

2 billion – number of smartphone users globally in 2016
60% – share of all mobile data from video in 2020

Data ownership

Individuals recognize the value of their digital shadows, privacy agents curate clients' data sets while personal data stores give us transparent control of our information: We retain more ownership of our data and opt to share it.

As public understanding of the value of our digital shadow grows, so does our appetite to retain ownership of it. Individuals, increasingly aware of security issues and the dubious behaviour of some organisations, decide how, when and with whom to share their personal data. Personal data stores provide more transparent control, while privacy agents and data brokers help curate our data sets. Many companies, whose success is based on access to customer data, adapt their business practices to cater for this.

Until recently, in general people felt quite comfortable trading elements of their personal life in return for better online services, to assist with health research or traffic surveys and the like, believing that anonymised data is impossible to trace back to source. In fact it's not that simple. The removal of personally identifiable information such as names, date of birth, addresses do little to cover our tracks. These days the ability to compare databases makes it almost impossible to ensure anonymity is maintained; even participants in a genomics project have been identified by matching their details with data from electoral rolls.

This, combined with a growing awareness that companies are benefitting disproportionately from the collection and sale of personal information, is driving the desire for greater individual control of personal data. It has also created a dilemma; how best to balance the benefits and conveniences that open data undoubtedly provides with the desire to retain personal power and control.

Connectivity has turned us all into a commodity.

Total privacy in a connected world may be an impossible goal but there are alternative ways to use the Internet without having to sacrifice everything to corporate search engines. The IndiWeb, for example, is a set of software utilities aiming to secure individual ownership of all the information posted including photos, status updates, blog posts, comments and so on – and all this without being cut off from the rest of the net. It paints a vision of a world where easy-touse open source software makes publishing - while keeping your own data - possible.

The Internet has made value of ourselves. We are not. after all, paying for products such as social network services - so by default connectivity has turned us all into a commodity that needs to be managed and controlled. But not everyone will want to take on this responsibility or to be as hands-on with regard to the management of their data as the IndiWeb requires. What, then, is the alternative? One suggestion is that individuals retain full ownership of their own data in machine-readable format but outsource its management and distribution to professional curators, who will ensure that appropriate policies are maintained and, under instruction from the owner, will be prepared to trade personal data in return for benefits. Look out for 'privacy agents', brokers who act as intermediaries and manage the flow of our data. Some customers will even hire 'personal data managers' who can operate in the same manner as financial advisors do today to make the process easier still. Expect the number of personal data managers to grow as they seek to manage and protect both 'free' individual data sets and the more commercially lucrative aggregated data. Furthermore, developments in authentication

Data revolution



systems will create new personal data platforms that will utilize universally accepted credentials that can be shared with multiple brand partners for marketing purposes.

The length of time that companies are able to hold on to data remains a thorny issue, as, although the principle of 'the right to be forgotten' has now been established, the process is still evolving and is very complicated. Some decisions - such as the removal of links to revenge porn - seem straight forward; others are not so, for example reports of violent crime committed by someone later acquitted because of mental health issues. For most of us it seems the Internet has a long and unforgiving memory. This will be addressed in part through the development of services that promise to limit the time they hold data; the marketplace for this will grow as customer awareness increases.

The Internet has a long and unforgiving memory.

There is of course a world beyond the familiar Google. Facebook and Amazon. The dark web is epitomized by the encrypted world of Tor Hidden Services, where users cannot be traced and cannot be identified. The Tor project is a not-for-profit organization that conducts research and development into online privacy and anonymity. It is designed to stop people, including government agencies and corporations, learning users' location or tracking their browsing habits. It is downloadable for free and, alongside many who want to avoid censorship. it is increasingly used by those who choose to opt out of the traditional search engines. Essentially Tor lets people "go dark". But as consumers make this choice, brands and organisations will fight harder for their customers and at some point "dark" may be expected to pay for the privilege. Meantime the mainstream Internet will certainly be a big market for privacy products as companies attempt to limit the risk of a mass migration of their customers. Indeed they may well find that privacy itself becomes a useful marketing tool.

Data ownership

Given that data has a value, guestions are also arising around data ownership on death. What happens to all those images, likes and dislikes and emails stored in the cloud? Some see the inevitability of a citizencentric data eco-system that empowers individuals with control and visibility over all data created by, or impacting on, them, including data after life - the onward usage of inherited data. Regulation has yet to catch up with the growing amount of digital assets that are stored on shared servers, some in different countries to their users. Currently it seems that the Internet firms and service providers can make the final decision on this but even then procedures vary from company to company. This is not only distressing for those dealing with grief, it is also curiously archaic. As social media ages and the number of deceased users increases, expect this to be addressed either on a country-by-country basis or more effectively by international consensus.

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Related insights

Dynamic pricing



The algorithms of Amazon and Uber cross over to affect more businesses, from energy use to parking. Real-time transparency allows better purchasing at the same time as margins and yields are automatically enhanced.

Mass engagement



As the public voice becomes easier to access and harder to suppress, leaders seek to engage to create, develop, secure and maintain legitimacy for their initiatives and policies – so further reducing their hierarchical power.

The increasing value of data



As organisations try to retain as much information about their customers as possible, data becomes a currency with a value and a price. It therefore requires a marketplace where anything that is information is represented.

The real sharing economy



Increasing collaboration drives organisations to reconfigure based on social networks and impact. Real sharing enterprises, not driven by profits, seek to share resources, knowledge, and decision-making responsibilities.