



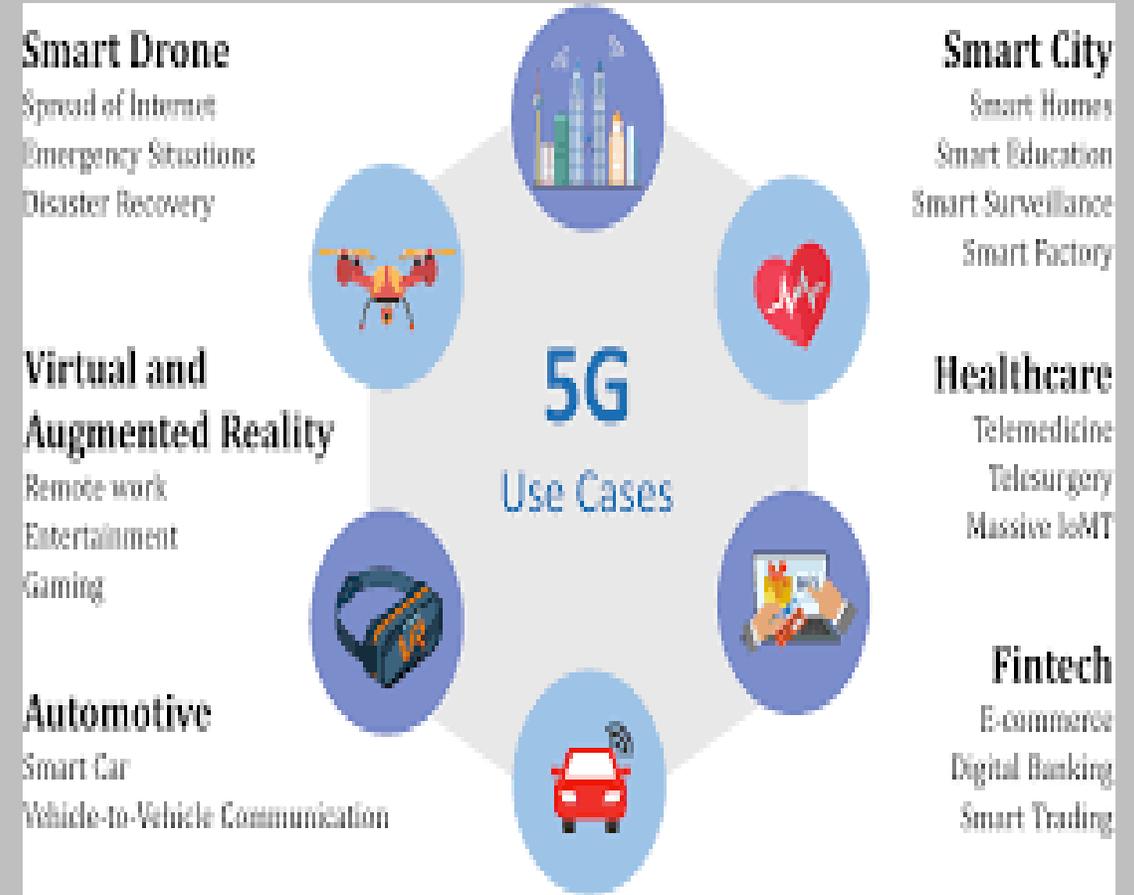
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THE GEOPOLITICS OF DATA

- Tracking the debate on Information & communications technology (ICT)

What is 5G? Why are the US and PRC fighting about it?

1991	1998	2008	2020?
2G	3G	4G	5G
Texting	Texting, Internet access	Texting, Internet access, Video	Texting, Internet access, Ultra HD & 3-D video, Smart home
2G Frequencies	3G Frequencies	4G Frequencies	5G Frequencies
GSM 2G Upto 1.9 Ghz	HSDPA 3G Upto 2.1 Ghz	LTE 4G Upto 2.5 Ghz	IoT 5G Upto 95 Ghz



5G allows for the harvesting of large amounts of data from smart-sensors, while big data analytics and AI allow for its processing and exploitation.

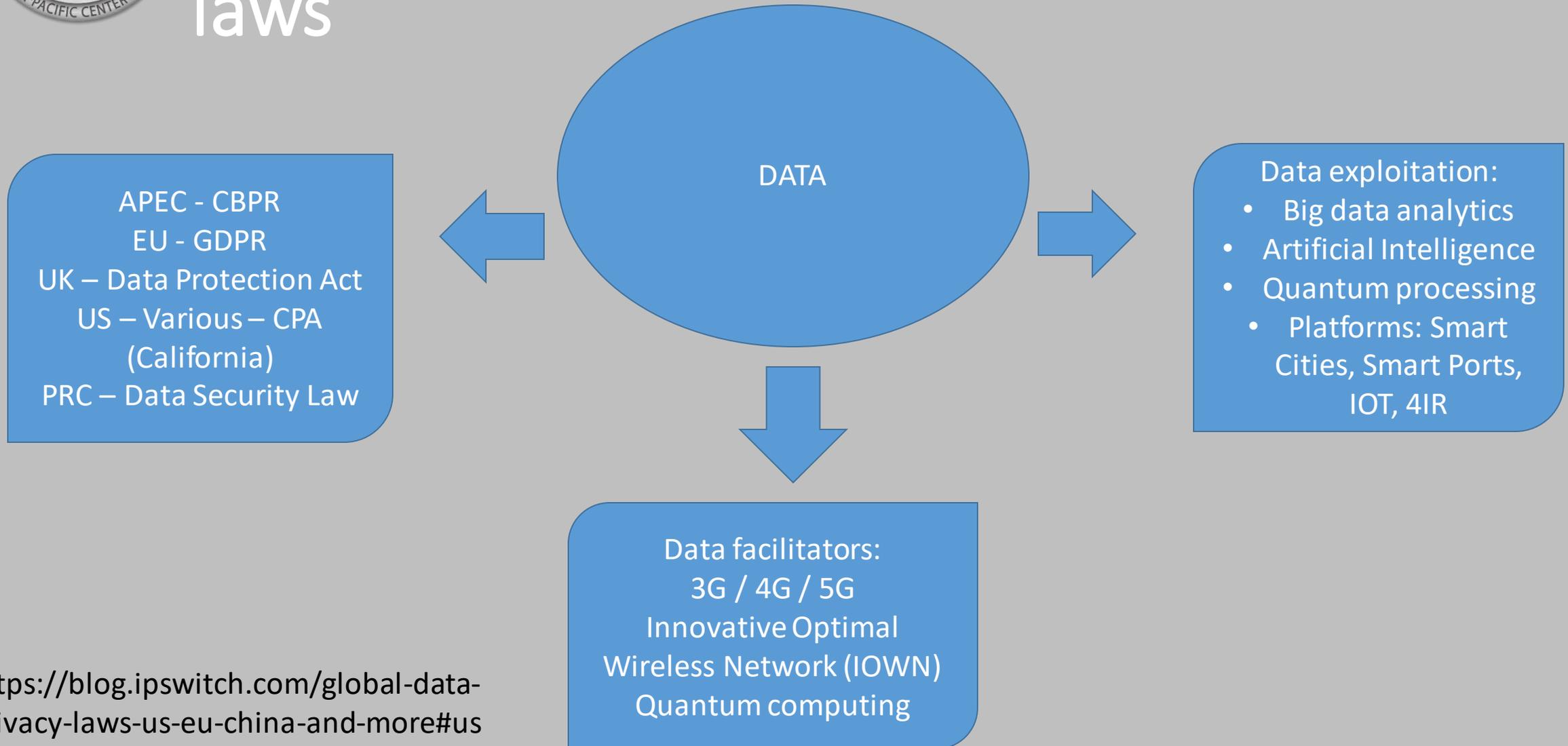


Bottom Line up Front

- There is a new generation of information & communications technology (ICT) approaching that will be the backbone of machine-to-machine networks, the 4th Industrial Revolution, and the Internet of Things.
- The industry will generate **\$12.3 trillion** to global economic output & **22mn jobs** worldwide.
- US and PRC Trade War rapidly becoming what FT calls a new **Technology Cold War**
 - Competition for **economic rewards** – **geo-economic**
 - Competition in **state powers over data** – **ideological**
 - Competition over **future of the internet** – **geopolitical**
 - Competition over **PRC ICT in US allies** – **geostrategic**



Data facilitators – Data exploitation – Data laws





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Human Rights, Democracy, and the Rule of Law



Direction of PRC Policy Relating to Data Technologies

2013: One Belt One Road / Information Silk Road

2015: Made in China: 2025

2016: 13th Five Year Plan

2016: National Innovation-Driven Development Outline

2016: Cyber Security Law of the PRC

2016: Civil-Military Fusion Doctrine

2017: National intelligence Law of the PRC

2020: Data Security Law (*under consideration*)



~The PRC National Innovation-Driven Development Outline, 2016

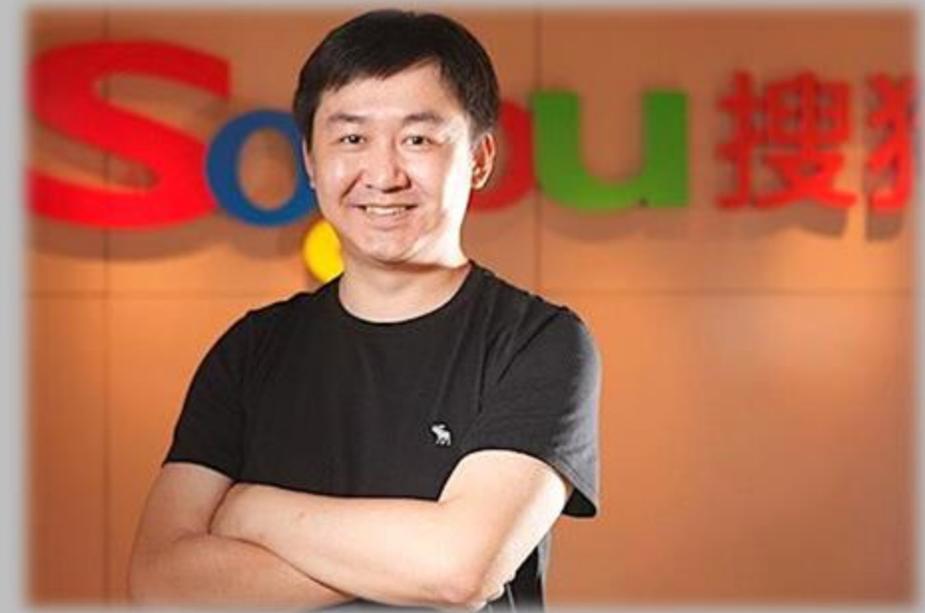
“Disruptive technologies are constantly emerging, continually reshaping the world’s competitive landscape, changing the balance of power among states.”



Chinese Communist Party and the Technology Sector

“We’re entering an era where we’ll be fused together. It might be that there will be a request to form a Party Committee or allow state investors to take a stake...as a form of mixed ownership. If you think clearly about this, you can really resonate with the state, you can receive massive support. But if its your nature to go your own way, you’ll find that things are more painful than in the past”

~Wang Xiaochuan, CEO of Sogou





Article 7 of National Intelligence Law

“Any organization or citizen shall support, assist and cooperate with the state intelligence work in accordance with the law, and keep the secrets of the national intelligence work from the public.”





PLA Military Command Academy

“As military activities accelerate towards extending into the domain of intelligentization, air combat platforms, precision-guided munitions, etc. will be transformed from ‘accurate’ to ‘intelligentized.’ 5G-based AI technology will definitely have important implications for these domains”





The Digital Silk Road: Exporting Hegemony?

“is **defined** as a situation in which one state is powerful enough to maintain the essential rules governing interstate relations, and willing to do so”

- **Strategic Scale:**

- Massive ICT infrastructure, supported by marine cables, and space satellite systems, to support smart ports and smart cities across 55% of world's GDP, 60 countries, 70% of the world population, and 75% of its energy resources. Total spending could reach \$1.2 – 1.3 trillion.

- **Strategic Intention:**

- Technology Acquisition Programs: 995, 863, Super863, advanced technology strategies: Made in China:2025, National Strategy for Innovation-Driven Development, Next-Generation AI Development Plan, civilian-military technology program: Civil-Military Fusion Policy

- **Strategic Pillars:**

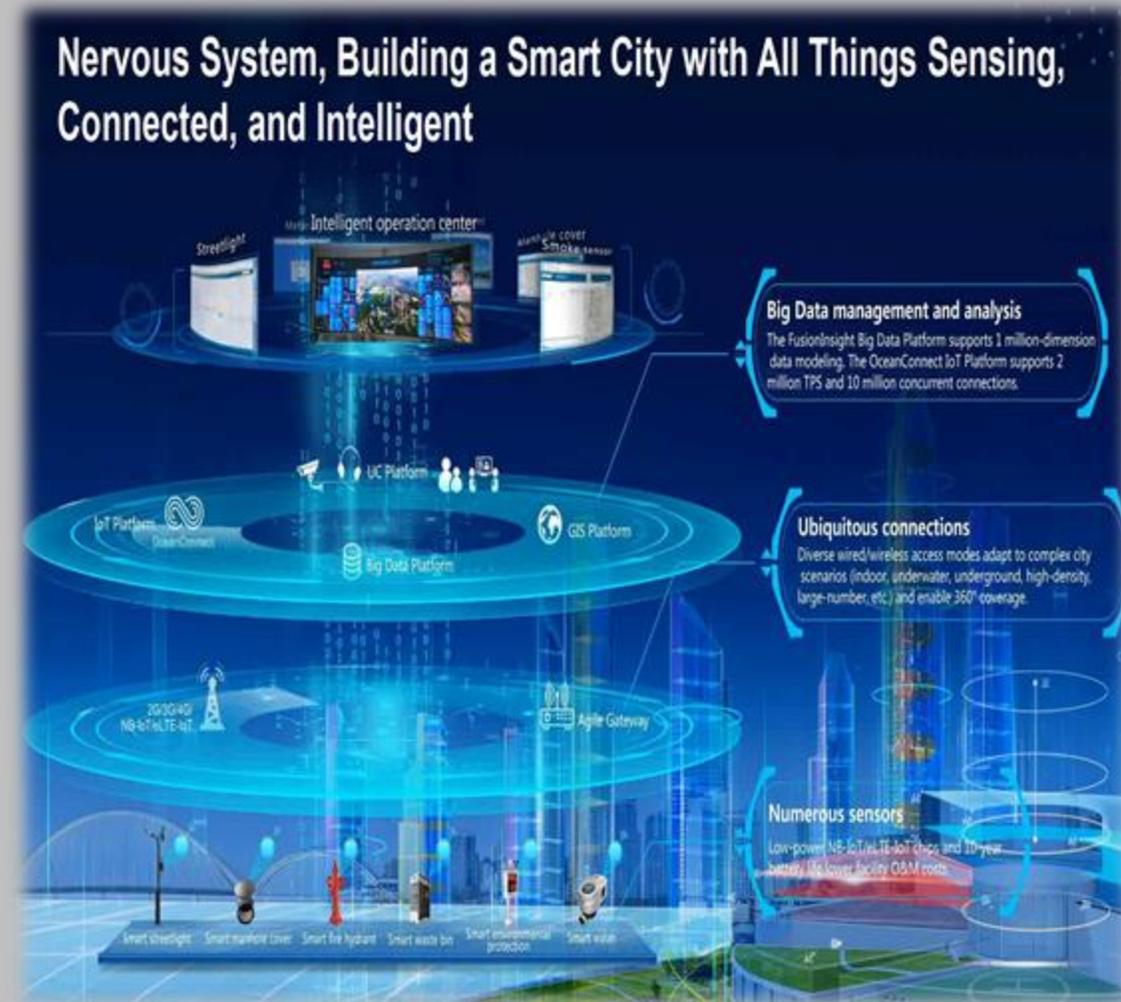
- Values and Governance
- Trade and Economics
- Ports and Shipping

Educate Connect Empower



Values and Governance

- Huawei and ZTE have built Smart Cities and Smart Ports in 200 cities across 60 countries
- These centralize personal, urban, and trade data, which PRC tech help harvest and provide real-time analysis & solutions.
- At the extreme end of the spectrum, countries can establish central hubs like the Integrated Joint Operations Platform (IJOP) in Xinjiang, which surveil populations at a granular level.

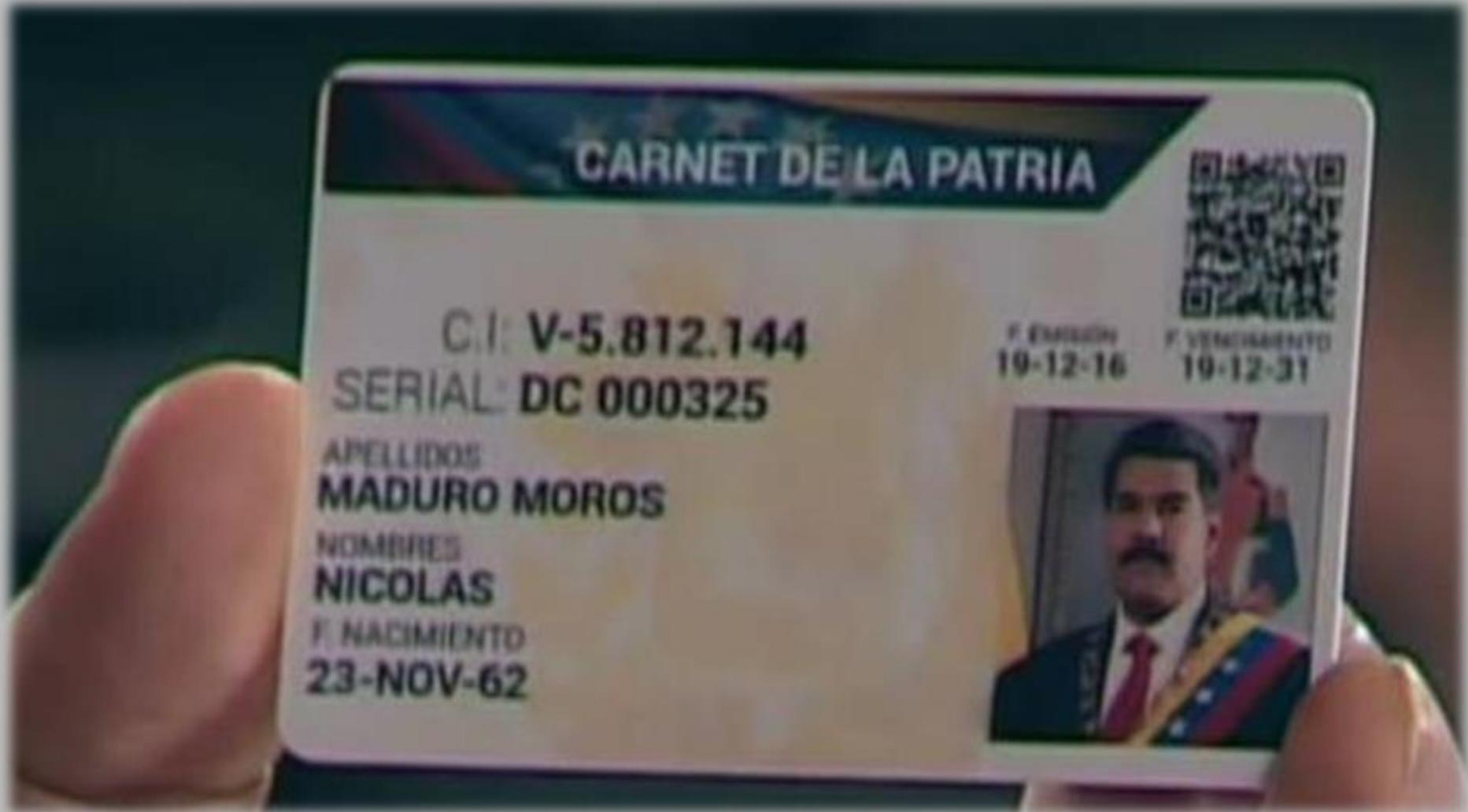


Huawei Actively Contributes to Global Smart City Construction and Sets Footprint in 120+ Cities in 40+ Countries.





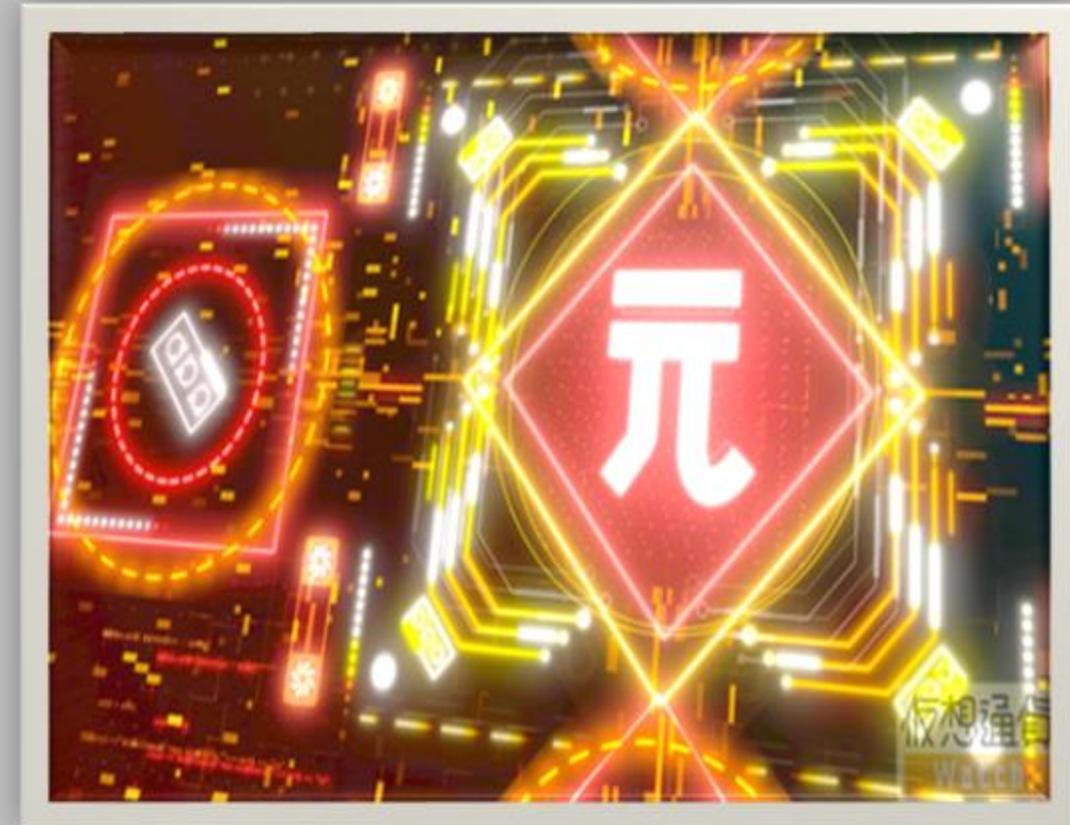
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Economics and Trade

- 2009: Li Ruogu, Chairman of China's Exim Bank called for an **end of dollar's dominance**
- 2010s: Ten Cent, Alibaba, Baidu, and Ant Financial all began to run **"digital wallets"**, with over 1bn users, promoting usage of the RMB across the Digital Silk Road.
- 2015: PRC rolls out the **Cross-border Inter-Bank Payment System** (CIPS) to compete with the dollar-dominated SWIFT
- 2018: PRC sets up clear house at the People's Bank of China called **"Wanglian"**, which monitors all transactions.
- 2020: Four PRC State Banks working on a digital currency called **Digital Currency Electronic Payment** (DCEP)
- July 2020 China's central bank may test digital yuan on Meituan Dianping's food delivery platform with 435 million users.

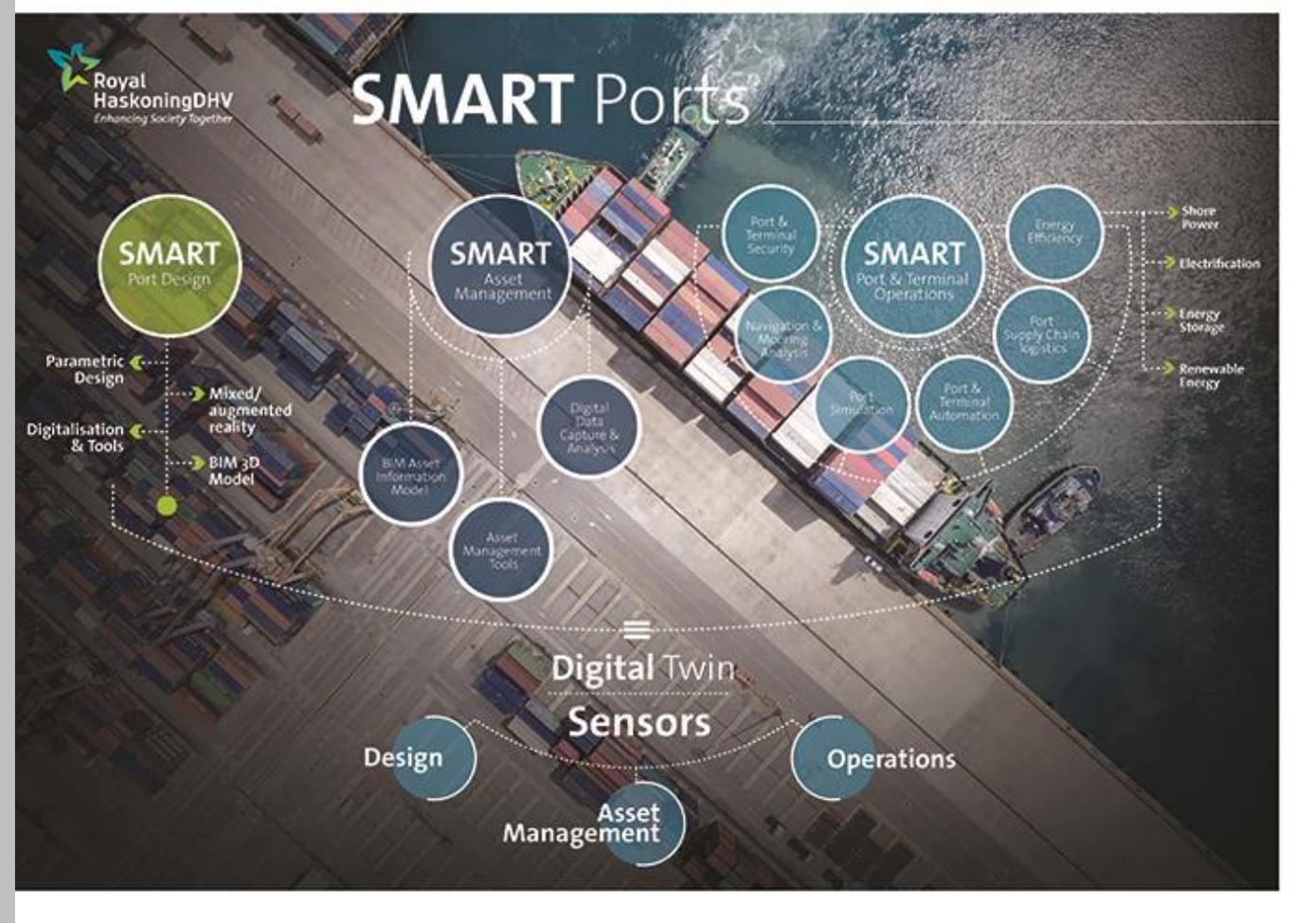




PORTS & SHIPPING

Smart Ports offer

- Centralized data programs
- Smart-lifts and cranes, increasing productivity and lessening loading and unloading times
- Big data monitors to adhere to regulatory requirements
- Smart energy usage for power



Discussion Points

- What is behind the decoupling in approaches toward technology?
- How is what the PRC doing different from what the West has done traditionally with technology?
- What policies will help the West respond to the PRC's 5G geopolitical strategy?
- What should be the Western response to efforts by the PRC in the ITU to change internet protocols?
- Can technology have political values embedded in them?

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The Geopolitical Risks in China's Digital Silk Road

by John Hemmings

January 28, 2020

This essay examines the strategic intentions and origins of the Digital Silk Road and the implications for U.S. and like-minded countries.

#ShamelessSelfpromotion.



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