M-Sec

SMART CITY DATA MARKETPLACE WITH SECURE MULTI-LAYER TECHNOLOGIES

DATA EXCHANGE

Recently, the demand for foreign business is increasing all over the world. Business opportunities are expected in a variety of situations. In such circumstances, data distribution between countries needs to take place safely and smoothly done to make the data effective enough to contribute to “building” the smart city.

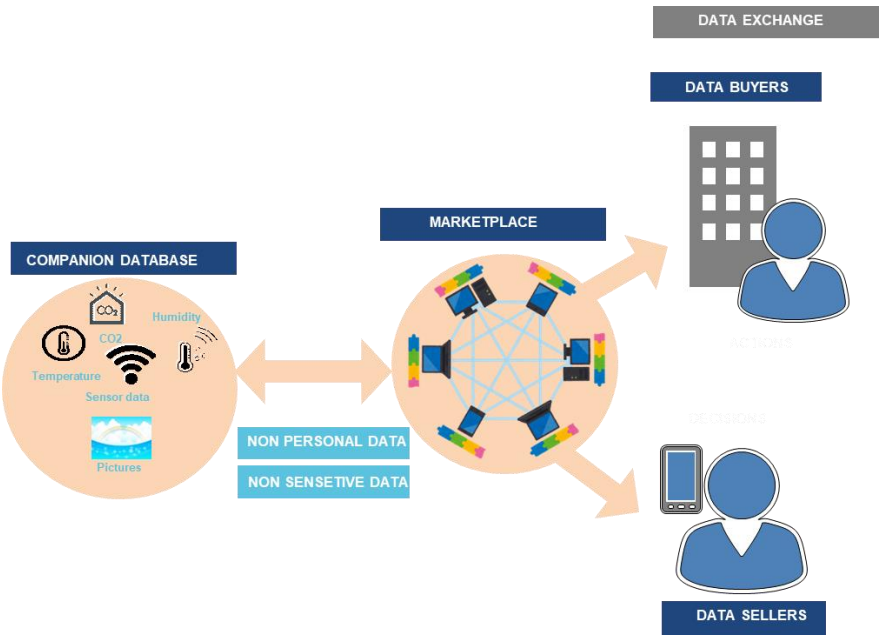
Along with the development of the Internet, cyber-attacks are becoming increasingly complicated and sophisticated, provision of a secure data distribution method between countries is an essential task for smart cities.

The idea of data marketplace is to construct a marketplace where data integrity is present and tamperproof data can be securely distributed with secure multi-layer technologies.

SIMPLE, SECURE & SMART DATA EXCHANGE

A MARKETPLACE OPERATED IN A SECURE ENVIRONMENT CONSIDERING SECURITY REQUIREMENTS OF GDPR AND APPI.

GUARANTEE THE SECURITY & SAFETY OF OUR DATA



DATA EXCHANGE AND THE MAIN CHALLENGE IN THE PROCESSING OF SENSITIVE DATA

Security and integrity of the data continues to be a big concern around these types of solutions for its applicability and scalability. Exchange of data needs to be prevented from falsification and be traded in a secure environment and need to avoid attacks to the block chain and the actual marketplace.

M-SEC AS A SOLUTION TO THE GREAT CHALLENGE IN PRIVACY & DATA SECURITY

- **Mobile wallet makeing content consumers to buy access to media.**
The mobile wallet deployed with **smart contracts**, that allow users to securely purchase interesting data using M-Sec tokens, a cryptocurrency in the form of smart contracts running on the blockchain..

- **End-to-End Security & Privacy**
All the data flowing from the Marketplace to the cloud and to the user application is secured by the Security Manager that ensures Authentication, Accounting and Authorization in the whole system.

- **Blockchain ready system**
The data generated by the whole service, propery encrypted, is complemented **by blockchain related features** avalable to users through the marketplace.

- **A secure market place to exchange anonymous data.**
The **Trust and Reputation engine** would enhance the security mechanisms of M-Sec and make it possible to evaluate the actual content being shared through the Blockchain and the Marketplace, thus ensuring the trustworthiness of the several actors participating in the exchange or sharing of information, data and services.

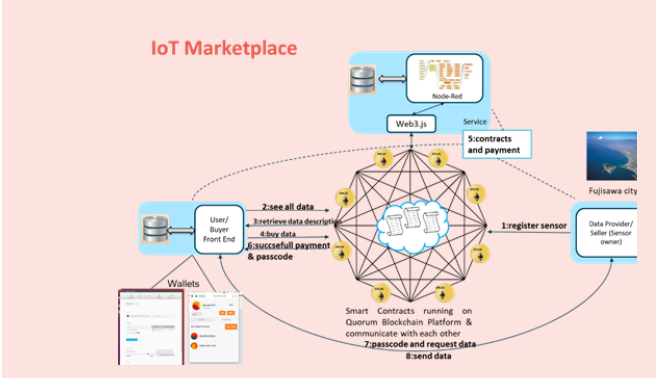
UNIQUE VALUE PROPOSITION

Friendly (easy-to-use interface, no technical skills required)

Multi-Vendor (interoperate from the richness of the variety)

Scalable

System Resilience



End to End Security (personal data encryption with asymmetric public/private key, blockchain technology for data tamper proof, distributed data, access control)

FOR WHOM MAY BE USEFUL?

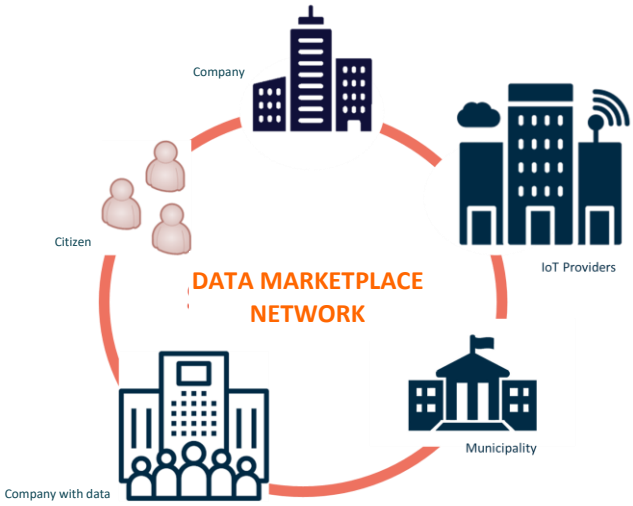
Are you a city and want to utilize specific data to improve your city?

Are you a company and want to buy, get or sell specific data for your business?

Are you a citizen and want to let your city utilize your data to improve the city?

Are you a Company who has many data from customers and want to sell a data securely?

Are you an IoT Provider and want to provide a data exchange solution?



PILOT TESTIMONY

ABOUT M-SEC

The M-Sec project is jointly funded by the European Union's Horizon 2020 research and innovation programme (contract No 814917) and by the Commissioned Research of National Institute of Information and Communications Technology (NICT), JAPAN (contract No. 19501).

The M-Sec consortium is a strong partnership of leading European and Japanese universities and research centers as well as companies in the area of Big Data, IoT, Cloud Computing, Blockchain and all of them have an extensive experience in smart city related projects.

The overall M-Sec consortium is made of 12 partners, 6 from 4 different European countries (France, Spain, Greece, Ireland) and 6 from Japan.

One of the main results of the project is based on providing a set of components that provide security and integrity of data traffic, end to end, from the device to the Cloud and to the application in a secure and transparent way, with a modular approach for the IoT and Smart City domain.