



THE GENERAL DATA PROTECTION REGULATION (GDPR) EXPLAINED -

DEVELOPED BY TUD STAFF & STUDENTS MAY 2025

A brief introduction to the complex world of General Data Protection Regulation (GDPR)

For more information see; <https://www.gdprexplained.eu/>

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1. Introduction

1.1 Definition

- The General Data Protection Regulation (GRPR) 2016/679 is a regulation in the European Union (EU) on data protection and privacy for all individual citizens of the European Union and the European Economic Area (EEA)
- Regulates the processing by an individual, a company or an organisation of personal dates relating to individuals in the EU
- **IMPORTANT:** It also addresses the issue of personal data outside the EU and EEA areas such as CBHE projects

1. Introduction

1.1 Development

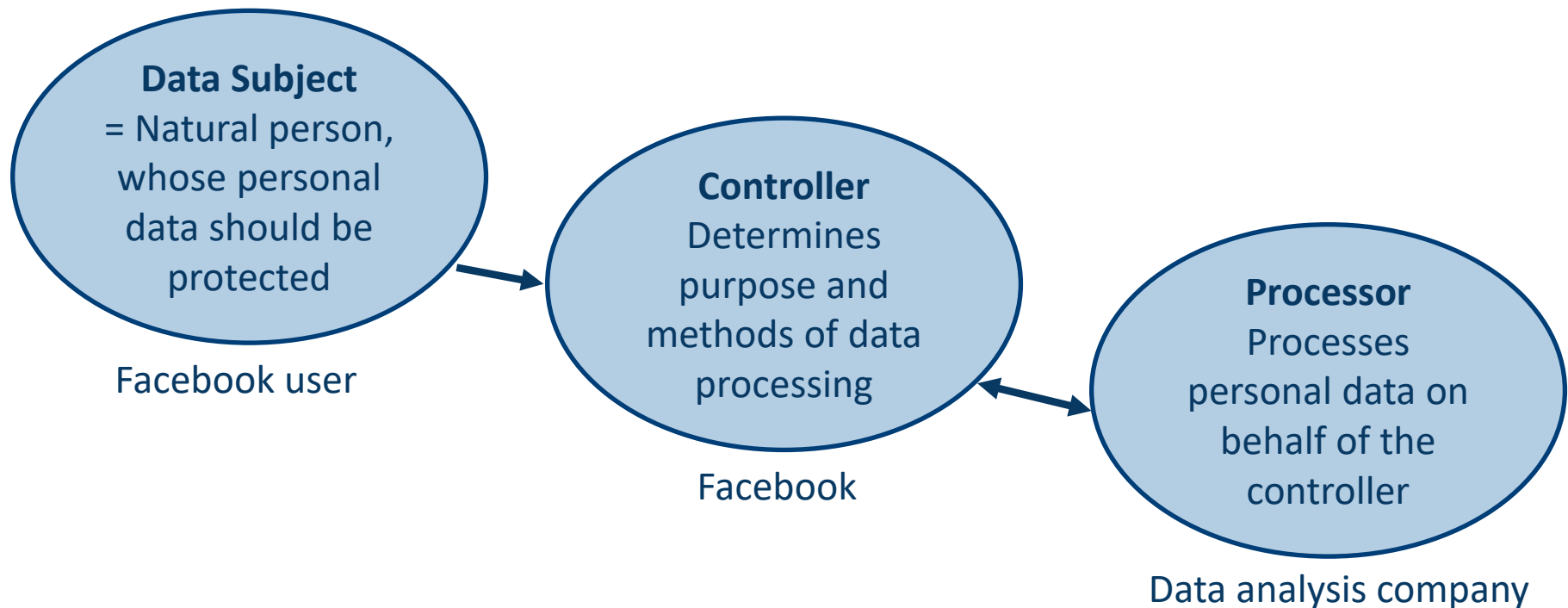
- 24.10.1995 Directive 95/46/EC is adopted
- 25.01.2012 EC proposal to strengthen online privacy rights and digital economy
- 12.03.2014 European Parliament adopts GDPR
- 15.12.2015 The European Parliament, the Council and the Commission reach an agreement on the GDPR
- 25.05.2018 The General Data Protection Regulation is introduced



Source: <https://www.spin.cw/blog/gdpr-5-steps-every-business-needs-to-take-before-may-25th-to-avoid-a-fine>

1.2 Basic Concepts

- Personal Data: Any information related to an identified/identifiable natural person
→ Contact details, IP addresses, web cookies, health records, ...
- Data Processing: Any operation, which is performed on personal data
→ Collection, storage, adaption, alteration, transmission, ...



1.3 Motivation and Purpose of the GDPR

- Update of the data protection laws
- Strengthening the rights of all EU citizens by protection of personal data and privacy
- Making organizations accountable for their actions and giving them clarity about their responsibilities
- Standardize and harmonize different data protection laws across Europe

2. Principles of GDPR

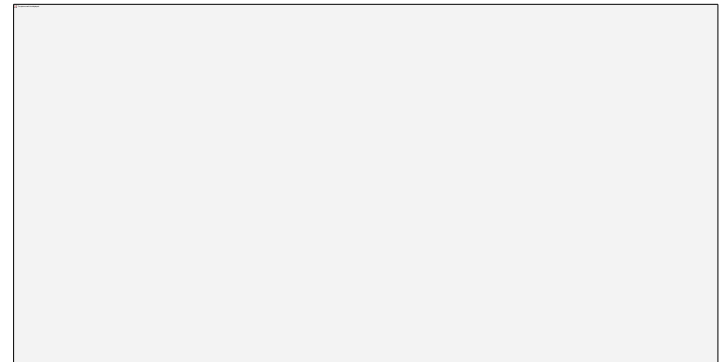
2.1 Lawfulness, Fairness and Transparency

Lawfulness = All processes you have that are related to personal data of EU citizens must meet the requirements described in the GDPR

Fairness = Every action performed both by a data controller or a data processor must match up with how it was described to the data subject

Transparency = Data subjects must know exactly...

- **Who** will have access to their data
- **What** their data are going to be used for



Source: <https://www.accengage.com/wp-content/uploads/2018/04/GDPR-Lawfulness-fairness-and-transparency.png>

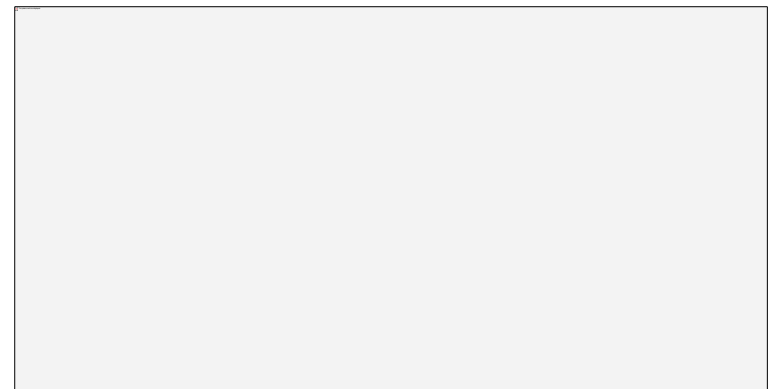
2.2 Purpose Limitation

Personal data must be collected only for a purpose that is...

- specific
- explicit
- legitimate

You must...

- Clearly state what this purpose is
- Only collect data for as long as necessary



Source: <https://www.accengage.com/wp-content/uploads/2018/04/GDPR-Purpose-limitation.png>

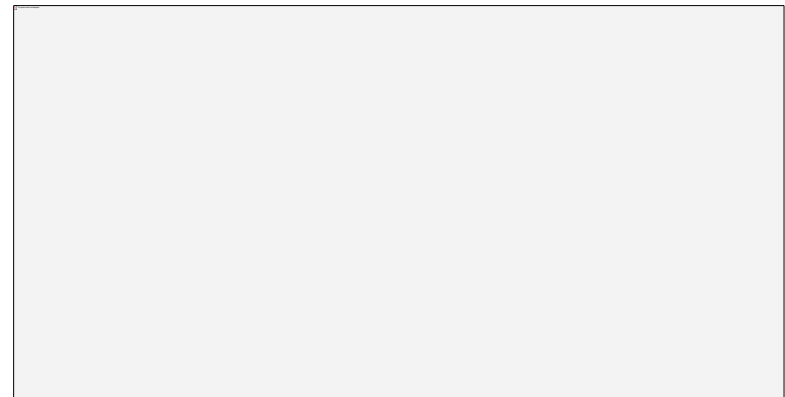
2.3 Data Minimization

Organizations must ensure that the data they collect is...

- adequate
- relevant
- limited

...according to their processing purposes

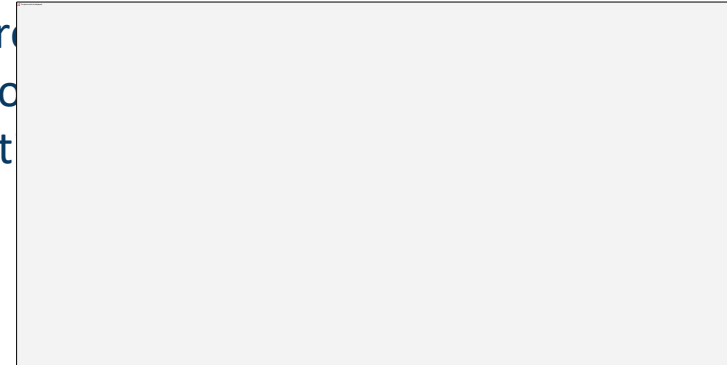
Regardless of this principle,
data is sometimes collected for various
unlawful reasons
(e.g. analyzing customer shopping behaviors)



Source: <https://www.accengage.com/wp-content/uploads/2018/04/GDPR-Data-minimisation.png>

2.4 Accuracy

- Inaccurate or incomplete data must be updated or removed
- Individuals have the right to request that organizations erase or rectify within a month erroneous data relating to them



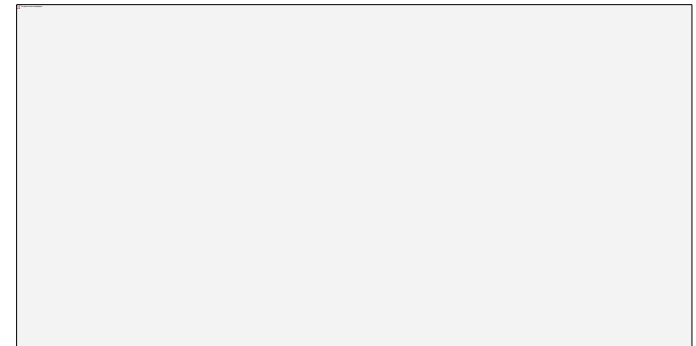
Source: <https://www.accengage.com/wp-content/uploads/2018/04/GDPR-Accuracy.png>

2.5 Storage Limitation

This principle should discourage unnecessary data redundancy and replication

It limits...

- How the data is stored and moved
- How long the data is stored
- How the data subject could be identified, if the data records were to be breached.



Source: <https://www.accengage.com/wp-content/uploads/2018/04/GDPR-Storage-limitation.png>

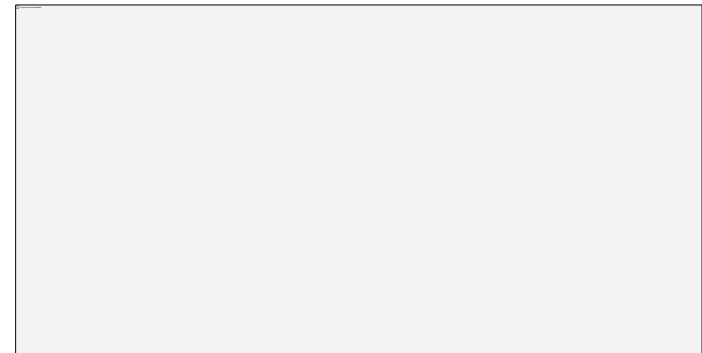
2.6 Integrity and Confidentiality

Personal data must be kept safe and protected against...

- Unauthorized or unlawful processing
- Accidental loss, destruction or damage

Organizations must spend an adequate amount of resources to protect the data from those who are negligent or malicious

- Enforcing security policies
- Using dynamic access controls
- Verifying the identity of those accessing the data
- Protecting against malware.

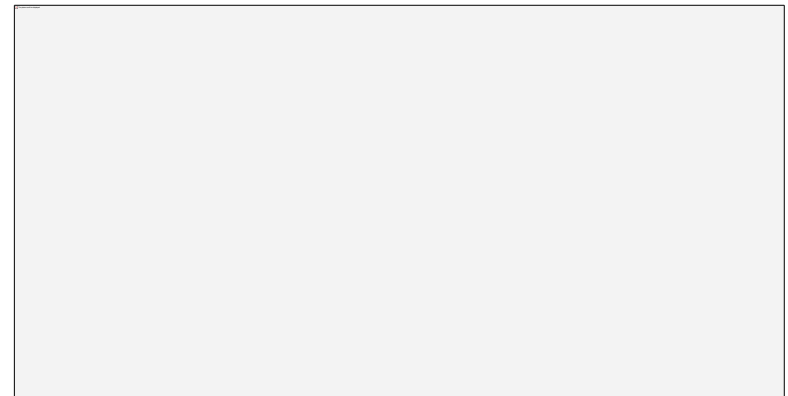


Source: <https://www.accengage.com/wp-content/uploads/2018/04/GDPR-Integrity-and-confidentiality.png>

2.7 Accountability and Liability

Organizations must be able to demonstrate to the governing bodies, that they have taken the necessary steps to minimize the risks their data subjects face

- GDPR requires organizations to respond to requests from data subjects regarding what data is available about them
- The organization must be able to promptly remove that data, if desired



Source: <https://www.accengage.com/wp-content/uploads/2018/04/GDPR-Accountability.png>

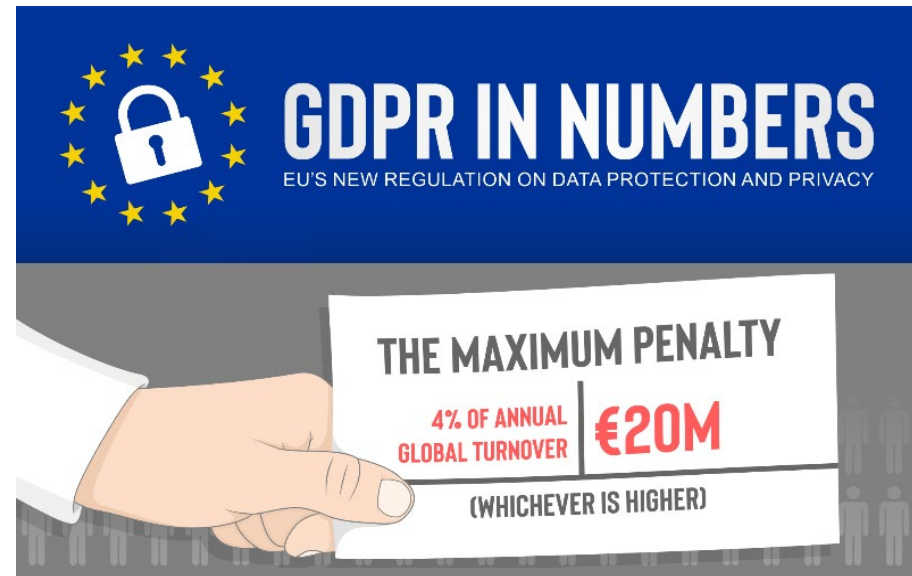
3. Key Changes

1. Increased Territorial Scope



Source: <https://medium.com/mydata/does-the-gdpr-apply-in-the-us-c670702faf7f>

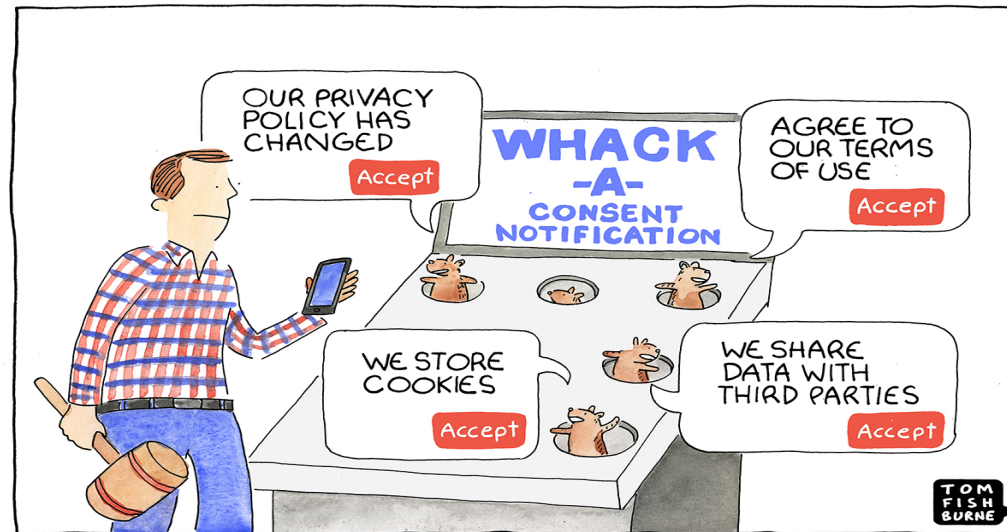
2. Penalties



Source: <https://medium.com/@GdprCash/gdpr-in-numbers-2-gdpr-fines-9450ae55fbb5>

3. Key Changes

3. Consent



Source: <https://marketooinist.com/2019/05/data-privacy-consent-fatigue-and-gdpr.html>

More powerful Data Subject Rights:

- Breach Notification (72 hours from breach)
- Right to Access (information on all saved data – free copy in electronic format)
- Right to be Forgotten (delete data after certain time)
- Age barrier (from 13 to 16)

4. Pro and Contra Analysis

4.1 Citizens

Pro	Con
Right to request collected data increases transparency	Annoying banners on websites asking for GDPR consent
Practices are easier to understand	Geoblocking on some foreign sites
Right to be forgotten	
Data transfer simplified (right to portability)	

Indirect consequences:

- Less marketing spam
- Increased cybersecurity

4.2 Organizations

Pro	±	Con
Consciousness for data protection among all employees	Organizations must acquire affirmative consent for data use from all employees/customers	Staff required for control of data protection within companies → Additional effort!
Data of customers/clients are treated in a more secure manner	Organizations must inform all their customers how their data is being treated	Course, training or e-learning required for all employees → Additional effort!
Data protection laws within the EU are now unified		Penalty fees must be paid in case of violations against GDPR (e.g. data breach)
Less need for archiving of unnecessary personal data not covered by GDPR		Small organizations' cost factor to be GDPR compliant than bigger companies
		Employees must handle data on new differentiated basis(depends on purpose)

5. Summary and Conclusion

What?	Protection of personal data of “natural persons”
Who?	EU citizens, organizations and affects non EU citizens
Why?	Update and unify data protection laws
How?	Guidelines for companies including 7 principles, strengthening rights of citizens and setting rules for companies and organisations

Conclusion:

GDPR is definitely an improvement of the rights of individuals but it might create difficulties or inconvenience for individuals and organizations

5. Reflection

More questions? – go to <https://www.gdprexplained.eu/>

6. Sources

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Thank You for Your Attention!