

# Data Privacy After GDPR

By

**Adir Mancebo Jr., Ph.D.**

Collaborators

**Anya Chandorkar**

**Anusha Nandula**

**Michael Limbo**

**Nedim Halicioğlu**



The Data Science Alliance (DSA) recognizes Privacy as one of the four guiding principles of Responsible Data Science (RDS). There can be no RDS without the assurance that professionals are working with data appropriately, within the context of their relationship with data owners. Many argue that the most effective way to guarantee data privacy is through legislative action. The General Data Protection Regulation (GDPR) is a product of this belief. GDPR, the world's first comprehensive data privacy legislation, went into effect in all member states of the European Union (EU) on May 25, 2018. The regulation, which aims to enhance individuals' control and rights over their personal data, demanded substantial changes to how many businesses operate. After more than four years, it is important to evaluate the effectiveness of such broad legislation on the way companies handle sensitive data and its impact on data privacy awareness around the world.



## What is GDPR?

GDPR is a comprehensive set of data protection rules regulating how companies must collect and process the personal data of EU residents. According to the regulation's guidelines, personal data is any information that can be used to identify a person. It can include an individual's name, address, financial information, medical history, among other data.

GDPR was primarily developed to address the public's concern about their own privacy—a worry that has grown with each big data breach. Accordingly, GDPR has a strong emphasis on user rights. Under the regulation, companies must guarantee the following: the right to information, the right of access, the right to rectification, the right to erasure, the right to restriction of processing, the right to data portability, the right to object, and the right to avoid automated decision making. The policy goal is to prioritize the privacy of customers as a vital component of business practice.

### The development of GDPR was based upon the following principles:

- |   |                      |
|---|----------------------|
| 1) Accuracy                             | 5) Data Minimisation |
| 2) Storage Limitation                   | 6) Security          |
| 3) Lawfulness, Fairness, & Transparency | 7) Accountability    |
| 4) Purpose Limitation                   |                      |

## The Impact of GDPR on Companies and Consumers

To understand the overall effect of GDPR on companies and consumers, we must consider the global reach of the regulation. Under GDPR, every company that processes and holds the personal data of individuals residing in the EU, regardless of the company's location, must adapt to the new regulation or face severe penalties. To avoid fines, even businesses that do not specifically target people in the EU have still implemented GDPR compliance measures, just in case the data of EU residents is processed in their systems. GDPR compliance is also a strategy for companies that 1) plan to eventually expand their activities to the European market and 2) want to signal to consumers how responsible they are with personal data.



Business leaders have come to realize that adhering to GDPR strengthens the relationship with customers, adding a level of trust and value that may not have existed before the European regulation was implemented. In 2021, Ali Zaman, Director Of Database Marketing at Salesforce, stated that “GDPR contributes to add great value for the customer relationships”. Among other effects, he argues that the regulation reprioritized the importance of companies taking the time to understand its customers and their interests.

However, there is still skepticism among business leaders about GDPR's benefits to both companies and consumers. A survey of senior figures, those responsible for the compliance and data protection functions in Irish business during November and December 2021, found that the belief that GDPR was beneficial to individuals decreased to 69% from 83% in the previous year. Concurrently, the belief that compliance with GDPR places an excessive administrative burden on organizations grew from 53% to 69%.

Furthermore, a study conducted in 2022 by economists Carl Benedikt Frey and Giorgio Presidente of the Oxford Martin School, found that companies exposed to GDPR around the world experienced a reduction in sales of 2% and a decrease in profits of 8%. Notwithstanding, the negative effects on business performance were not equal across all types of companies. While small businesses have suffered considerably after GDPR, large companies have experienced only small adverse impacts. In fact, the researchers found no evidence that the sales and profits of large technology companies, such as Facebook and Google, were affected by GDPR.

Overall, the evidence suggests that GDPR has significantly improved the way businesses manage and monitor customer data; but it has done so at a high cost—especially for small businesses. Moreover, given the potential for large fines, companies across the world have reevaluated their approach to consumer data, becoming more proactive about privacy and security. Take for instance the fine of €746 million imposed on Amazon in 2021 because their advertising targeting system was allegedly carried out without proper consumer consent.



## GDPR and the Global Landscape of Data Protection Regulation

The importance of GDPR to the global discussion of consumer data protection is also quite evident. Many countries have already followed in the footsteps of GDPR. Canada, South Africa, Australia, Japan, South Korea, Kenya, Argentina, Brazil, and Chile have developed their own privacy laws and regulations, often building upon GDPR's framework.

In the U.S., the advancement of data protection policies has been led by individual states. In June 2018, just one month after GDPR came into effect, California legislators approved the California Consumer Privacy Act (CCPA)—America's first comprehensive data privacy law. The CCPA focuses on consumer rights regarding data at its point of collection, and was later expanded with the approval of the California Privacy Rights Act (CPRA) in November 2020. Colorado, Connecticut, Virginia, and Utah have also passed privacy legislation strongly influenced by GDPR; they go into effect in 2023. Many other states, as well as the federal government, are currently in the process of discussing similar laws.

## Responsibility Beyond Regulation

The road towards effective personal data protection is still being paved. In its four years of existence, GDPR has helped advance data privacy; but arguably there is substantial room for improvement. For instance, GDPR lacks guidance on the practice of data science. Namely, there are no regulations regarding the analysis, modeling, and deployment of data after organizations collect and process it. Companies that undertake these data activities must understand the necessity of safeguarding the privacy of individuals' personal data at every step.

Regulations like GDPR are well intended and have pushed many companies to improve the way they handle sensitive data. However, broad and complex legislations can impose great burdens on small businesses; and these policies are often rigid and adapt slowly to rapidly advancing technologies. Thus, it may not be wise to rely solely on government action to guarantee the protection of personal data.



The DSA believes it is the responsibility of every professional that handles personal information to ensure that Privacy is not compromised. We are building a movement to instill this principle, along with those of Fairness, Veracity, and Transparency, in the hearts and minds of data science professionals worldwide.

## Citations

1. Desai Anokhy. 2022. US State Privacy Legislation Tracker. Retrieved November 7, 2022 from <https://iapp.org/resources/article/us-state-privacy-legislation-tracker/>
2. Meili Bell. 2022. How the GDPR Affects United States Companies. Retrieved November 8, 2022 from <https://www.sixfifty.com/blog/gdpr-affects-united-states-companies/>
3. Carl Benedikt Frey and Giorgio Presidente. 2022. The GDPR effect: How data privacy regulation shaped firm performance globally. Retrieved November 8, 2022 from <https://cepr.org/voxeu/columns/gdpr-effect-how-data-privacy-regulation-shaped-firm-performance-globally>
4. Ross Benes. 2018. How US Companies Are Becoming GDPR Compliant. Retrieved October 30, 2022 from <https://www.insiderintelligence.com/content/how-us-companies-are-becoming-gdpr-compliant>
5. European Parliament. 2016. General Data Protection Regulation (GDPR). Retrieved July 25, 2022 from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679>
6. Anthony Jones. 2022. GDPR Three Years Later: What Impact Has It Made? Retrieved November 5, 2022 from <https://www.ispartnersllc.com/blog/gdpr-one-year-later-impact/>
7. Liam McKenna and Paul Lavery. 2022. General Data Protection Regulation: A survey of the impact of GDPR and its effect on organisations in Ireland. Retrieved November 8, 2022 from [https://iapp.org/media/pdf/resource\\_center/survey\\_gdpr\\_impact\\_ireland\\_2022.pdf](https://iapp.org/media/pdf/resource_center/survey_gdpr_impact_ireland_2022.pdf)
8. David Roe. 2019. How US Organizations Are Responding to GDPR and the Need for Data Privacy. Retrieved October 28, 2022 from <https://www.cmswire.com/information-management/how-us-organizations-are-responding-to-gdpr-and-the-need-for-data-privacy/>



9. ServiceNow. 2018. Complying with the General Data Protection Regulation (GDPR): ServiceNow Governance, Risk, and Compliance. Retrieved October 25, 2022 from <https://www.servicenow.com/content/dam/servicenow-assets/public/en-us/doc-type/resource-center/white-paper/wp-preparing-for-the-gdpr.pdf>
10. Pete Swabey. 2022. GDPR cost businesses 8% of their profits, according to a new estimate. Retrieved November 8, 2022 from <https://techmonitor.ai/policy/privacy-and-data-protection/gdpr-cost-businesses-8-of-their-profits-according-to-a-new-estimate>
11. Adam Uzialko. 2022. How GDPR Is Impacting Business and What to Expect in 2020. Retrieved November 6, 2022 from <https://www.businessnewsdaily.com/15510-gdpr-in-review-data-privacy.html>
12. Branka Vuleta. 2022. 10 Eye-Opening GDPR Statistics [Updated for 2022]. Retrieved October 25, 2022 from <https://legaljobs.io/blog/gdpr-statistics/>
13. Ben Welford. 2018. What is GDPR, the EU's new data protection law? Retrieved October 25, 2022 from <https://gdpr.eu/what-is-gdpr/>
14. Ali Zaman. 2021. How Can GDPR Help Improve the Customer Experience? Retrieved November 7, 2022 from <https://www.salesforce.com/eu/blog/2021/08/GDPR-customer-relationship-lessons-learned.html>
15. 2021. Luxembourg DPA issues €746 Million GDPR Fine to Amazon. Data Privacy Manager. Retrieved November 9, 2022 from <https://dataprivacymanager.net/luxembourg-dpa-issues-e746-million-gdpr-fine-to-amazon/>
16. 2022. State Laws Related to Digital Privacy. National Conference of State Legislatures. Retrieved November 7, 2022 from <https://www.ncsl.org/research/telecommunications-and-information-technology/state-laws-related-to-internet-privacy.aspx#:~:text=Five%20states%E2%80%94California%2C%20Colorado%2C,of%20personal%20information%2C%20among%20others.>