EC Data Platform
State of play and way forward
external presentation

DIGIT B1

8 December 2023

DIGIT.B.1

Data, Artificial Intelligence & Web

Unit Mission

...focus on the following areas:

- data, information and knowledge management;
- data analytical processes and tools;
- artificial intelligence;
- business intelligence; digital innovation ....

Unit Services

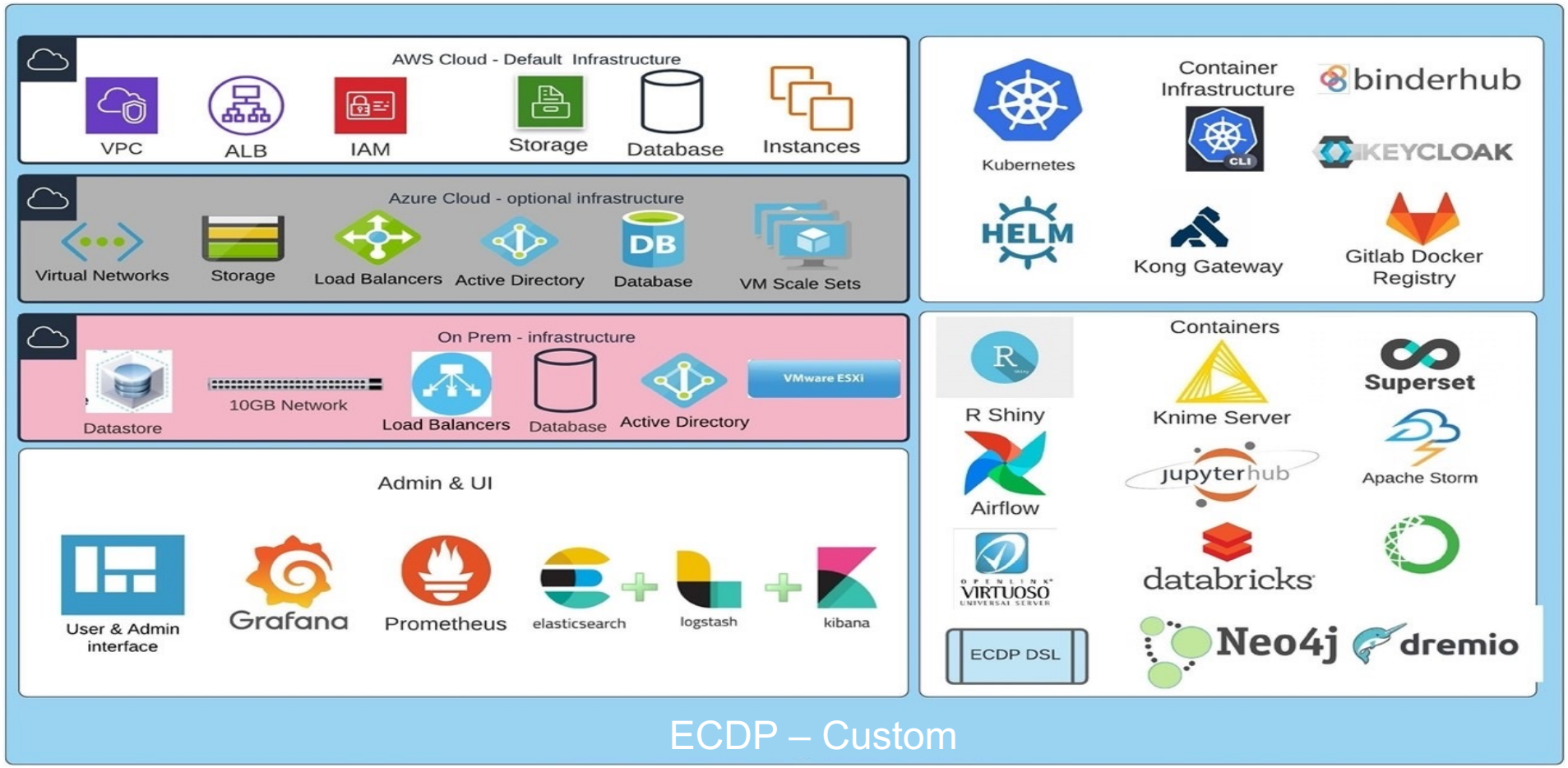
- Data Analytics
- Data Centre File Storage (DCFS)
- Data Virtualization with Denodo
- EC Data Platform
- Europa Web Platform
- Qlik Sense
- QlikView
- SAP BusinessObjects Business Intelligence
- SAP Data Services
- Single Integrated Framework for Collaboration
- Wikis platform

Data Analytics and ECDP

- **Detecting** analytics solutions available in the Commission
- **Assess** whether the solutions can become corporate services
- Address **specific needs** of the DGs on certain business areas
- Promote **prototyping/piloting** in view of creating corporate services
- **Create flagship projects** to pioneer solutions for certain business areas
- **Use the ECDP** as a building block for the solutions
- **Reuse the developed components** to feed the ECDP.

EC Data Platform

The EC Data Platform is a corporate data environment where EC staff can share and re-use data from different policy areas and perform analytics to extract insights



- Architecture
- Infrastructure
- Tools
- Integration
- Services
- Governance
- Security
- Data access
- Reusable components

…

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Addressing @EC DGs and users

Implementation

- Design service offering to **answer most EC needs / target most EC persona**.

→ DSL Azure-based (*standard*) offering is targeting mainstream usage, *e.g.* policy analysts.

→ DSL AWS-based (*custom*) offering can be customised by users for own needs, *e.g.* data scientists.

- Support implementation of **ad-hoc projects requested by DGs with specific needs**.

→ Analytics PoCs and pilots.

→ Dedicated flagship projects: ESTAT WIH, GROW eProcurement, JUST eLab, ...

- **Build communities, empower users, share best practices and collect feedback**.

→ Identify most common data-related use cases and create synergies across DGs.

→ Create / support CoPs on Connected, Yammer, ...

→ Organise data events and share data stories.

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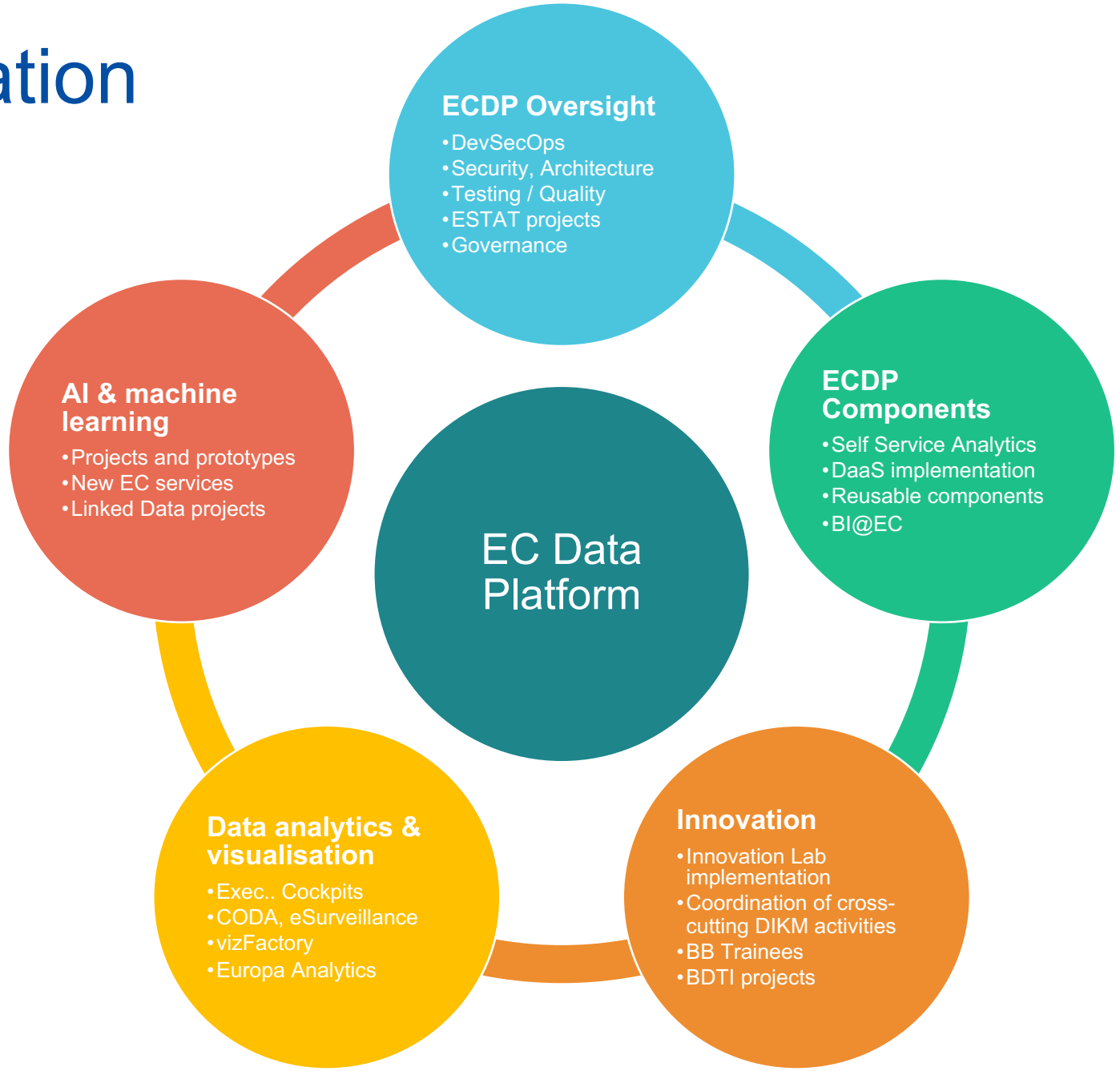
Organisation



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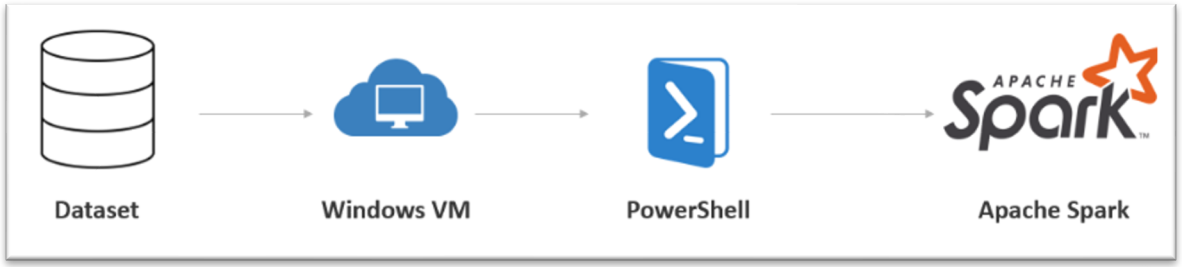
ECDP Overview

What the EC Data Platform is:

- **Sandbox environment**
- **3 flavours: AWS, Azure, Open Source**
- **Accessible to EC and Member States***
  - **Big Data Test Infrastructure**

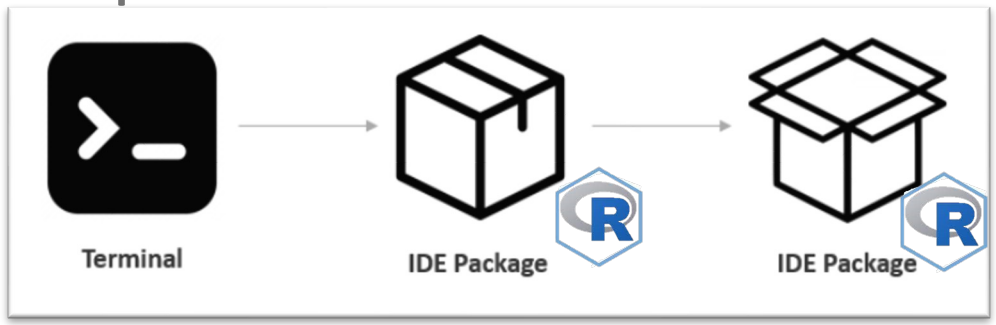
What can you use it for? (examples)

- **I need to train Machine Learning models on a large amount of data stored on my Windows Virtual Machine.**



- **I need to extract insights from a large data set and create the related visualizations.**

- **I need to setup a development environment in R on shared machines to build R scripts.**



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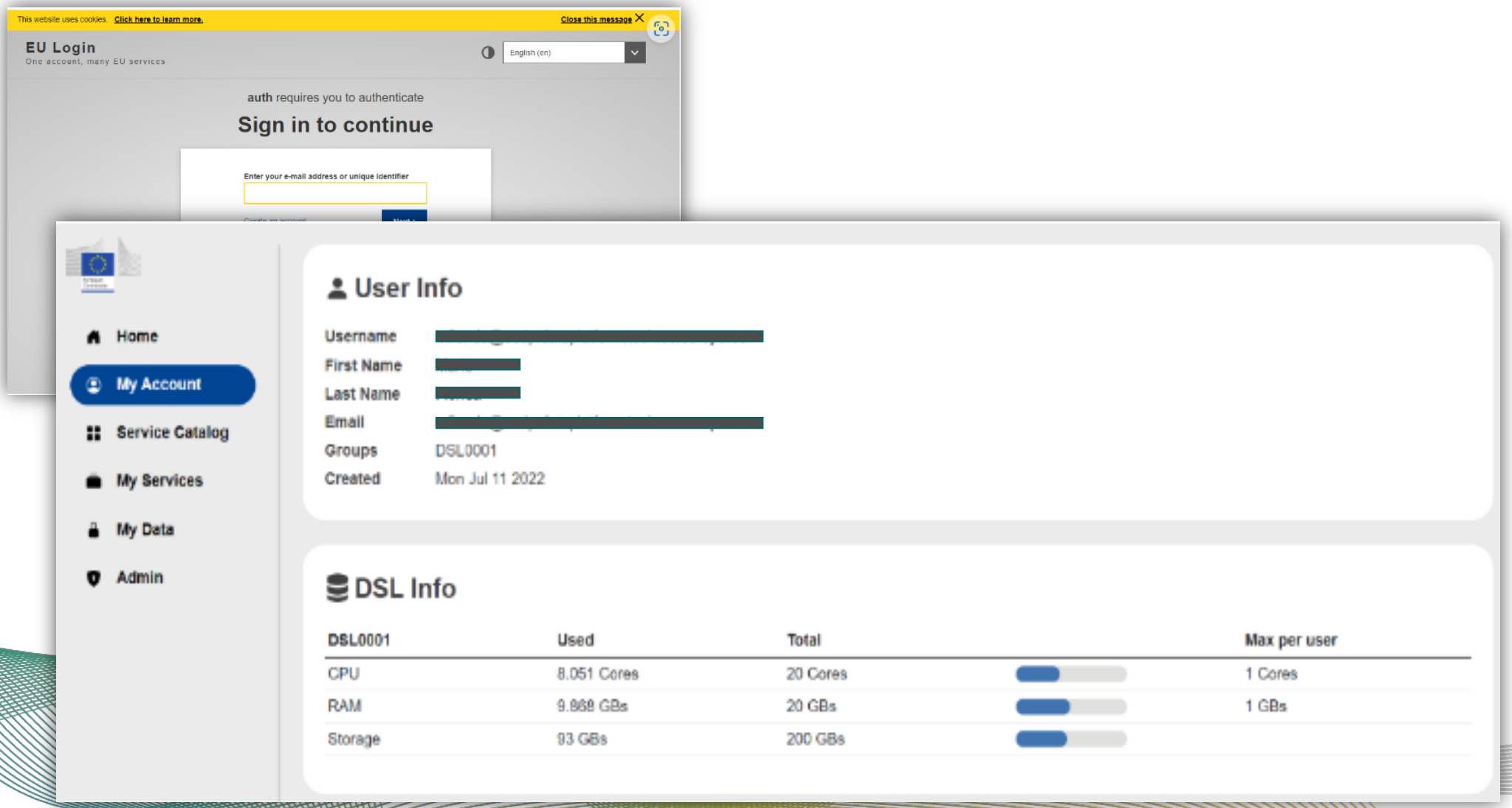
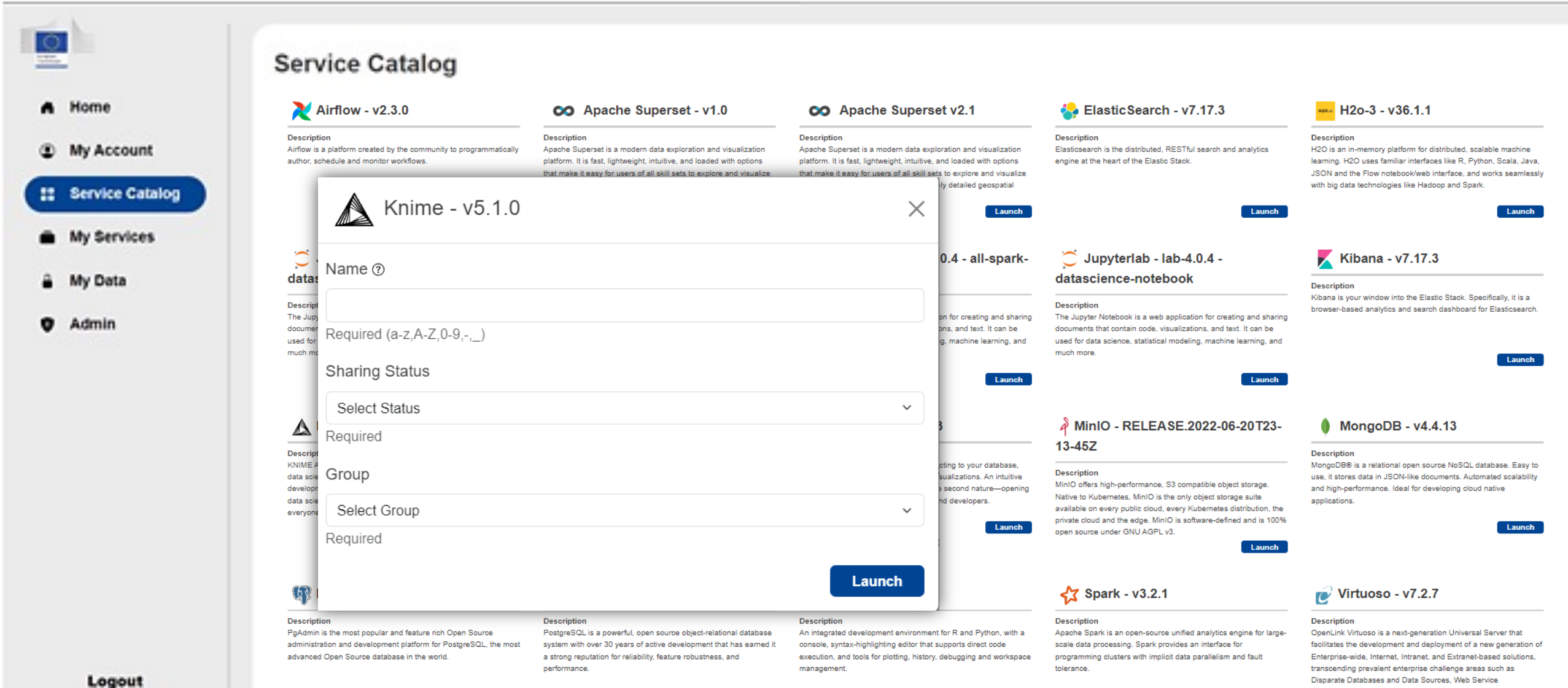
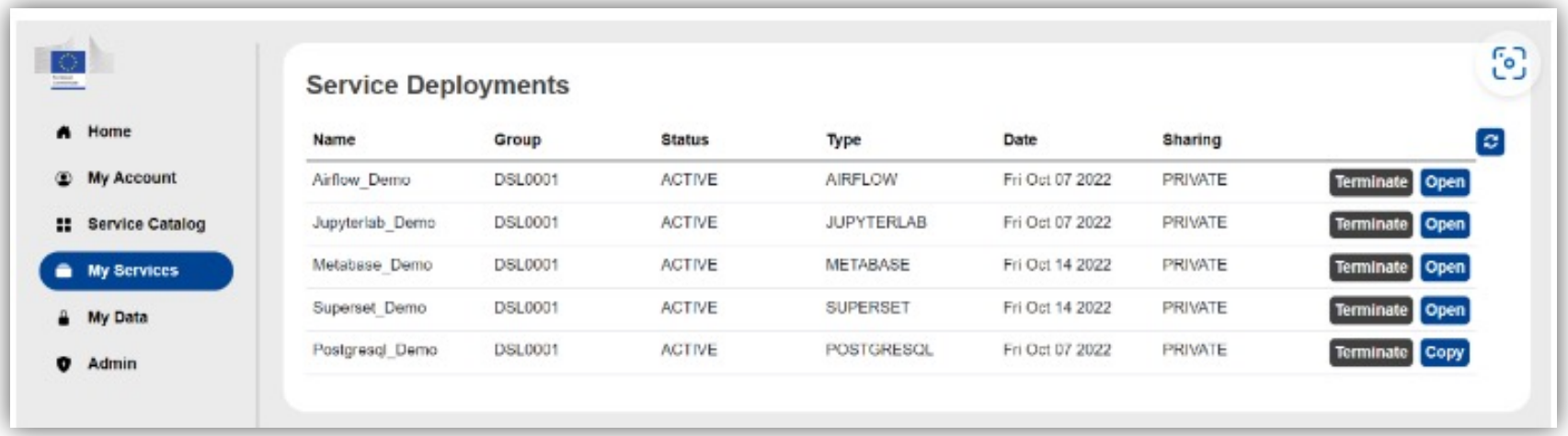
ECDP – Open-Source portal (1/3)

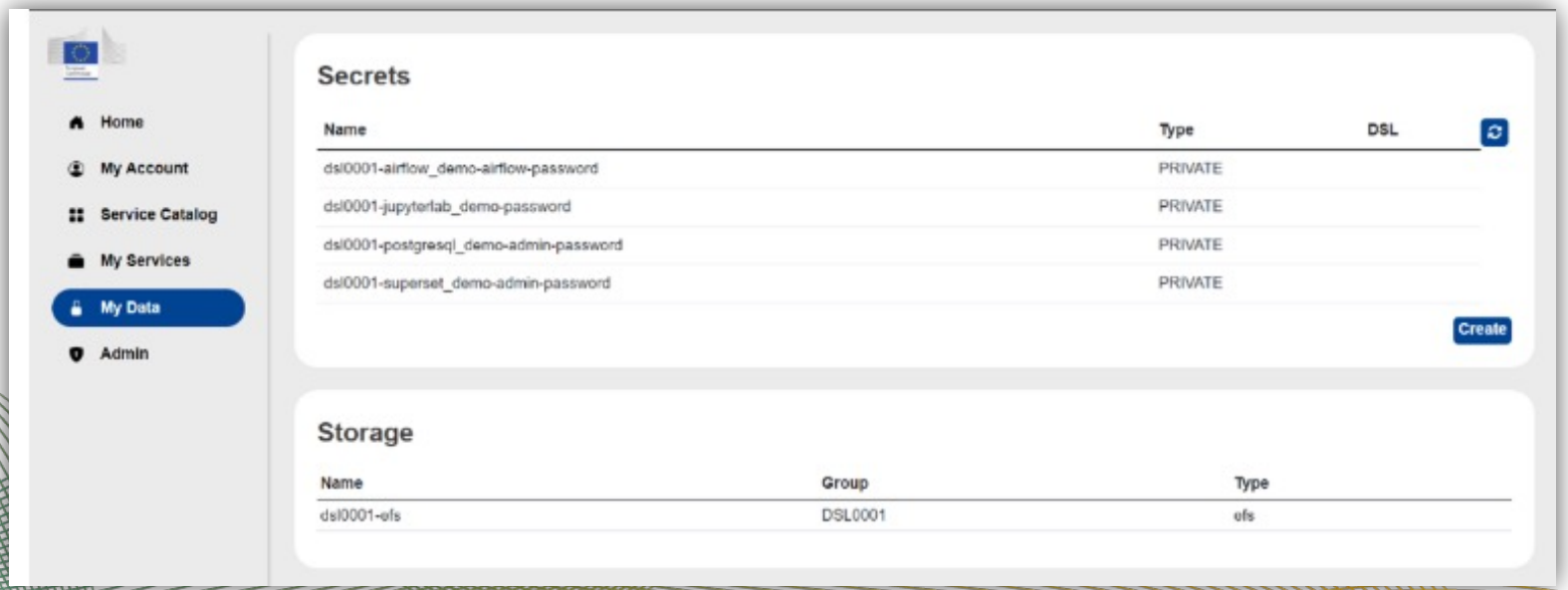


ECDP – Open-Source portal (2/3)



ECDP – Open-Source portal (3/3)





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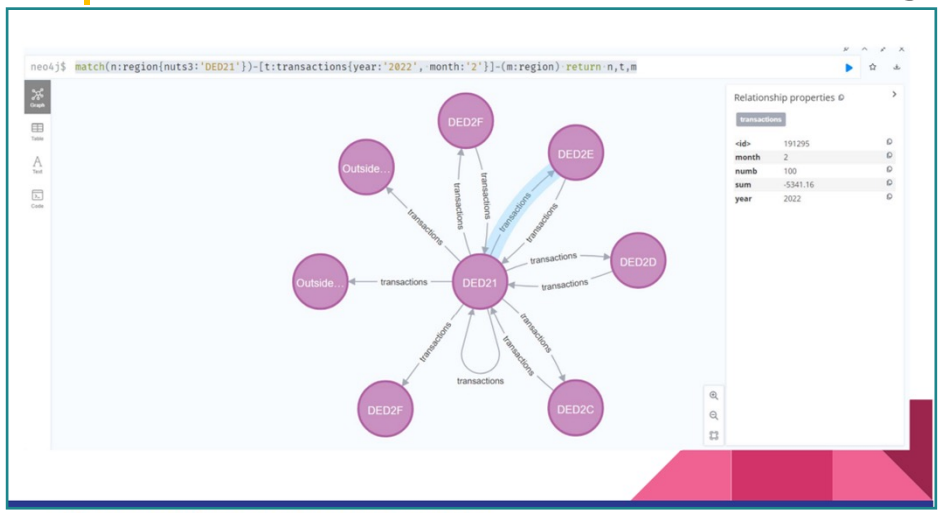
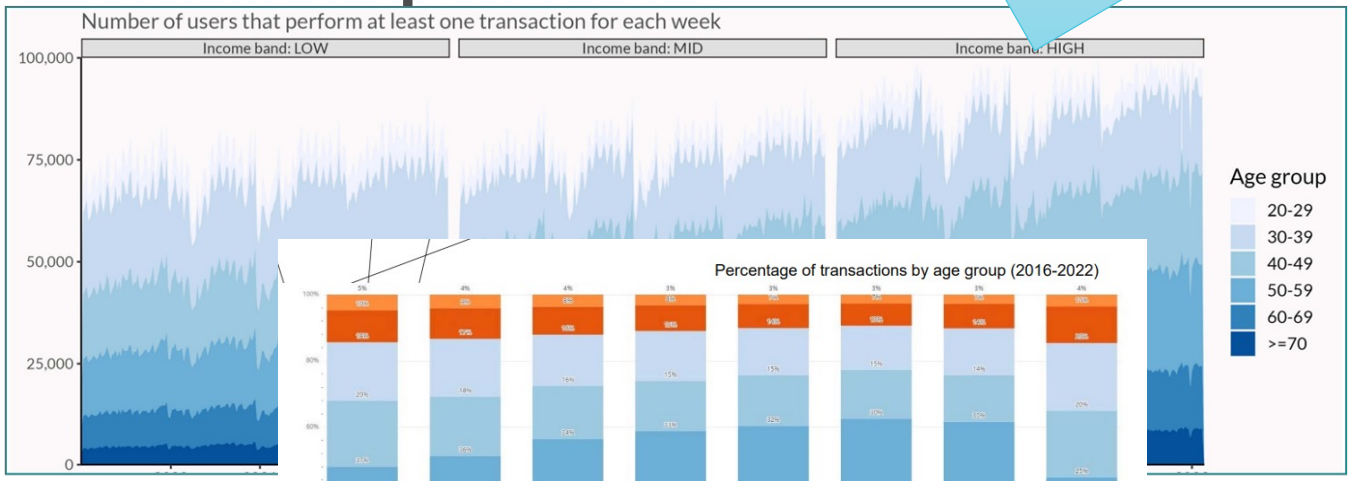
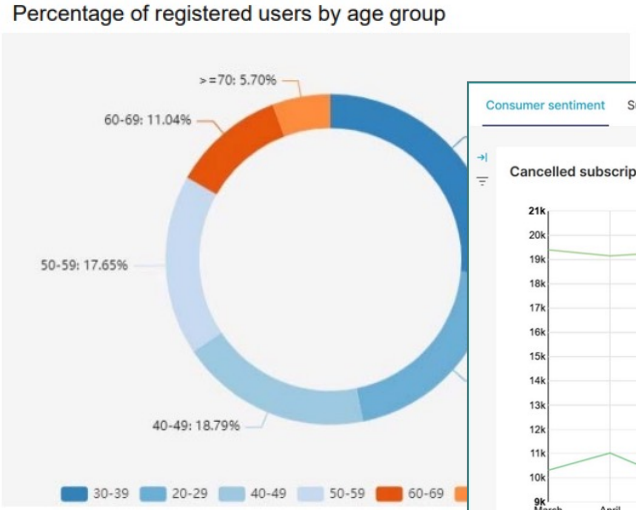
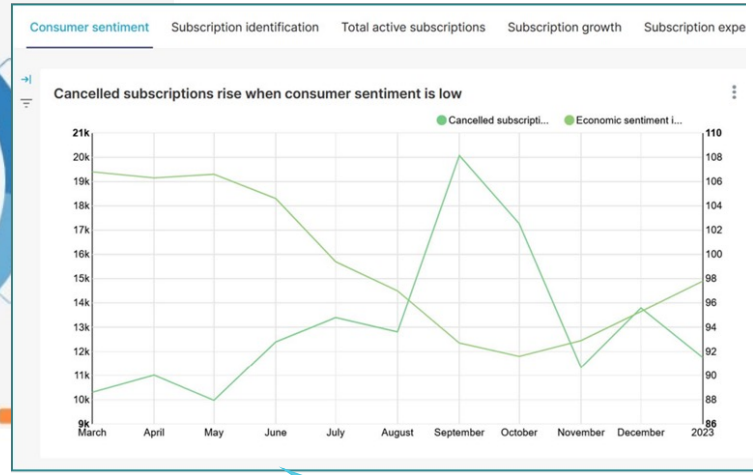
ECDP data analysis examples

Consumer spending as early warning for financial crisis

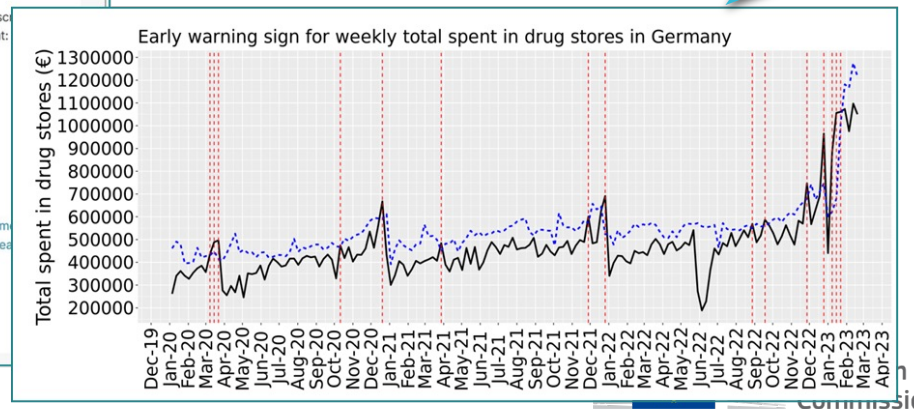








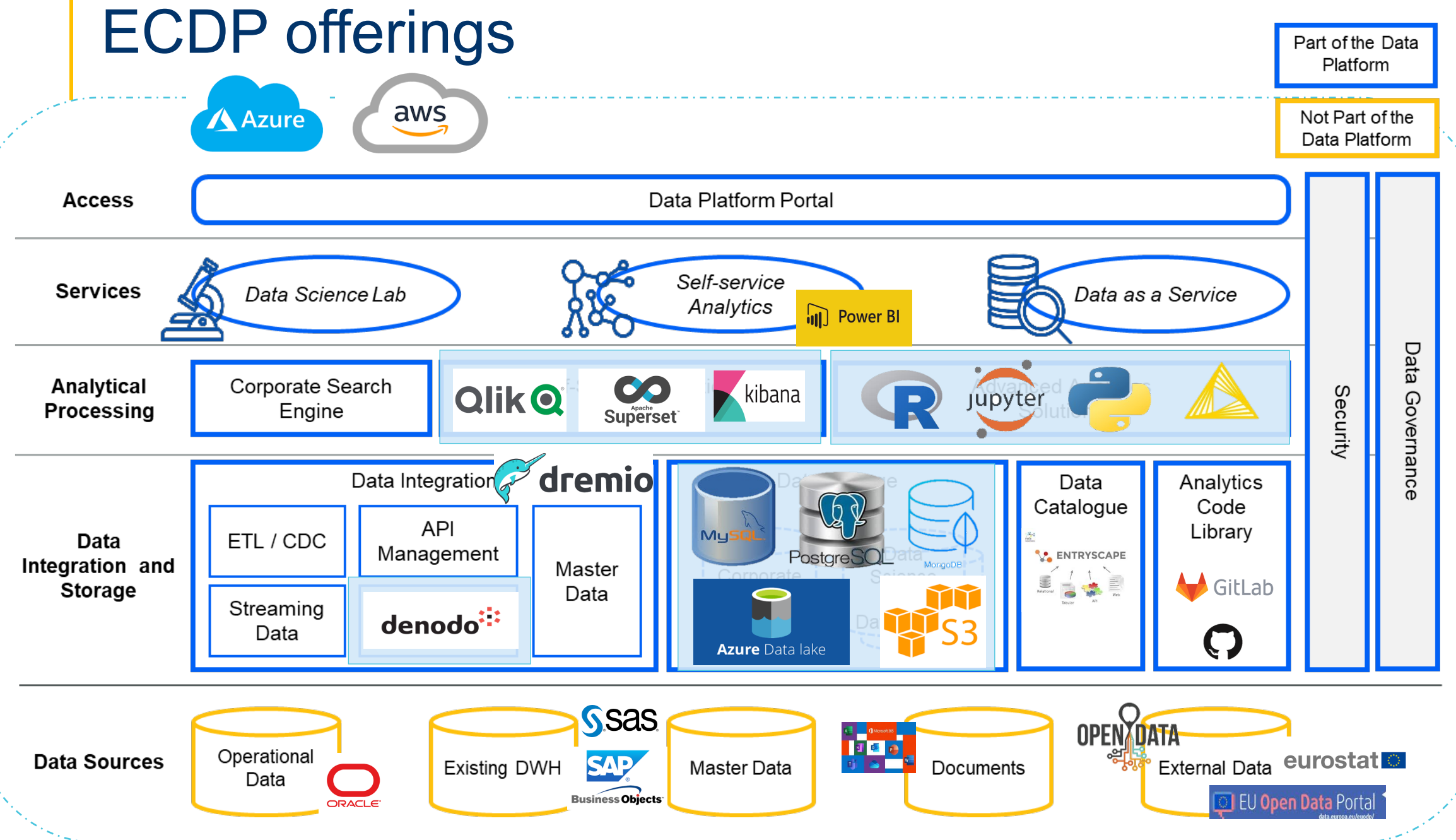
Pharmacy spending to track desease outbrreak



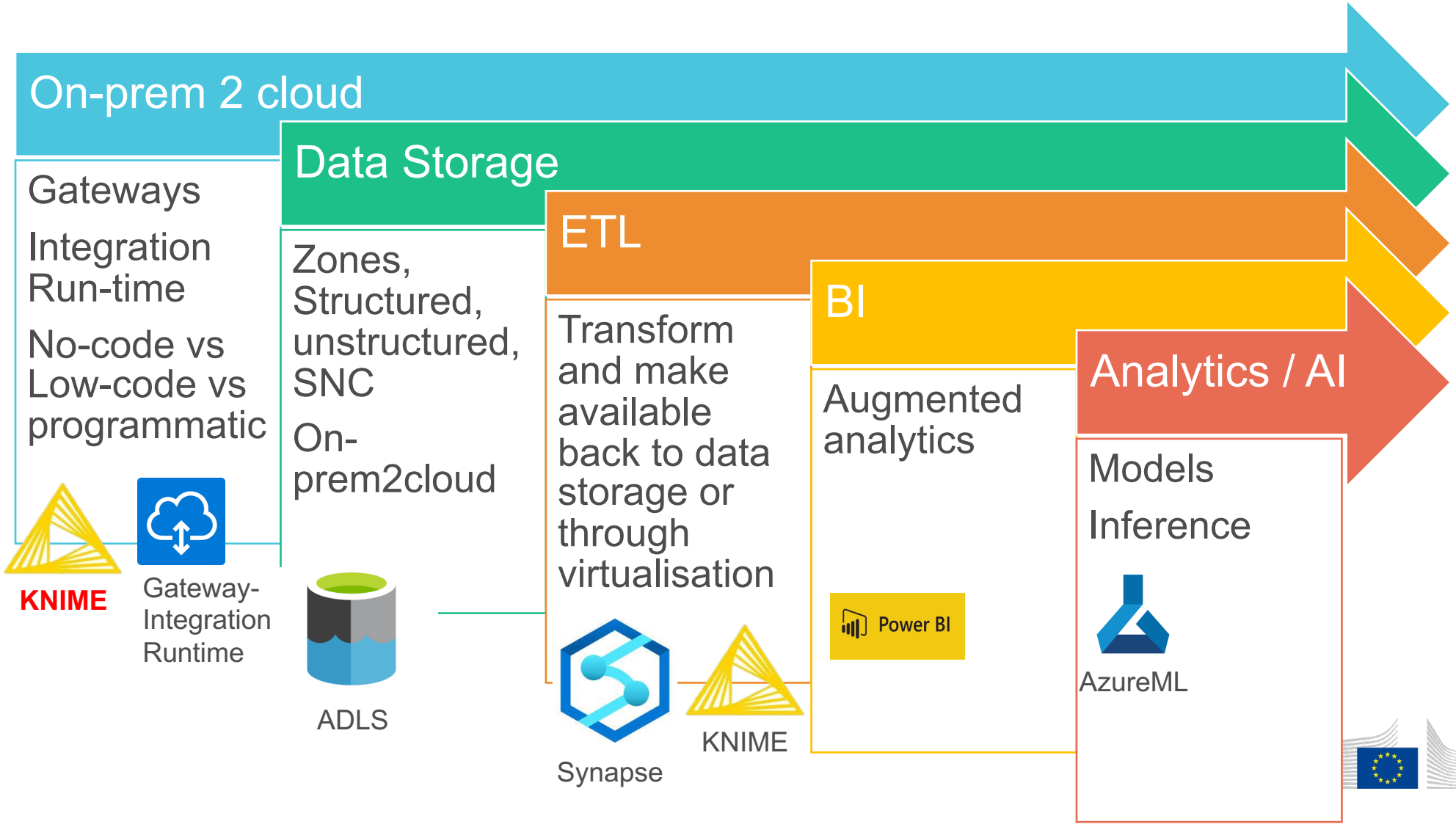
Subscription cancelation to track consumer sentiment

More examples in [EUROPEAN BIG DATA HACKATHON 2023]

ECDP offerings



Journey: ECDP @Azure



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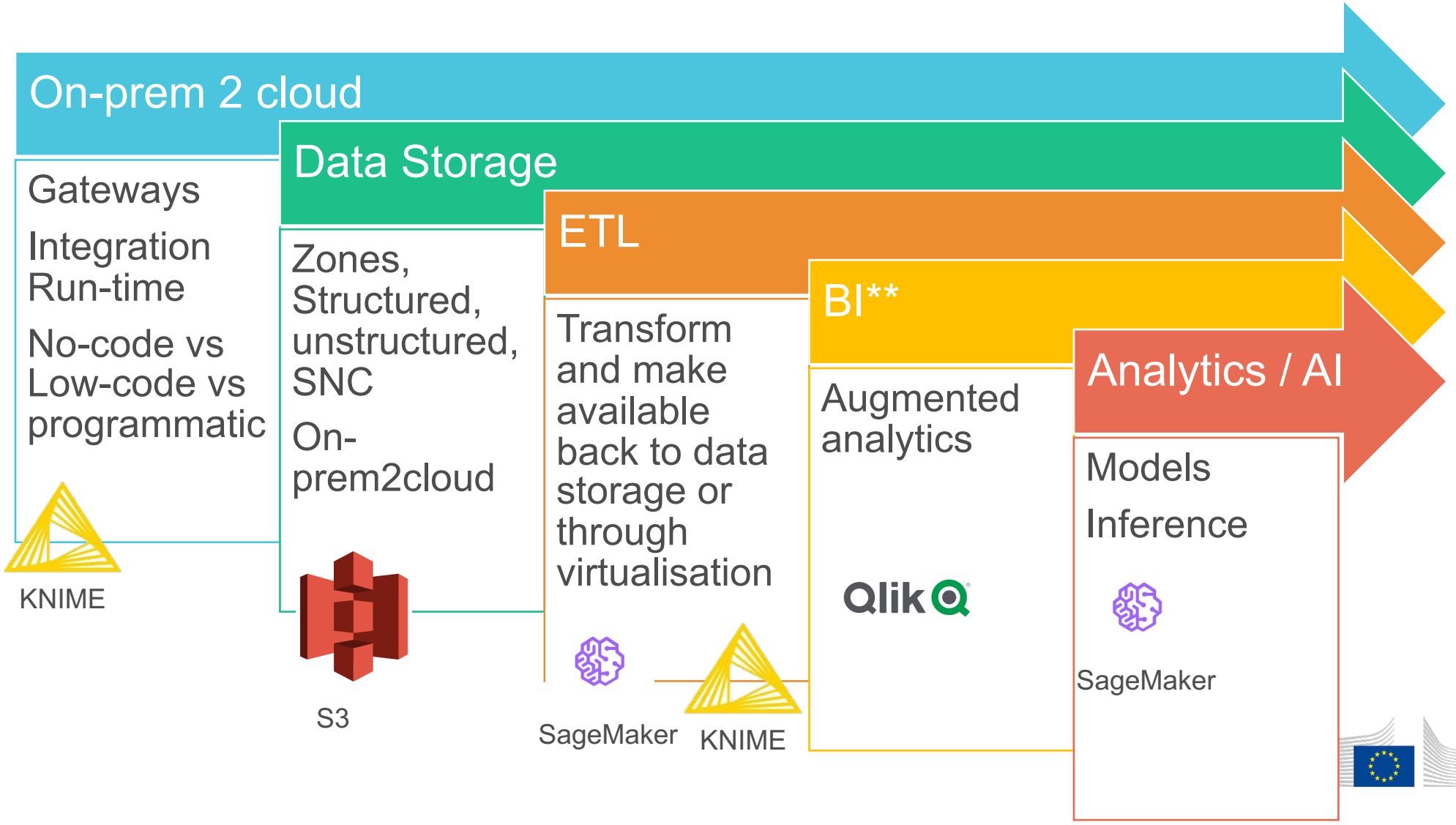
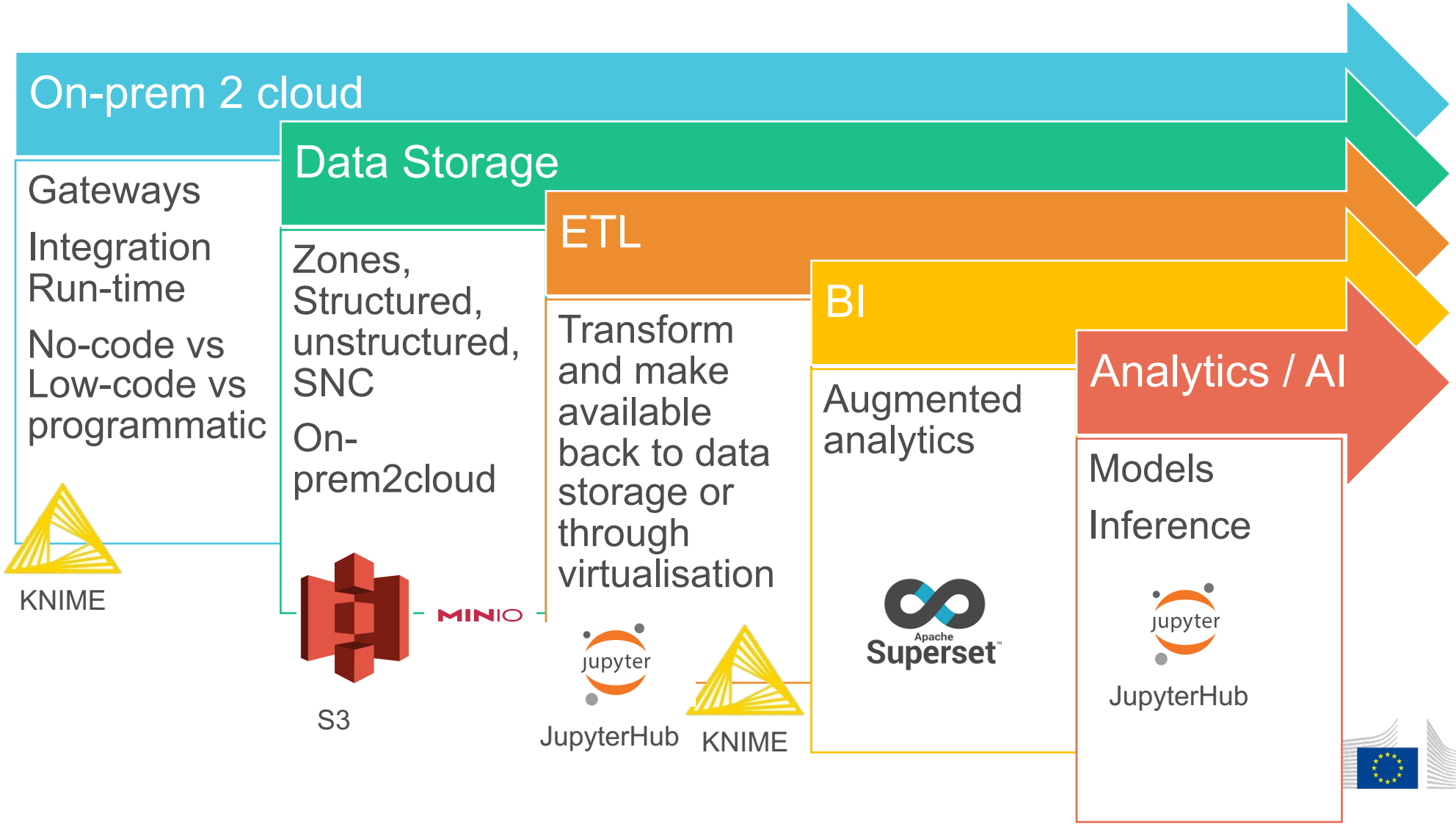
Journey: ECDP @AWS



Journey: ECDP @Agnostic



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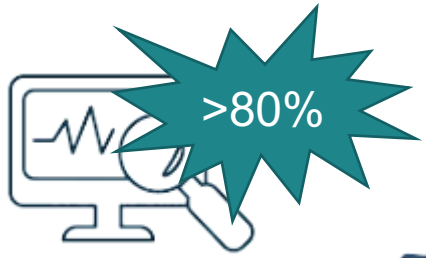
Data Analytics

Identifying and supporting **business priority areas** with services and solutions to tackle specific needs using data analytical tools.

- optimize workload / workforce
- increase quality
- work more effectively

Support the legislative process

HR and budget/financial processes



Monitoring & Dashboarding

Citizens / Staff engagement

Cybersecurity / Fraud detection
Technical monitoring

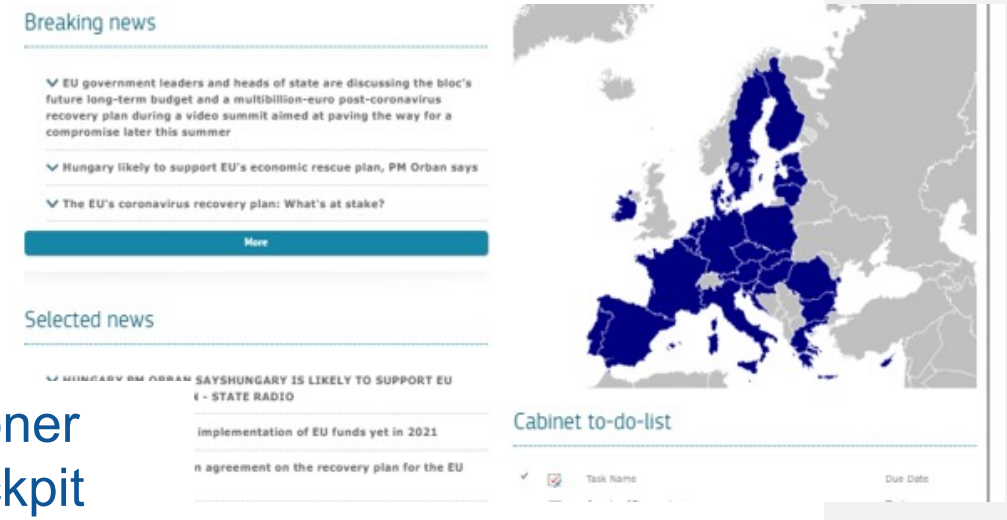
Country / thematic knowledge

Digital Workforce

Information discovery and retrieval

Executive Cockpits

Ideation | Design | Implementation | Finalised



Commissioner Hahn's cockpit

Status Project

Who Cabinet Hahn, DIGIT

Type Info hub / Analytics / Dashboards

Challenge Tailor made information for EC executives, exploiting internal and external information sources, collaboration solutions, dashboards, news.

Solution Visualisation techniques, collaboration solutions and data dashboarding based on modern BI and interactivity

Benefits

- Tailor made information
- Flexibility and agility
- Channelling different strands of information

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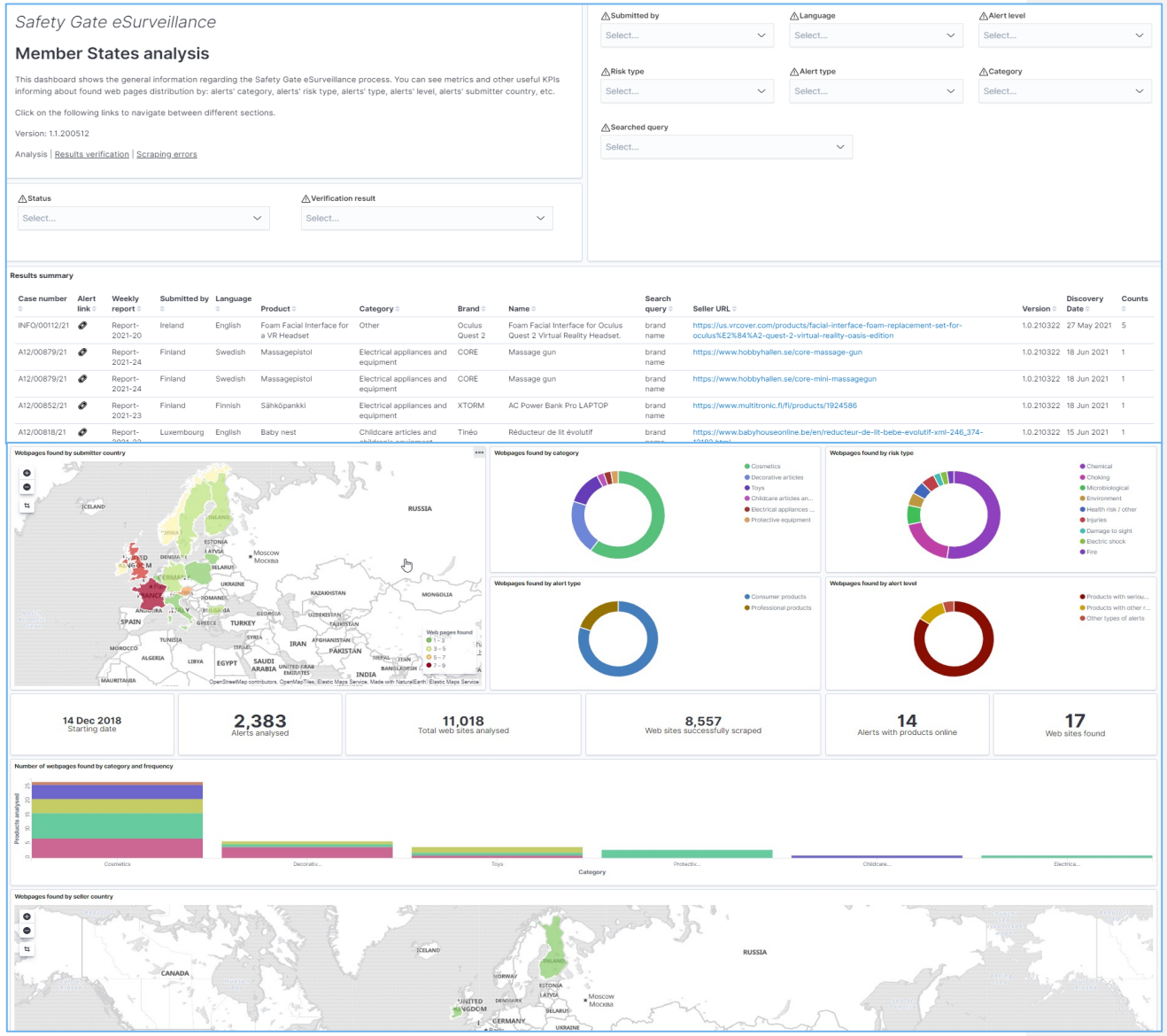
eSurveillance – SafetyGate (DG JUST)

Ideation | Design | **Implementation** | Finalised



Status Project

Who JUST, DIGIT

Type Search / Web-scraping / ML / Analytics / Dashboards

Challenge Detection of unauthorised online offers of unsafe products signalled in the EU rapid alert system for dangerous non-food products: Safety Gate.

Solution Component system built entirely on standard EC technologies for searching, scraping and data analytics

Benefits

- Enhancing of the control capacity of Market Surveillance Authorities (MSAs)
- Harmonisation of fragmented online market surveillance approaches in MS

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Thank you!

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