



---

# Data and transparency

From just 5% of the world being connected to the internet in 2000 to 56% in 2019, the amount of data being produced has massively increased and new digital technologies have resulted in exponential leaps in computing power. Companies have woken up to the value of the data their products produce which has led to the market for big data analytics to grow from \$7 billion in revenue in 2011 to a projected [\\$103 billion by 2027](#). As nearly 2.5 quintillion bytes of data each day is produced, corporations are shifting their focus on the quality of data they produce.

The question of ownership and monetization of our personal data will become increasingly important and contested in the coming decades. U.S. presidential candidates are now running on platforms to [break up Big Tech](#) for monopoly practices and an increasing number of [internet pioneers](#) have called to democratize our personal data. Transparency and privacy are now taking the forefront of the conversation but there's yet to be any international baseline on regulating data collection and usage. Public policy may also become much more effective if researchers can analyse the real-time behaviour of millions of people at a time. On the other hand, people's privacy – and even freedom – may be seriously undermined without proper checks and balances.

## Implications

Big data offers the opportunity to better understand systems so that the outcomes of any intervention can be improved. However, organisations need to not only put the right talent and technology in place, but also structure workflows and incentives to optimise the use of big data.

More than ever before, our world will be defined by our creation of data, what we do with it and how we process it. Communication technologies are fuelling this evolution by spreading new ideas and innovations to more people each day.

There's been a rise of surveillance capitalism and integration of surveillance by governments all over the world such as China, Egypt, India, Venezuela, Indonesia and Ecuador. The rise of technocratic regimes has normalized tactics that seek to gain more control over citizens. In 2017 the New York Times put out a report saying that over 50 countries recently put out legislation for increased surveillance.

The commercial application of Big Data allows for consumers to be better targeted for products and advertisements, this benefits the customer by allowing for a more personalized online experience.

As the development of general AI continues, mass amounts of data will be needed to increase its efficiency and understanding. The objectivity and validity of that data and will be increasingly influential in the future.

The ubiquity and analysis of data presents huge opportunities to optimise systems for efficiency and positive outcomes, but this largely depends on people's willingness to share their data with business, government and other stakeholders. If the public are not able to exert some control over when and how their data is shared and stored, and if high-profile data breaches continue, it is possible that a backlash will occur, and useful insights will be lost. Better terms of service and greater transparency around data gathering and storage could help to address concerns, though more will need to be done to ensure that privacy, security, intellectual property – even liability – are always a top priority in a big data world.

### ***Urgent Questions***

Due to the consolidation of Big Tech, how can antitrust laws be redesigned for the 21st century?

In what ways can individuals have better control over their data and privacy?

How will we society choose to value individuals data going forward?

How can we make sure to not entrench our own biases within our technology

How will power dynamics change in society due to the all encompassing elements of technology?

Will general AI being the catalyst for ending human suffering or will we lose control of our own technologies?

How will democracy and freedom evolve in the age of surveillance capitalism?

## **Current trajectory**

OneWeb, Facebook and Google all look to [provide internet access globally](#) and to previously unconnected regions. They hope to be the first link for many people logging on for the first time, allowing them unprecedented access and first choice for new users' data.

China in 2018, taking advantage of their massive amounts of data, [has begun to implement a citizens rating system](#) on which they monitor each individual's actions. In attempt to implement a safer and more "honorable" society, the government revokes rights and hands out fines as penalties for breaking the law and unjust behavior.

In 2019, the EU has passed a higher [standard for copyright and data](#) in follow up to GDPR. The new laws include restricting the revenue and ownership of data that Big Tech gains from artists' work and allows more independence for journalism on their platform. The EU now is leading the charge in reshaping how we control our data and regulating the new age of 'surveillance capitalism'.

[India plans to adopt increased surveillance capabilities](#) before their 2019 election, allowing for more control over their citizens' data and internet usage. As the largest democracy in the world, India's influence helps normalise surveillance as their increased security could potentially begin to look similar to China's firewall.

From social media algorithms and college admissions to court cases and mortgages, we are increasingly relying on big data and AI for decision making. However, concerns are surfacing that this AI, being built by humans, is subject to human bias - such as sexism and racism. Due to so called 'black box' processes, once built in to algorithms, this bias is very hard to eliminate.

## **Stats**

In 2017 90% of the worlds data had been created in the past [two years](#)

The [output of data](#) in 2018 was 2.5 quintillion bytes a day.

The Economist [writes](#) that data has replaced oil as world's most valuable resource.

In 2018, [Google processed](#) on average 40,000 searches every second and 3.5 billion per day.

In 2019 there are more than [25 billion](#) connected devices and that number is expected to triple in just the next 5 years.

In 2019 alone, big data is set to grow [by 20%](#).