Project Overview

kraken-h2020

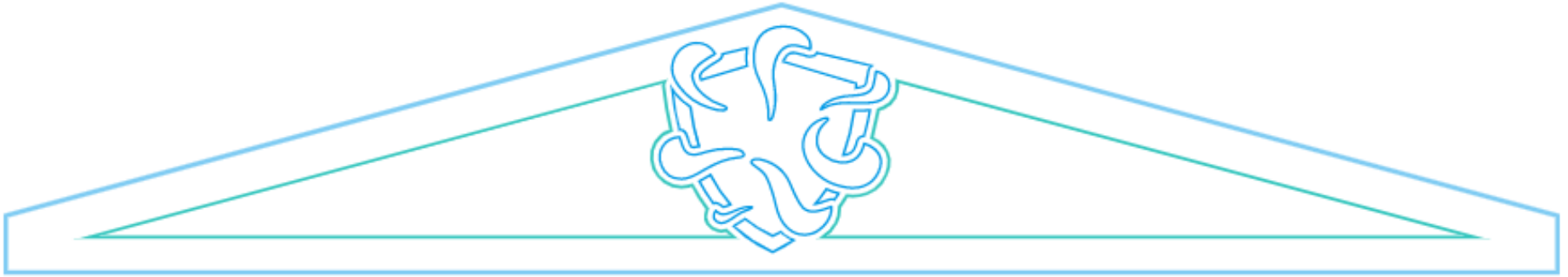
@KrakenH2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871473

Our mission

Realize a trusted **marketplace** to share certified information between users and organization, leveraging on **Distributed Ledger Technology**, promoting the vision of **Self Sovereign Identity**, preserving **security and privacy** by design and creating an effective **compliance framework** to make the output compliant with EU regulations.

Project's Pillars



The Self-Sovereign Identity paradigm, to provide a decentralized user-centric approach on personal data sharing

A data marketplace, which will allow the sharing of personal data and its corresponding AI/ML analysis, all while preserving privacy.

Enhanced Security of all information and transactions thanks to several techniques based on advance crypto tools privacy-preserving.

Why Kraken can be disruptive

KRAKEN makes Self Sovrin Identity easy

Thanks to Kraken users create their own SSI within a digital wallet leveraging on SOVRIN Network

KRAKEN makes blockchain business ready

2 different use cases will be addressed to showcase the value of our project

KRAKEN makes everything law compliant

No more distance between technology and compliance: the project will study the way to allow the leverage on blockchain and the respect of major EU regulations

Our main goals

Deliver a wallet in which Users can finally own their information and share them with zero-knowledge proof thanks to SSI approach

Build a «bridge» between technology innovation (SSI, DLT) and the EU regulation (eIDAS, GDPR, etc)

Leverage on Distributed Ledger Tecnology to minimize risk of single point of failure

Identify a winning business model to create sustainable **economic value** for **'personal data spaces'** supporting the Digital Single Markets'.

Create a secure framework in which companies can get trusted information and where data providers can rely on specific privacy metrics

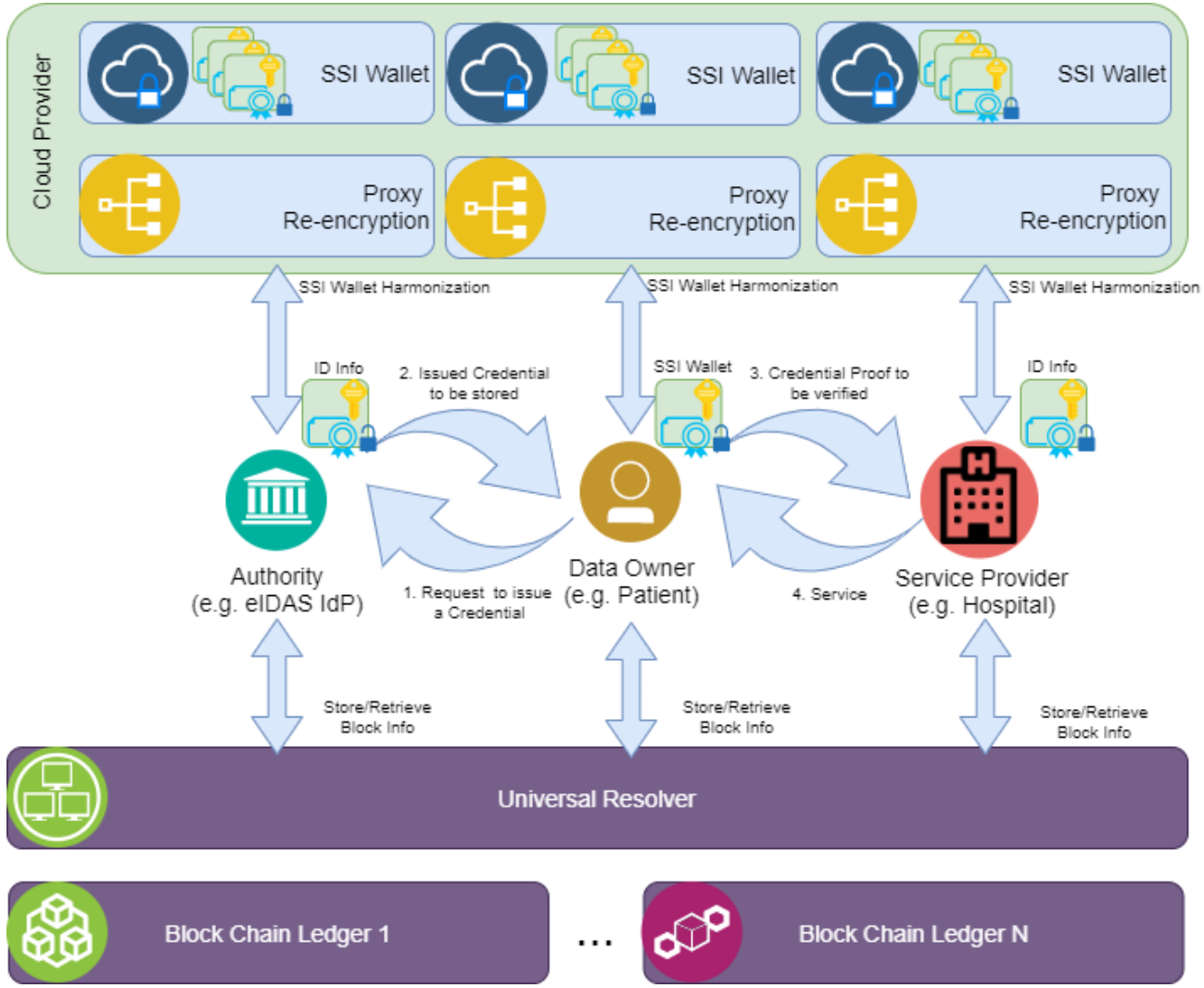
Demonstrating in two high-impact pilots – **Health and Education**- the maturity, feasibility and applicability of our business research

How it will work

- Based on Distributed Ledger Technology, our echosystem will involves 3 users:
  - Data Owner
  - Authority Provider
  - Service Provider

- Data Owner will have an SSI wallet to store credential and share DIDs with service providers when requested

- Marketplace will allow the sharing both of single claims and stream of data



Use Cases: Healthcare

A **biomedical data marketplace** for

(1) individual citizens (Data Owners)

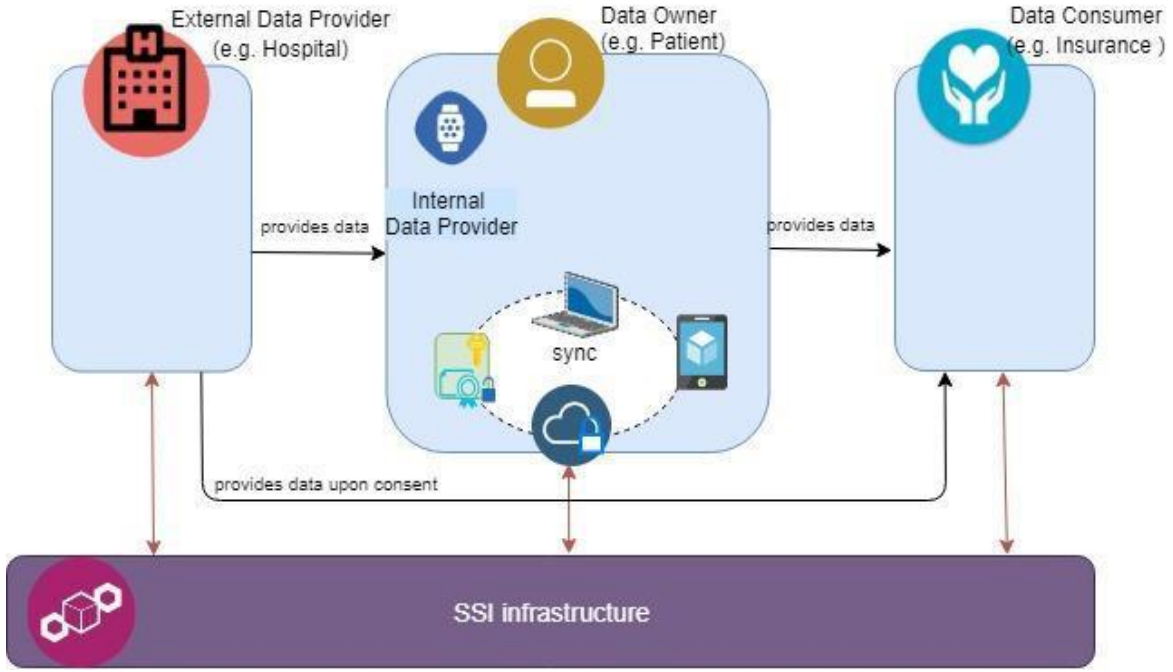
(2) healthcare organisations (External Data Providers)

where to commercialize to third parties *(Data Consumers, e.g., insurance, pharma),* in full compliance with the GDPR

- **patient medical records**
- **real-world, wellbeing data from wearable devices**

Benefits

- **Data providers** can control the use of their data and be equally rewarded, increasing awareness of their rights and liabilities and sharing the economic benefits
- **Data users** can have access to high-quality aggregated data in seamless way, extract maximum value from data and benefit society by (1) creating added economical value and (2) accelerating the pace of data-driven research and technological innovation in the biomedical field



In the healthcare platform, individual citizens (Data Owners) and healthcare organisations (External Data Providers) can register through a *Self Sovereign Identity* (SSI) Wallet and set data access criteria and consent options for data usage, prior to providing data to the ledger. Data consumers, also registered in the SSI Infrastructure, can request data from the platform or from External Data providers upon consent.

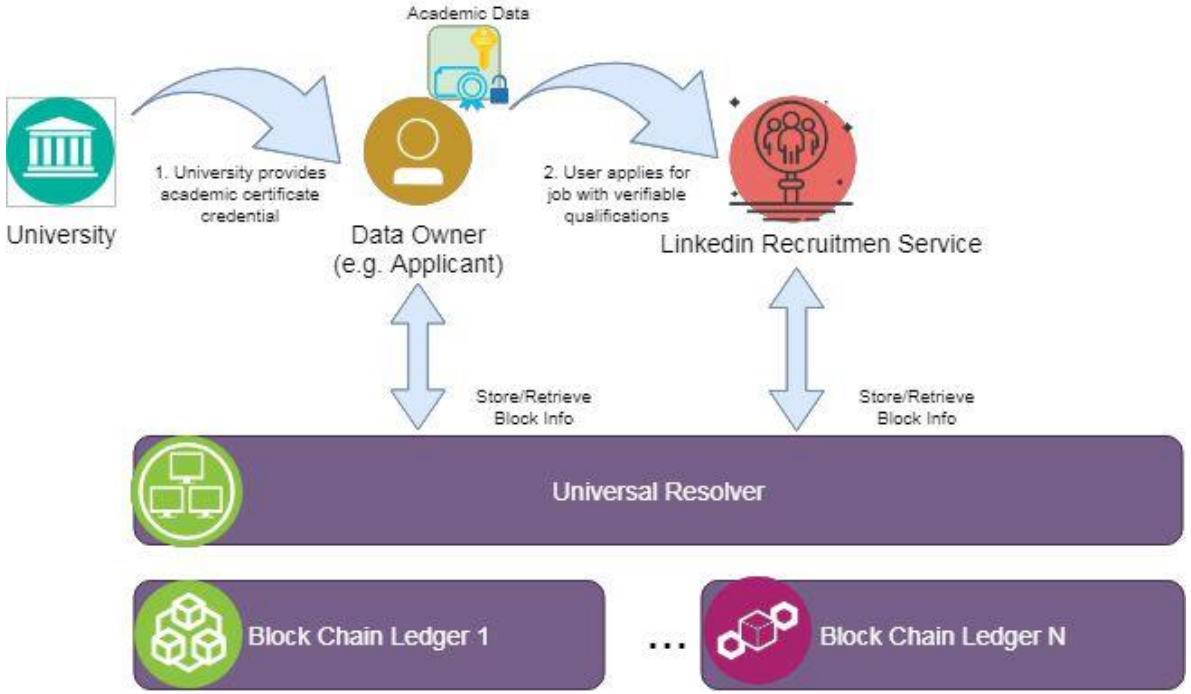
Use Cases: Education

Secure sharing of academic data of students, such as graduation certificates, certificates for courses, and the enrollment status for individual terms.

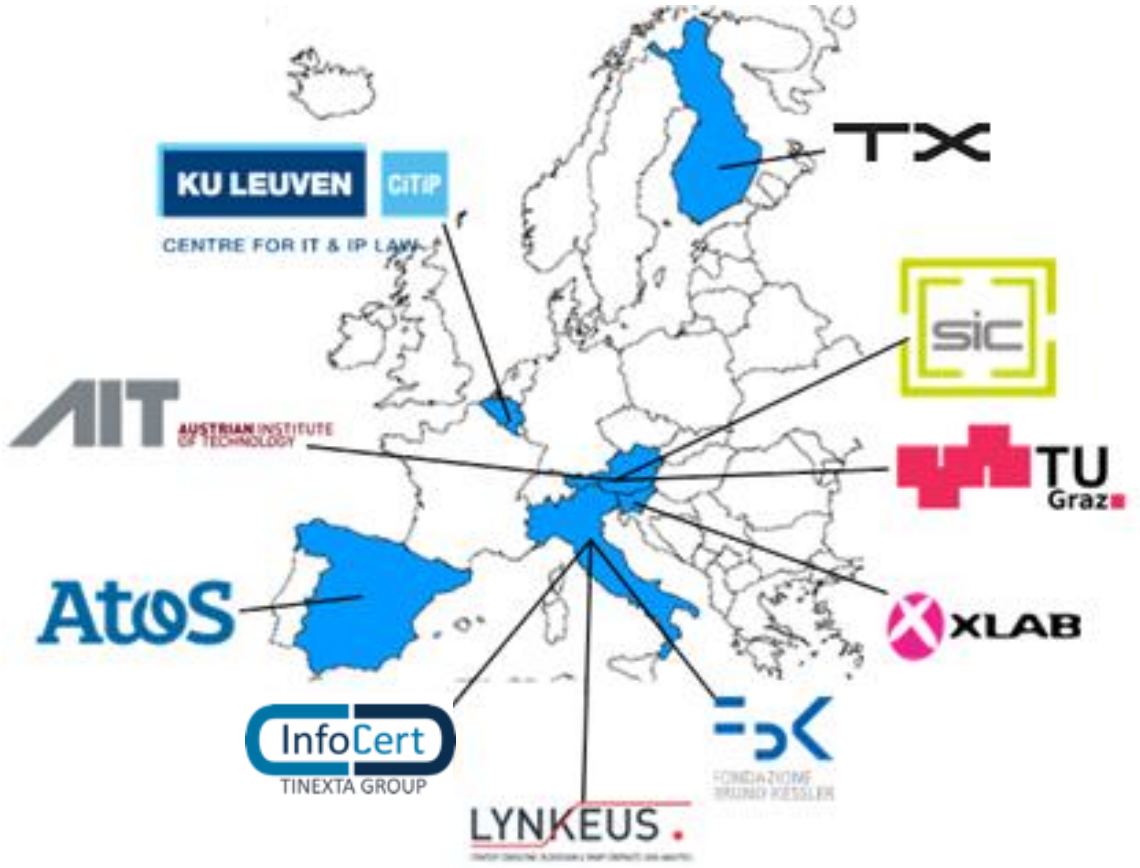
Enabling to perform **analytics** on that data in a privacy-preserving way.

Benefits

- **Students**: use student data for job applications and share selected data without compromising other data
- **University**: exchange student data while ensuring the students' privacy.
- **Recruiter**: make analysis of student data sets, e.g., gain insight into the academic performance of an individual student by comparing it with analytic of the data set
- **Companies**: facilitating the search for new talent during the selection processes.



The Consortium



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Thank you for your attention!

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