

INDTECH2018

**Innovative industries for smart
growth**

29-31 October, 2018

Vienna, Austria

www.indtech2018.eu

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#IndTech2018

Plenary – Keynote 2

KETs as an enabler for an innovative industry

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Chief Executive Officer

Chief Technology Officer

Infineon Technologies Austria AG

30 October, 2018

Why are KETs important: central „building blocks“ and enablers for innovation

Globalization, digitalization, „knowledgization“:
Europe can be the best place to live

Making it happen: Conclusions

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Infineon at a glance

Focus areas

Energy efficiency

Mobility

Security

IoT & Big Data

Employees

Around 37.500 employees worldwide
(as of Sept. 2017)

Americas
3.850 employees

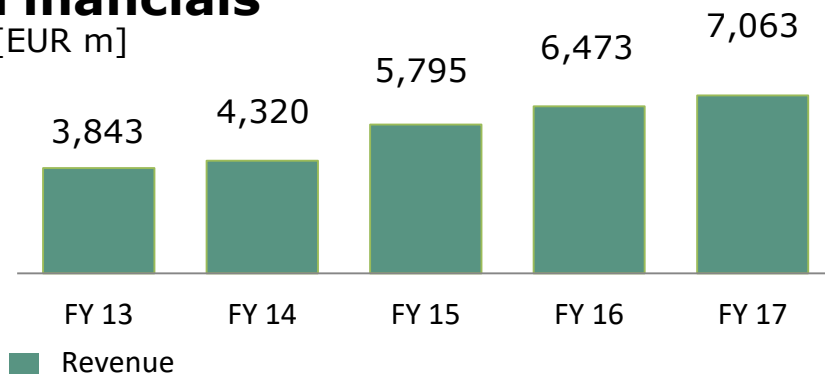
Europe
15.650 employees

Asia/Pacific)
18.000 employees

36 R&D- and **17** manufacturing locations

Financials

[EUR m]



Market Position

Automotive



2

Strategy Analytics
April 2017

Power



1

IHS Markit,
Technology Group,
August 2017

Smart card ICs



1

IHS Markit,
Technology Group,
Juli 2017

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Infineon at a glance

Focus areas

Energy efficiency

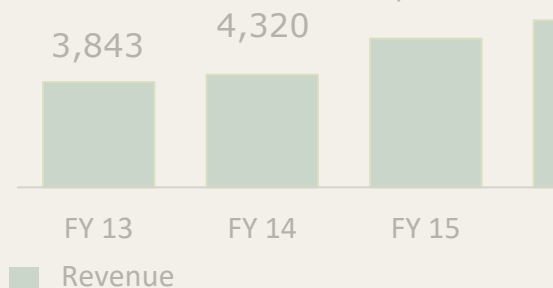
Mobility

Security

IoT & Big Data

Financials

[EUR m]



Infineon Austria

Facts FY 2017 (30.09.2017)

Revenue (Mio) € 2.539,6

Investments (Mio) € 150,2

Employees total 3.785

R&D in % of revenue 17%

Employees

employees worldwide

Europe
15.650 employees

Asia/Pacific
18.000 employees

manufacturing locations

Position

Power



1

IHS Markit,
Technology Group,
August 2017

Smart card ICs



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IHS Markit,
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Infineon: We invest in and for Europe

Villach, Austria



- › New 300-millimeter chip factory:
 - › **Investment 2019-2025: €1.6 billion**
 - › **400 new jobs**
- › Expansion of **860 jobs in R&D** at Infineon Austria

Dresden, Germany



- › Expansion of chip manufacturing:
 - › **Investment of a high three-digit million amount over next 3 years**
 - › **300 new jobs**
- › **New R&D Center: 250 new jobs**

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Infineon: We invest in and for Europe

Villach, Austria



- › New 300-millimeter manufacturing:
 - › Investment 200 million
 - › 400 new jobs
- › Expansion of **860 jobs in R&D** at Infineon Austria

Dresden, Germany



Despite higher costs for energy, wages and infrastructure

- › New 300-millimeter manufacturing:
 - › Investment of a high three-digit million amount over next 3 years
 - › 300 new jobs
- › **New R&D Center: 250 new jobs**

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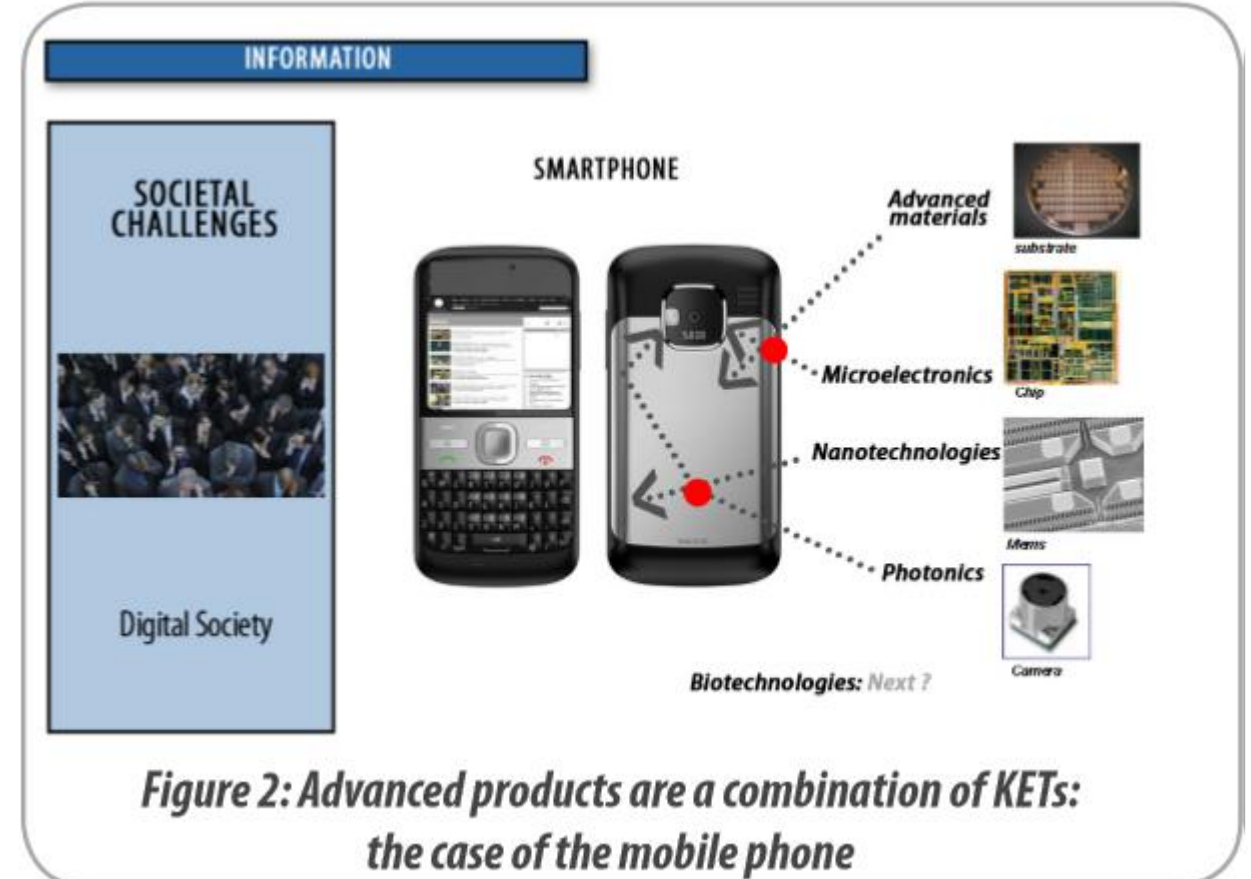
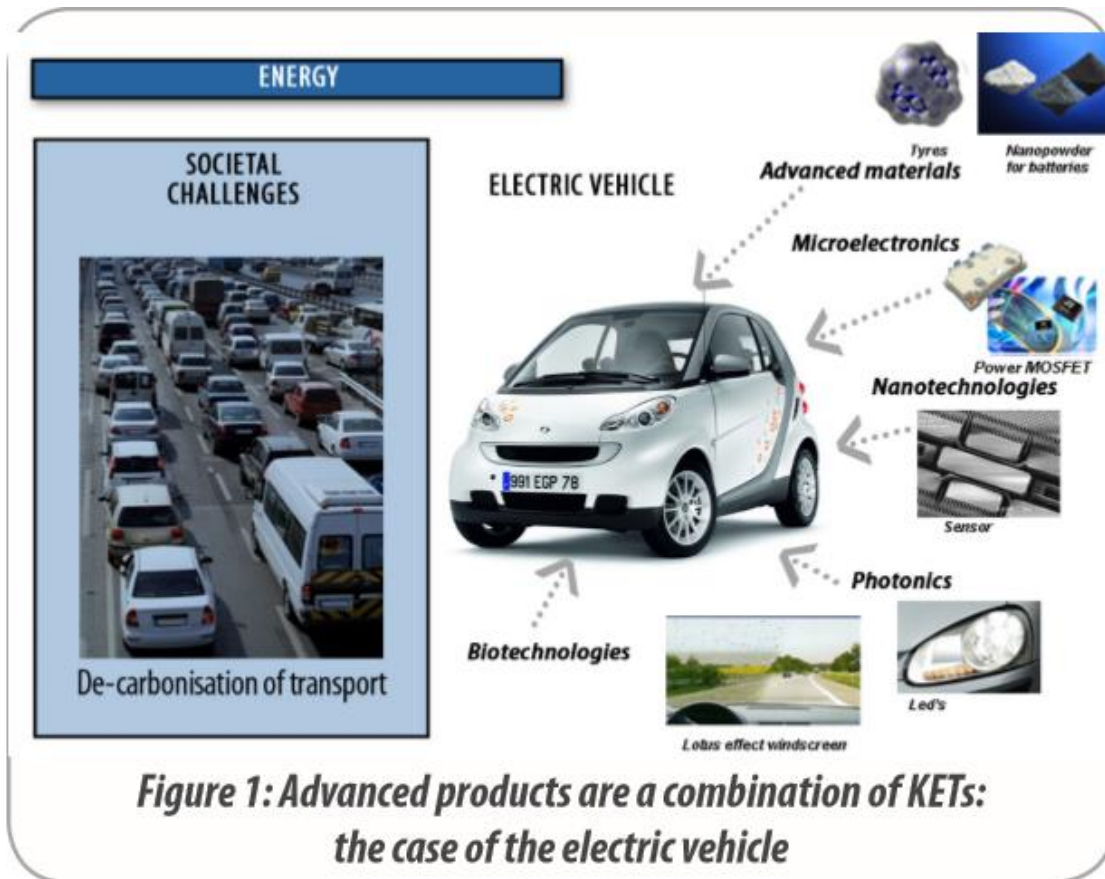
Why are KETs important: central „building blocks“ and enablers for innovation

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Making it happen: Conclusions

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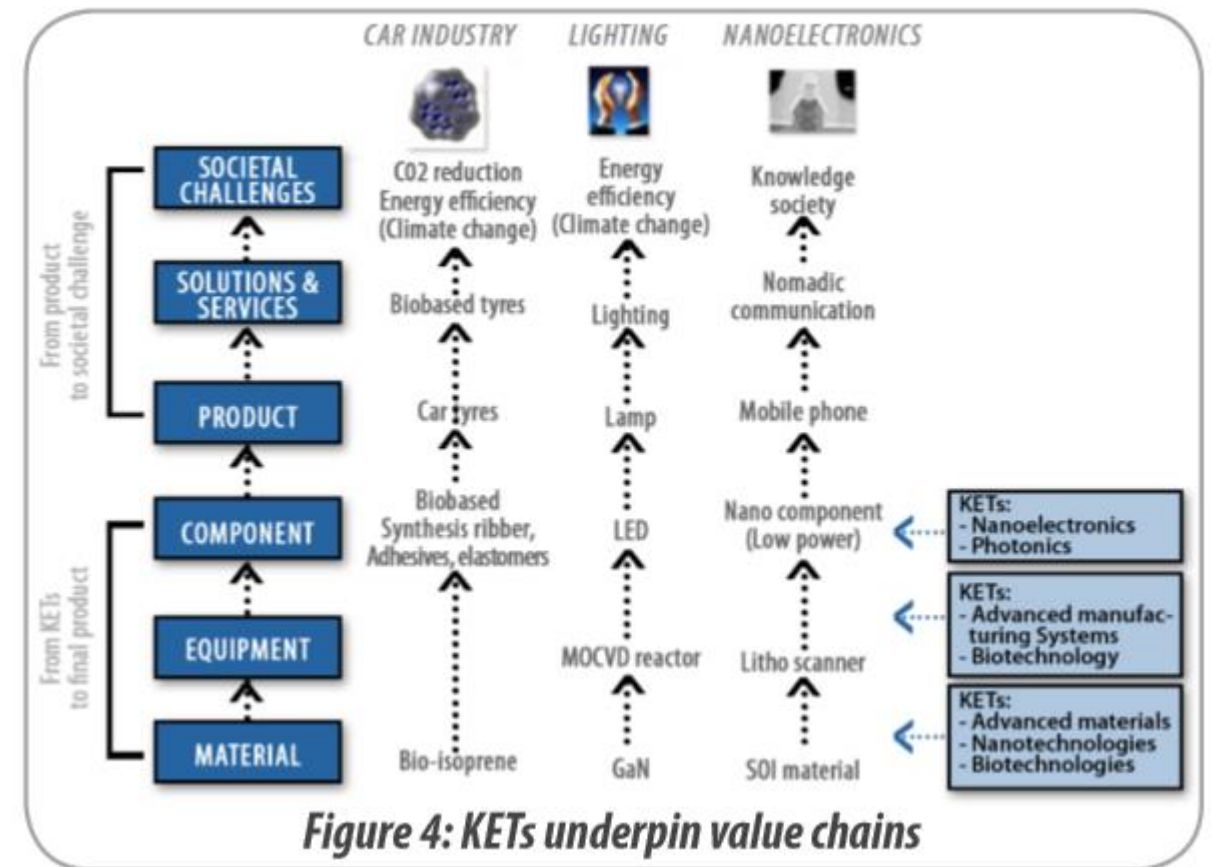
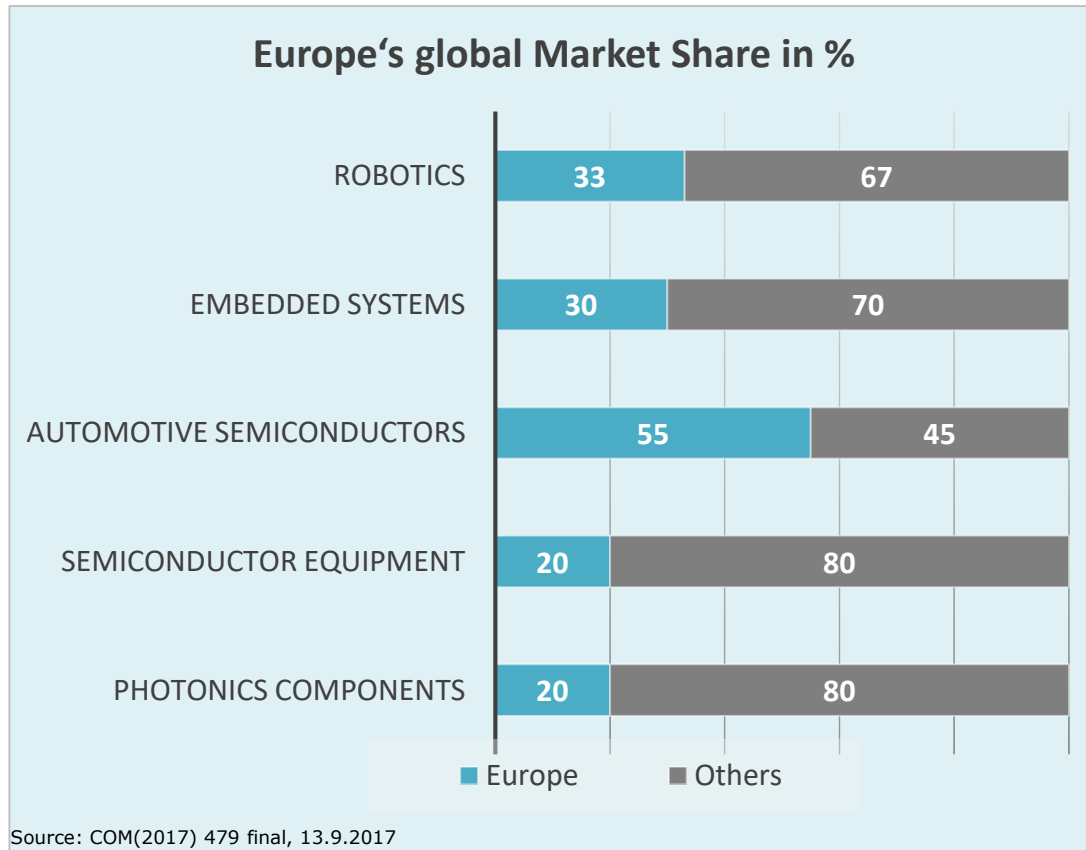
KETs are the essential technology building blocks creating value



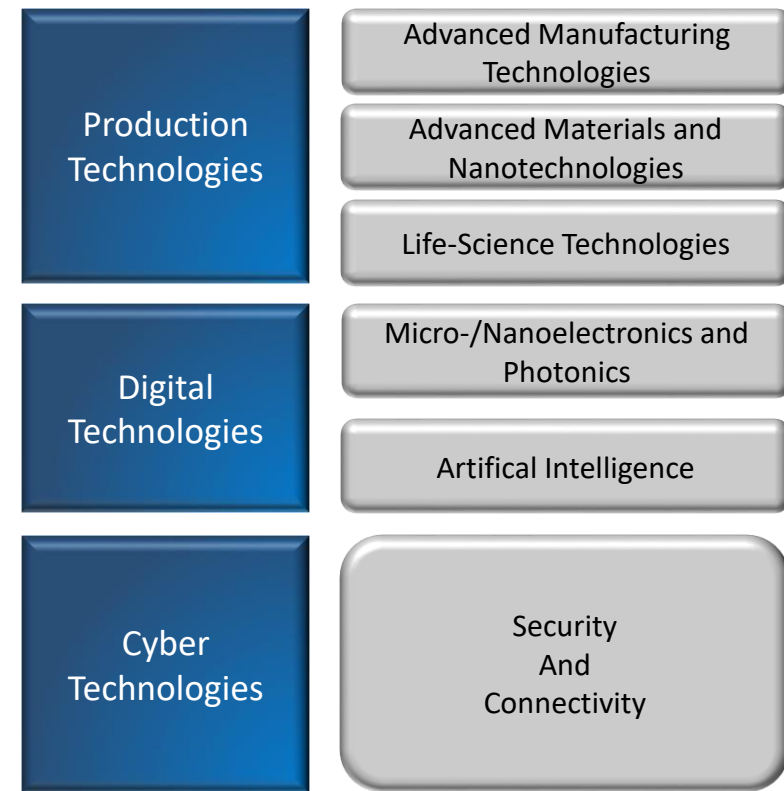
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Source: HLG report June 2011

KETs are the essential technology building blocks creating value



A more strategic view on technology and innovation is needed...



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Global Megatrends shape our society

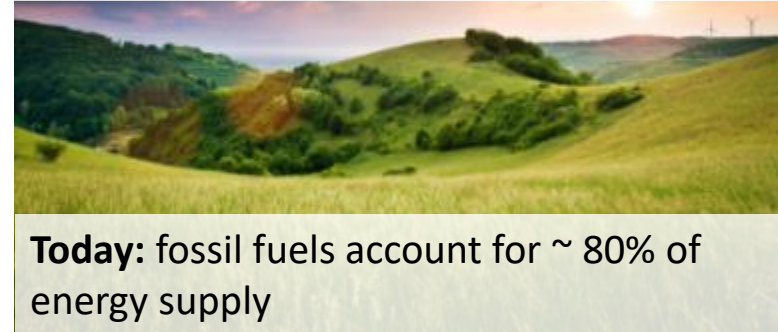
Demographic & social change



Urbanization



Climate change & resource scarcity



Digital transformation



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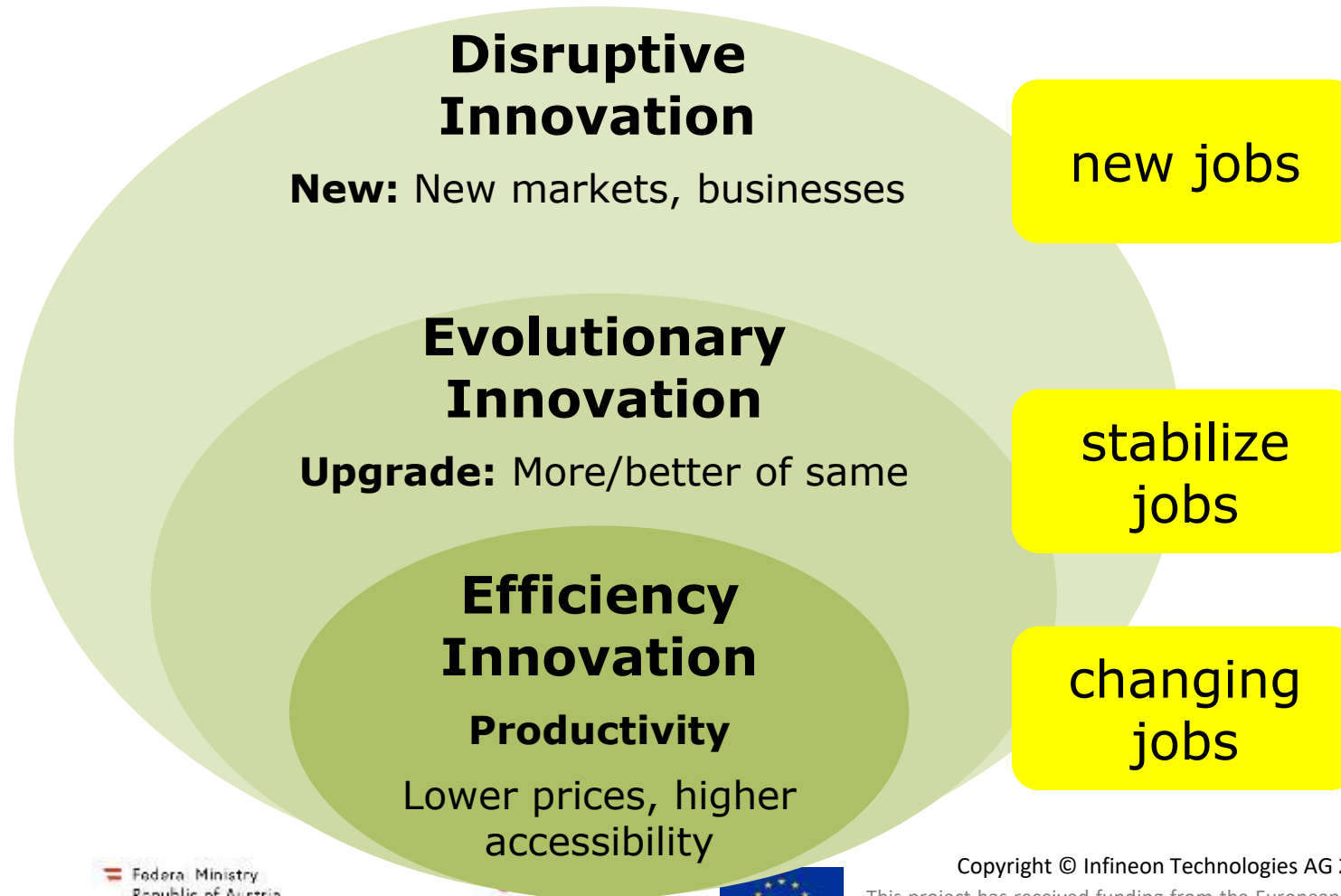
Digitalization – more with less!

- › **Energy efficiency:** More power with less resources
- › **Quality of life:** More quality of life and security at lower cost
- › **Prosperity:** More access to better and cheaper products through higher productivity
- › **Mobility:** More sustainable movement in narrow spaces
- › **Working world:** More human-like work through cooperation with machines

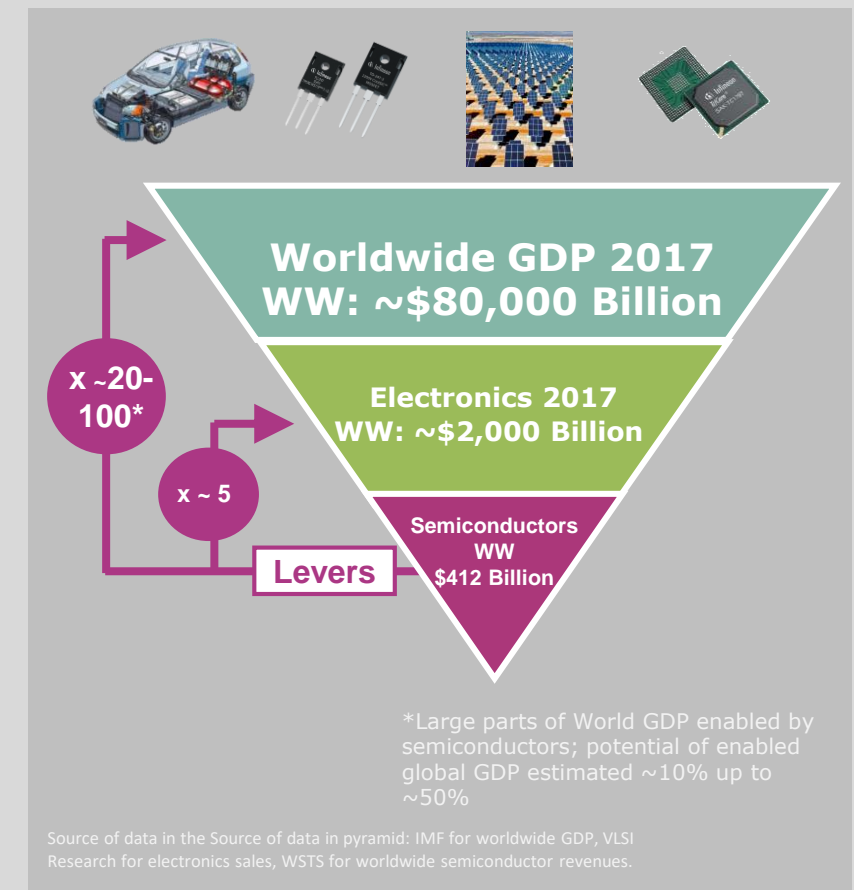
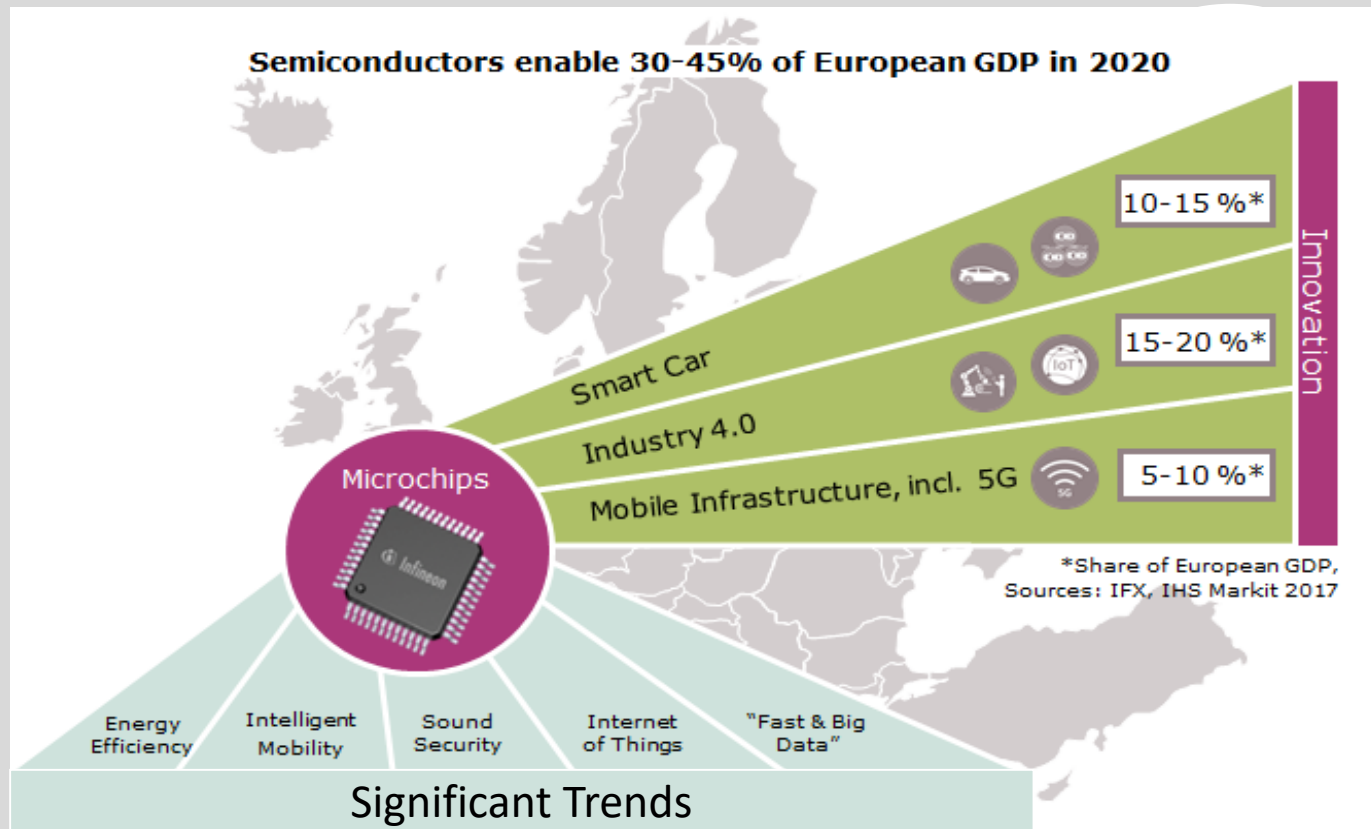
Digitalization affects all areas of our life and benefits society.

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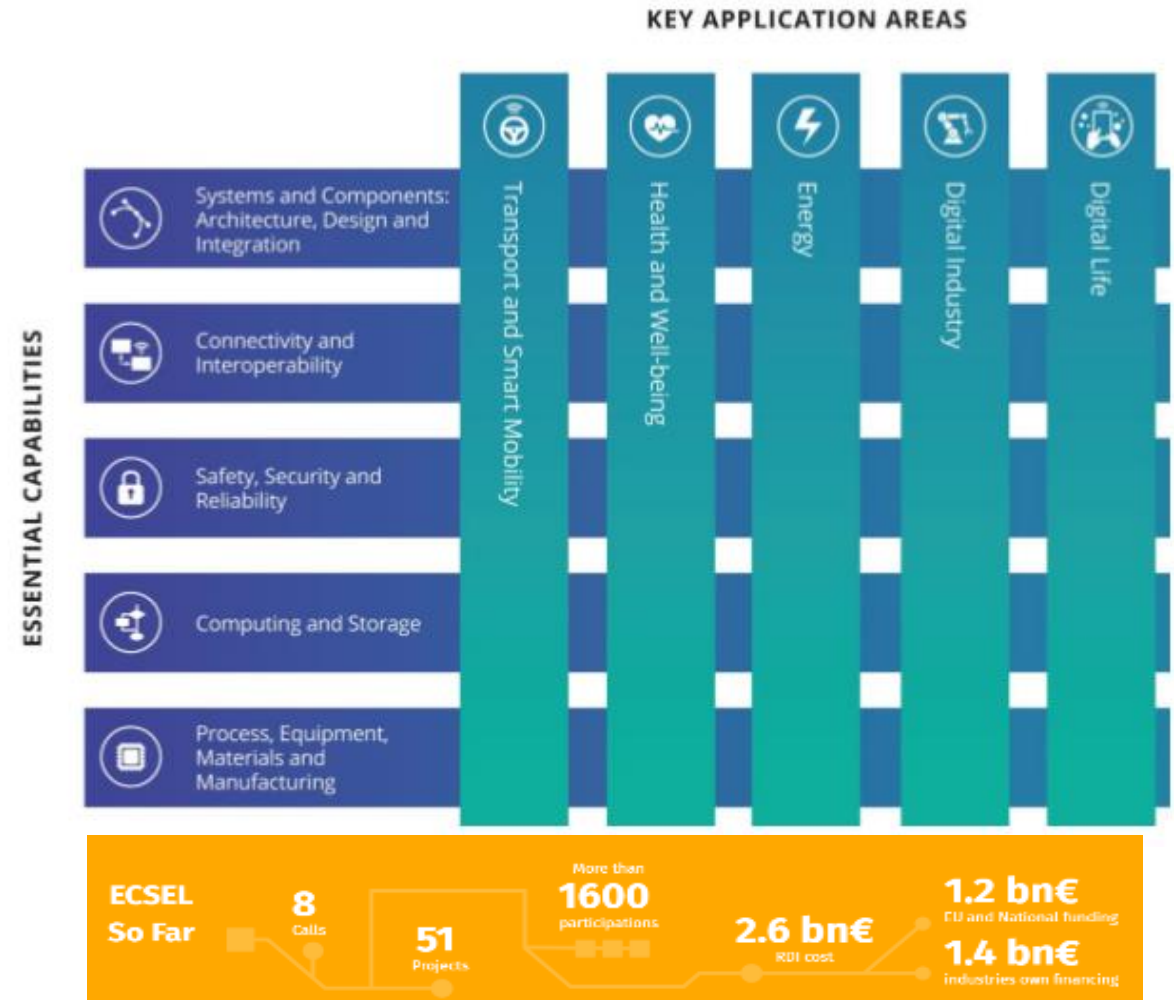
Digitalization and Innovation: we can grow....



Semis: Enablers for the digital transformation, in Europe and worldwide



Example ECSEL: Demonstrating joint success

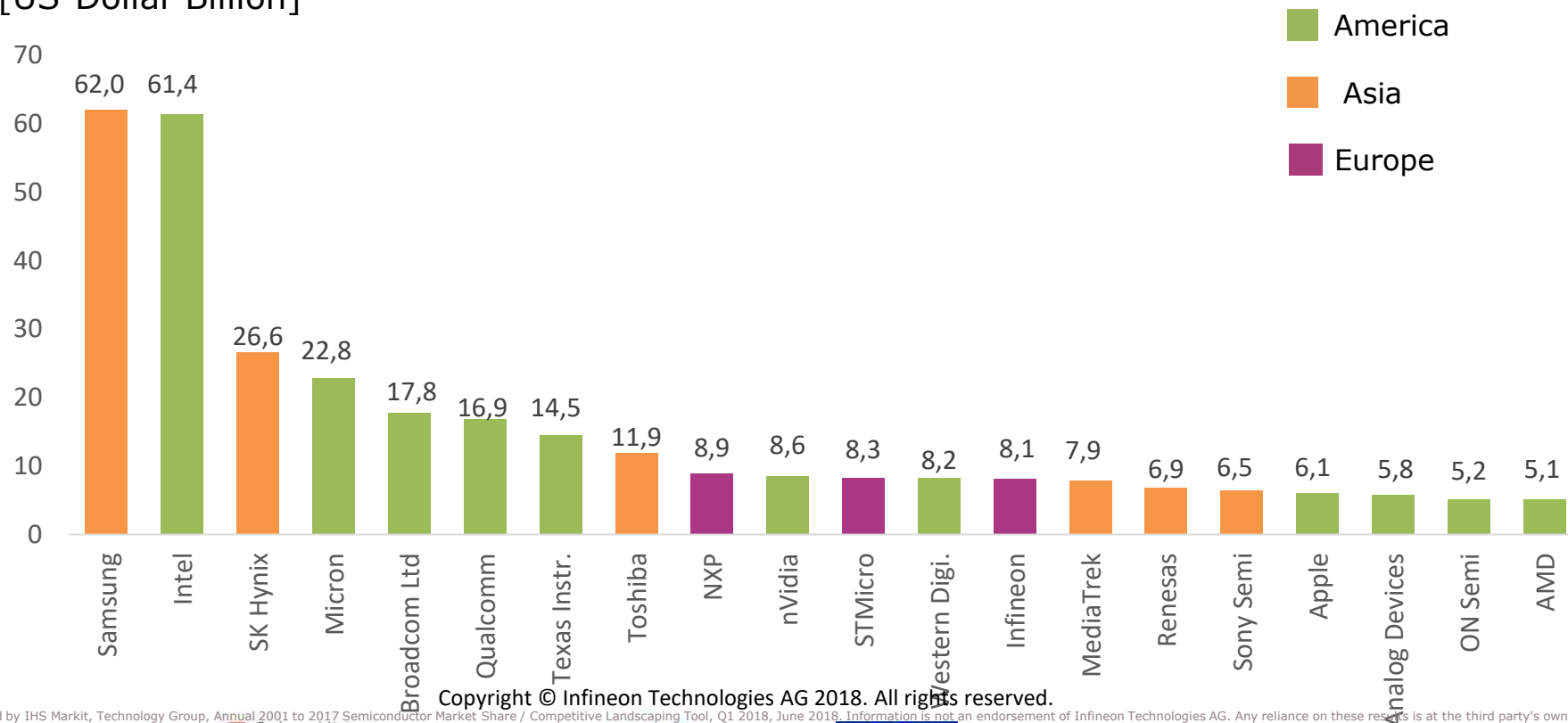


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Example KET Semi: Europe needs to take a driver seat

Top 20 Semiconductor Suppliers in 2017

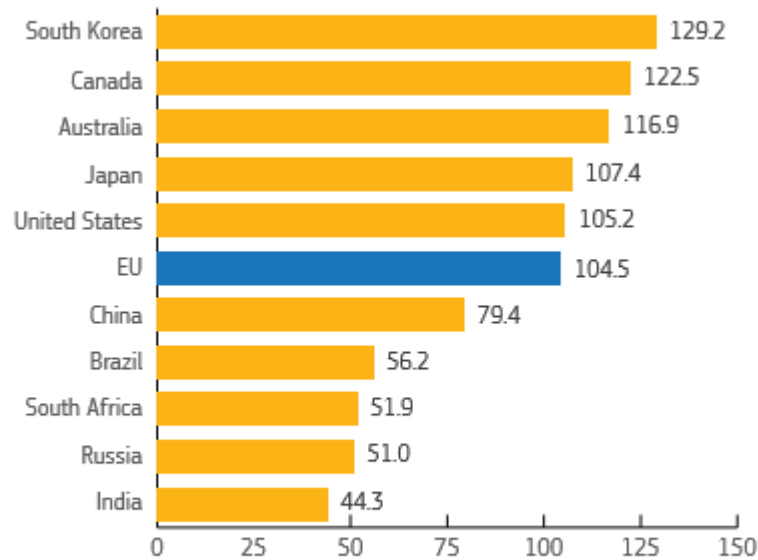
[US-Dollar Billion]



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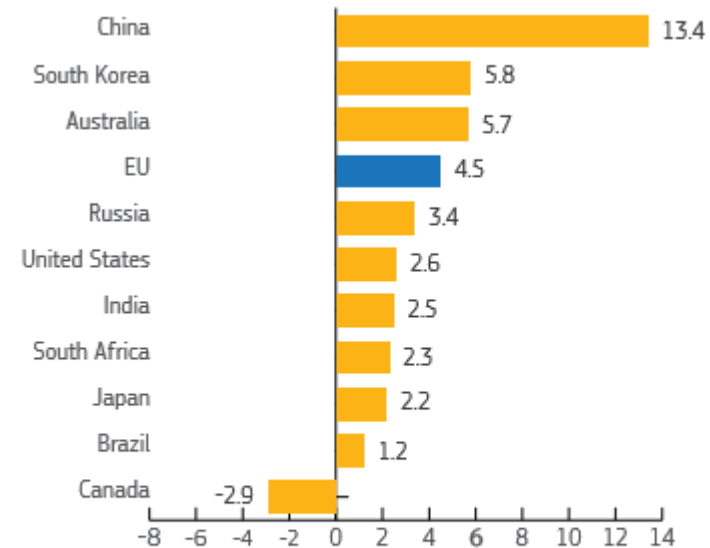
Source: Based on or includes content supplied by IHS Markit, Technology Group, Annual 2001 to 2017 Semiconductor Market Share / Competitive Landscaping Tool, Q1 2018, June 2018. Information is not an endorsement of Infineon Technologies AG. Any reliance on these results is at the third party's own risk. Visit technology.ihs.com for more details.

Europe must keep an eye on its innovation performance...



Bars show countries' performance in 2017 relative to that of the EU in 2010.

Source: <https://ec.europa.eu/docsroom/documents/30281>



Change in performance is measured as the difference between the performance in 2017 relative to the EU in 2010 and the performance in 2010 relative to the EU in 2010.

Source: <https://ec.europa.eu/docsroom/documents/30281>

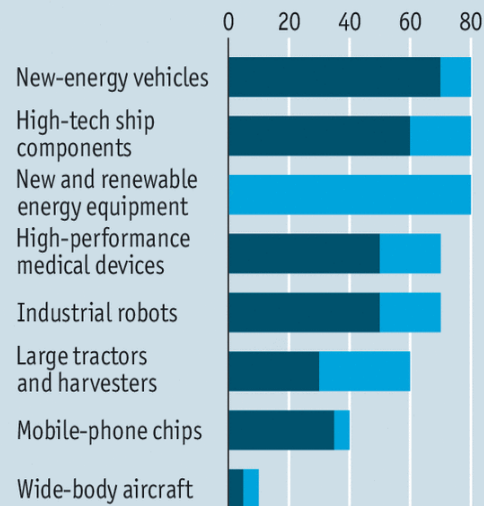
Beyond Europe: Strategic & focused growth: „Made in China 2025“

“Made in China 2025”



Dominant ambitions

Chinese companies' domestic market-share target, %



Source: Mercator Institute for China Studies

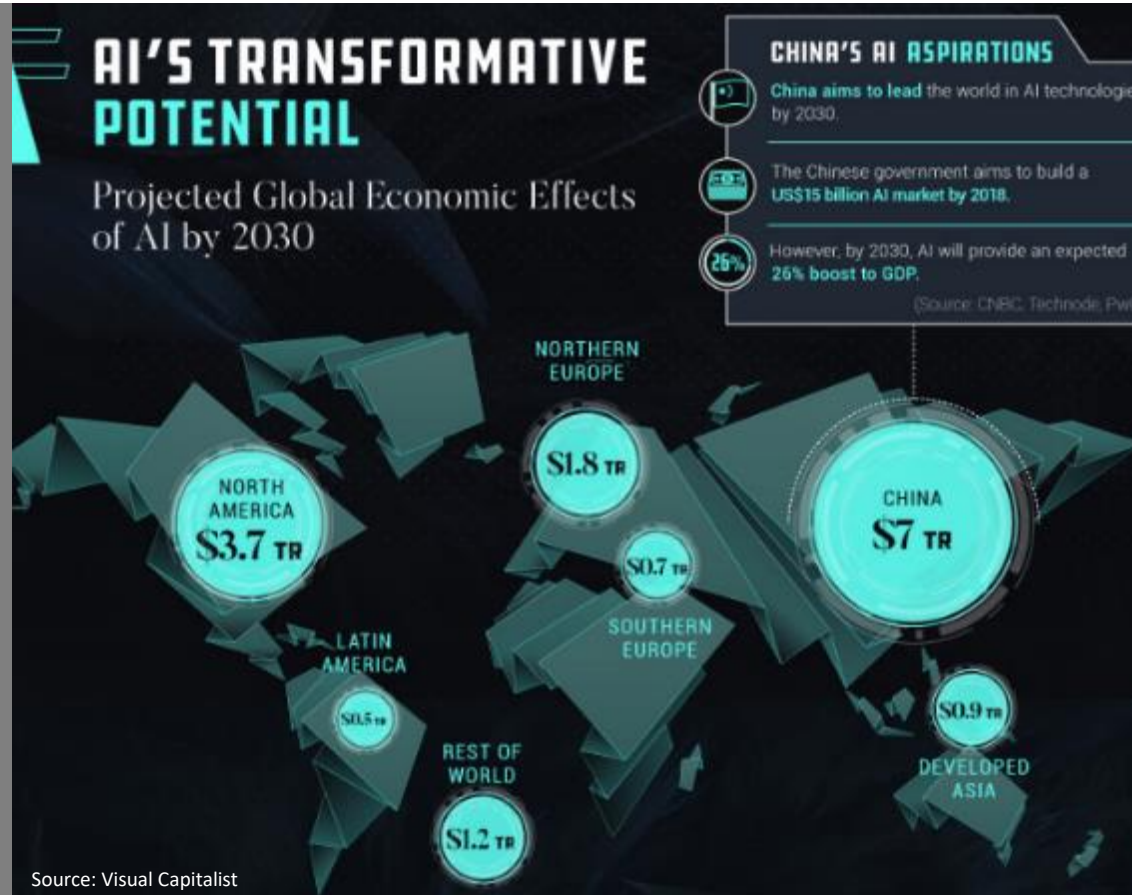
Economist.com

Combination of:

- › Technology from outside
- › Own capabilities
- › Market demand
- › Public money

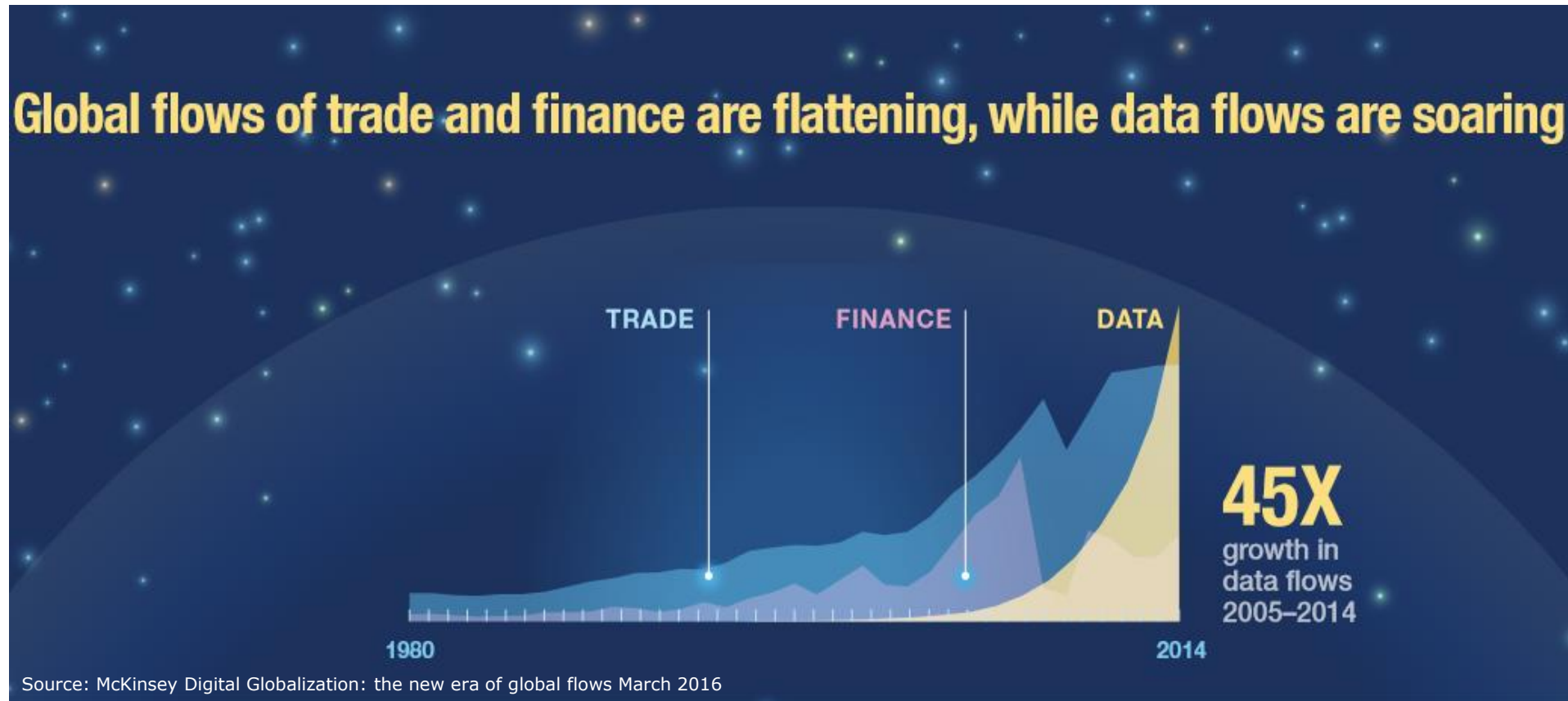
**...may give the strategy
“Made in China 2025”
significant effects ...**

Artificial Intelligence: US and China are „on the fast track“



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Globalization and data flows have entered a new era...



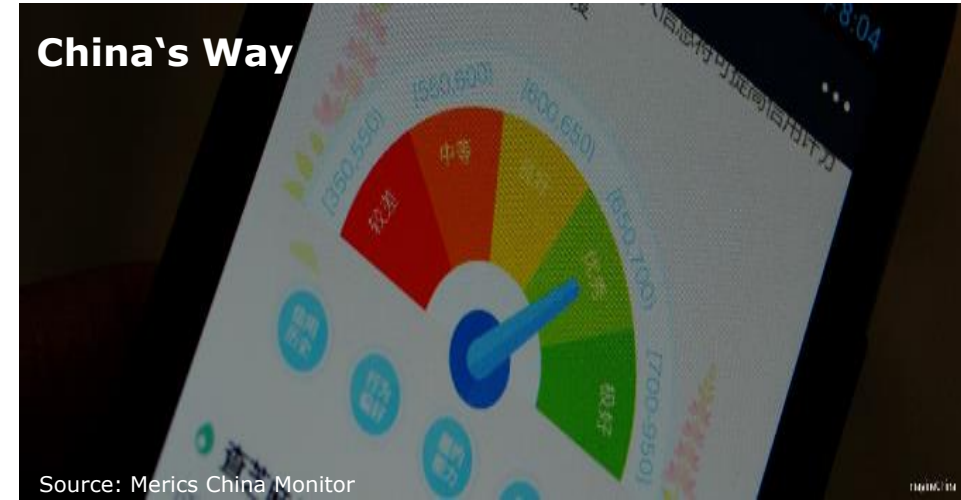
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Technology is not neutral but linked with democratic values...

USA's Way



China's Way



EUROPE's WAY?

e.g. Europe 2020:

Smart, Sustainable and Inclusive Growth and Jobs

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Conclusions

KETs are the new geopolitical „currency“: they are system relevant for strategic value chains, competitive strength, economic & societal autonomy and security

Digital transformation is more than technology: economic, political and cultural competition. However, competition in technology will decide

A globally competitive European strategy is THE key for this competition. China and U.S. act strategically! We need to create a strong European way

In practice: MFF with focus on future-oriented objectives (Innovation, Digitalization & digital infrastructure, Education), HEU: significant budget, KETs (eg AI) aligned resources, innovation-oriented procurement.