4.11 The Organisational Response

The management of data requires a 21st not a 19th century approach to business. With digital as the norm, we move on from principles based on physical products.

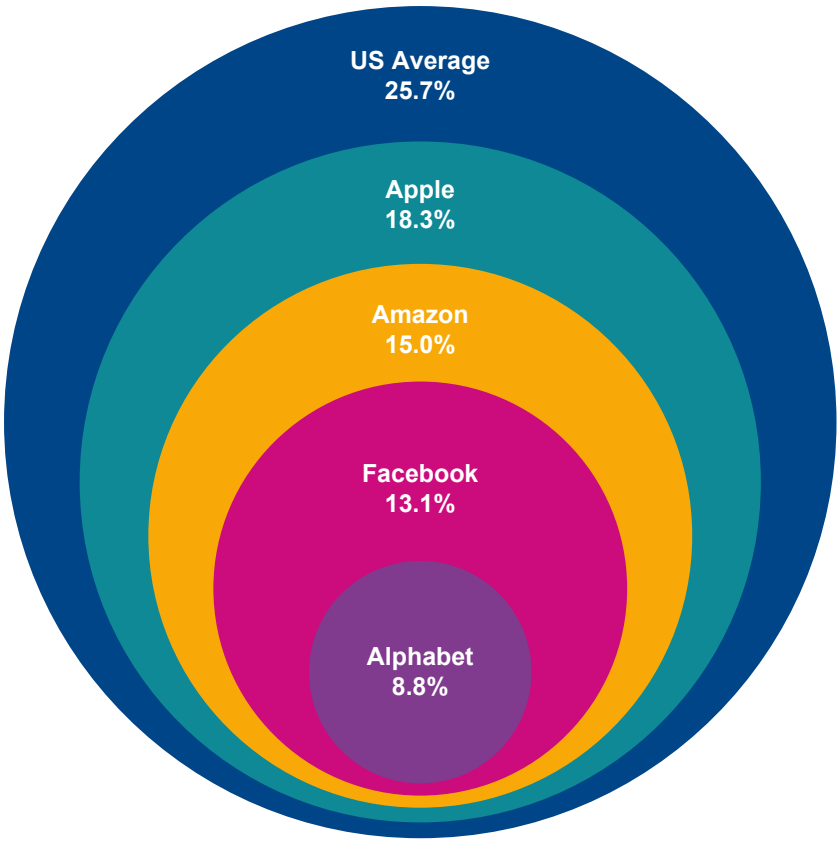
Context

It is clear that many of today's digitally-driven organisations are significantly unlike traditional businesses. Multiple corporate leaders and a plethora of fast-growing unicorns are all seeking to deliver significant change, mostly via creating value from data. But questions are being raised about how these companies function, what their values are, and how their impact and influence is measured and held to account. Although Big Tech has replaced big oil, big steel, big banks, and the big 4 automotive firms as the world's most powerful companies, many see that the way they operate is not comparable. While Google and Amazon may have the same legal structure as other corporations, such as GM, Coca-Cola, and JP Morgan, the way they behave internally, and function externally, is meaningfully different. The growing perception is that existing regulatory tools and business norms are outdated, inadequate, or insufficient, in light of their changing business models.[148] Given that over the next decade, most organisations will gradually become data companies to a greater or lesser extent, many believe that new metrics are needed to manage them and judge their performance.[149]

A Different Set of Rules

Over the past ten years or so, the new data-rich organisations that have expanded, have done so in ways that companies in previous eras could not. Recent research has highlighted several reasons for this:[150]

- As software has replaced hardware, the cost of leading digital innovation has dramatically declined, allowing relatively small investments to yield large payoffs.
- Online platforms increasingly control vast amounts of valuable data, which they gather largely for free from their customers. The owners of these platforms enjoy substantial advantage from access to their customers' data, which is very difficult for others to replicate.
- The speed of change is now so fast that many regulators are behind the curve and unable to jump ahead of the innovators.

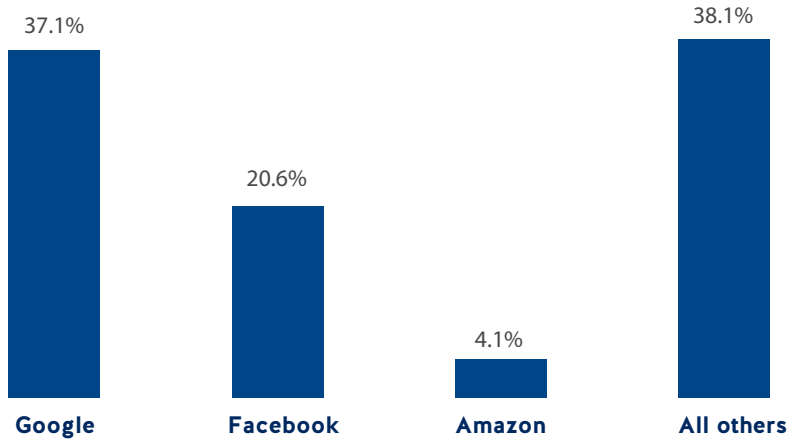


Effective US Corporate Tax Rates (2018)

One of the consequences of this, is that the core parameters – legal personality, limited liability, transferable shares, and even the concept of intellectual property - that have set the operating landscape for most companies for the last century, are no longer fully fit for purpose. For instance, many in our workshops argued that there is a fundamental difference between the economics of production of physical vs. digital products. Making things of value from resources and materials which have a finite supply, and therefore an implied cost, is completely different to making things from data, which is an almost unlimited raw material - the cost of creation and replication of which is fast falling to zero. Research by academics such as Mariana Mazzucato and Shoshana Zuboff, and the work of the Future of the Corporation project, are exploring potential new paradigms here, but as yet, there is no clear consensus on how this should be addressed.[151],[152]

Moving Goalposts

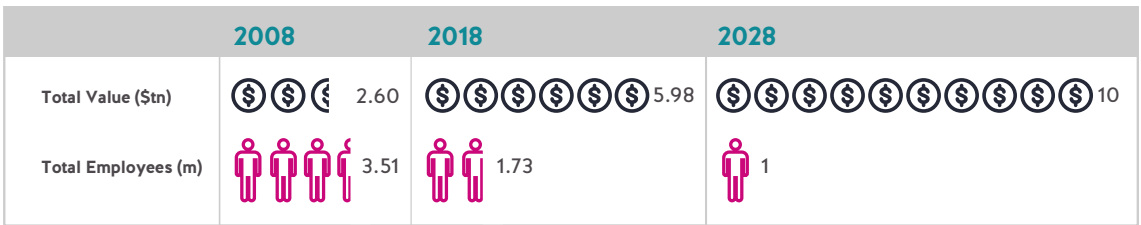
Meantime, the size and scale of the modern corporation is changing. In 1975, 17% of the market value of the S&P 500 was based on intangibles; by 2015, this had flipped to 84%. Many leading companies are now focussing on innovating to build IP, brand value, and other key assets, and up to 90% of the value of some firms is correspondingly assigned to intangible assets. Data is at the heart of this transformation. In 2008, the world's ten most valuable companies were worth a combined $3.5tn, and employed a total of over 3.5 million people. By 2018, the top ten companies were worth twice as much, but only had 50% of the number of total full-time employees. As new technology enables higher revenue per employee, then looking ahead another ten years, it is possible that the top ten companies will be worth over $10tn, but employ only 1m people. There are several key implications:



Share of US Digital Ad Revenues (2018)

- Economic power: There is an accelerating concentration of economic power within organisations whose core businesses are increasingly built on data. WEF analysis suggests that up to $2.3tn, or 40% of the total value of the top 20 global companies' current market capitalisation, could be associated with the data they own, access, and monetise. To give some context, that is more than the total GDP of Italy - the world's seventh largest economy. Furthermore, many in our workshops and beyond, considered that some digital firms "face no limits in ability to scale – the bigger they are, the bigger they are likely to grow."[153] This raises many questions around both the potential scale and influence of a corporation.

- Unequal wealth distribution: There is the associated issue of concentration of wealth for employees, and their potential disconnection from wider society. Although external shareholders clearly gain from a profitable organisation, many of the major digital companies have significant employee options and shareholdings, which have grown substantially. Moreover, the average income per employee of the top 5 companies (Apple, Amazon, Alphabet, Microsoft, and Facebook) in 2017/18 was $1.4m. With many employees now multi-millionaires, some question whether the majority understand what "normal" life is like for most citizens, and because of this, have less empathy with them. This is not just a West Coast issue. In the UK, Cambridge, the home of corporate research labs and multiple major start-ups, is now the city with the highest level of inequality – largely due to its success over the past 20 years, driving wealth into the hands of a few but not all.[154] There is a growing risk of those working for and running the world's most powerful organisations fast becoming disconnected from the society from which they earn their incomes.



Smaller Big Companies - Value and Employees of Top 10 Companies Globally

- Low Tax: The way that many of the world's data rich companies are being managed, is frequently (and quite legally) minimising their tax liabilities. In previous generations, where manufacturing was the dominant industry, the production of goods, sales, and associated taxation was largely national. Even within the services sector, the co-location of human resources and much of the corporate activity, has supported regional tax income. In 2017, the UK Financial Services sector contributed £72bn, or 11% of total government receipts, with corporation taxes accounting for £12bn.[155] However, in 2018, compared to a standard US tax rate of 21%, Apple paid an effective tax rate of 18.3%, Amazon 15.0%, Facebook 13.1%, and Alphabet only 8.8%.[156] Many in our workshops felt that this was a poor reflection of their overall contribution to society.

As trust in Big Tech has declined, the structures and practices of several companies have come under particular scrutiny. As a result, their influence is clearly in the spotlight, and some face a regulatory effort to curb their dominance.[157] The EU has been leading here, but now India and some in the US are also calling for change.[158] There are a number of ways in which this can be addressed. Democrat and Presidential candidate Elizabeth Warren, for example, is calling to break-up Big Tech; others are seeking to curb their power by sharing data with other firms, and making it easier for users to switch to competitors.[159]

The Future of the Corporation

Looking ahead, many in our workshops felt that there is a need to consider how a future corporation, tech or otherwise, should function, not just economically, but how it can contribute to society and whether its role should go beyond that of a profit-making machine for its employees and shareholders. Fifty years after many Anglo-Saxon companies subscribed to the Milton Friedman view that the attention of a company should be to maximise shareholder returns, and that to pursue anything other than (legal) profit would be "pure and unadulterated socialism," there is change in the air.[160] Friedman's 1970 NYT article, arguing that the social responsibility of business is to increase profits, is now seen by many, but certainly not all, as setting a false direction that has led to the generation of wealth for investors and executives, but at a cost to employees, customers, the environment, and wider society.[161] Led by a number of high-profile pioneers such as companies including Patagonia, Unilever, and Virgin, a growing range of businesses are already adopting social purpose that complements their commercial purpose. Indeed, in August 2019, the largest US business group, the Business Roundtable, replaced its long-held view that maximising shareholder value is the defining corporate goal, with a more inclusive vision that takes account of other stakeholders.[162] It will be interesting to see how the data companies adapt to this.

"We are close to a data oligopoly with too much control in the hands of the few."

San Francisco workshop

Organisation 4.0

Several in our workshops suggested that there may be more viable alternatives to the corporate form within the next decade. We may well even see a different type of legal entity emerging for the data-driven organisation. New initiatives include hybrid forms, such as public benefit corporations; these are very much orientated towards having a strong social purpose. Others point to the previously controversial dual class share structure adopted by Google at IPO, and since used by many other tech companies. It allows entrepreneurs to control the corporation, without owning the majority of the cash flow rights. This is now so popular that stock exchanges have changed their listing rules to allow tech firms with differential voting structures to list their shares.

Looking ahead, we may well see the emergence of two separate systems for companies with different types of structure, governance, and regulation; one system for traditional product and service companies and the other for primarily data intensive firms. If there is a widening gap between two increasingly dissimilar and disconnected economies, governments and stock exchanges may need to set them apart from each other. This could, for example, be an evolution of the NASDAQ and Dow exchanges in the US. There may be different approaches for governance, for taxation, for research funding, for public support, and also for company valuation.

What We Heard

In our South African discussion, it was suggested that *"data will mean a whole new set of corporate metrics,"* while in Sydney, several felt that *"in the future, the Big Tech firms will have all the power."* With data driving ever greater power and influence for those that control it, how companies are structured, focused, governed, and held accountable, may be about to change dramatically. In San Francisco, they said, *"we are close to a data oligopoly with too much control in the hands of the few."*

Fundamentally, some see that there has been a power shift from government, society, and multinational corporations, to the transnational, global digital firms. From Jakarta and Bangkok, to Washington DC, Bogota, and Mexico City, we consistently heard that *"data is power,"* while in Frankfurt, the view was that *"those who hold the data hold the power."* Our London discussion raised questions on power and agency, such as *"who has the power? How is it accountable?"* Moreover, it was suggested that *"data creates power, shapes the wielding of power, the balance of power, and the accountability of power."* Many agree that this accountability has been sorely lacking over the past few years, and are supportive of greater regulatory action.

"As we see new actors whose profits exceed the income of most nations, they will wield even greater power...this power may not be accountable and therefore is potentially very dangerous."

Hong Kong workshop

A forward-looking perspective from our discussions was that, *"as companies' awareness of their power changes, we will start to see increased leverage of power over data flows."* Potentially, as we *"move from self-regulation to trusted regulators, with clear demarcation of rights,"* questions will emerge around how power can be divested. In Mexico City, the expectation was that over the next few years, *"algorithms will become ubiquitous, and the companies that operate them will have little interest in the social impact that they may have."* As a response in Frankfurt, several proposed that *"we need more transparent algorithms,"* as *"we do not question the decisions that machines made for us."* Moreover, *"critical algorithms will be regulated."*

Some in San Francisco proposed that we may well see *"algorithmic regulation to address the issues that cannot be regulated by humans."* However, *"algorithmic governance may well enable the associated companies to generate more revenue with even less human capital."* The consensus in Copenhagen was that, for most companies, *"CXO understanding of data value will change,"* while in Hong Kong, it was added that many *"institutions are out of sync,"* and this has to change; *"as we see new actors whose profits exceed the income of most nations, they will wield even greater power."* Indeed, *"this power may not be accountable and therefore is potentially very dangerous."*

While some of the above shifts were in the background for our value of data discussions, there were multiple mentions of how, for digital companies, these may provide extra challenges. For instance, in Jakarta, it was suggested that *"we will need to look beyond the purpose of the company,"* as data can be shared and used for wider impact than many other assets.

In the San Francisco workshop, one proposal was that *"access to the truly valuable data is in the hands of a few companies,"* and so *"tech firms become the trusted source of data and services, including social services and healthcare."* Furthermore, we may soon see *"government ceding the running of many public services to more informed and capable private companies."*

"We will need to look beyond the purpose of the company"

Frankfurt workshop

Implications for Data Value

The whole basis upon how corporate entities behave, develop their cultures, are judged by society, and are rewarded by the markets, is evidently changing in some sectors. How, why, and where financial recompense is attributed, is being questioned equally by academics, government, and, in some areas, media. How one company can be worth $1tn and employ only 100,000 will be increasingly contrasted with those that are valued less financially, and yet employ more people. Data-driven companies and the digital economy are clearly different from the more tangible product and services economies, but they are currently being judged by the same parameters and have become uncomfortable bedfellows.

As power shifts, so does value – this is nothing new – but the norms by which one company and its performance are compared to another, are under stress. Monopolistic behaviour aside, traditional means of judging value for shareholders, against value for society's wider stakeholders, are changing: The current research on the Future of the Corporation is just one of several programmes seeking to propose new ways for firms to be managed, monitored, and valued.[163] There are significant implications for data-driven companies. Expect greater scrutiny of their corporate values, their behaviours, more transparent reporting, and changes in the way they are taxed. Some organisations will be proactive, acknowledge the need to change, and try to manage a more equitable distribution of profits and impact. Others may take a more defensive stance. Beware those who appear to support change, but do little to achieve it.

"We may soon see government ceding the running of many public services to more informed and capable private companies."

San Francisco workshop


2.1
6.13%
-1.12
+22.36
1.24
2.45
42
32.5
27.3
55.6
14.5
78.8
35.5
22.3

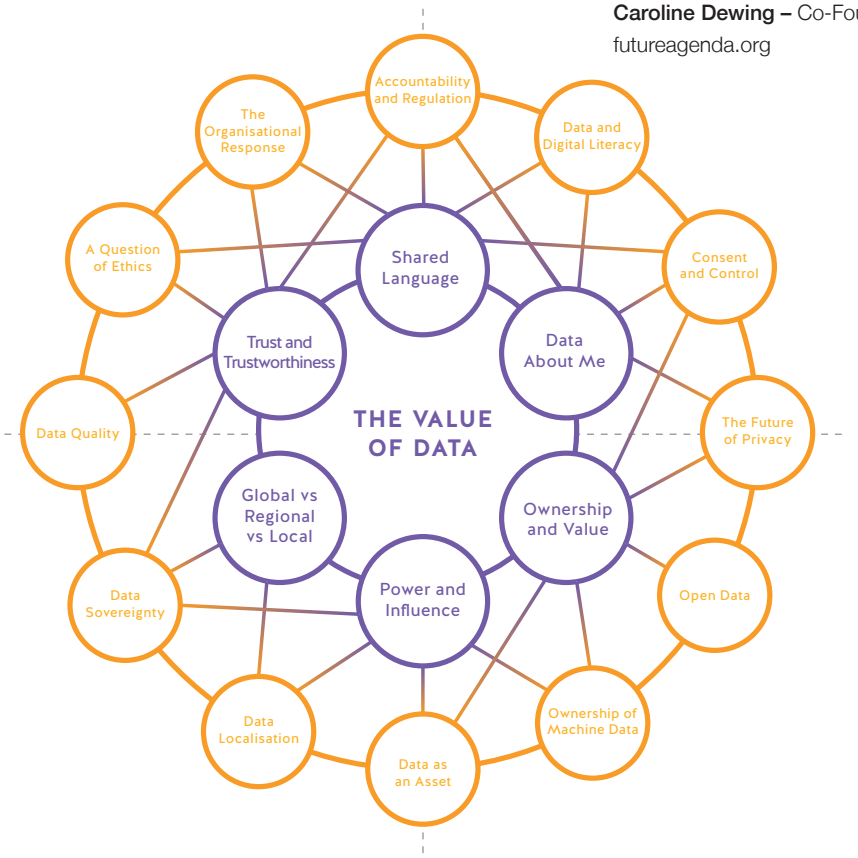
Context

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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