# GDPR Compliance: Implementation Use Cases for User Data Privacy in News Media Industry

Ahmedur Rahman Shovon Shanto Roy Arnab Kumar Shil Tanjila Atik

### **Table of Contents**

Introduction Objective Process

Why GDPR? Implementation System Design

Personal Data Privacy by Design Dataflow

GDPR Overview User Dashboard Demonstration

### Introduction

General data privacy regulation (GDPR) is a European Union general data protection regulation subjected to protect personal data of the citizens in the EU.

Our paper presents implementation use cases towards the consequences of maintaining user data privacy after the adoption of GDPR; specifically in the news media industry.





## Why GDPR?

- GDPR restricts the use of user personal data by media or service industry.
- Developers should follow new data usage policies so that a system preserves users data privacy rights (J. Seo, 2017).

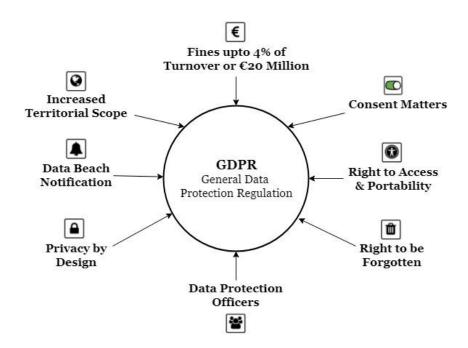
Prevents user data misuse without the consent of European Union citizens (I. N. Shu, 2017).

All companies had to change their user data access policies across the world to follow GDPR compliance.

# Personal Data Categories (G. D. P. R, 2016)

01	Name	06   Ethnic origin
02	Address	07   Political opinions
03	Phone number, email / IP address	08   Religious or philosophical beliefs
04	Transaction history	09   Physical or mental health
05	Traveling habits	10   Genetic and biometric data

### **General Overview of GDPR**



 $\equiv$ 

Objective

Identify and present system design and implementation use cases for news media industry that is compliant with GDPR



01   Appoint a data protection officer	06   Provide a privacy Dashboard
02   Stick to a code of conduct	07   Categorize sources of personal data
03   Acquire consent for data	08   Protect data subject right to erasure
04   Facilitate user consent	09   Establish anonymized processes
05   Provide set of policies to end users	10   Access restriction to processes

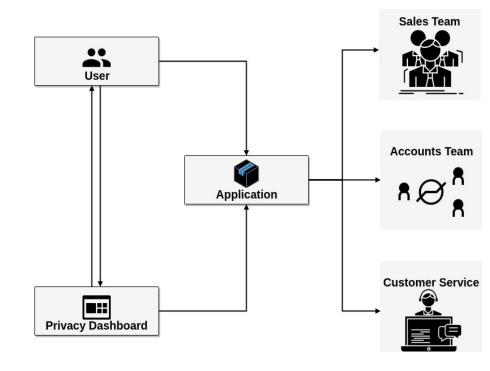
# User Consent Centric Privacy by Design

News media industries partake various user information by selling subscriptions.

How they are managing these data and using further for advertisement or analytics purpose?

#### **GDPR Compliance Approach:**

Provide a privacy by design solution that comes with options for users to manage their private data (G. D'Acquisto, 2015).

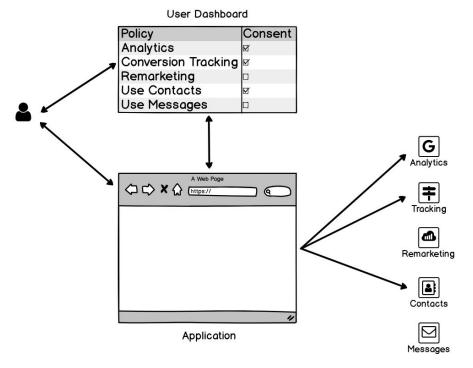


# Dashboard for Subscribers

Initiation of a user dashboard to manage private data access (R. Ducato, 2016).

Users can read the policies and therefore assign the data access rights through their consents (A. Rossi, 2017).

Users must have the opportunity to hold their right to give and at the same time to withheld their consent.





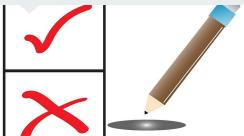


#### **Add User Policies**

Data protection officers add user policies and consents to GDPR dashboard.

#### **Users Give Consents**

Without achieving the consents, the user data is not being used anywhere.





#### **Use Data Accordingly**

Dashboard restricts the use of user private data according to user choices.

# System Design and Development

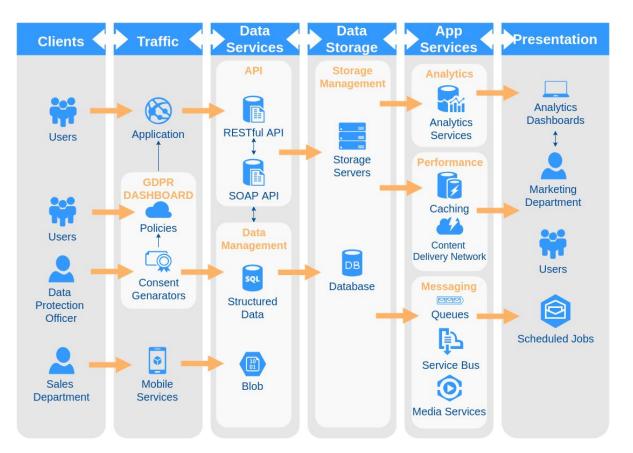


Figure: System Architecture presenting design issues and processes

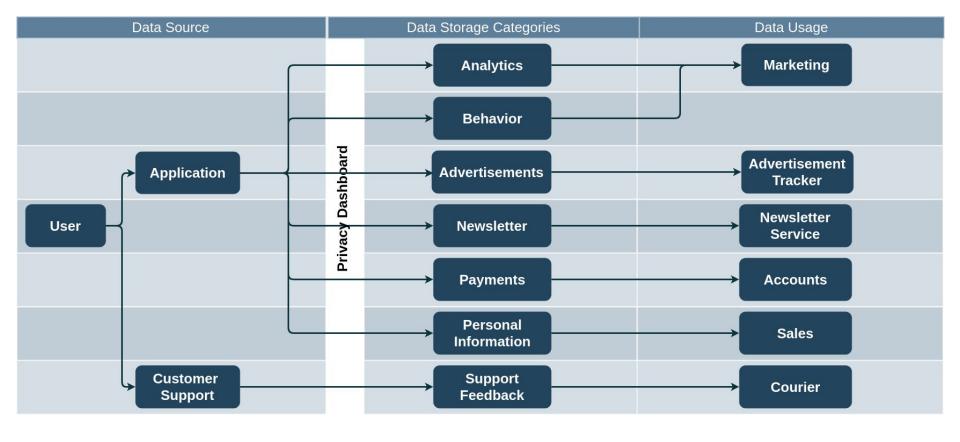
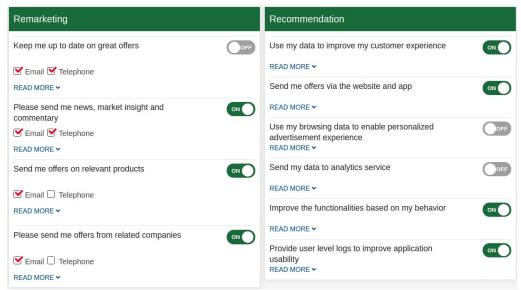


Figure: Introduced Privacy in Dataflow

## Sample User Dashboard

User dashboard contains the data usability policies and related options to users requesting for their permission in re-usability of user created contents.

- 01 | Systems and data auditing
- 02 | Work-flows and data processing
- 03 | Policy and privacy configurations
- 04 | User consent preference
- 05 | User subscription management





- G. D. P. Regulation, "Regulation (eu) 2016/679 of the european parliament and of the council of 27 april 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing directive 95/46,"Official Journal of the European Union (OJ), vol. 59, no. 1-88, p. 294, 2016.
- G. D'Acquisto, J. Domingo-Ferrer, P. Kikiras, V. Torra, Y.-A. de Mon-tjoye, and A. Bourka, "Privacy by design in big data: an overview of privacy enhancing technologies in the era of big data analytics," arXiv preprint arXiv:1512.06000, 2015.
- A. Rossi and M. Palmirani, "A visualization approach for adaptive consent in the european data protection framework," in E-Democracy and Open Government (CeDEM), 2017 Conference for IEEE, 2017, pp. 159–170.



- I. N. Shu and H. Jahankhani, "The impact of the new european general data protection regulation (gdpr) on the information governance toolkit in health and social care with special reference to primary care in england," in 2017 Cybersecurity and Cyberforensics Conference (CCC). IEEE, 2017, pp. 31–37.
- R. Ducato, "Cloud computing for s-health and the data protection challenge: Getting ready for the general data protection regulation," in Smart Cities Conference (ISC2), 2016 IEEE International. IEEE, 2016, pp. 1–4.
- J. Seo, K. Kim, M. Park, M. Park, and K. Lee, "An analysis of economic impact on iot under gdpr," in Information and Communication Technology Convergence (ICTC), 2017 International Conference on.IEEE, 2017, pp. 879–881.

