



KPMG's 19th consecutive

Global Automotive Executive Survey 2018

In every industry there is a 'next' –
See it sooner with KPMG

www.kpmg.com/GAES

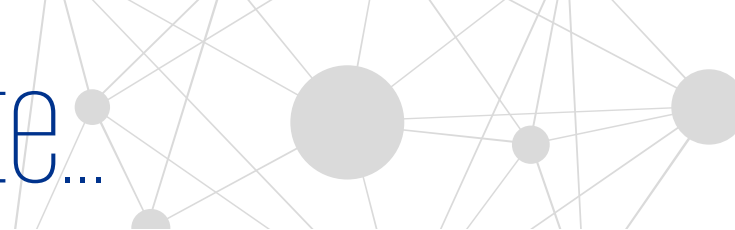
Ricardo BACELLAR
KPMG Brazil Head of Automotive

Seminário AutoData
MEGATENDÊNCIAS DO SETOR AUTOMOTIVO
OS DESAFIOS DE 2018 COM OU SEM O ROTA 2030
05 MARÇO • Hotel Transamérica • 08h30 às 17h30



Mar / 2018

We have what to celebrate...



ISTOE Dinheiro

EDIÇÃO Nº 1055 02.02



ÚLTIMAS REVISTA TV DINHEIRO ECONOMIA NEGÓCIOS MERCADO DIGITAL FINANÇAS INVESTIDOR ESTILO BLOGS ÍNDICES



Entrevista

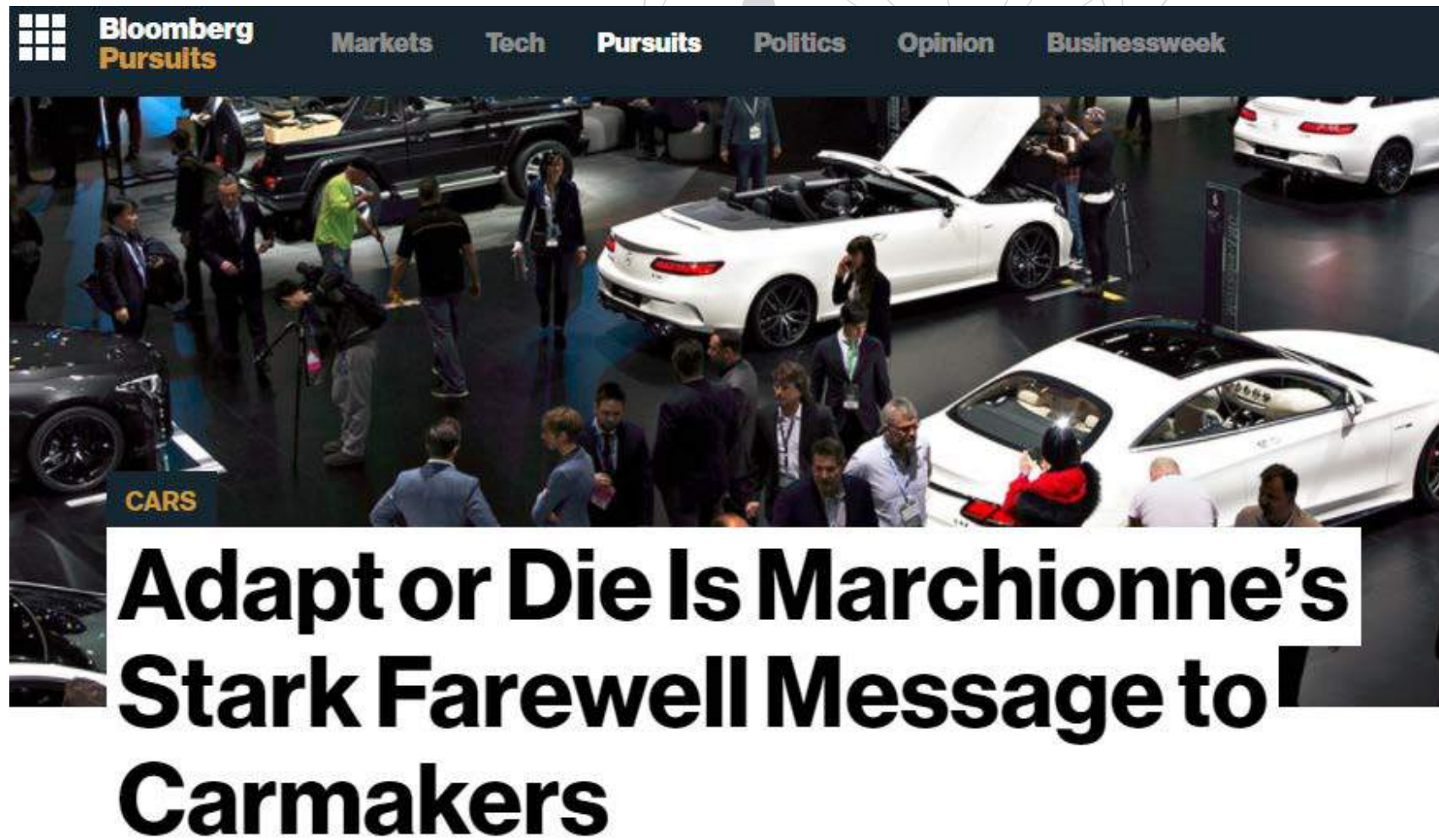


ANTONIO MEGALE, PRESIDENTE DA ANFAVEA


Começamos 2018 com um crescimento de 23%

Gabriel Reis

... But there's much more to be done!



... But there's much more to be done!

A stylized illustration of a city skyline at night. In the foreground, a large digital billboard with a green frame and a black screen displays the text "What will the future mobility ecosystem look like?" in glowing yellow pixelated font. The billboard is decorated with horizontal bands of green, yellow, and white. The background shows a city skyline with various buildings, some with lit windows, under a dark blue sky with a few clouds. The overall style is retro and digital.

What will the future
mobility ecosystem
look like?

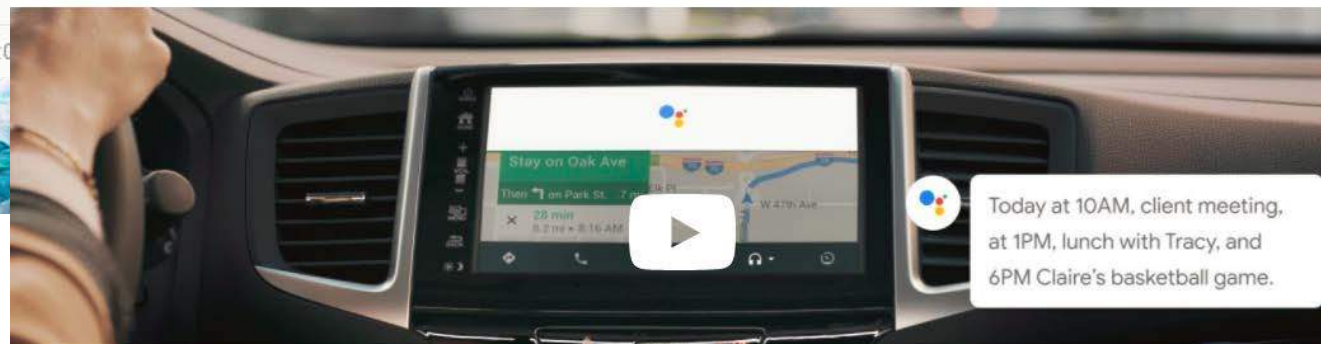
But there's much more to be done!



New devices and more: what's in store for the Google Assistant this year

In your car

The Assistant can also help you in the car, so that you can keep your hands on the wheel and eyes on the road. Starting this week in the U.S., the Assistant is coming to Android Auto.



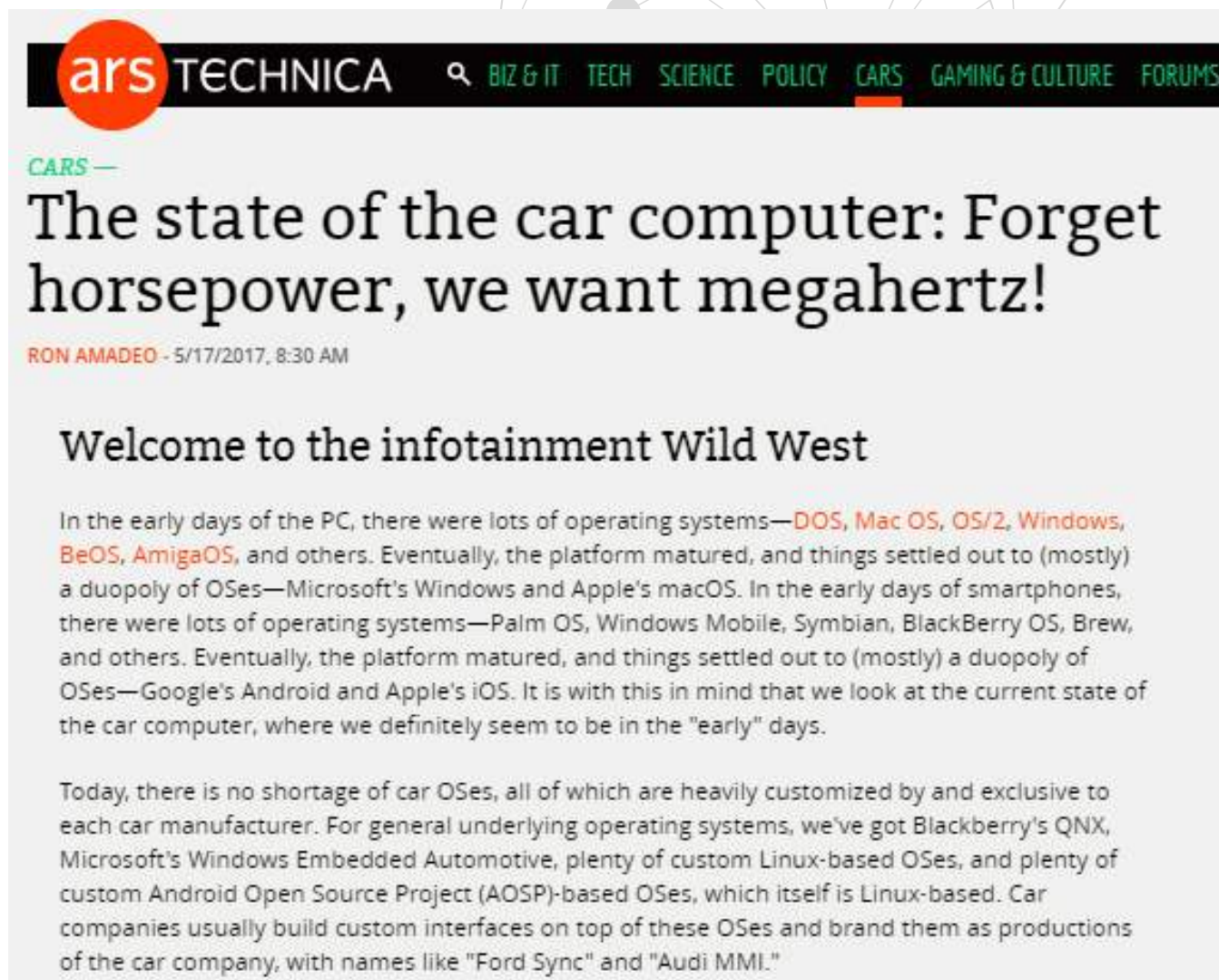
report has been added to

is primarily focused toward the impact
the sector and some of its related

BTOPIC ▼
a Management

Connected cars and things

But there's much more to be done!



The screenshot shows the top of an Ars Technica article. The navigation bar includes links for BIZ & IT, TECH, SCIENCE, POLICY, CARS (which is highlighted), GAMING & CULTURE, and FORUMS. The article title is 'The state of the car computer: Forget horsepower, we want megahertz!' and the author is Ron Amadeo, dated 5/17/2017, 8:30 AM. The sub-header is 'Welcome to the infotainment Wild West'. The main text discusses the evolution of operating systems from the early PC days (DOS, Mac OS, OS/2, Windows, BeOS, AmigaOS) to the smartphone era (Palm OS, Windows Mobile, Symbian, BlackBerry OS, Brew, Google's Android, and Apple's iOS), and then applies this context to the current state of car computers, noting that they are in the 'early' days with many heavily customized, manufacturer-exclusive OSes like BlackBerry's QNX, Microsoft's Windows Embedded Automotive, custom Linux-based OSes, and custom Android Open Source Project (AOSP)-based OSes.

ars TECHNICA 🔍 BIZ & IT TECH SCIENCE POLICY **CARS** GAMING & CULTURE FORUMS

CARS —

The state of the car computer: Forget horsepower, we want megahertz!

RON AMADEO - 5/17/2017, 8:30 AM

Welcome to the infotainment Wild West

In the early days of the PC, there were lots of operating systems—DOS, Mac OS, OS/2, Windows, BeOS, AmigaOS, and others. Eventually, the platform matured, and things settled out to (mostly) a duopoly of OSes—Microsoft's Windows and Apple's macOS. In the early days of smartphones, there were lots of operating systems—Palm OS, Windows Mobile, Symbian, BlackBerry OS, Brew, and others. Eventually, the platform matured, and things settled out to (mostly) a duopoly of OSes—Google's Android and Apple's iOS. It is with this in mind that we look at the current state of the car computer, where we definitely seem to be in the "early" days.

Today, there is no shortage of car OSes, all of which are heavily customized by and exclusive to each car manufacturer. For general underlying operating systems, we've got BlackBerry's QNX, Microsoft's Windows Embedded Automotive, plenty of custom Linux-based OSes, and plenty of custom Android Open Source Project (AOSP)-based OSes, which itself is Linux-based. Car companies usually build custom interfaces on top of these OSes and brand them as productions of the car company, with names like "Ford Sync" and "Audi MMI."

But there's much more to be done!



... But there's much more to be done!



John **orders lunch** for
pick-up through his
in-car app

But there's much more to be done!

≡ **EXAME** ↗ Revista EXAME WhatsApp Bolsonaro Agronegócio EXAME 50 Anos Clube

NEGÓCIOS

Acionistas fecham acordo para vender Sem Parar por R\$ 4 bi

Todos os acionistas da STP teriam chegado a um acordo para vender 100% do negócio

Por **Mônica Scaramuzzo**

🕒 5 mar 2016, 09h36



But there's much more to be done!



But there's much more to be done!

REUTERS World Business Markets Politics TV

#DEALS

OCTOBER 12, 2017 / 9:23 AM / 4 MONTHS AGO

Shell buys NewMotion charging network in first electric vehicle deal



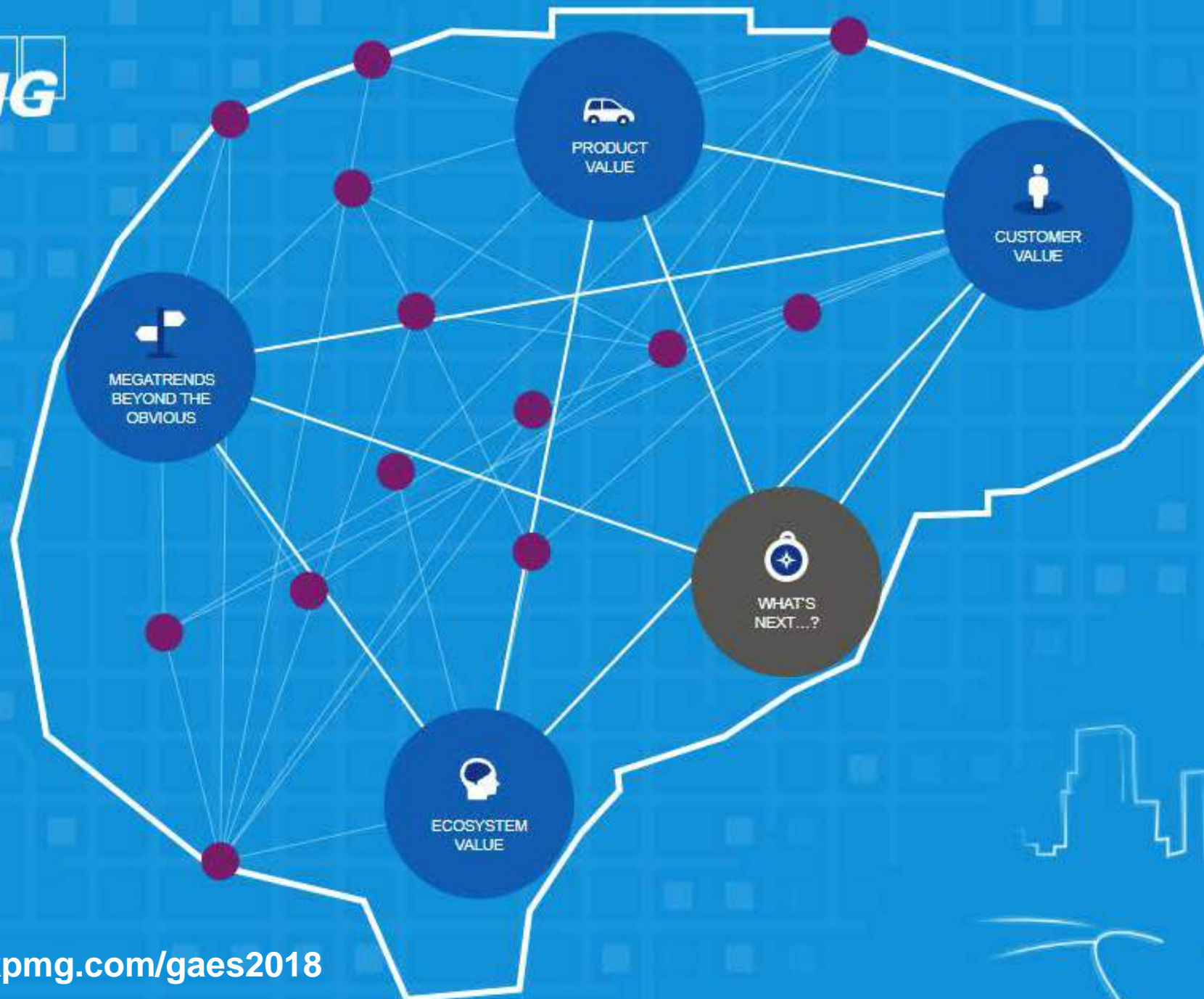
REUTERS World Business Markets Politics TV

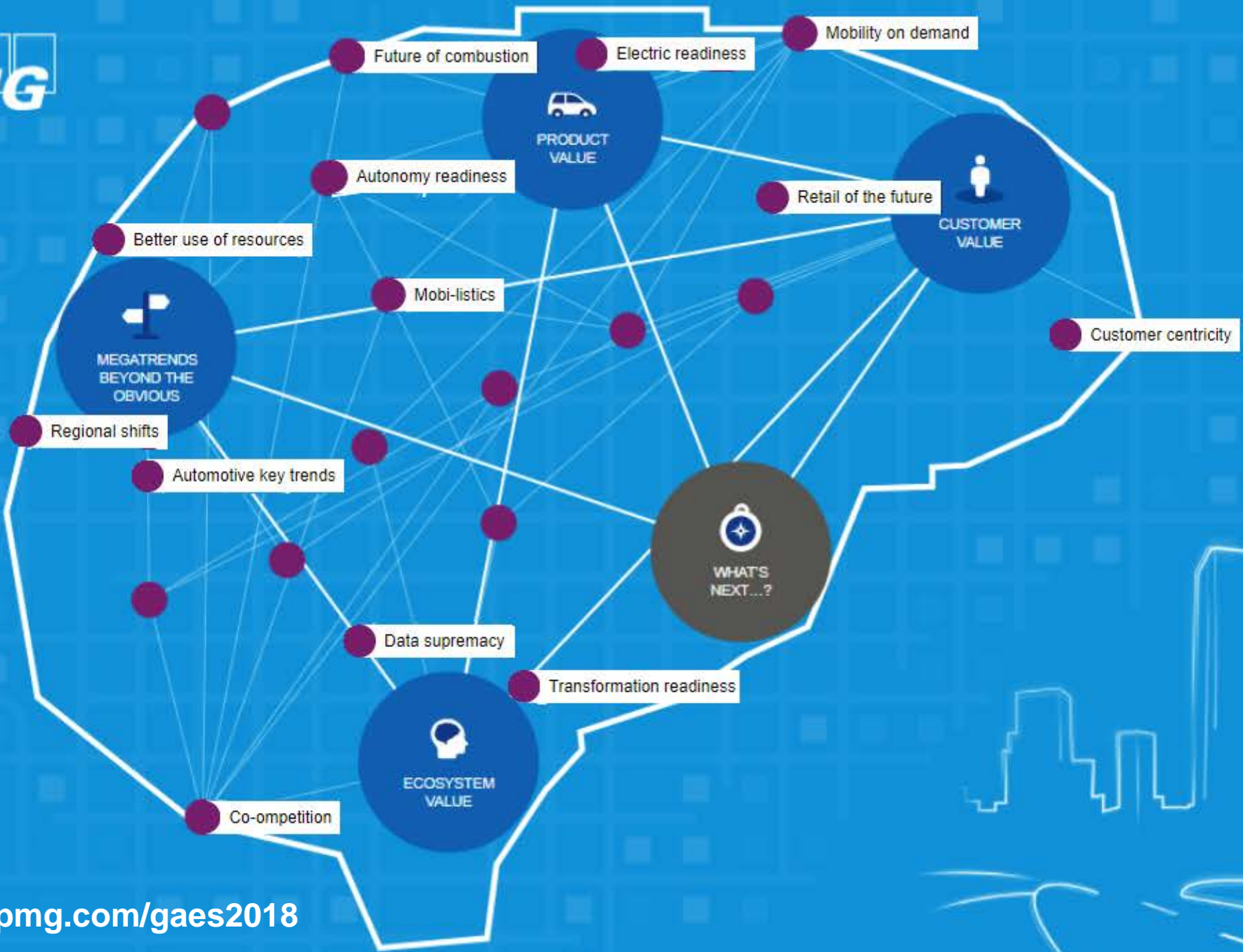
#TECHNOLOGY NEWS

JANUARY 30, 2018 / 8:17 AM / 2 DAYS AGO

BP invests \$5 million in FreeWire in electric vehicle move





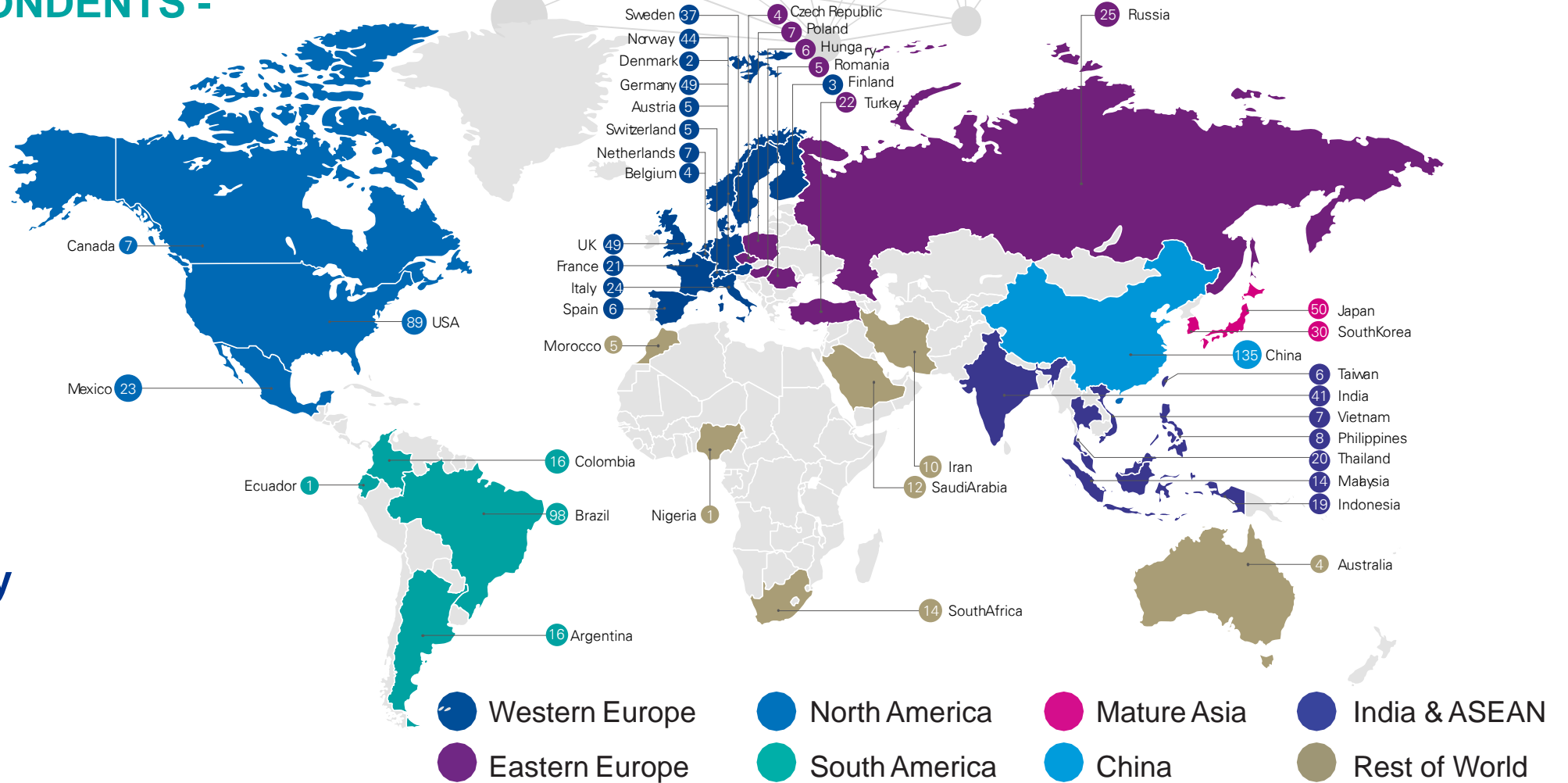


About the executive survey

For the 2018 survey we gathered the opinions of more than **900 executives** from **43 countries**.

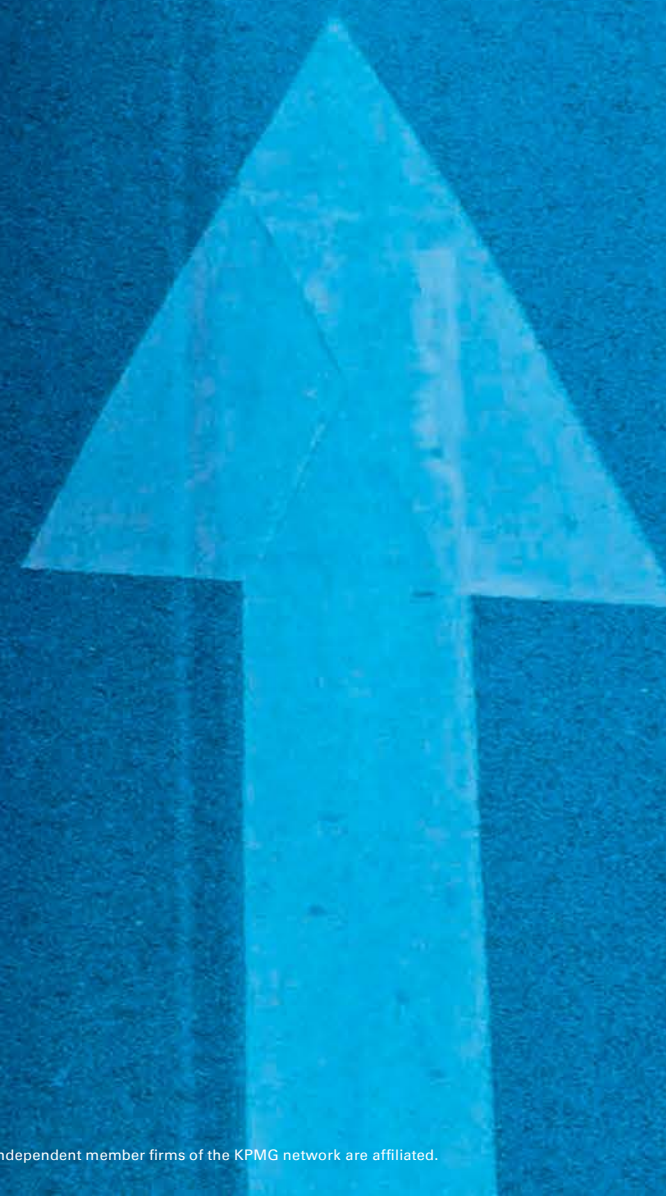
TOP 5 RESPONDENTS - EXECUTIVES

- 135 China
- 98 Brazil
- 89 USA
- 50 Japan
- 49 Germany
- 49 UK

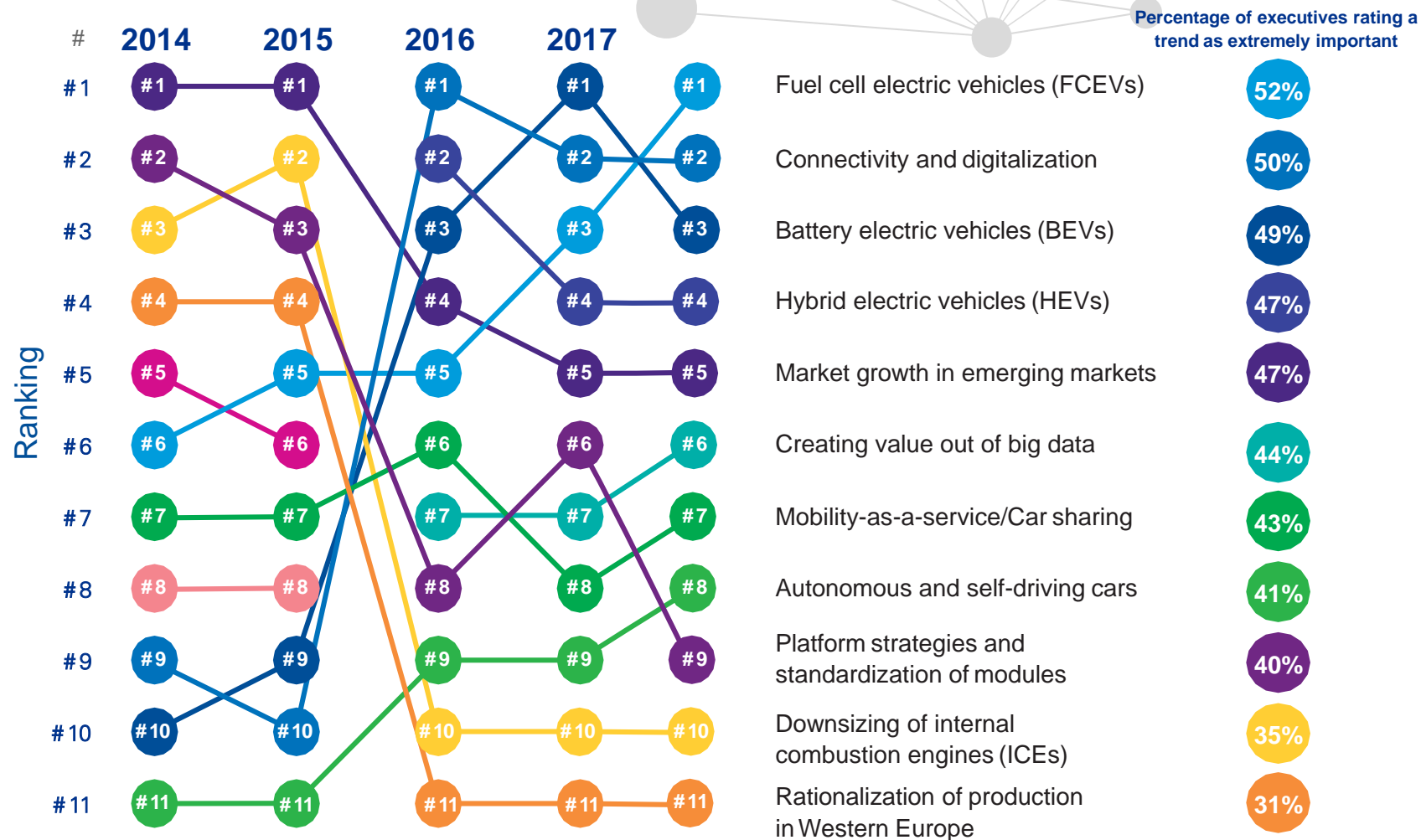


Note: Map shows number of respondents from each country | **Source:** KPMG's Global Automotive Executive Survey 2017

Key trends until 2025

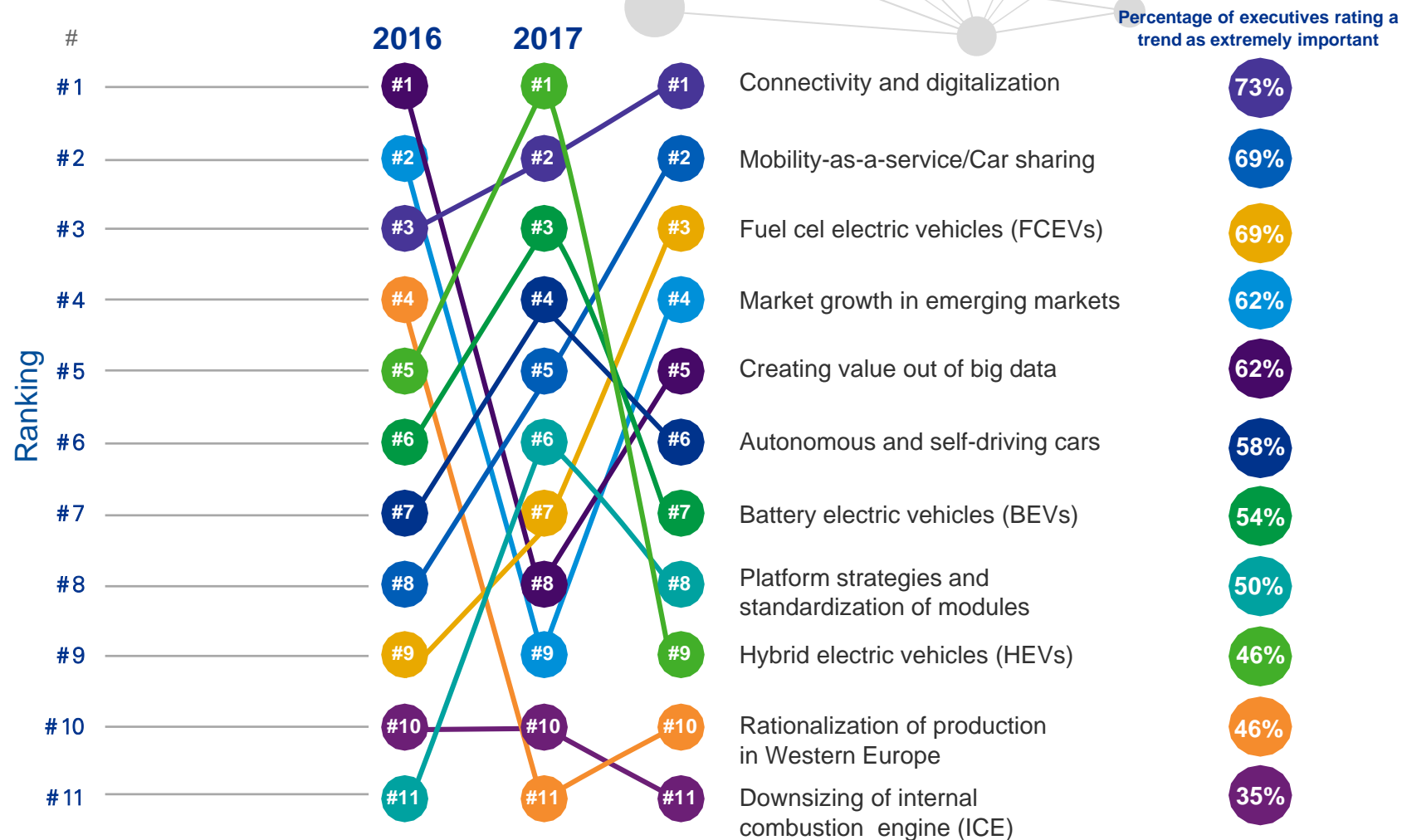


Key trends until 2025



Source: KPMG's Global Automotive Executive Survey 2017

Key trends until 2025



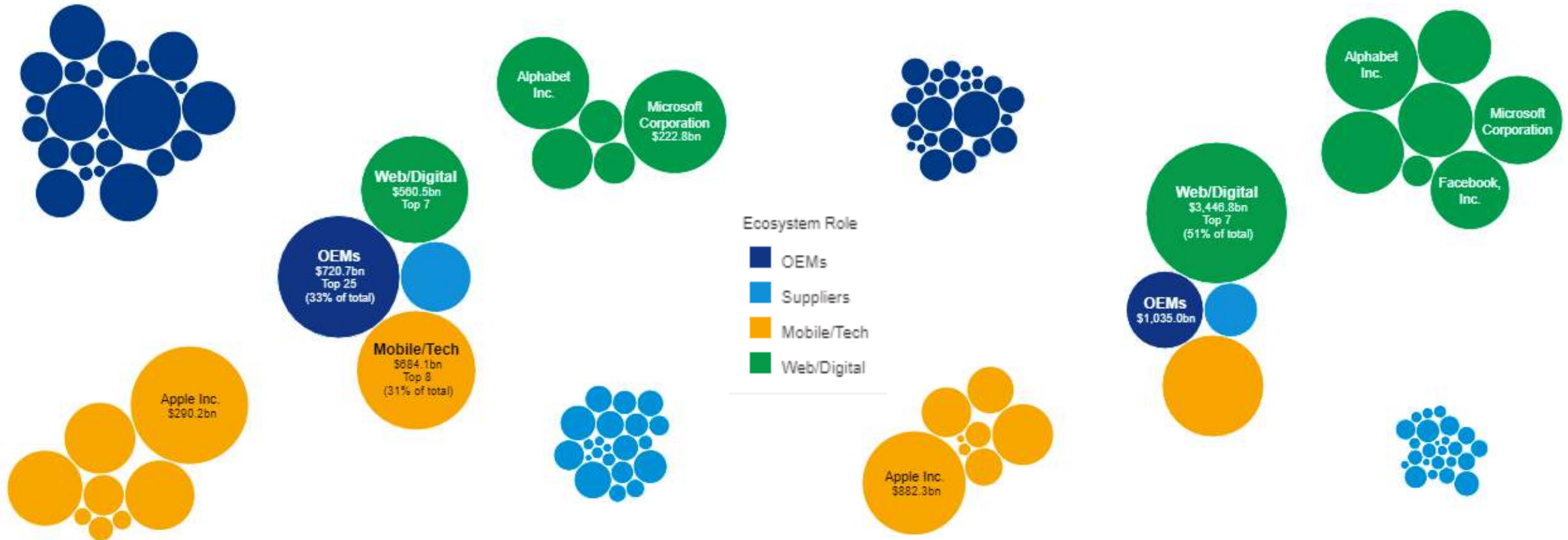
Source: KPMG's Global Automotive Executive Survey 2017

The auto industry has to transform the business

Total market capitalization (in \$bn)

2010

2017

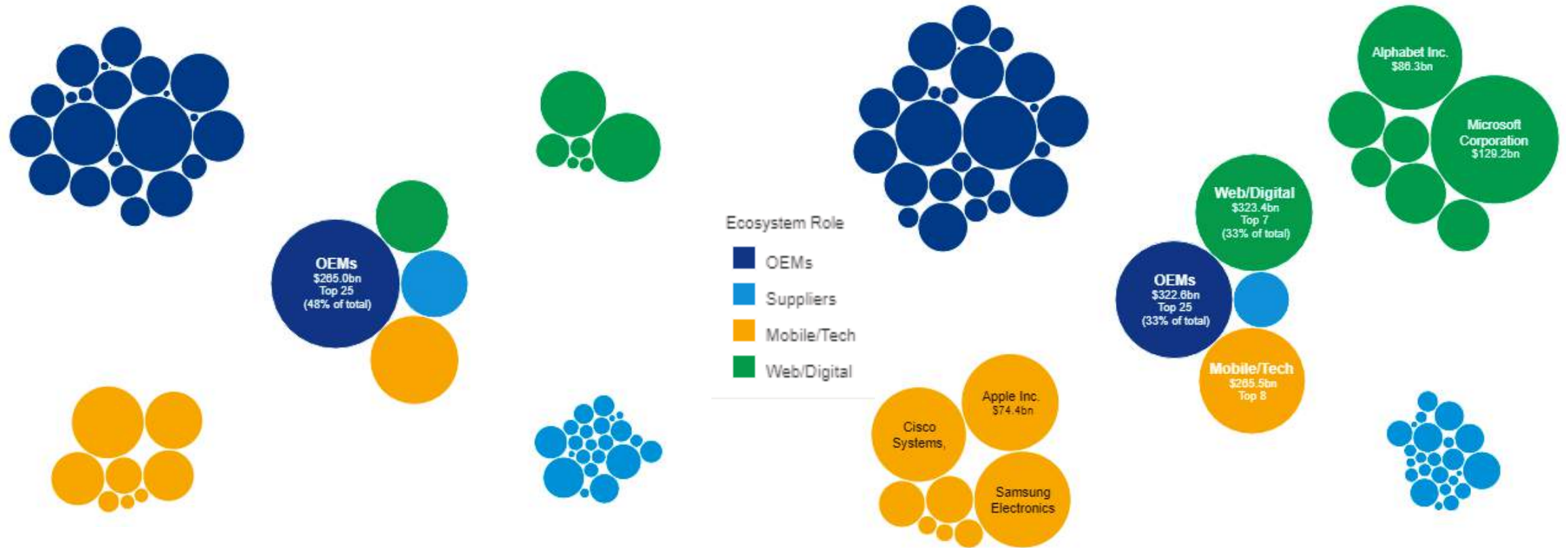


The auto industry has to transform the business

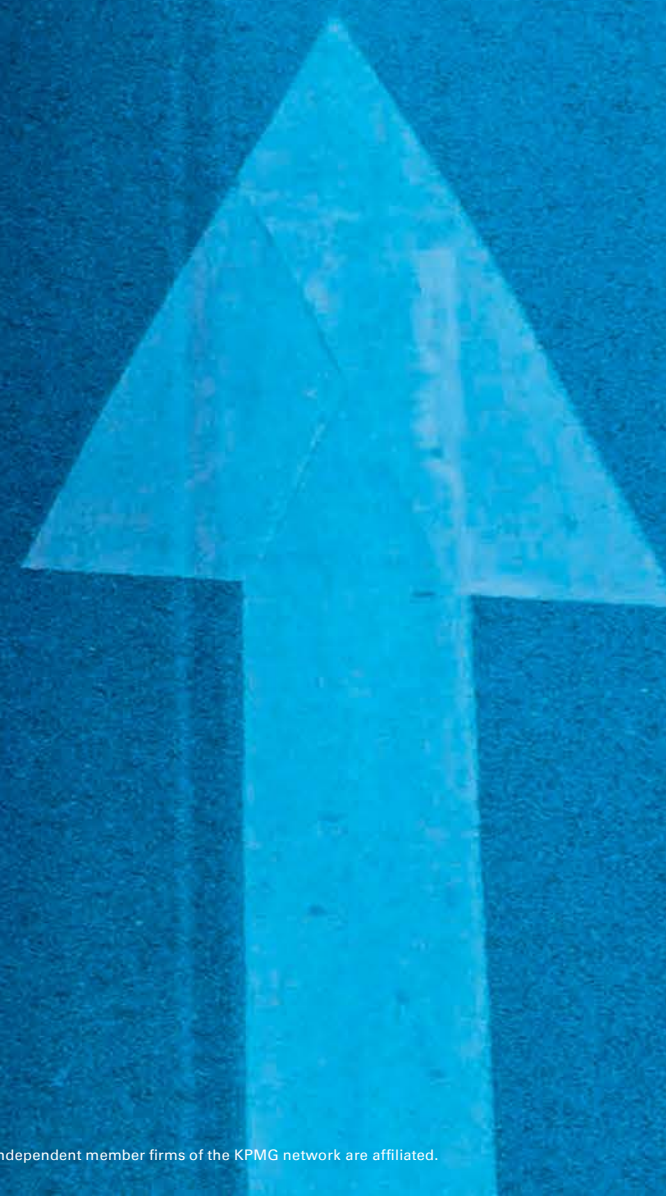
Total cash position (in \$bn)

2010

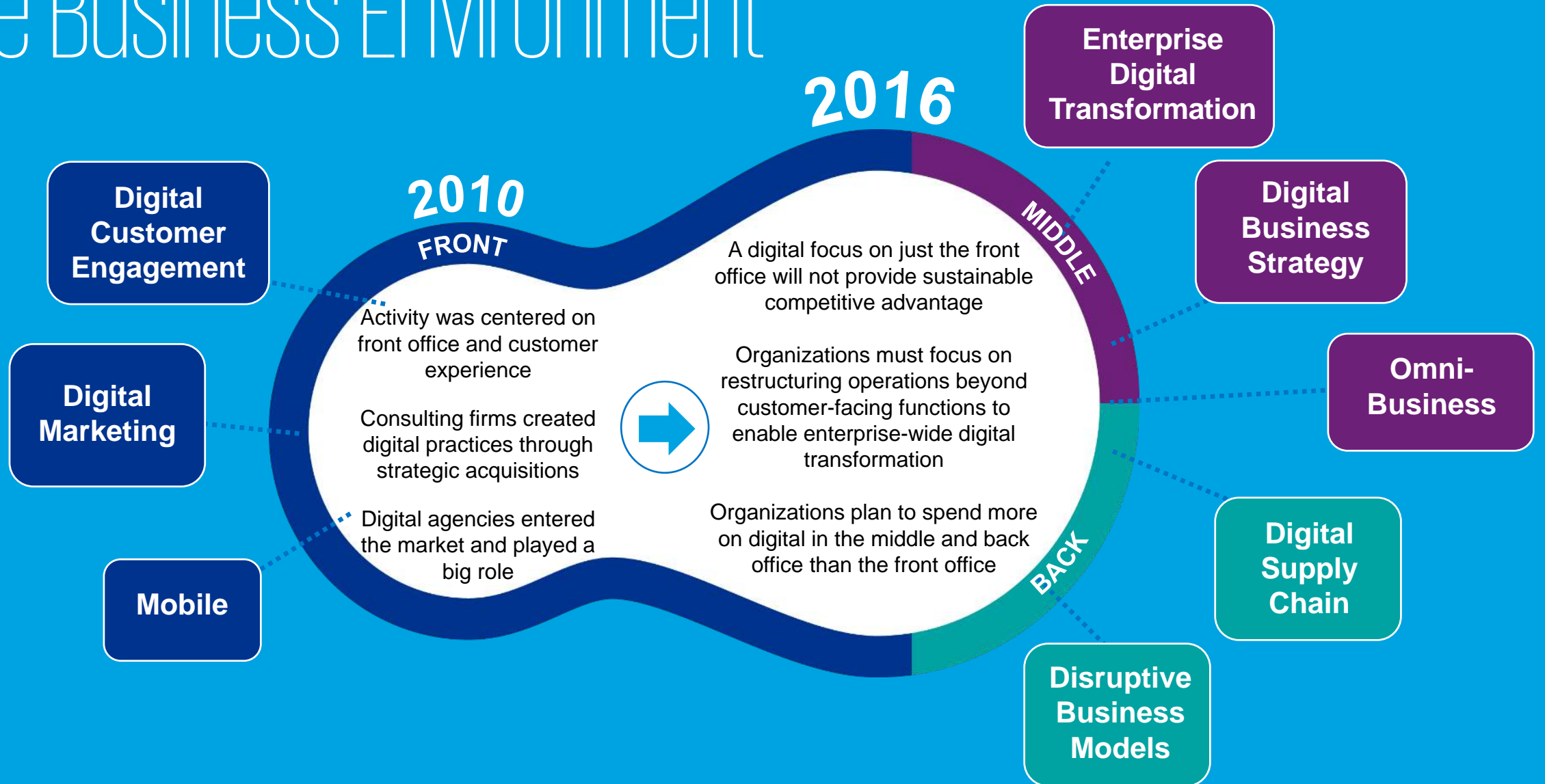
2017



Business Ecosystem Transformation



Digital Disruption has dramatically changed the Business Environment



Digital disruption

is the change in **form and substance** that occurs when new **digital technologies** and **mental models** which create new **business models** with **value propositions** that **exponentially** challenge existing goods and services.



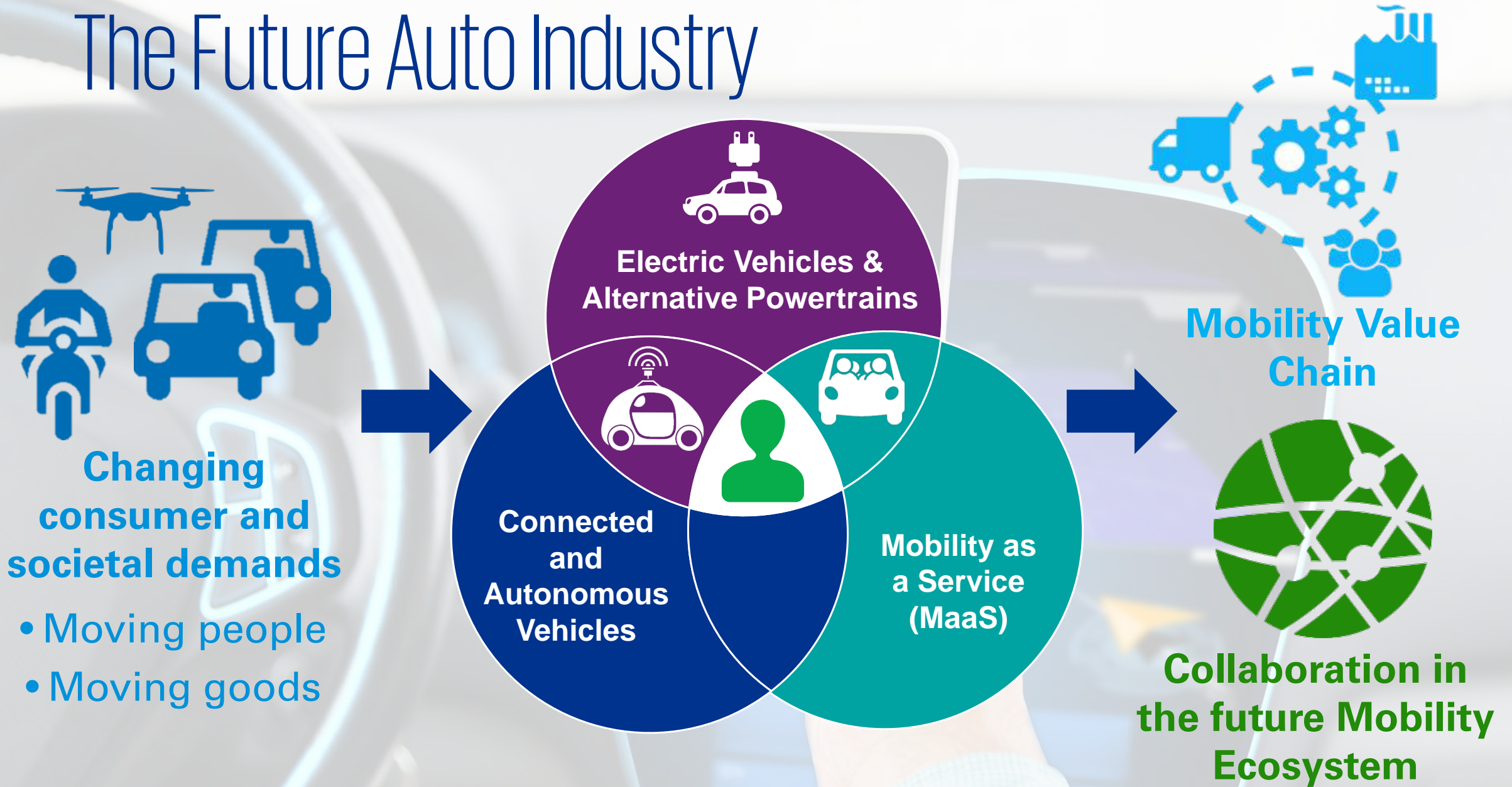
Asset Light

Data Rich

Customer Centric

Platform Based

The Future Auto Industry



The auto industry has to transform the business



78% of global automotive executives would choose an electric car if they were to buy a car over the next 5 years.



By 2020, more than **90%** of cars sold will be connected

Data is the fuel for future auto business model for **83%** automotive executives

By 2020, more than **90%** of cars sold will be connected



Digitalization will drive more innovation in the **next 20 years** than there was been in the **past 100 years.**

50% of global consumers consider privacy & security as an extremely important purchasing criteria.



80% of global consumers expect the OEM to take care of charging stations.

Source: 2016, WEF, Digital Transformation of Industries: Automotive and 2017, KPMG, Global Automotive Executive Survey

The auto industry has to transform the business



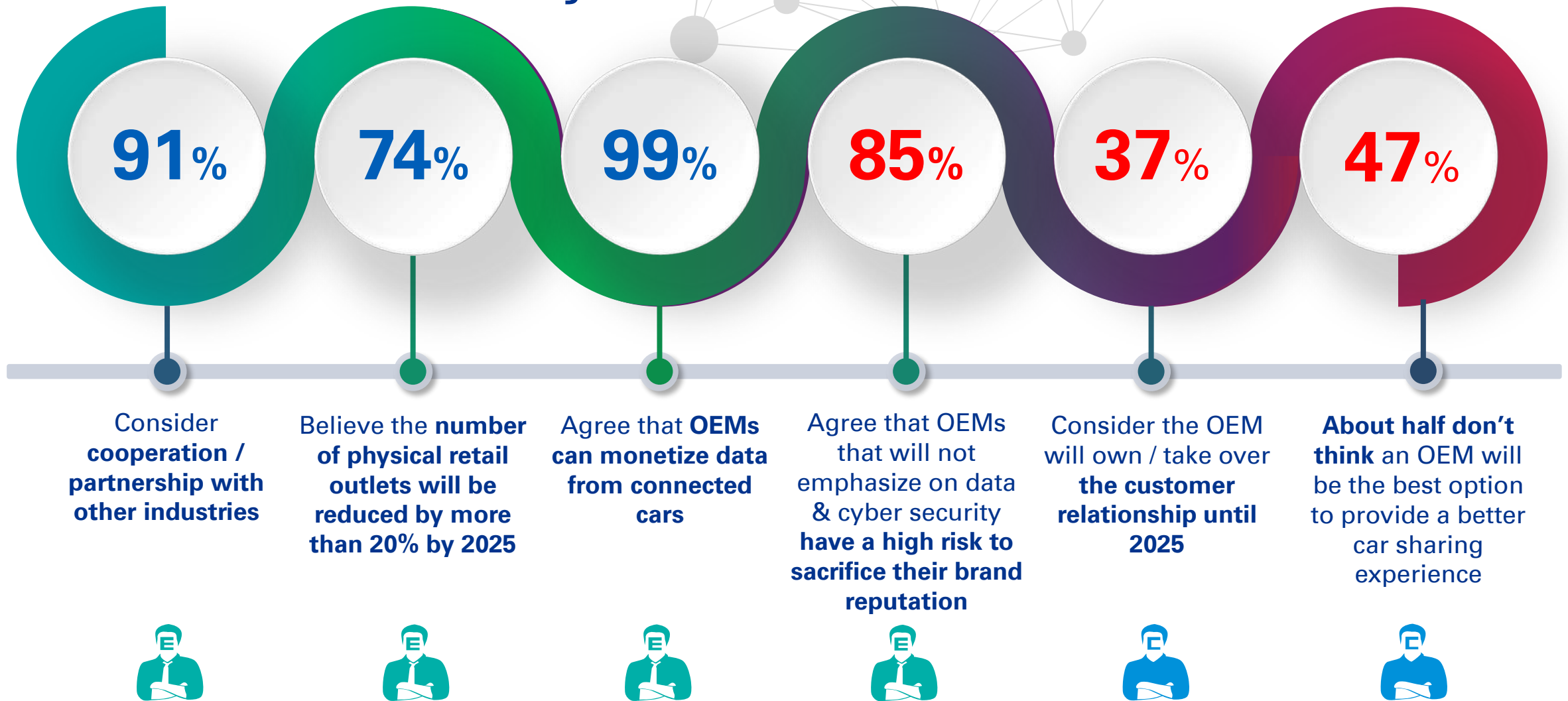
83% believe there will be a business model disruption in the next 5 years

84% agree that digital ecosystem will generate higher revenues in the automotive value chain than the hardware of the car itself.

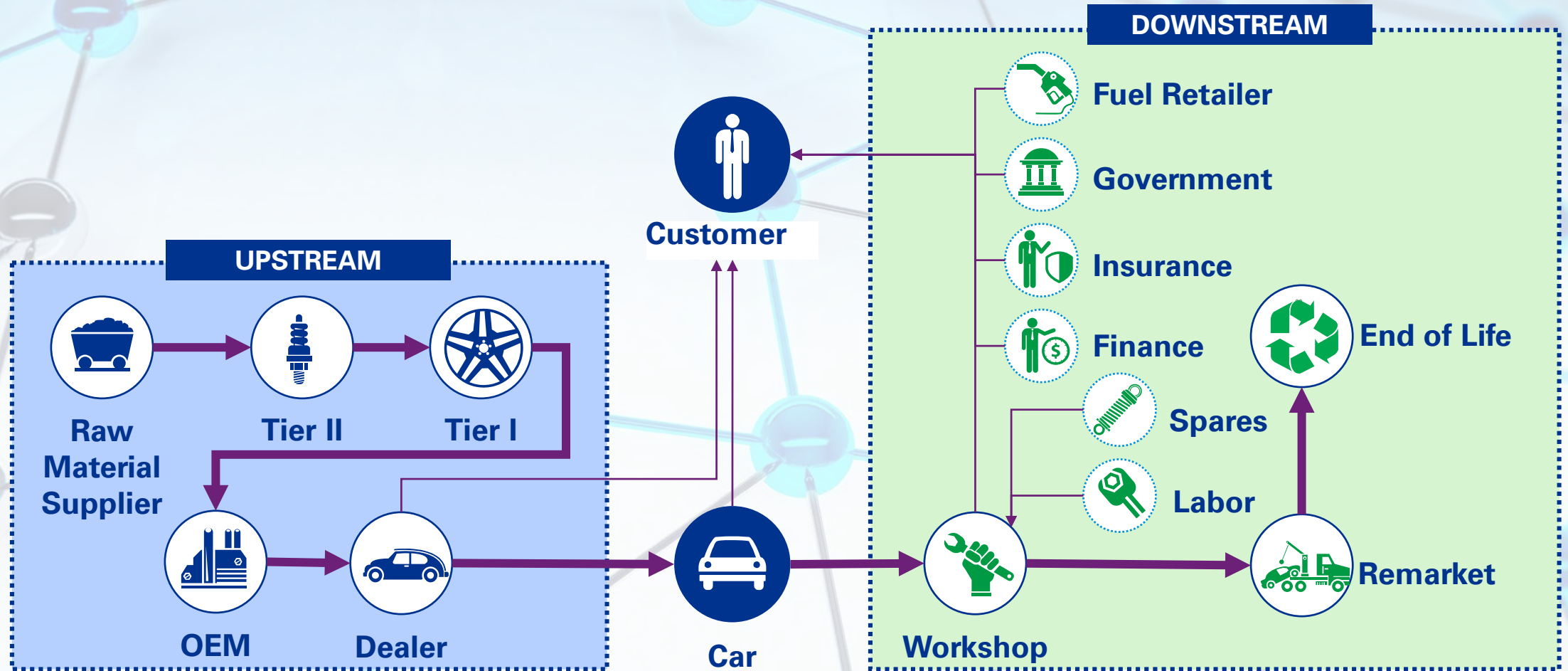
75% say that measuring market shares simply based on unit sales is outdated.

81% agree that if OEMs don't have a structured approach to integrate or cooperate with innovative startups, they will fail.

The auto industry has to transform the business

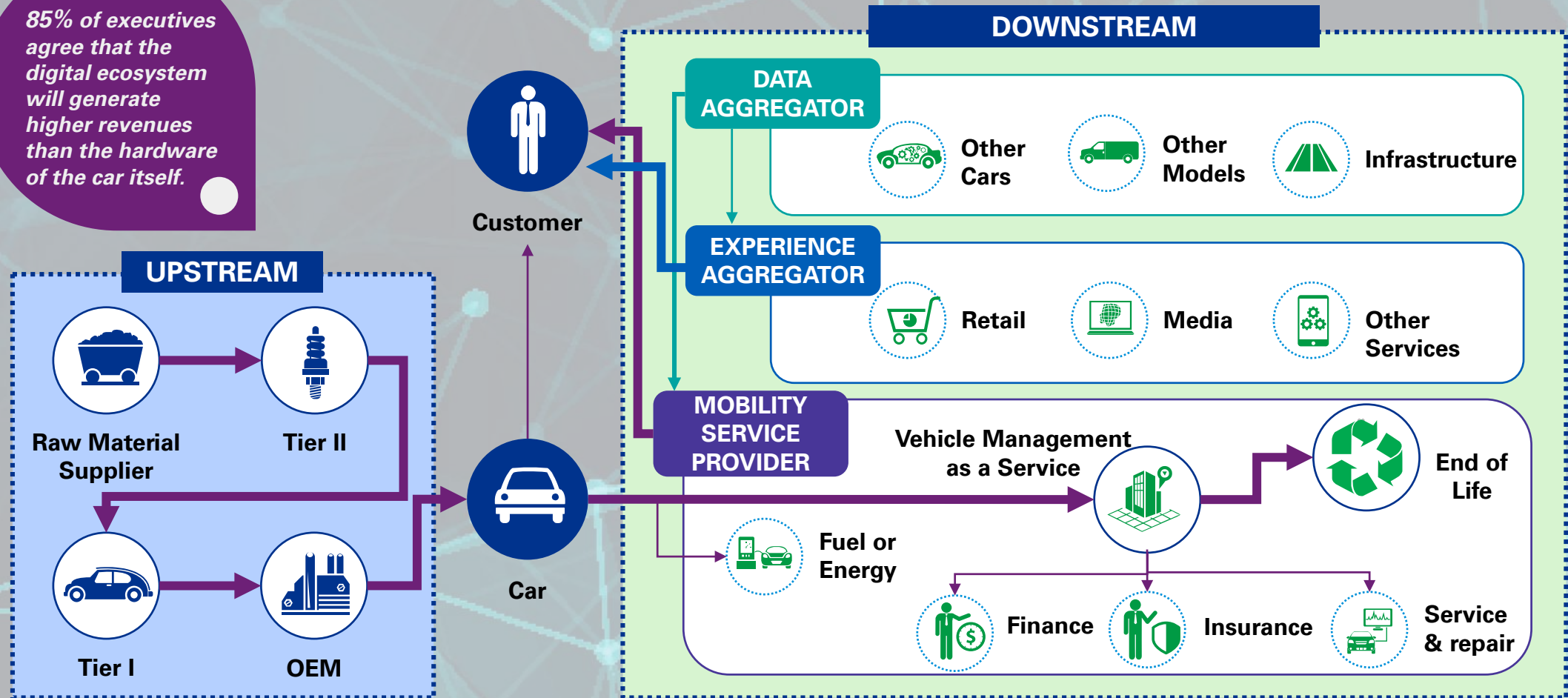


The actual ecosystem



The new ecosystem

85% of executives agree that the digital ecosystem will generate higher revenues than the hardware of the car itself.



The new ecosystem



New value drivers

*“Measuring success based on unit sales is outdated. Management according to Product profitability is over – **Customer value will become core focus**”*

*“Possible applications, for example, include **online maintenance** (updating software remotely), **self-diagnosis** (...) provided to the client via the cloud”*



60% of customers agree when buying a self-driving car that they will only be interested in what they **can do with their time in the car.**

84% of executives agree that **data is the fuel** for the future business model of auto companies.

NEW business partnerships / revenue streams

GM launches Marketplace for in-car shopping and reservations

Posted Dec 5, 2017 by [Darrell Etherington \(@etherington\)](#)



HOME SERVICES NEWS EDUCATION ABOUT US

SpotHero Announces Voice-Activated, In-Car Parking Reservations via the Google Assistant in Android Auto

New SpotHero Integration on the Google Assistant Showcased at CES 2018

January 18, 2018 09:15 AM Eastern Standard Time

CHICAGO--(BUSINESS WIRE)--SpotHero, North America's leading parking reservation service, has launched a new integration that enables drivers to book parking with the Google Assistant using voice commands. With the [Google Assistant's recent integration](#) into Android Auto, drivers with Android Auto will soon be able use SpotHero and the Google Assistant to find and pay for parking on the go, completely hands-free, in more than 50 major markets across North America. Starting today, drivers can book parking with the Assistant on eligible devices, including Android phones and iPhones, simply by saying "Hey Google, book parking."

Auto infotainment is next big advertising, marketing playground

With that warning in place, the in-car, infotainment system experience will be a new playground for the marketer. The good and bad news is there are no rules yet. Companies will try many different ways to deliver messages to the user. Some will be successful, and some will fail.



SILICONVALLEY.COM
TWITTER
FACEBOOK
GOOGLE+
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Social Web Mobile Cloud Gadgets Cleantech VC Data Games Policy Media

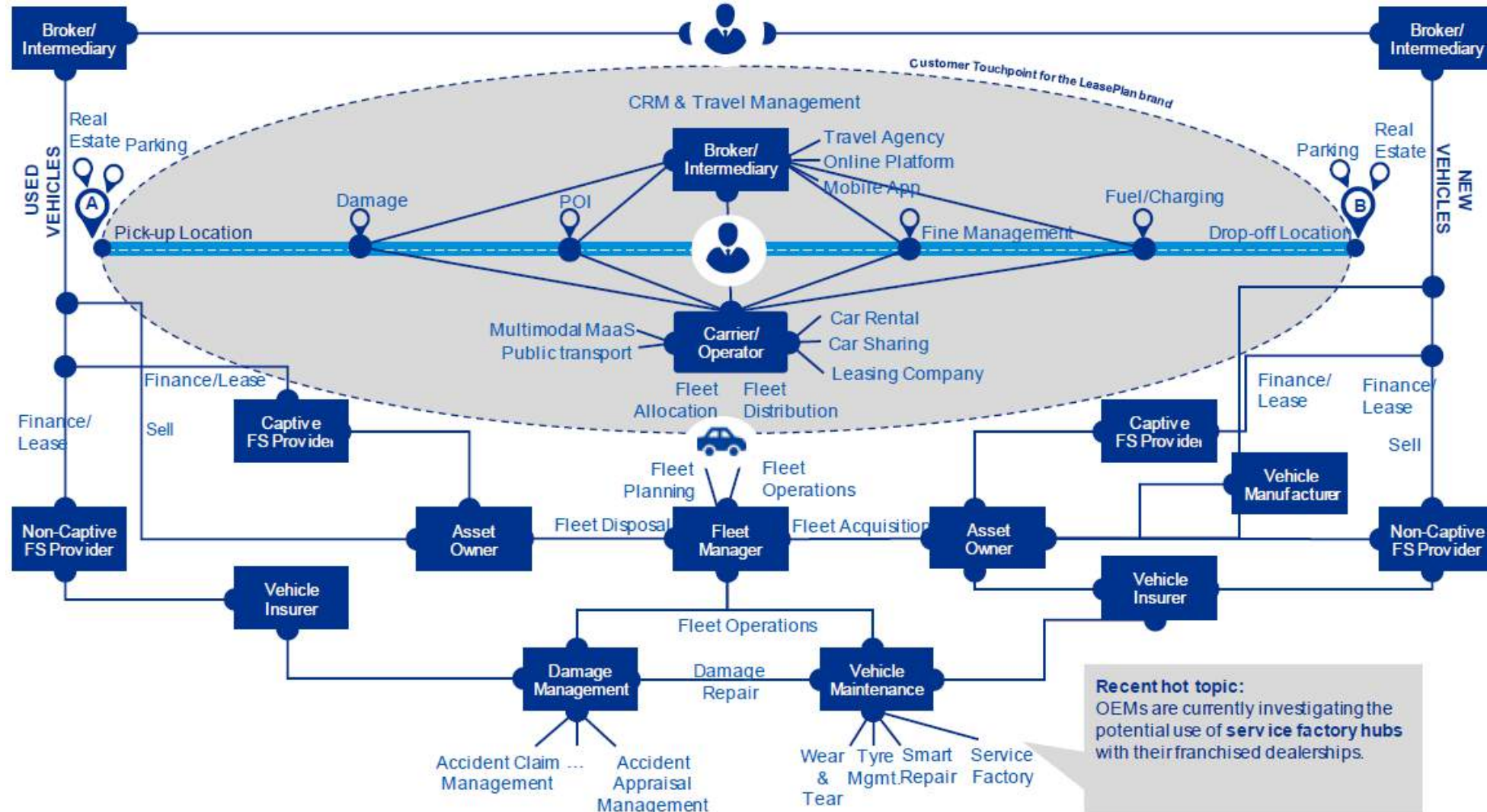
Your car may soon serve you ads — how about a pizza?

By [Ethan Baron](#) / January 5, 2018 at 2:48 PM

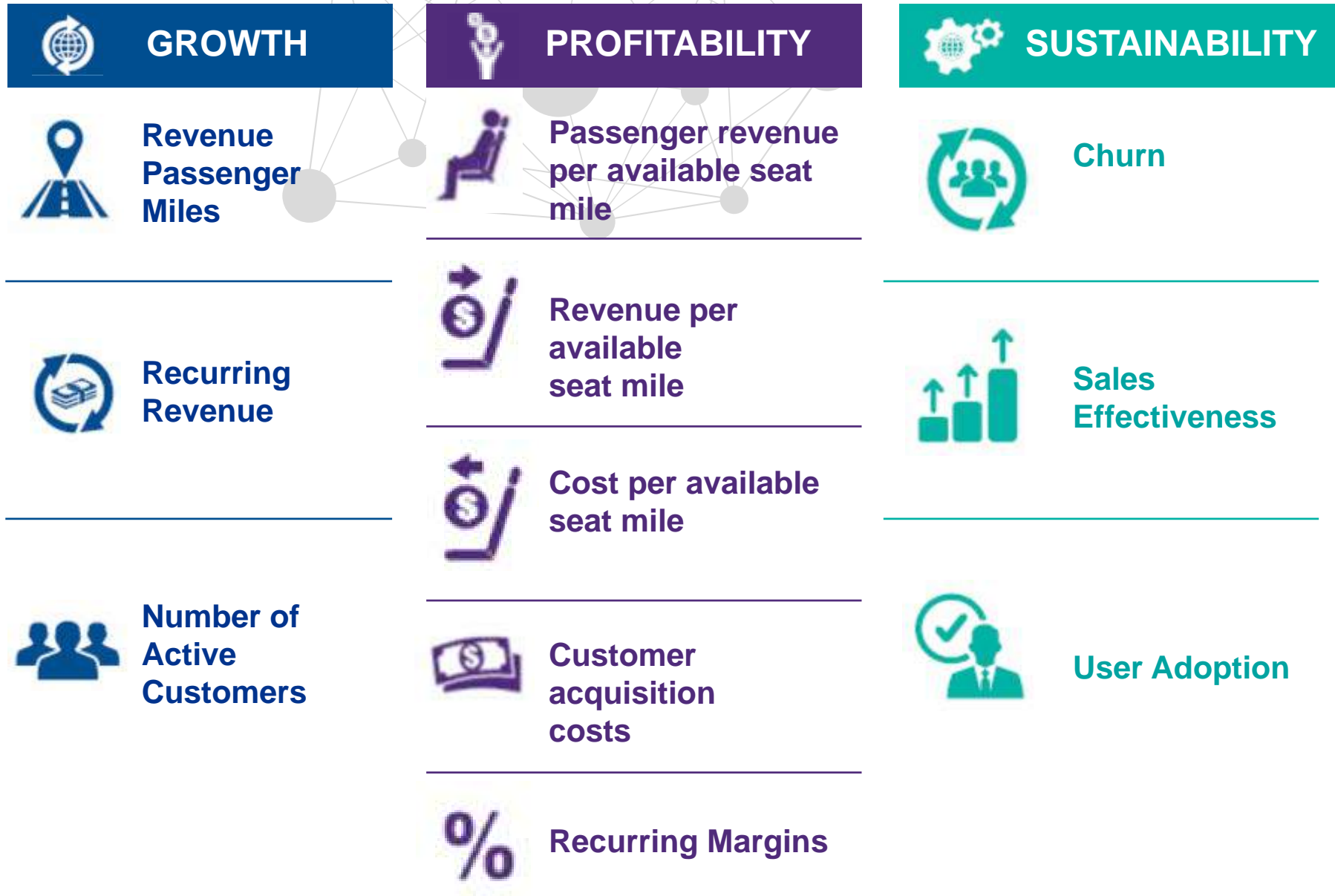


n't
what

NEW business partnerships / revenue streams



NEW KPIs

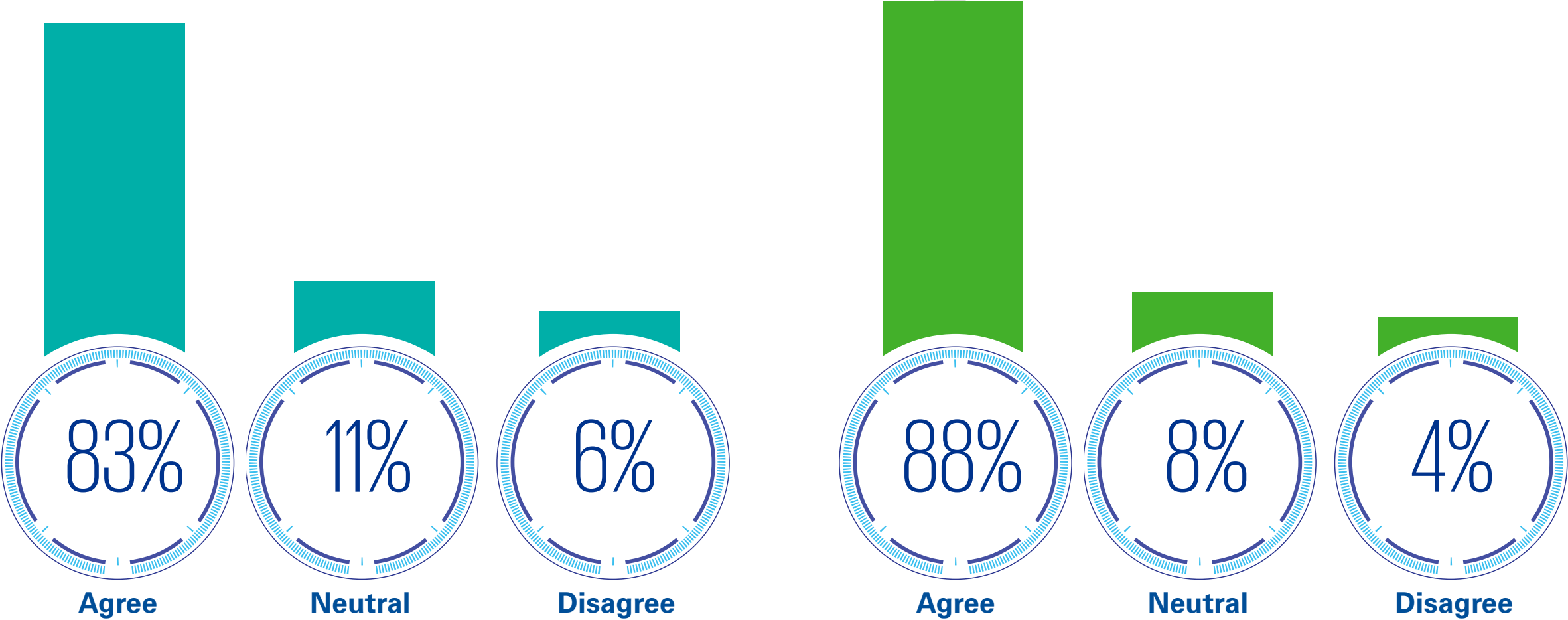


Three core elements for new clockspeeds: Data & Analytics



Data supremacy

Data is the fuel for the future business model of automotive companies.



Automotive Data & Analytics Use Cases



Benefits Auto & Manufacturing Companies Achieve from Analytics

1% increase in OEM's customer loyalty is worth \$700 million – OEM aims to increase by 7 points

50% reduction in defect rate in production using predictive analytics

Improved production effectiveness using optimization analytics

- **30%** increase in potential production capacity
- **90%** increase in schedule adherence using production scheduling and sequencing optimization

20% reduction in warranty cases per vehicle through advanced pattern detection

80% reduction in scrap rate in 15 weeks from enhanced root cause analysis

Optimized extended warranty contract pricing using predictive cost modeling

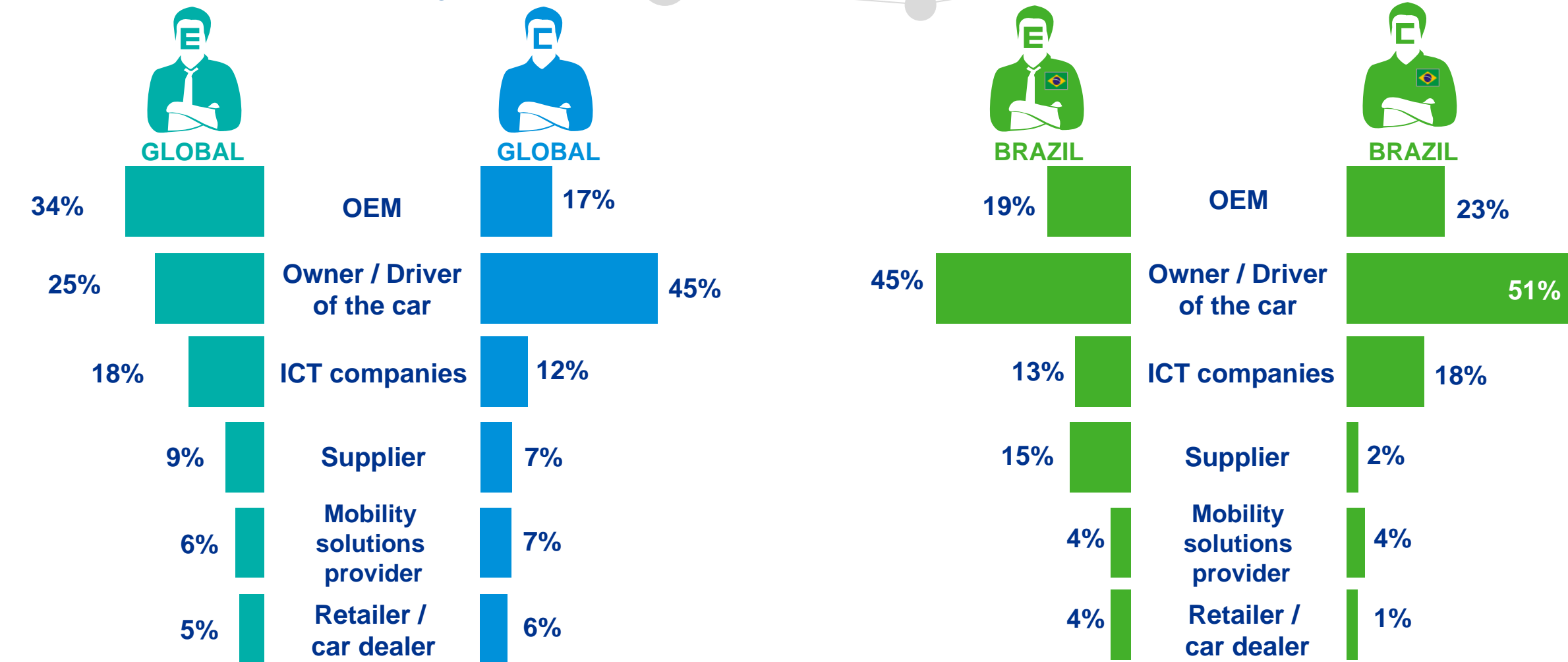
Spare parts inventory optimization
– 30-60% reduction in inventory levels
– 18% reduction in replenishment levels

25% reduction in direct maintenance costs using cost and availability modeling

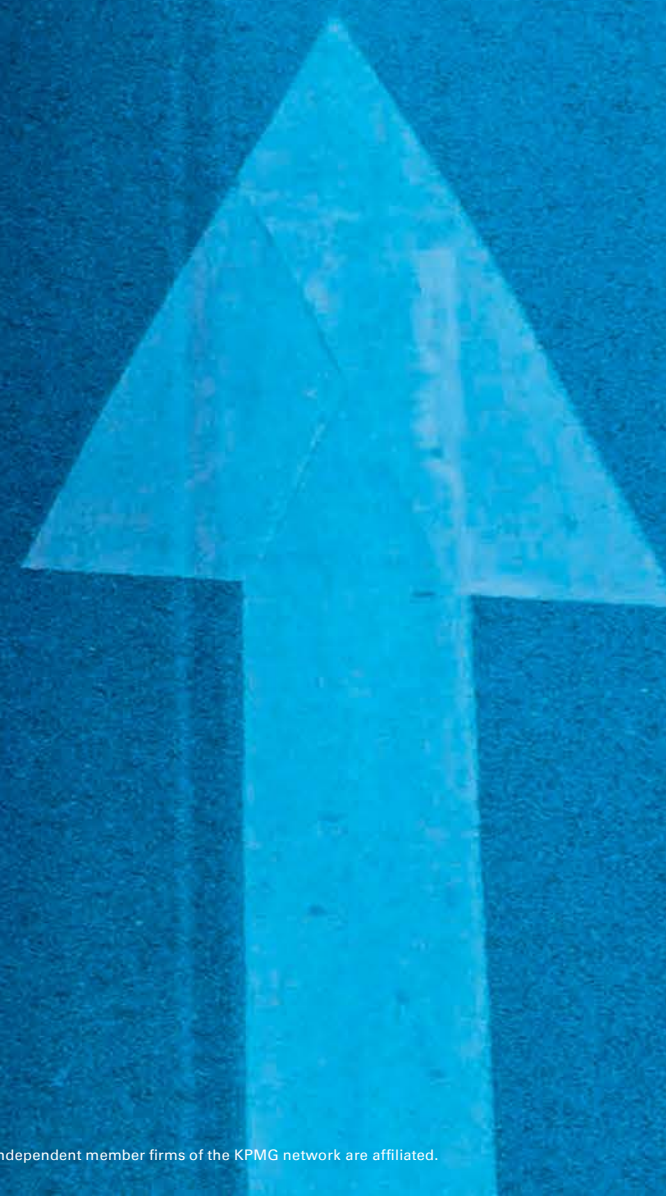
Mid-cycle product change prompted by social media feedback

Data supremacy

Connected cars generate an enormous amount of consumer & vehicle data.
Who do you think will be the owner / guardian of the consumer data in 2025?

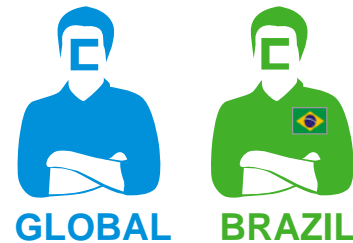


Three core elements for new clockspeeds: IA & Digital Tools

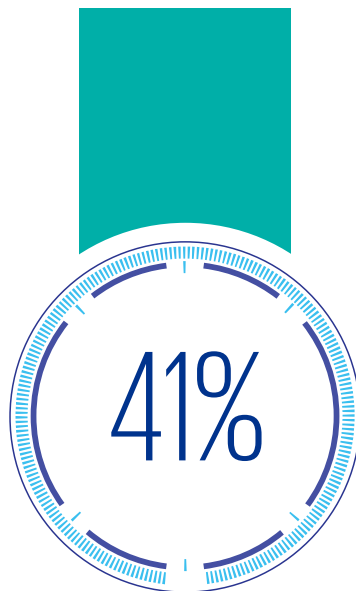


Customer centricity

Imagine you are sitting in your car and you have turned on your in-car navigation system and your smartphones navigation app with traffic info. The in-car navigation system tells you it would be favorable to take a right, while your smartphone tells you to take a left. Which information would you rather trust and follow?



That of your car



That of your
smartphone



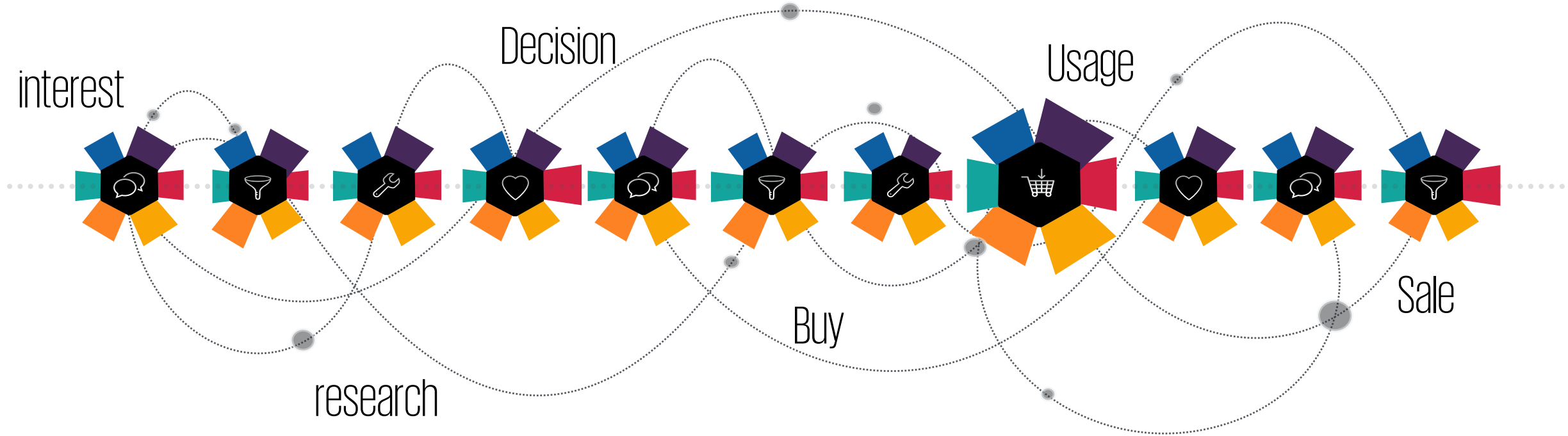
That of your car



That of your
smartphone

Customer centricity

At the heart of relationship building we have the customer journey mapping technique, connecting every single point of contact between the brand and its customers

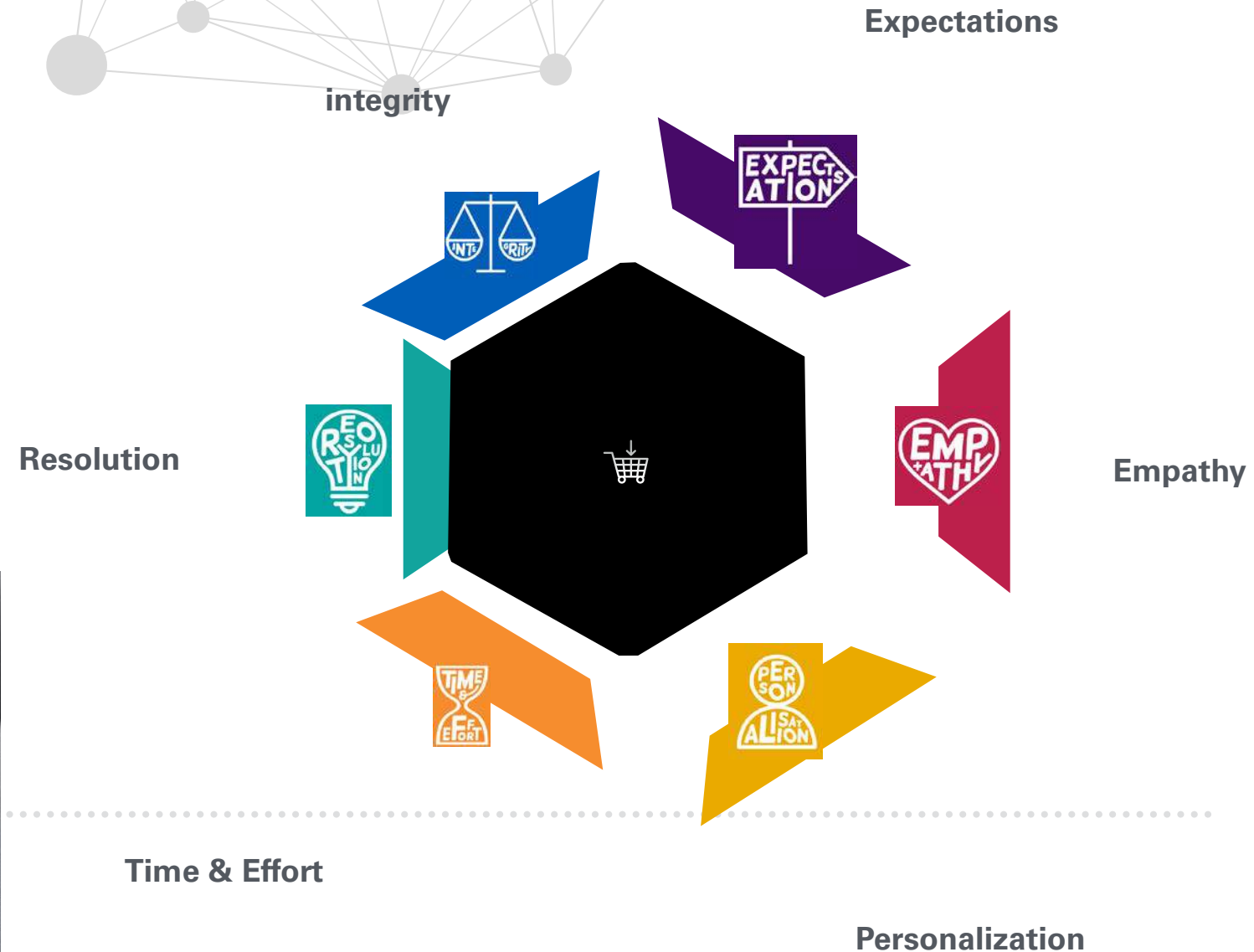


Customer centricity

Customer: Joseph (young single designer)
Usage: driving to work

Customer: Joseph (young single designer)
Usage: driving to the beach on weekends

Customer: Rose (young married nurse)
Usage: driving to the beach on weekends



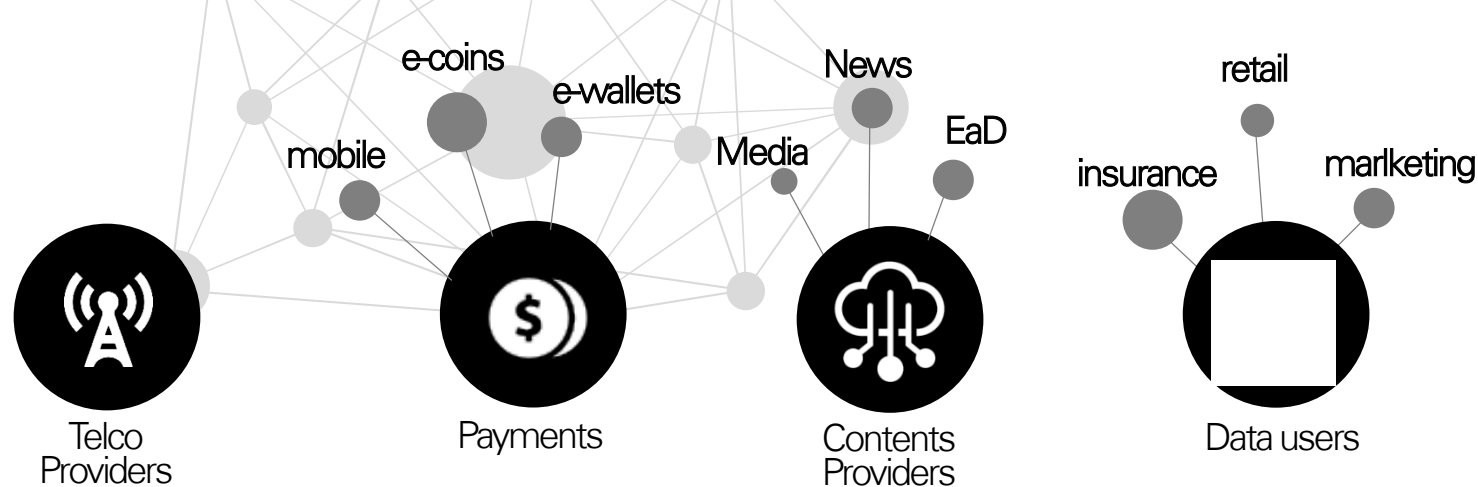
Ecosystem

Datacentric ecosystem

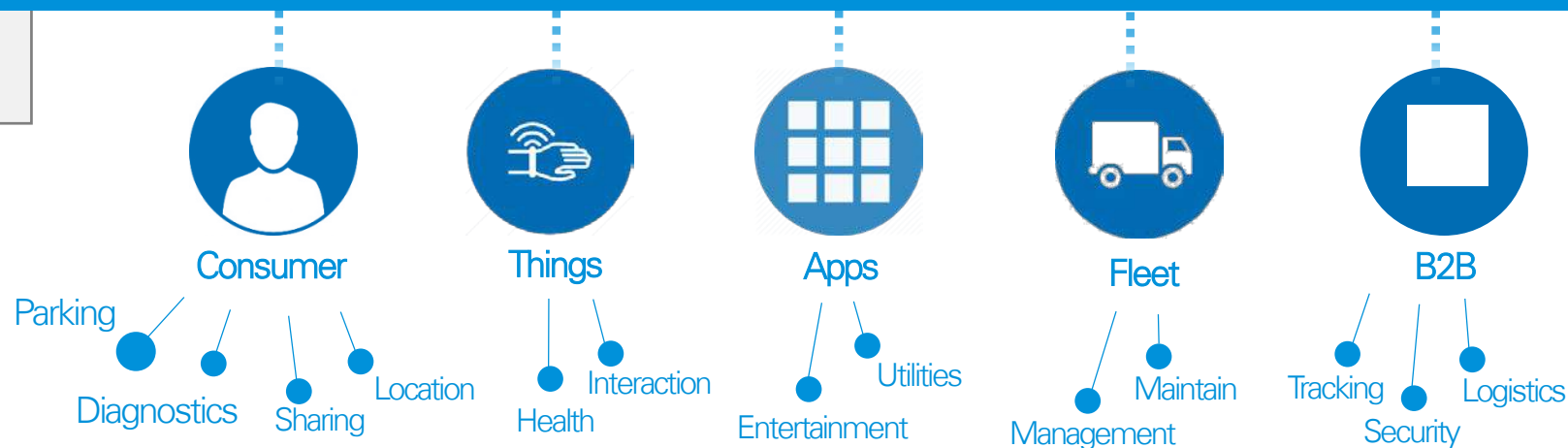
Automotive Digital

Data Gateway

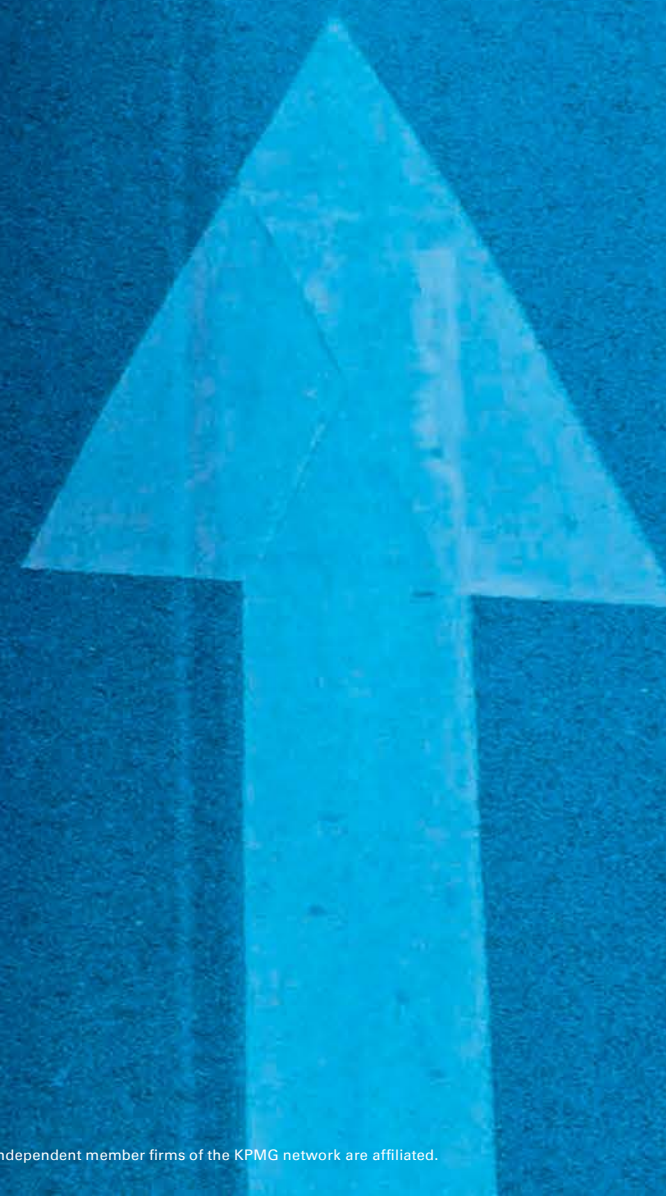
Standards
Cyber Sec
Data Governance



Open Digital Platform

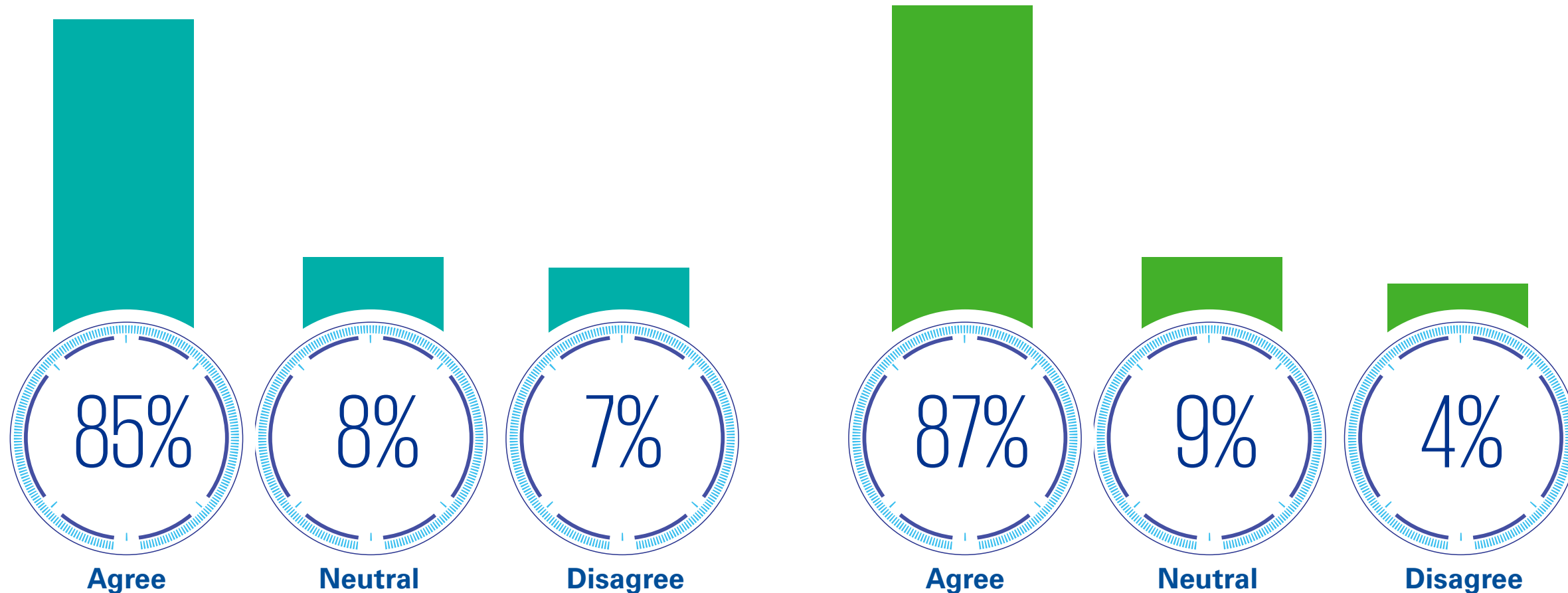
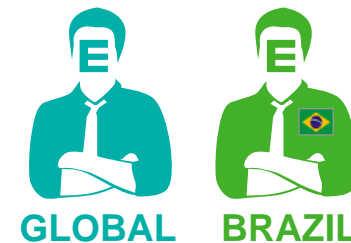


Three core elements for new clockspeeds: Cyber Security



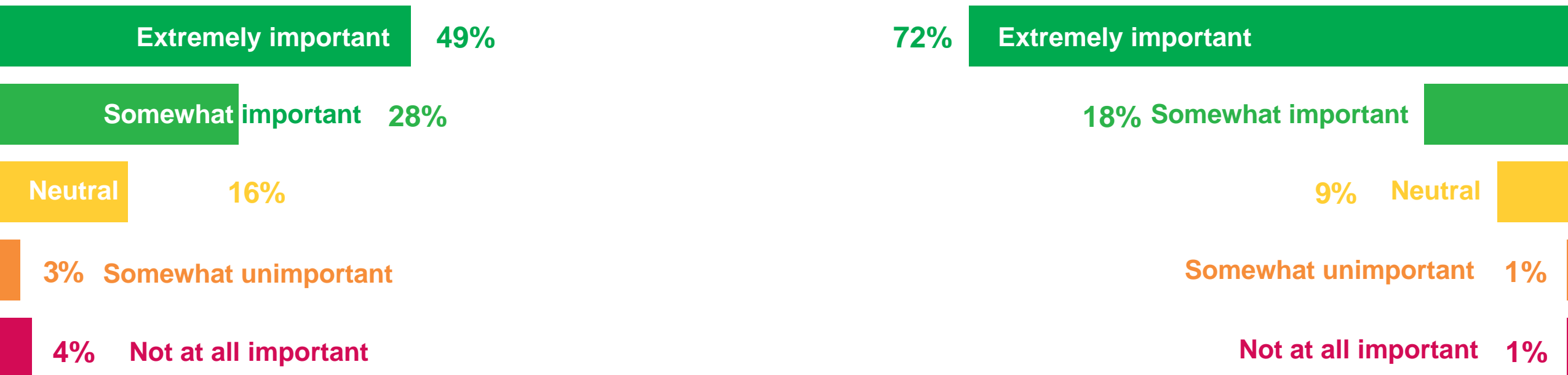
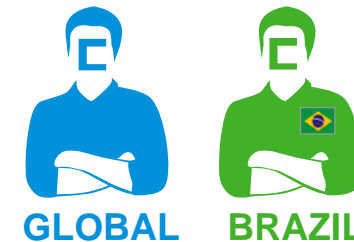
Data supremacy

Companies that will not emphasize on data & cyber security have a high risk to sacrifice their brand reputation and value proposition for zero-error tolerance and releasability.



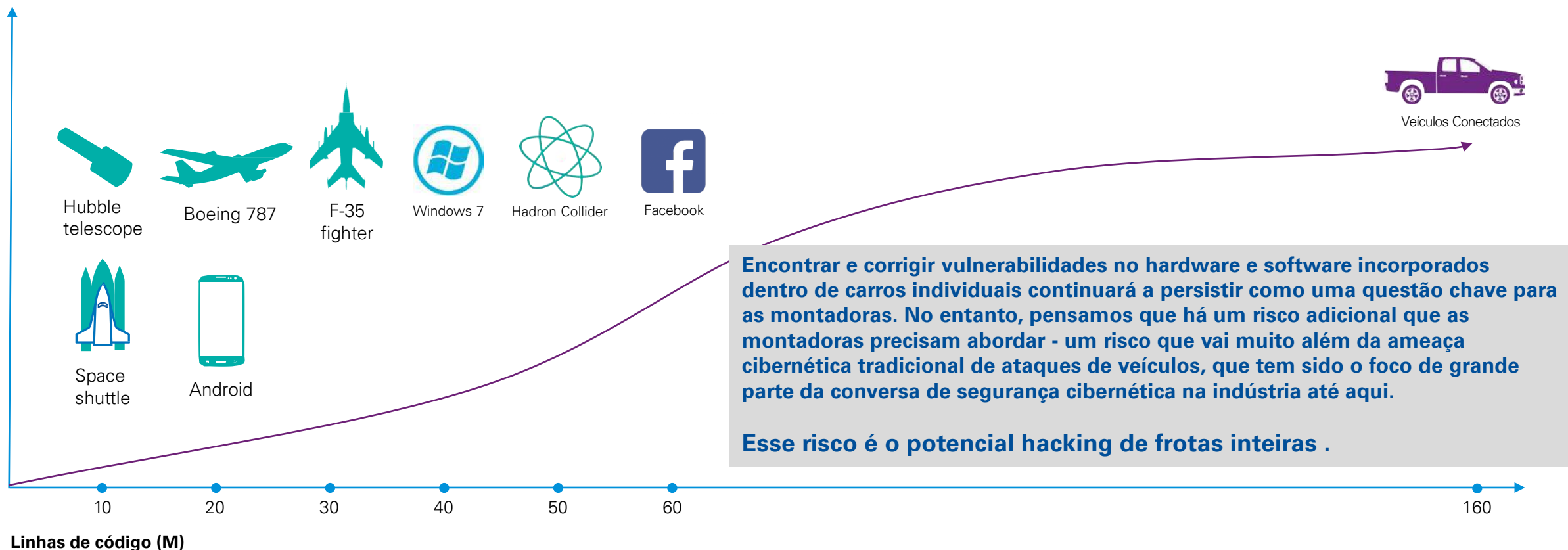
Data supremacy

How important is data privacy & security for you as a purchasing decision of a vehicle / to use of a mobility service over the next 5 years?



Cyber Security

A crescente complexidade da tecnologia do veículo tem inúmeros benefícios, mas, ao mesmo tempo, cria um risco real de ataque cibernético - um risco que tememos e que muitas empresas da indústria automotiva possam estar subestimando.



Cyber Security



Powertrain technologies



Electric readiness

Executive opinion



(BEVs) Battery Electric Vehicles

will fail due to infrastructure challenges.



(FCEVs) Fuel Cell Electric Vehicles

will be the real breakthrough for electric mobility.

Absolutely agree 22%

Partly agree 40%

Neutral 20%

12% Partly disagree

6% Absolutely disagree

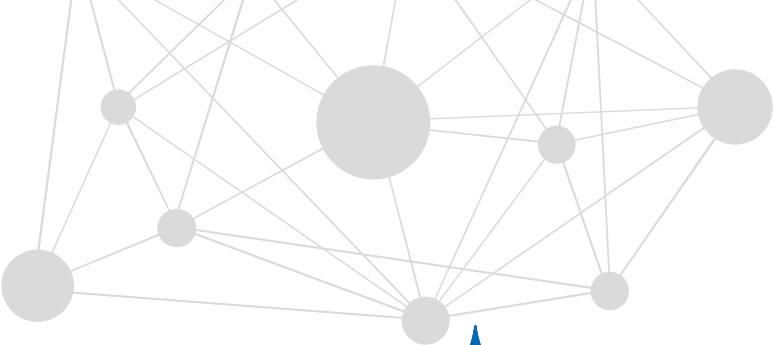
33% Absolutely agree

45% Partly agree

16% Neutral

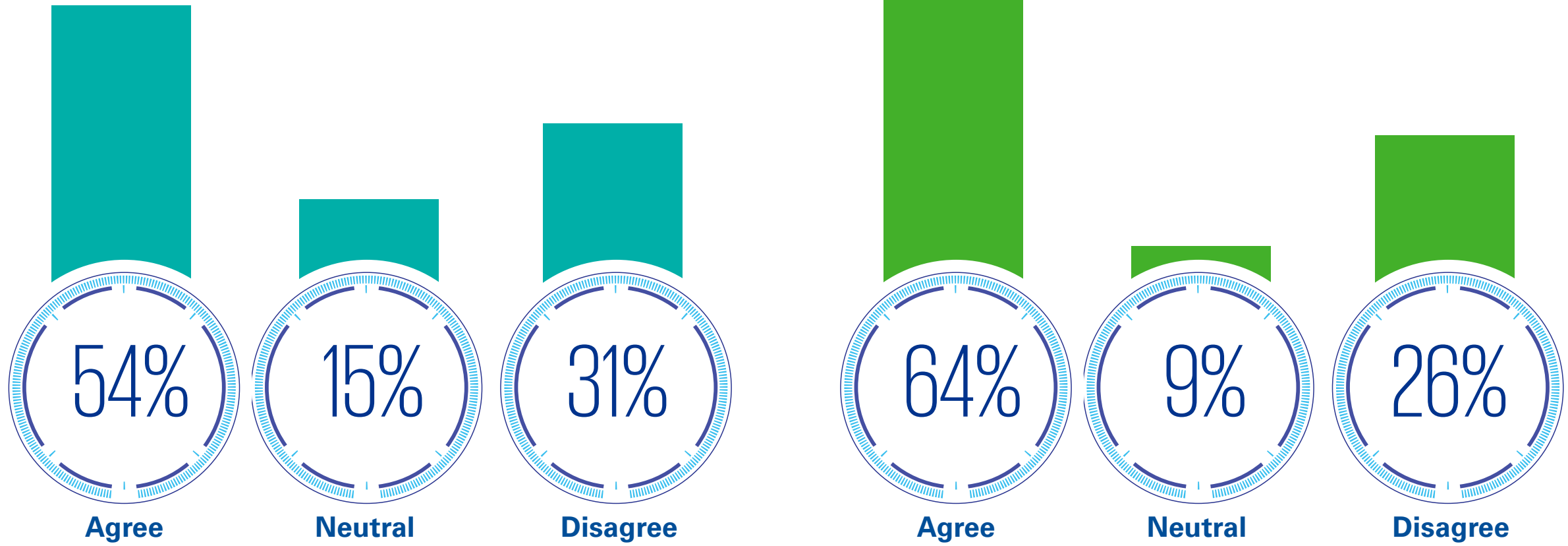
Partly disagree 5%

Absolutely disagree 1%



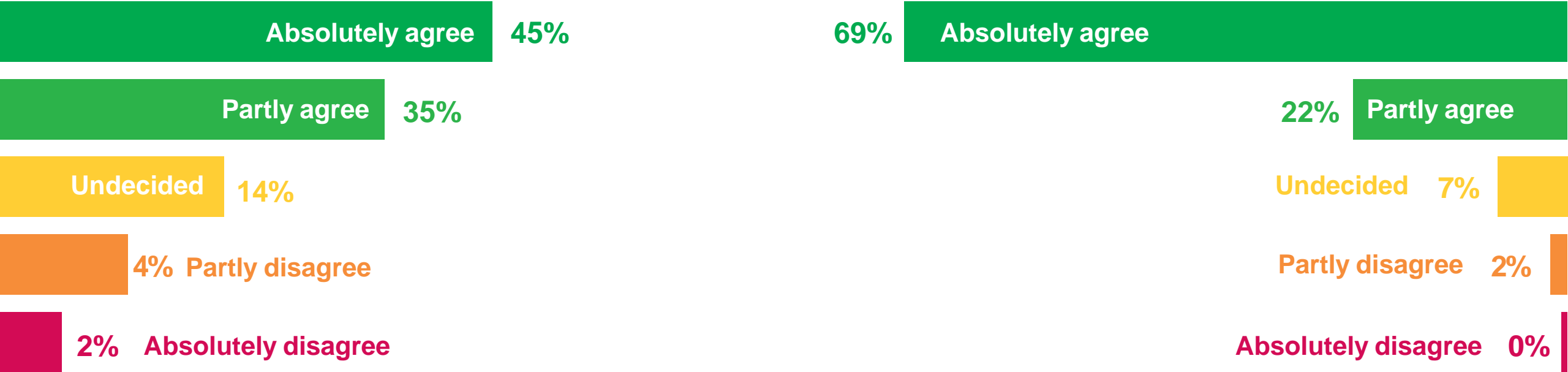
Electric readiness

Pure battery electric vehicles (BEV) will fail due to the challenges related to setting up the required infrastructure.



Electric readiness

If I buy an electric vehicle I expect the manufacturer of the car to take care of all matters around charging.



Electric readiness

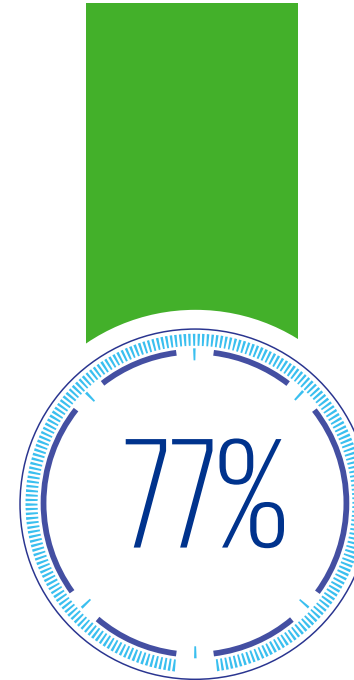
OEMs strategies with regard to charging will be...



**OEMs create their own
charging ecosystem
with proprietary
technology and services**



**OEMs will not
need to take care
of the charging
infrastructure**



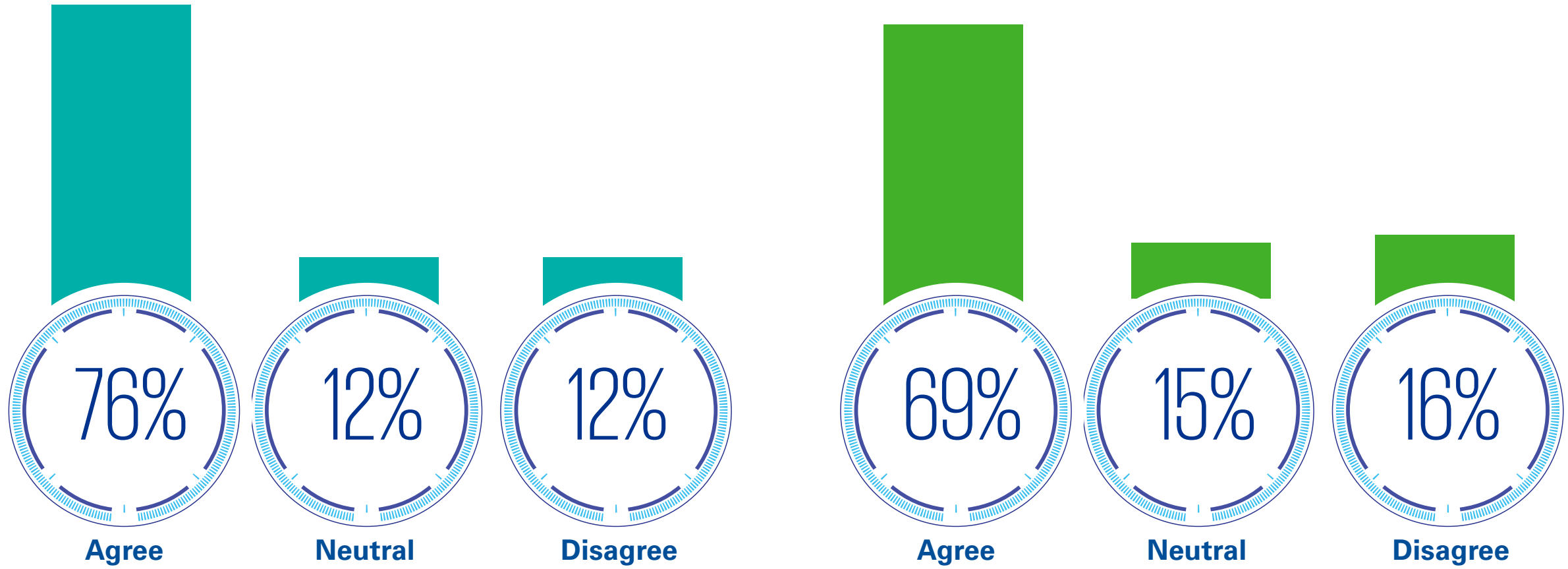
**OEMs create their own
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**OEMs will not
need to take care
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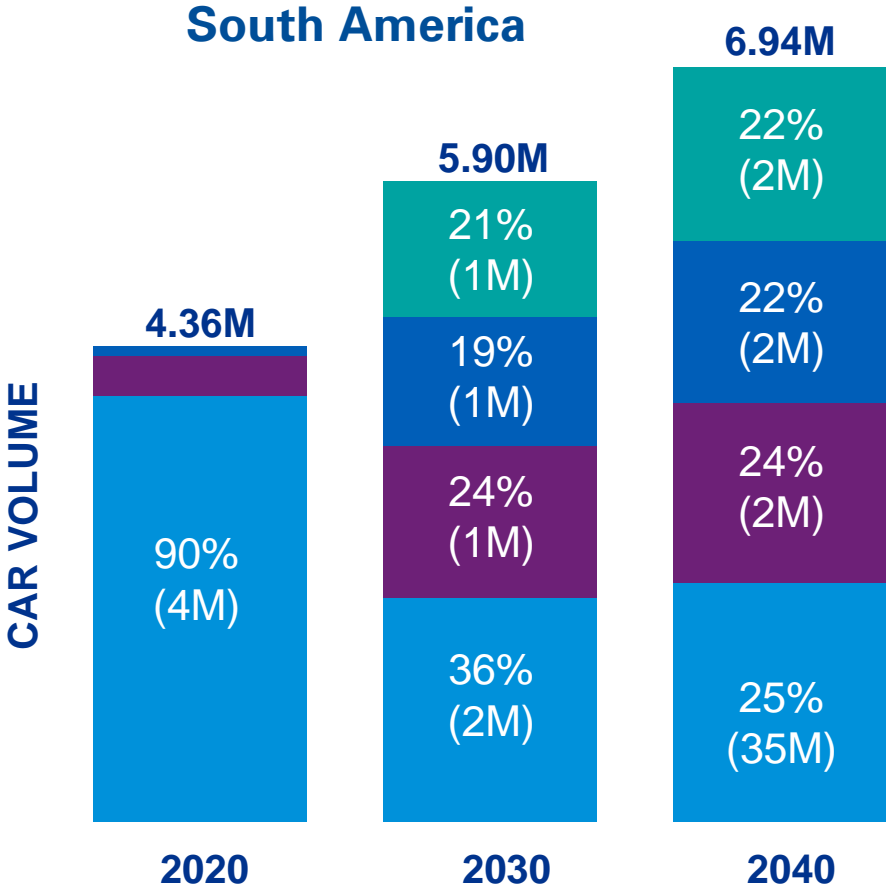
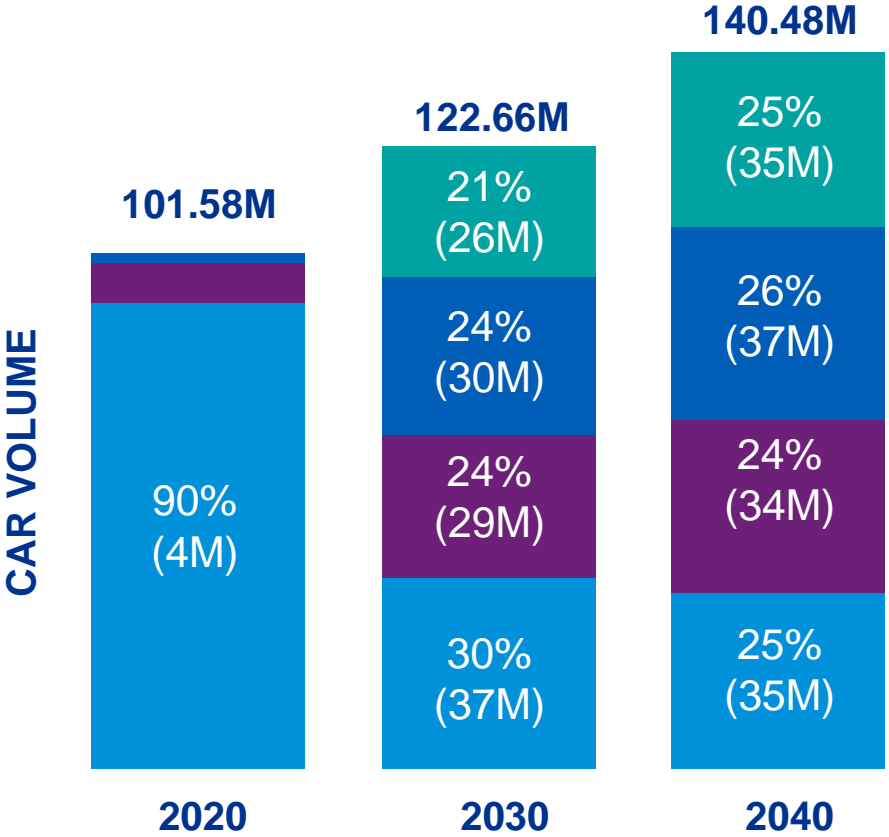
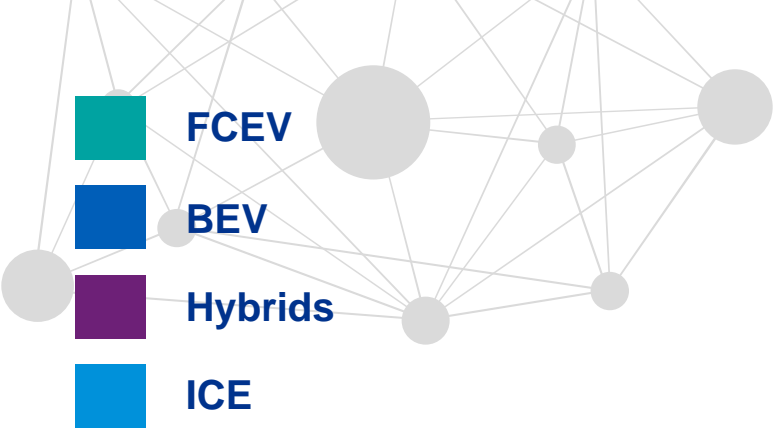
Electric readiness

Internal combustion engines (ICE) will still be more important than electric drivetrains for a very long time.

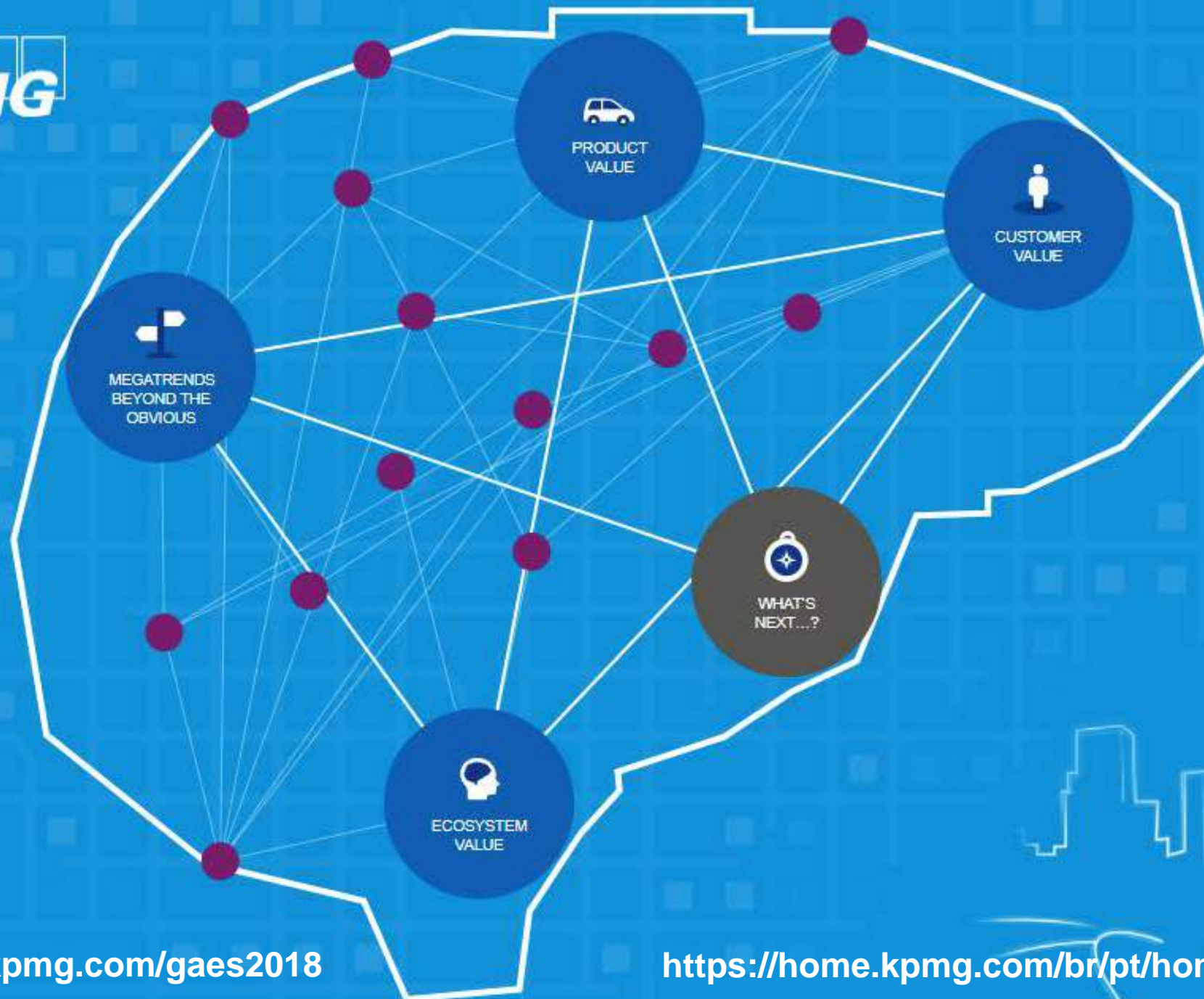


Electric readiness

What is your opinion on the share between ICE, Hybrids, BEV & FCEV in 2030 and 2040?



Closing



Publicações



Thank you

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www.kpmg.com/automotive

www.kpmg.com/socialmedia

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