

The EU Data Protection Reform and Big Data Factsheet

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1. Big Data is a big opportunity for EU companies

According to some estimates, the value of European citizens' personal data has the potential to grow to nearly €1 trillion an**nually by 2020**. Strengthening Europe's high standards of data protection therefore means business - not a burden to innovation

As consumers are increasingly concerned about privacy, loss of trust translates into lost opportunities and revenues for companies. Recent high profile data breaches have pushed consumers to escape from service providers that did not adequately protect personal data.

EU companies offering privacy-friendly services

What is Big Data?

The term 'Big Data' refers to large amounts of different types of data produced from various types of sources, such as people, machines or sensors. This data could be climate information, satellite imagery, digital pictures and videos, transition records or GPS signals. Big Data may involve personal data: that is, any information relating to an individual, and can be anything from a name, a photo, an email address, bank details, posts on social networking websites, medical information, or a computer IP address.

can be more appealing to consumers, and hence more competitive. The EU has the highest data protection standards in the world. This generates trust.

'It's better in Europe'

Big Data markets are similar to cloud services markets – they are new, booming and largely undefined, with a huge potential for growth. Trust is a key determinant of whether these markets take off in Europe. Consumers need to trust companies in order to take up the services they offer. Privacy-friendly companies in this respect have a competitive edge, and the privacy-friendly environment in Europe is the incentive that can bring innovative technology companies to set up shop in the EU.

Plenty of recent examples illustrate this point.

- Apple is investing €1.7 Billion in new European Data Centres.
- Cloud computing company Salesforce.com expanded its investment in Europe by opening new data centres in UK (2014) and Germany (2015). It plans to open another data centre in France. According to Salesforce.com's management, the new data centre represents a "doubling down on Europe", which in turn reflects Europe's status as the fastest growing region for Salesforce in fiscal year 2013.
- **IBM** opened new cloud data centers in the UK, Germany, France and Italy to offer privacy-friendly services.
- **Zettabox.com** is an example of a genuinely European cloud storage solution. Its slogan is "It's better in Europe". Zettabox **decided to base its operations entirely in Europe** in order to provide a high quality cloud service, with the highest possible level of protection of personal data.

2. EU Data Protection Reform: an enabler for Big Data services in Europe

The data protection reform package builds a single, strong, and comprehensive set of data protection rules for the EU. It will boost innovation in sustainable data services by enhancing legal certainty and strengthening trust in the digital marketplace. This way it fosters a virtuous circle between the protection of a fundamental right, consumer trust and economic growth:

 More trust – a plethora of market surveys and studies show that the success of providers to develop new services and products using big data is linked to their capacity to build and maintain consumer trust.

Trust in internet services: Where we stand

- **81**% of Europeans feel that they do not have complete control over their personal data online Eurobarometer, 2015.
- A large majority of Europeans **(69%)** would like to give their **explicit approval** before the collection and processing of their personal data Eurobarometer, 2015.
- Only 24% of Europeans have trust in online businesses such as search engines, social networking sites and e-mail services. Eurobarometer, 2015.

- > HOW: Stronger rights for citizens (access and correction of personal data, an explicit right to be forgotten, a right to object to data processing and the right to be informed when data security is breached).
- **Easier market access for start-ups** a new right to data portability will allow citizens to receive their personal data from one service provider and move them to another.
 - > **HOW**: Start-ups and smaller companies will be able to access data markets dominated by digital giants and attract more consumers with privacy-friendly solutions. This will make the European economy more competitive.
- **Enhancing transparency** Individuals need better information on data protection policies and what happens to their data when it's processed for online services.
 - > **HOW:** Organisations will be required to **publish transparent and easily accessible data protection policies**. Simple icons on a website could explain how, by whom and under whose responsibility personal data will be processed.
- **Playing by the same rules** 28 national legislations will be replaced by one, simple and clear legal framework and a one-stop-shop for governance and enforcement.
 - > **HOW:** One law for the whole continent reduces bureaucracy and costs, creating the necessary conditions for EU companies, especially small players such as startups, to exploit the potential of Big Data in the digital single market. Companies will deal with one single supervisory authority, not 28, making data processing simpler and cheaper.
- 'Data protection by design' The reform helps big data operators by requiring them to invest in good data protection practices, making them an essential building block of their business plan.
 - > **HOW:** The new 'data protection by design' principle motivates architects of Big Data analytics to **use techniques like anonymisation**, **pseudonymisation**, **encryption**, and protocols for anonymous communications. The Commission will work with Member States and in particular the supervisory authorities and stakeholders to ensure that businesses receive adequate quidance on these techniques.

Simplifying life for startups and other small players: exceptions in the rules

- No Data Protection Officers: Companies will not have to appoint one, unless data processing is their core business activity.
- No more notifications: notifications to supervisory authorities are a bureaucratic burden which costs business 130 million euro every year. The reform will scrap these entirely.
- No excessive data access requests: companies can charge a fee for providing access to personal data when these requests become excessive.
- No impact assessments: small players will not have to carry out data protection impact assessments unless there are high risks for citizens.

3. Same rules for EU and non-EU companies

EU data protection rules will apply not only to European companies, but also to foreign companies offering products and services to EU citizens, or monitoring their behaviour. In other words, **the same rules will apply to all companies operating in the EU regardless of where they come from**. This will level the playing field between European and non-European companies. Start-ups from other world regions will have to play by the same rules as start-ups from Europe. This is about fair competition in a globalised world.

4. What are the benefits of Big Data?

The main advantage of Big Data is that it can reveal patterns between different sources and data sets, enabling useful insights. Let's think for example of health, food security, intelligent transport systems, energy efficiency and urban planning.

These ultimately **allow higher productivity and improved services, which are the source of economic growth**. The use of Big Data by the top 100 EU manufacturers could lead to savings worth € 425 billion, and by 2020, Big Data analytics could boost EU economic growth by an additional 1.9%, which means a GDP increase of € 206 billion.

Encouraging innovation: driverless cars

The European Union needs to make it easier for great ideas to be turned into products and services that will bring our economy growth and jobs. Driverless cars are a case in point. The technology in driverless cars means more exchange of car data, including personal data. Data protection rules go hand in hand with innovative and progressive solutions by European car manufacturers. For example, in case of a crash, cars equipped with the eCall emergency call system can automatically call the nearest emergency centre. This is a prime example of a workable and efficient solution in line with EU data protection law. With the new rules, the functioning of eCall will become easier, simpler and more effective in terms of data protection.

5. Big Data and issues for privacy

Ensuring personal data protection becomes more challenging as information is multiplied and shared ever more widely around the world. Information regarding individual's health, location, electricity use, online activity and so forth can be publicised, raising **concerns about profiling, discrimination, exclusion and loss of control**.

Big Data analytics does not always involve personal data. But, when it does, **it should comply with the rules and principles of data protection**: the EU's Charter of Fundamental Rights says that everyone has the right to personal data protection in all aspects of life: at home, at work, whilst shopping, when receiving medical treatment, at a police station or on the Internet. Big Data is no different.