

# GDPR – Thread or Opportunity?



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## Current Status of GDPR

Early can be too late

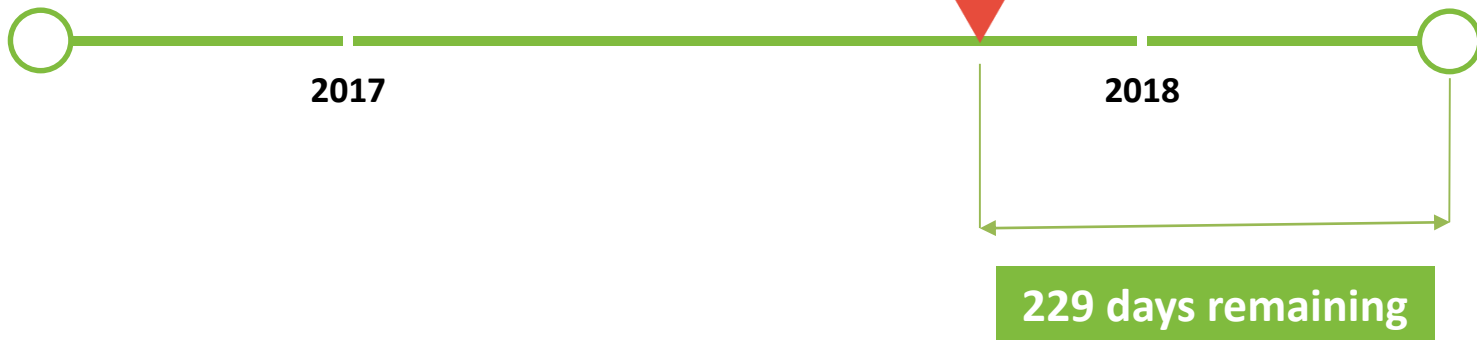
**27th April 2016**

GDPR Accepted

**9th October 2017**

**25th May 2018**

GDPR into affect



## Key Word – Subject of Data

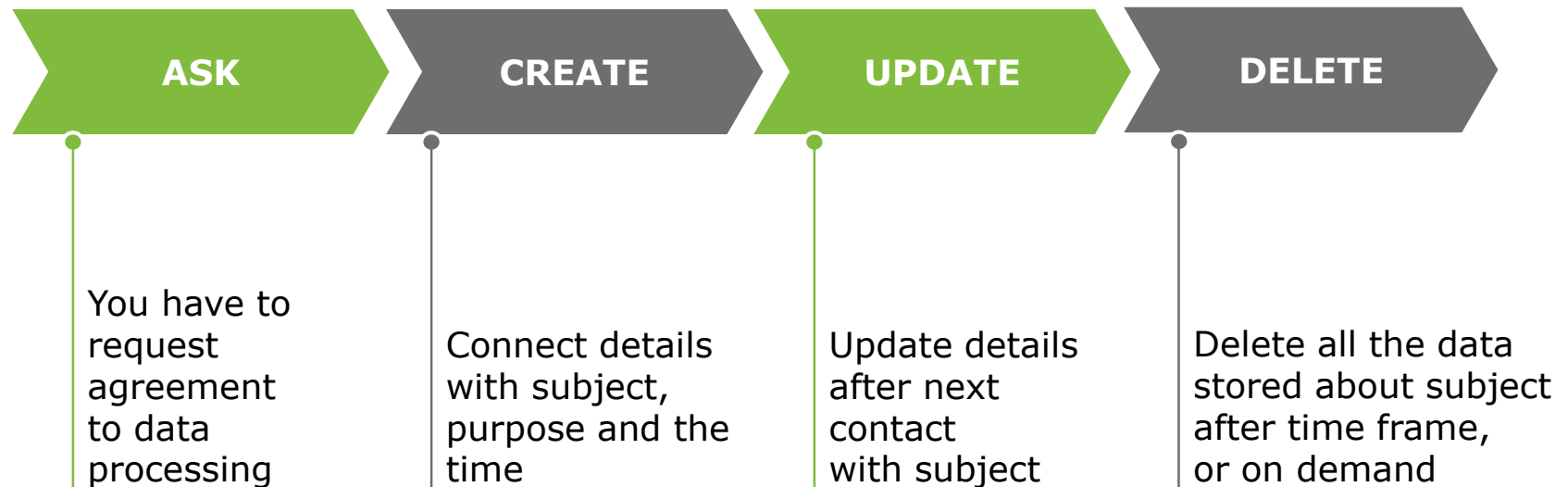
*„An individual about whom information  
is stored in a computer-based system.”*  
encyklopedia.com

### SUBJECT OF DATA

Covers: **Customers, employees,**  
actors with the public  
institutions,...

# Lifecycle of the Personal Data

## Processflow of maintenance of the personal data



# Particular GDPR rights

## The Right of Access

- › Company should request for processing
  - › Request should have following details:
    - › Which **exactly** data are stored
    - › The scope of data analysis
    - › Time period of storing the data
- › **Even if the subject do not agree with the data processing, service have to be provided to him**
- › Subject of data can in every time request for information:
  - › Which data does the company have?
  - › What does it do with them?
  - › For how long will company save these data?



# Particular GDPR rights

## The Right to Erase

- › Subject of personal data can request to delete all data which organization have.
- › Company have to do following steps:
  - › Find all data about data subjects
  - › Delete them
  - › Provide to customer report that the data were deleted
- › Some data should companies stored because of some law reasons
- › No analysis possible (even if allowed before)
- › This cases should be defined
- › Company has to inform subject of data which data will not be deleted and why



# Particular GDPR rights

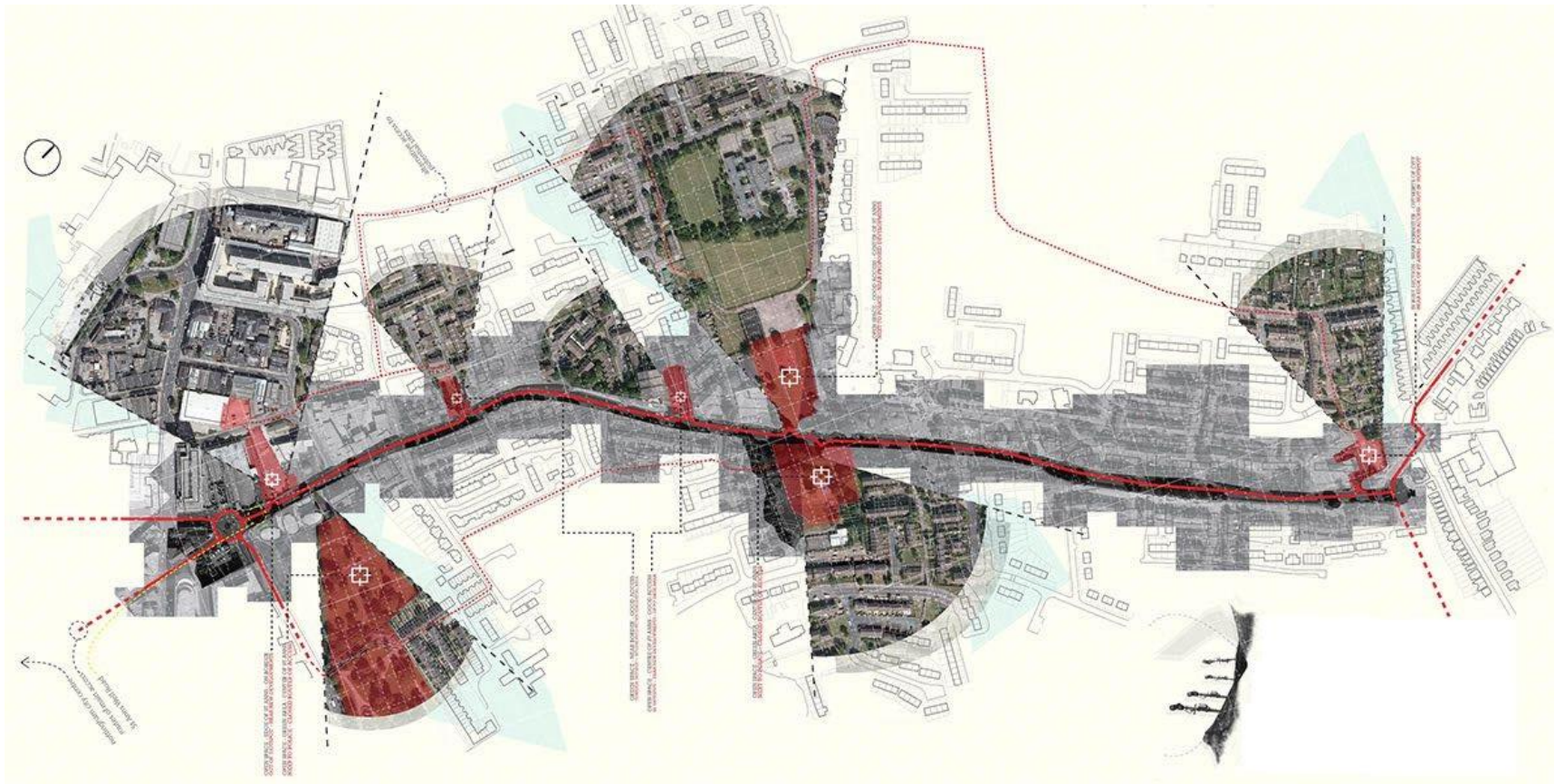
## The Right to Restrict Processing

- › Subject of personal data in every time change his agreement with all its parameters
  - › Which **exactly** data are stored
  - › The scope of data analysis
  - › Time period of storing the data



# Case Study of Implementation

## Physical Realization of Implementation



# Case Study of Implementation

## Data audit – costs with saving potential

- › Divided into two parts
  - › Audit of data
  - › Audit of Data Flows
- › Applications working with personal data
  - › External
  - › Internal
- › We can find that we duplicate some applications



# Case Study of Implementation

## Anonymization vs. Pseudoanonymization

### › **Anonymized**

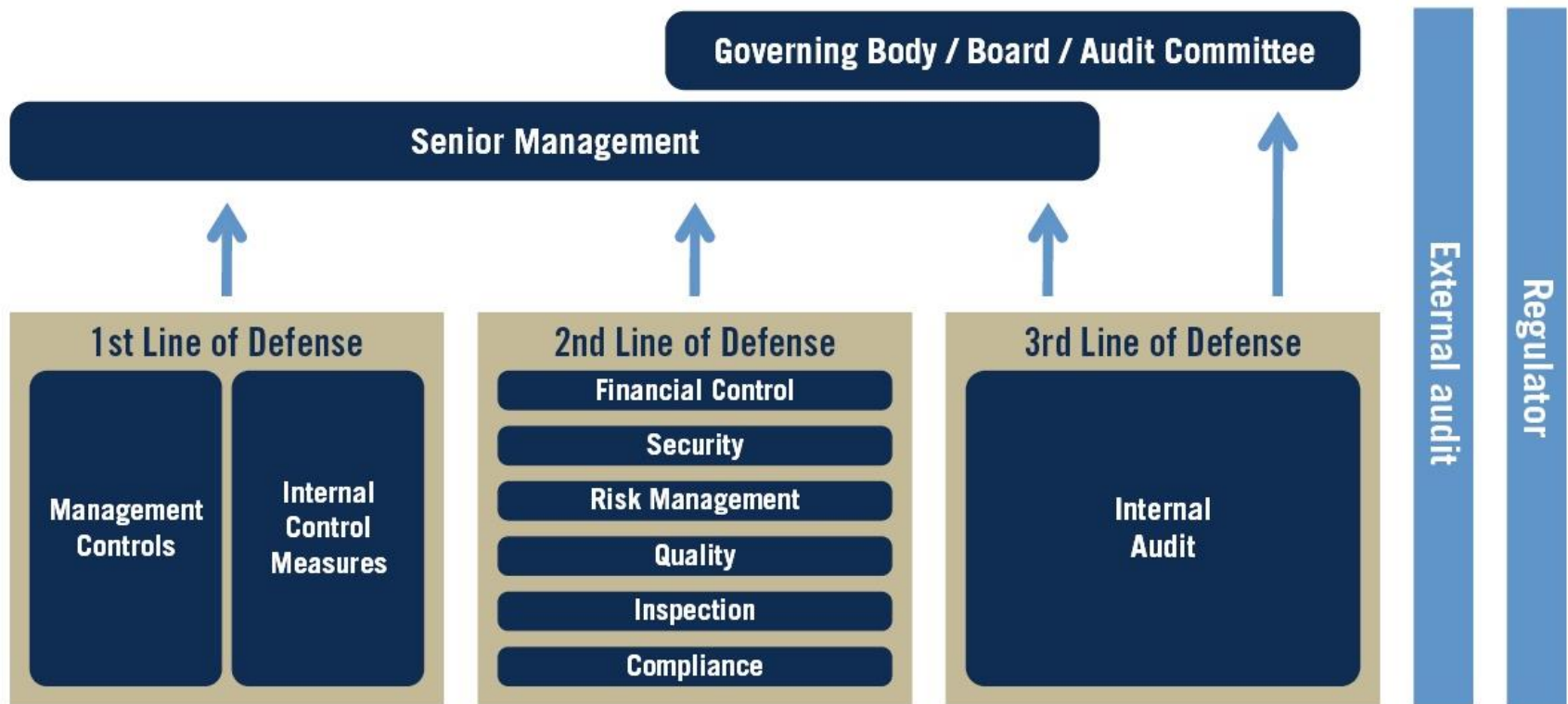
- › We speak about anonymized data sets in moment when there is no possibility to identify the person.
- › For statistical purposes, many parameters missing

### › **Pseudo-anonymized**

- › We speak about pseudo-anonymized data sets when we have some additional information in other databases that can identify the subject. (only administrator)
  - › they can be processed in wider scope than was previously defined;
  - › they have exceptions from the notification, reporting and some other rules;
  - › right usage ensure the private security;
  - › it can serve as a cyber-security tool as well

# Case Study of Implementation

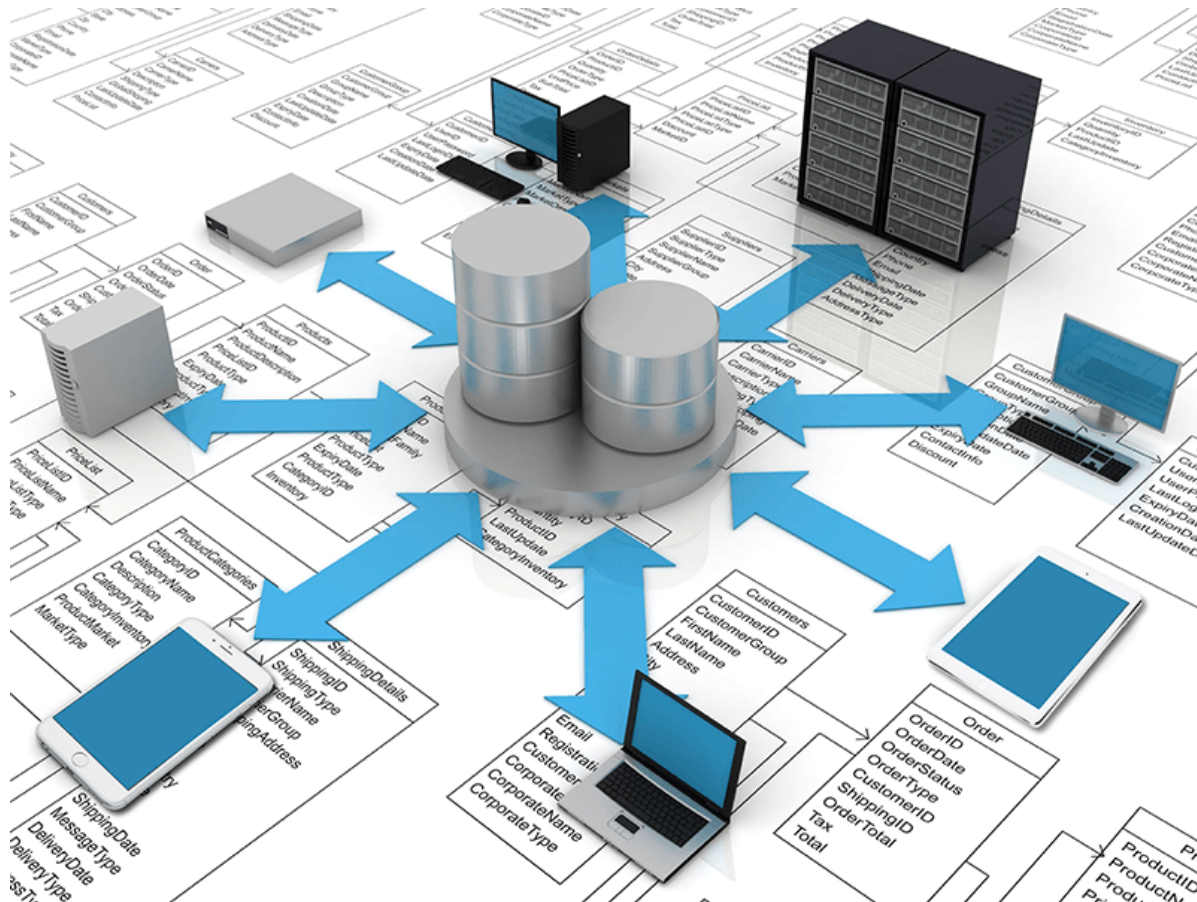
## Assurance of Compliance





# Case Study of Implementation

We can effectively monitor only communication with our central database



# Case Study of Implementation

## Communication logs check

- › Two weaves:
  - › Requests for some personal data of customers
  - › Requests for more details for existing data
- › Text comparison algorithms used
  - › Levenshtein's distance
  - › Jaro–Winkler distance
- › Combination of these algorithms used

## Key words findings

- › Expert rules (zero point)
- › Text mining algorithms in combination frequency analysis

## Conclusion

**Minimalization of risks**

**Impact to Industry 4.0 concept implementation**

**Right data audit shows how effective companies are**

**Big question how will companies communicate with customer**

**Internal control systems improvement**

Research was supported by SGS21188 project realized on Technical University of Liberec.

**Start think about it! 25th of May 2018 will be too late.**



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