

4.6 Data as an Asset



Organisations are obliged to account for what data they own or access. They are required to report their full data portfolio, and are taxed on this.

Context

It is increasingly recognised that data is a valuable asset to the organisations that collect it. But so far, data-driven businesses have not always aligned well with existing business concepts or taxation mechanisms. A company which owns lots of property or other physical assets clearly has a lot of 'capital'. But can or should data be seen as an asset and even as 'capital' - especially when it is either personal or machine data that is not owned by the organisation concerned. Moreover, what is the value that is being taxed?

If data is officially recognised as a corporate asset, significant organisational, industry, and trade implications could follow. As first articulated in a workshop in Jakarta, if a company's future value includes an assessment of the data that it owns, manages, analyses, or accesses, then the way data-based businesses are valued, and perhaps taxed, will be transformed. Data may itself be measured as an asset. The possible implications of this, for business, for economic growth, and indeed how national GDP is measured, are considerable.



Data as an Asset

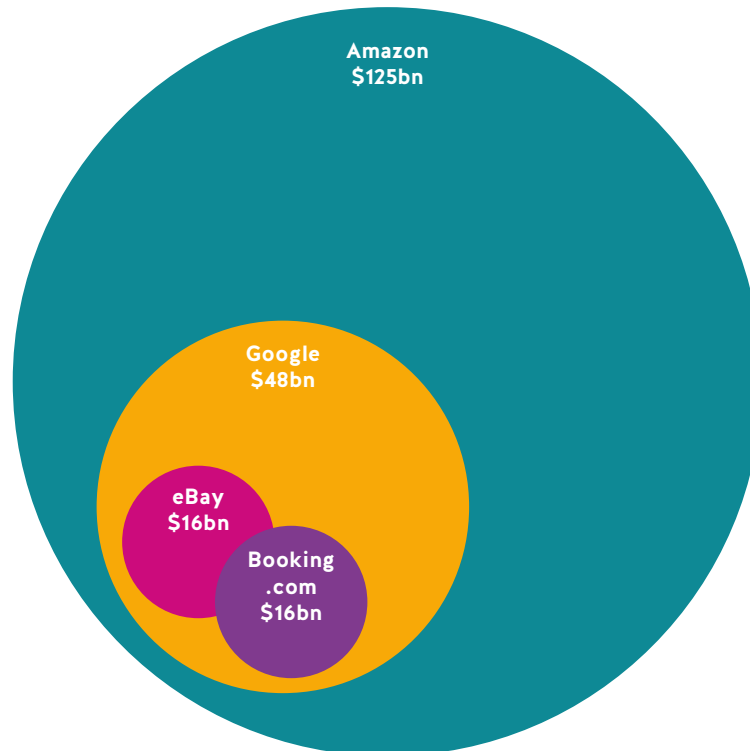
Many experts suggested that if data is considered to be an independent asset, then it will be more rigorously monitored and tracked, and potentially regulated. Increasing numbers of academic researchers are investigating this scenario.⁹⁰ If data is officially recognised as a corporate asset, in the future, organisations may well be obliged to account more clearly for the data they control and use. Every major company, government, and NGO may legally be required to declare the value of its data assets on a regular basis. This could involve formal accounting valuations of some data sets, but it could also include assessments of the value generated by these assets.

The pivotal challenge here is how to value one entity's data so that it can be compared against another's, or a wider benchmark. Flows of data are not a commodity: each stream of information is different, in terms of timeliness, or how complete it may be. This lack of 'fungibility' makes it difficult to define a specific set of data, and to put a price on it so that the value of one data set can be determined.

“EU taxing commercial activity of digital firms is not taxing data – it is about closing taxation loopholes.”

San Francisco workshop

SOURCE: <https://www.imf.org/en/News/Seminars/Conferences/2018/04/06/6th-statistics-forum>



Who Has What: Estimated Value of Data (2017)

Although the current focus for many in business and government is on personal data, different sectors are trying to come up with an agreed way to value their own specific data sets. The oil industry, for example, is beginning to align around its seismic analysis used to map reserves; in the automotive sector, efforts are underway to find a way to value the data generated by connected and autonomous vehicles; and the value of IoT data within smart cities is a mounting area of attention. Governments are also keen to understand the value of their data assets and are trying to establish common standards. In 2018, for example, a UK Parliament Select Committee⁹¹ discussion suggested that the value of the aggregated NHS patient data set could be around £10bn.⁹² The UK Government is sounding out options.

To provide some rigour, the IMF, among others, is trying to help define an approach to calculating data assets; researchers at a November 2018 conference explored how measuring economic value needs to recognise the impact of data. One paper estimated that in 2017, Amazon's data was worth \$125bn and was growing at 35% per annum – so data accounted for 16% of the total market value of the company.⁹³ Google's data was worth \$48bn at the time.⁹⁴

Some consider that those with the data assets are already making plans for calculating their value. For those interested in buying information on the dark web, for example, the relative value of personal health data is around ten times the value of an individual's credit card information.⁹⁵ Experian, for one, has detailed what common pieces of personal information are currently sold for.⁹⁶ The FT also has a personal data calculator.⁹⁷ More legitimately, a host of investment banks, economists, and consultants are doing their own analysis on the leading tech companies, as a means of better rating them and predicting future stock values.⁹⁸

Data as a Liability

Once data is seen as an asset, it can also become a liability. It certainly has to be stored and properly maintained – both of which incur costs. Businesses have to allow for this. Accountants will still have to balance books and calculate data equity, so having data liabilities to offset against data assets will be important; after all, assets provide a future economic benefit, while liabilities present a future obligation or risk. Storing some kinds of data could, for instance, be seen to erode user trust and therefore become a liability. It may also mean that costs of securing data will outweigh the costs associated with losing it. Data security experts argue that it would be more appropriate to consider the vast amount of the data organisations hold as a liability, since the value they can extract from it is minimal in comparison to the costs of preventing it from being stolen or misused, or paying the price when it eventually is

“If we actually did have a more formal system for measuring the value of data as a capital, we might be better able to use it, since ‘how to use it’ would be factored into this value.”

Madrid workshop

Some markets such as the UK are already charging significant fines to companies that fail to protect the data in their care. Increasingly, this, combined with the ingenuity of today's hackers, has meant that corporates must set aside capital to account for this. An unintended consequence may be that competition is stifled, as the barriers to entry for new business becomes simply too high.

Digital Taxation

Controversial in the US, but more widely accepted elsewhere, is the idea that governments could (and should) exact a tax on an organisation's digital activities. The EC has proposed a so-called digital service tax of 3% on the local activities of Big Tech firms such as Google, Facebook, and Apple.⁹⁹ The UK has set a precedent by announcing its intention to introduce a digital services tax by 2020, so that multinationals "with profitable UK businesses pay their fair share."¹⁰⁰ Other member states in the EU have put forward proposals at a national level. Recently, the OECD also announced a target of 2020 to agree similar rules.¹⁰¹ To date, all these focus on taxing revenues from activities.

Data Tax

What is being discussed so far is not a tax on data, but on digitally-related income. However, this could be a precursor to a wider tax on data – and in particular on an organisation's data assets. Just as several European countries and the likes of British Columbia in Canada apply an annual personal wealth tax, based on the market value of assets that are individually owned, so if a company's data has an agreed value, then, it is argued, governments could exact an annual data asset tax on top of, or as part of, corporation tax.

For organisations, there is a clear downside to a data tax. Many see that it could stifle innovation, as information is dumped in order to minimise costs. On the other hand, some think that, from a social impact perspective, this could be a significant leveller, and would herald the end of the data land-grab of recent years. They argue that if it happens, this is simply a sign of a growing maturity in the data sector, and a realignment of power and money.¹⁰² Whichever view is taken, researchers are now looking at the broader implications of the extra value creation and the impact on national and global GDP, if digital revenues, data taxes, and other data assets were included in calculations. As one US workshop participant stated, "*when data capital gets combined with digital tax, then it will become really interesting.*"

"It is more likely that a common approach to certifying data for valuation will evolve from the bottom up, via an industry, regional, or even community approach."

Tokyo Workshop

What We Heard

Data Assets

There was general agreement that, rather than being *“initiated at a global level from the top down, it is more likely that a common approach to certifying data for valuation will evolve from the bottom up, via an industry, regional, or even community approach.”*¹⁰³ Ways in which to “justify how to put a value on something that may not belong to you” were discussed in Hong Kong. In San Francisco, the view was that this would best be undertaken by an independent governing body, in order to ensure transparency and credibility. This idea was also explored in Toronto, where it was proposed that *“we need a common framework that is agreed (per industry).”* Many around the world concurred with this; however, there was no consensus around which global organisations would be capable of taking it forward.

Data Liability

In Europe, existing liability laws are based on the concept of physical products, so there were a number of discussions around whether these could be adapted and applied to data-based products.¹⁰⁴ In Sydney, it was proposed that the idea of data liability should be extended to include data negligence, and one suggestion was that there is *“responsibility to share and use data for the common good,”* while another was “failure to use data appropriately for both private and public benefit will be seen as negligent.”

Data as a Capital

Another suggestion originally coming out of Sydney, and supported in London, San Francisco, and Toronto, was to add data as a 7th capital in the multi-capital model that currently underpins integrated reporting. A number of organisations are already moving from simply reporting on their financial impact, to include social, environmental, natural, and human capital in their annual reports.¹⁰⁵ Led by the likes of AXA, Puma, and Unilever, a growing portfolio of major companies are involved in these discussions, and are preparing to disclose the wider impact of their business outcomes. They are trialling and agreeing standardised approaches for measuring and reporting the impact and value of what they envisage is the full range of activities, so including data capital in the mix could be a timely evolution. In Manila, it was felt that *“if we actually did have a more formal system for measuring the value of data as a capital, we might be better able to use it, since ‘how to use it’ would be factored into this value.”*

“When data capital gets combined with digital tax, then it will become really interesting.”

San Francisco workshop

Others disagree, pointing out that, unlike other intangibles such as R&D assets (e.g., patents), which may well depreciate in value over time, the aggregation and recombination of data can create new value, and therefore data capital may well grow faster than the other six and so skew future views of an organisation's impact. Some think data is already being accounted for through R&D. In London, the view was that *"data capital reporting is happening and here, already baked into much R&D valuation, especially in terms of IP,"* while in Toronto, one comment was that *"this is just like IP capital (but broader)."* However, in San Francisco, a challenge to this was *"does data itself count as IP or do you have to do something with it to make it valuable?"* If it does, then a separate tangible value on data capital, at least in business terms, may emerge.

Data Taxation

While many companies are lobbying for a global agreement on data taxes (via the OECD), several US firms and political leaders are arguing strongly against this move. The view in the San Francisco workshop was that this is *"governments fishing for ways to generate income from data, and does not feel right,"* and that *"EU taxing commercial activity of digital firms is not taxing data – it is about closing taxation loopholes."* Others see that these initiatives give licence for other countries to follow suit.¹⁰⁶

South African opinion was that, in general, *"African governments don't have the capacity to tax the digital economy – they don't even tax the oil industry properly."* Several expressed doubt about the ability of regulators to address the problem *"... governments [in Africa] face significant challenges if they want to tax digital transactions. There needs to be a better understanding of the data value chain; where data is created, the value it produces, and who benefits from this."* They also noted that, although in theory, social media is already being taxed in some locations, the reason why Ugandans may have to pay the equivalent of five cents a day to connect to any of their preferred social networking sites is more about curbing freedom of speech rather than redirecting revenues.¹⁰⁷ In Jakarta, the perspective on this was that *"the issue is very politically dependent – it is driven by the individual finance minister – and how he wants to raise income."*

"There needs to be a better understanding of the data value chain; where data is created, the value it produces, and who benefits from this."

Implications for Data Value

Although several in the digital economy dislike the idea that data can be considered as an asset, many others, including governments, inter-governmental organisations, and consultancies, are very keen to push the concept forward. As yet, it may not be coherent in terms of the mechanics, but if an industry or region can agree fundamental principles, a whole raft of change will be set in motion. The challenge is to create a regulatory environment which encourages competition, while making information-intensive organisations more accountable for the data in their care.

Some initial discussions about the value of Amazon's and Google's data over and above its financial wealth, suggests that either this is not currently being factored in. If, within the next decade, analysts and economists come to some shared understandings, seeing data as an asset could be one of the biggest influences on how we see the value of data, and may well determine how responsible organisations are seen to act.



“We need a common framework that is agreed (per industry).”

Toronto workshop

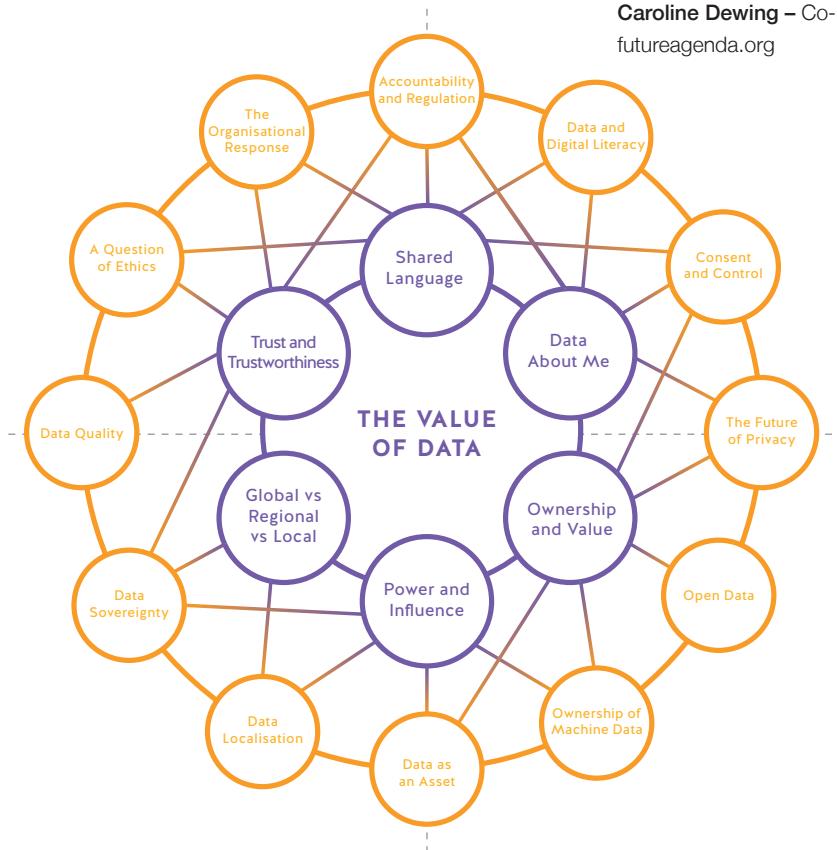
Context

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: www.futureagenda.org

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First published November 2019 by:
Future Agenda Limited
84 Brook Street
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