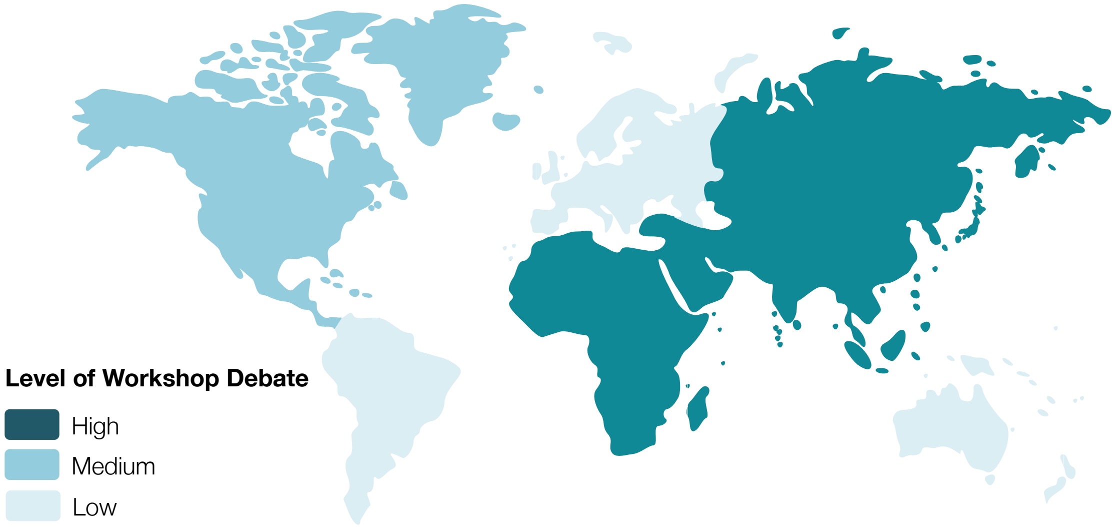
4.7 Data Localisation

Nations see benefit in copies of all citizen and machine data in regional centres. Government and local companies seek access to data held by foreign corporations.

Context

Data localisation aims to ensure that a copy of all nationally-generated data remains stored and accessible in the country of origin. It attempts to restrict data flows across borders by either mandating companies to keep data within a certain jurisdiction, or by imposing additional requirements before it can be transferred abroad. The objectives behind these restrictions are diverse, including privacy, cybersecurity, public order, law enforcement, taxation, and economic development.

Support for localisation is growing in a number of countries. In highly populated Asian nations, such as China and India, many think curbing access to national data will facilitate economic growth locally, and build or protect political power. This is prompting many new measures. In India, for example, in 2018, the Reserve Bank of India prohibited companies from sending financial data abroad, and a draft government policy envisages a ban on the international transfer of data generated by Indian ecommerce users. The number of restrictions on cross-border flows has tripled over the last decade, with over 80 in place at the time of writing.[108]

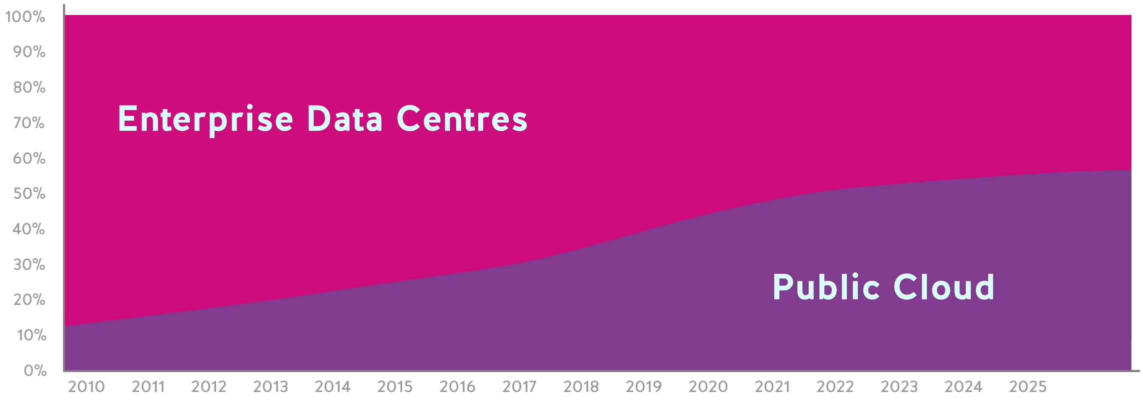


Opponents of data localisation argue that it restricts, rather than stimulates growth, with consultants such as Deloitte suggesting it will have negative economic consequences.[109] Proponents of cross-border data flows argue that local legislation undermines free trade by adding onerous and expensive obligations for businesses, including building, operating, and maintaining data centres in multiple countries, as well as creating and updating separate data sets – even if they are a mirror of those held elsewhere. Add to that the inconvenience of having to go through a number of regulatory approvals to either operate in a market or comply with specific sector rules, and it's clear, they argue, that this restricts opportunity.[110] Opponents of data localisation therefore argue that it is counterproductive for emerging economies, constraining economic growth and with a negative impact on social development.

What We Heard

In the discussions, those in favour of data localisation focused on three main areas:

1. **Economic Development –** Encouraging investment in and the development of national data centres that drive, and are linked to, foreign direct **investment.**
2. **Technology Ecosystems -** Seeding growth of local centres of data expertise and access, that encourage regional company innovation and growth.
3. **Market Access –** Using data regulations as a political lever, where multinationals cede control of data sets in return for market access.



Source: Data Age 2025, sponsored by Seagate with data from IDC Global DataSphere, Nov 2018

Global Data: Data Stored in Public Clouds vs Corporate Data Centres

Economic Development

A constant thread throughout many discussions was that, despite the increase in global GDP, the real value of data trade to date has been largely ringfenced and retained by multinationals. In Hong Kong, opinion was that *"there are some companies whose profits exceed the GDP of many nations, and which wield extraordinary power. This power is in private hands and not accountable to democratic processes, which is potentially very dangerous."* There was a sense in some workshops that participants, several of whom were policy makers, wanted to push back against this. In Bangalore, for example, the perspective was that *"companies don't respect governments, unless they have a workforce on the ground."* India's richest man and Chairman of Reliance Group has been quoted as saying, "India's data must be controlled and owned by Indian people and not by corporates, especially global corporations."[111] The national government is keen to address this, and sees the potential to both curb the power of large foreign companies and also boost local industries through localisation legislation. China is adopting a similar approach, and other nations are watching with interest. In our Jakarta workshop, it was observed that *"there is a risk of an increasing digital divide... so the role of government in relation to the management of data could be transformative."*

However, in Sydney, it was observed that localisation laws are only really beneficial for countries with large populations; *"a few mega-countries like India can have their own independent system, but most others know that they do not have the influence to restrict sharing."*

Technology Ecosystems

The other, connected, argument in favour of localisation is that it can boost the local tech sector. This was proposed in Nairobi, where it was felt it would *"drive locally-driven tech innovation"* and *"facilitate the development and enactment of legislation to support growth in IT service consumption – as an engine to spur data centre growth."*[112] On the face of it, this might seem true, as more data centres will have to be developed locally. However, others argued that a boost for the data centre business will be outweighed by lower efficiency from using relatively expensive domestic data storage, and by the loss of foreign processing trade. They also pointed out that, increasingly, goods supply chains have an associated data stream feeding information back and forth between the manufacturer and the user. Growth will be therefore restricted if data cannot be aggregated internationally.[113]

"There are some companies whose profits exceed the GDP of many nations, and which wield extraordinary power. This power is in private hands and not accountable to democratic processes, which is potentially very dangerous."

Hong Kong workshop

Building on this, in Manilla it was felt that the existing Philippines data protection laws are suitably robust, and provide effective controls around the potential misuse of data. Therefore, rather than close its doors to data, it was suggested that the opportunity is to position the country as a *"centre of excellence when it comes to processing data from other regions and countries."*

In India, localisation legislation is setting precedents, and is supported by a powerful combination of tech leaders, and state and national politicians, not to mention the Reserve Bank of India.[114],[115],[116] The current proposals cover national security, economic development, and the desire to build local technology-enabled innovation ecosystems. Multinationals, including those from India itself, such as TCS, Infosys, and Wipro, that are dependent on operating within agreed international frameworks, however see this policy as short-sighted.[117] In the Bangalore workshop, one prognosis was that *"a new compromise may well be developed, based around international standards…..however, the situation is likely to get worse before it improves, as there is currently little consensus around data localisation."*

Market Access

With its Great Firewall, China successfully controls its own internet. Although many outside China agree with the principle of sector-focused data localisation for the likes of health and financial services data, some see numerous contradictions in the Chinese Cyber Security Law, which came into effect in June 2017 and was fully enforced in early 2019.[118] This includes controversial provisions affecting transfers of personal data out of the country, and prevents firms unwilling to comply with these rules from operating there.[119]

One important issue is the extent to which the Chinese government has access to data stored within its boundaries. Microsoft's Azure cloud service in China claims to be in an independent third-party data centre, and the AWS infrastructure is privately owned. However, few in any of our discussions on this believe that they are beyond the reach of the Chinese state. Apple, by contrast, has chosen to use the Guizhou-Cloud (GCBD) – a government-owned data centre. This was questioned in our Bangkok discussion, where there was scepticism about the real depth of the company's stance on privacy. In the West, Apple has positioned itself as an organisation that defends privacy as a civil right.[120] However, some, particularly those we spoke to in Asia, now see that these principles have been compromised in order to access the significant Chinese market.[121] Certainly, the view in Bangkok was that *"Apple has caved in."* Furthermore, concern was expressed about the independence of the global Chinese technology companies which store data from other countries on their servers. Many believed that they are also obliged to give the Chinese government access to their records.[122]

> "Data differences are one aspect of a large systemic conflict... but this matters, because as China grows, more people/nations will try to emulate it."
>
> Washington DC

In Hong Kong, the perspective was that we are witnessing a cultural challenge to the way the internet will be managed in the future; *"what would be the implication of China winning the debate about data, and what would happen if it exported its values around the world?"* As this battle continues, there may well be one set of internet standards for the West, and another for key parts of Asia, they argued.

Implications for Data Value

Several nations are now pushing back against localisation regulation, most significantly the US and the EU. In Washington DC, this was framed as part of a broader geopolitical change; *"data differences are one aspect of a large systemic conflict... but this matters, because as China grows, more people/nations will try to emulate it."* There is also significant action across SE Asia. In Thailand and the Philippines, both of which have separate data privacy legislation that could be applied to data localisation at some point, the general appetite was for the development of privacy frameworks that protect consumers, while also allowing data to flow across borders.[123]

Several put the rise of localisation regulation down to a lack of expertise amongst policy makers. In Bangkok, the suggestion was, "The quality of government officials' data knowledge needs to improve – and with it, the understanding of the potential benefits." In Bangalore, the view was that "we will see an increasing assertion of data localisation around the world, but at the same time there will be growing discontent as consumers complain of a slower Internet, and the delivery of goods and services being hampered. Potential investors may choose to go elsewhere."

Reasoning against localisation, Singapore is seeking to change the direction of travel, arguing that those that store data locally pose a risk to the growth of the region's digital economy. For example, the nation's central bank chief recently shared his view that "if data cannot cross borders, the digital economy cannot cross borders, and we will be poorer for it." Moreover, "a good part of data localisation that is happening in the world today is due to misguided notions of cyber security or data privacy, or worse still, old-fashioned protectionism."[124]

Data localisation is caught up in a pushback against globalisation, and there is a growing awareness of the divide between those who produce data and those who exploit it. Until recently, multinational organisations have profited from the lack of regulation, but many now see that, despite the cost and inconvenience, if they want to participate in the fast-growing, hugely populated markets of the new economies, there is a need for a stable and consistent regulatory environment. A suggestion first expressed in Bangalore that *"the creation of a World Data Council may well facilitate international negotiations,"* was widely supported.

Looking ahead, although there is interest in developing international principles, such is the dissonance between different nations, there is little expectation that it will happen any time soon. While multinational companies and inter-governmental bodies may increasingly lobby against localisation, in a world of increased patriotism and nationalism, they may well have to take more significant measures to address the very real concerns about cultural sensitivity, economic growth, and national security.

> "A new compromise may well be developed, based around international standards.....however, the situation is likely to get worse before it improves."
>
> Bangalore workshop

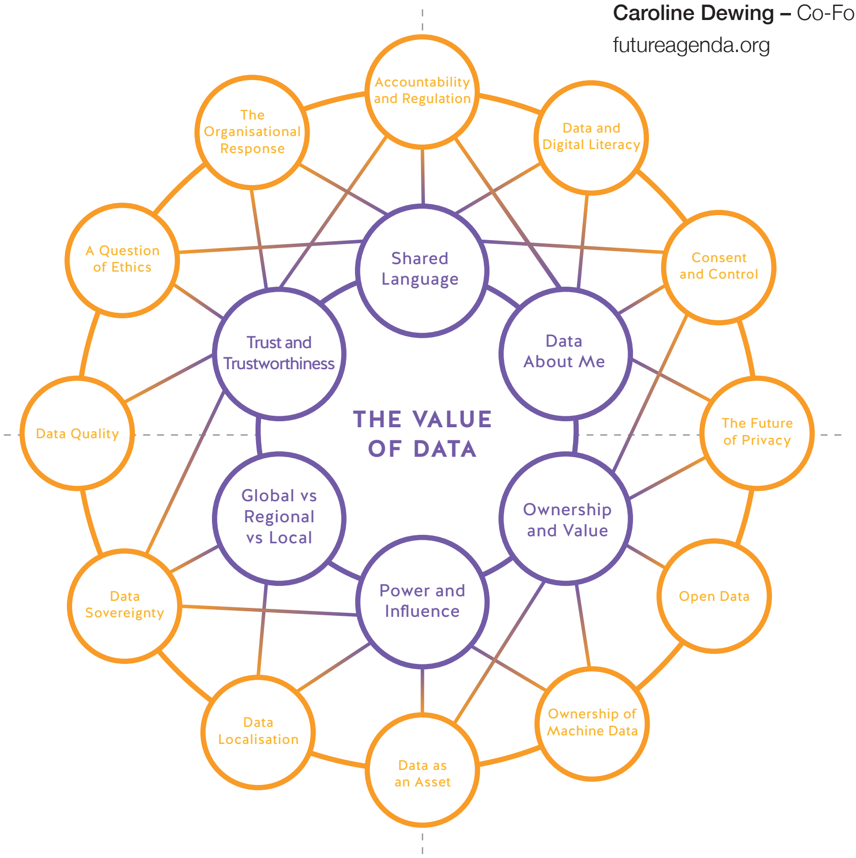
Context

This is one of 18 key insights to emerge from a major global open foresight project exploring the future value of data.

Throughout 2018, Future Agenda canvassed the views of a wide range of 900 experts with different backgrounds and perspectives from around the world, to provide their insights on the future value of data. Supported by Facebook and many other organisations, we held 30 workshops across 24 countries in Africa, Asia, the Americas, and Europe. In them, we reviewed the data landscape across the globe, as it is now, and how experts think it will evolve over the next five to ten years.

The aim of the project was to gain a better understanding of how perspectives and priorities differ across the world, and to use the diverse voices and viewpoints to help governments, organisations, and individuals to better understand what they need to do to realise data's full potential.

From the multiple discussions 6 over-arching themes were identified alongside 12 additional, related future shifts as summarised in the diagram below.



Details of each of these, a full report and additional supporting information can all be found on the dedicated mini-site: www.deliveringvaluethroughdata.org

About Future Agenda

Future Agenda is an open source think tank and advisory firm. It runs a global open foresight programme, helping organisations to identify emerging opportunities, and make more informed decisions. Future Agenda also supports leading organisations, large and small, on strategy, growth and innovation.

Founded in 2010, Future Agenda has pioneered an open foresight approach bringing together senior leaders across business, academia, NFP and government to challenge assumptions about the next ten years, build an informed view and establish robust growth strategies focused on major emerging opportunities. We connect the informed and influential to help drive lasting impact.

For more information please see:
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