campaigns begin	Early stage supply chain security initiatives	Risk quantification and mitigation strategy
				Technology enabled and data driven

Further information

Full UK economic impact report can be found here:

<https://home.kpmg.com/uk/en/home/insights/2015/03/connected-and-autonomous-vehicles.html>

Global executive survey:

<https://home.kpmg.com/xx/en/home/insights/2015/12/kpmg-global-automotive-executive-survey-2016.html>

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