

March 2016



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The Digital Economy, Mega-Regional Trade Agreements and Health Care | Emerging Trends

HUAWEI TECHNOLOGIES CO., LTD.



Outline

1

The Digital Economy

2

The Health Care Sector and the New Digital Reality

3

Mega Regional Agreements

4

Emerging Trends

Defining The Digital Economy | More questions than answers

Is it just about e-commerce?

Is it about all digitally-enabled online transactions?

Is it about using digital platforms to facilitate the exchange of goods and services in the real world?

Is it about replacing physical goods with digital downloads?



The Digital Economy | new players and traditional stalwarts



Tencent 腾讯



Even brick and mortar companies that we associate with the “traditional” economy see themselves today as internet companies .

The Digital Economy | innovators and disruptors



The digital economy is not only difficult to define, but is also in a constant state of flux and is constantly evolving.



iTunes



The Digital Economy | arriving at a workable definition

The Digital Economy

“The ecosystem comprising goods, services, platforms and solutions that are either instrumental to or avail themselves of internet connectivity and online access”.

Important caveat

“[...] the digital economy is increasingly becoming the economy itself”. OECD (2014).

Any effort to “ring-fence” the digital economy from the real economy or make arbitrary distinctions between the two, will only become increasingly futile

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Health Care & the Digital Economy | more definitions

Health IT

Information-driven health practices and the technologies that enable them. Includes billing and scheduling systems, e-care, EHRs, telehealth and mobile health

E-Care

The electronic exchange of information – data, images and video - to aid in the practice of medicine and advanced analytics

EHR

An electronic health record is a digital record of patient health information generated by one or more encounters in any care delivery setting.

Telehealth

Often used as a synonym for e-care, but includes non-clinical practices such as continuing medical education and nursing call centers.

Mobile Health

The use of mobile networks and devices in supporting e-care

Health Care & the Digital Economy | limited benefits

- Innovations in the area of **telehealth** and **telemedicine** have helped overcome the **tyranny of distance**, making it possible to provide rudimentary care to patients in remote locations, and to **save costs** by outsourcing some activities such as diagnostics to lower-cost locations (telediagnosics).
- The internet has also allowed consumers (patients) to mitigate the very real **information asymmetries** that exist in this sector, making readily available information on such things as medical conditions, the availability and cost of treatments.
- **Wearables** make it possible to track and monitor important health parameters like sleeping patterns, daily exercise regimes, and weight gain or loss
- **Downloadable apps** make it possible to schedule appointments, claim reimbursements, and the like using mobile smart-phone platforms.

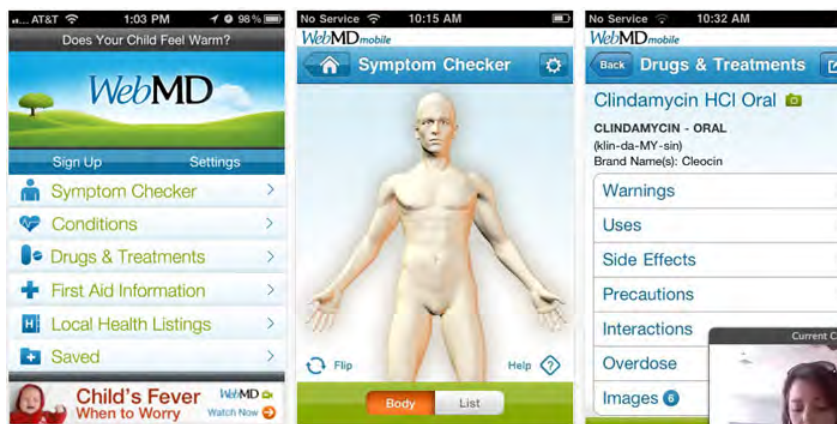
Health Care & the Digital Economy | something missing

The 10 biggest health-care companies in the Fortune 500



The punch-line here is that the biggest health care companies are all legacy players, none of which were established or rose to predominance on the back of the digital economy . With very few exceptions they are all largely active or dominant on one geographical market, namely the United States

Health Care & the Digital Economy | some players



Health Care & the Digital Economy | online initiatives



Health Care & the Digital Economy | key constraints

- The digital economy in the healthcare space is still largely fragmented along national lines.
- The high level of regulation and government intervention that permeates the healthcare sector limits the freedom of action of private sector participants which stifles innovation.
- The real problem is what I like to call the data-disconnect: Data and big data analytics are the lifeblood of the digital economy. In the health care sector, data is nominally owned by the data subjects (private individuals), and is collected and held by healthcare providers (hospitals, medical insurers) who are legacy incumbents typically at the low end of the scale when it comes to digital innovation (albeit not necessarily other forms of innovation). The most innovative players in the digital economy (entrepreneurs, start-ups and venture capitalists) are the ones with the great ideas and in many cases money, but they don't have data, and they don't have any easy way to obtain the data they need in light of prevailing privacy laws.

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International Rule-Making | The TPP

THE TRANS-PACIFIC PARTNERSHIP

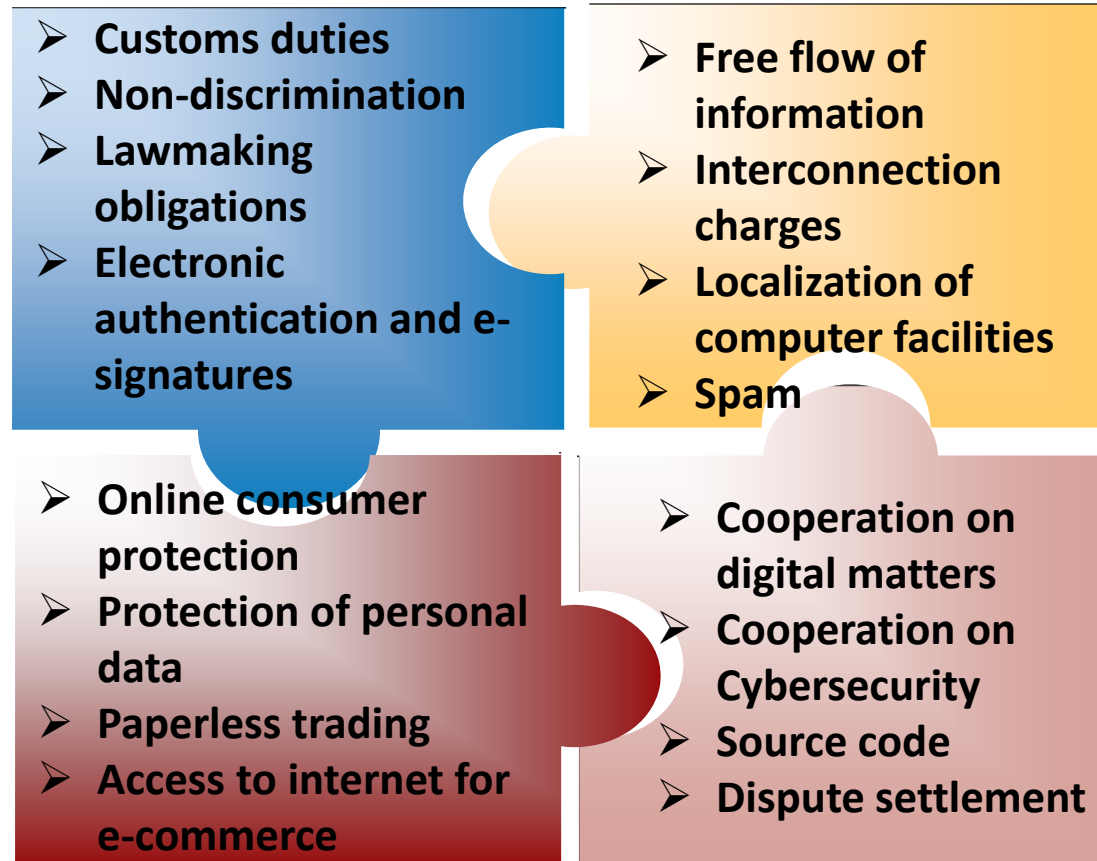


Different provisions impacting the digital economy

- E-commerce chapter
- Rules on technical barriers to trade and standard setting
- Cross-border trade in services
- Rules on regulatory coherence
- Intellectual property rules

International Rule-Making | The TPP E-commerce chapter

Some 18 provisions covering a broad range of issues impacting digital trade:



International Rule-Making | The WTO: ITA and TISA



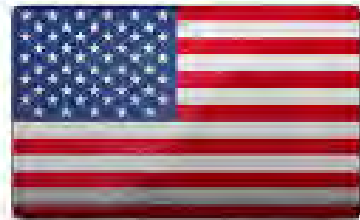
The 2015 update of the **WTO Information Technology Agreement** will see tariffs eventually phased out completely on hundreds of IT products, including Magnetic Resonance Imaging (MRI) machines and Computed Tomography (CT) scanners, and a large number of medical devices.

The **WTO Trade in Services Agreement** draft text currently being negotiated includes provisions on the free flow of data, net neutrality, the protection of source code and the protection of personal data. It is likely to include e-commerce provisions that are very similar to those in the TPP.

International Rule-Making | The TTIP

- The TTIP is very likely to contain many of the same provisions on the digital economy that the TPP has already established standards on and will further entrench these as the default rules that all countries will eventually have to adopt and/or comply with.

TRANSATLANTIC TRADE AND INVESTMENT PARTNERSHIP



International Rule-Making | EU-US Privacy Shield



- Concluded in February 2016 in response to the European Court of Justice invalidating the Safe Harbour framework that had hitherto regulated the transfer of personal data between the EU and the US (as well as Switzerland);
- It remains to be seen how the new rules will function in practice, whether they are again challenged before the ECJ and how affected companies will respond to the new rules.
- It also remains to be seen whether these rules will establish a new de facto set of international privacy standards.

International Rule-Making | Industry advocacy



- Many of trade associations or their member companies enjoy privileged access to government negotiators and confidential drafts of negotiating texts.
- There is a genuine opportunity for Huawei to play a role in influencing these outcomes.

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Future Risks and Opportunities | bucking the trend

- Data localization obligations
- Local content requirements
- Mandatory source code sharing
- Calls to include mandatory backdoors
- Subsidy and state aid programs



These are just some of the many restrictions policymakers in many countries are implementing that represent very real risks to the continued development of the digital economy.

Future Risks and Opportunities | data and privacy are key

This is an area where we are likely to see breakthrough innovation only if the most innovative players in the ecosystem can gain access to medical data in a more comprehensive way, either by partnering with those stakeholders holding it, or by obtaining permission to access such data from the data subjects directly.



Thank you

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