



European Factory  
Platform

# SENTIENT

EFPF Open Call Pitching and Exhibition

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Soumya Kanti Datta, Digiotech

- **Brief Partner Introduction**

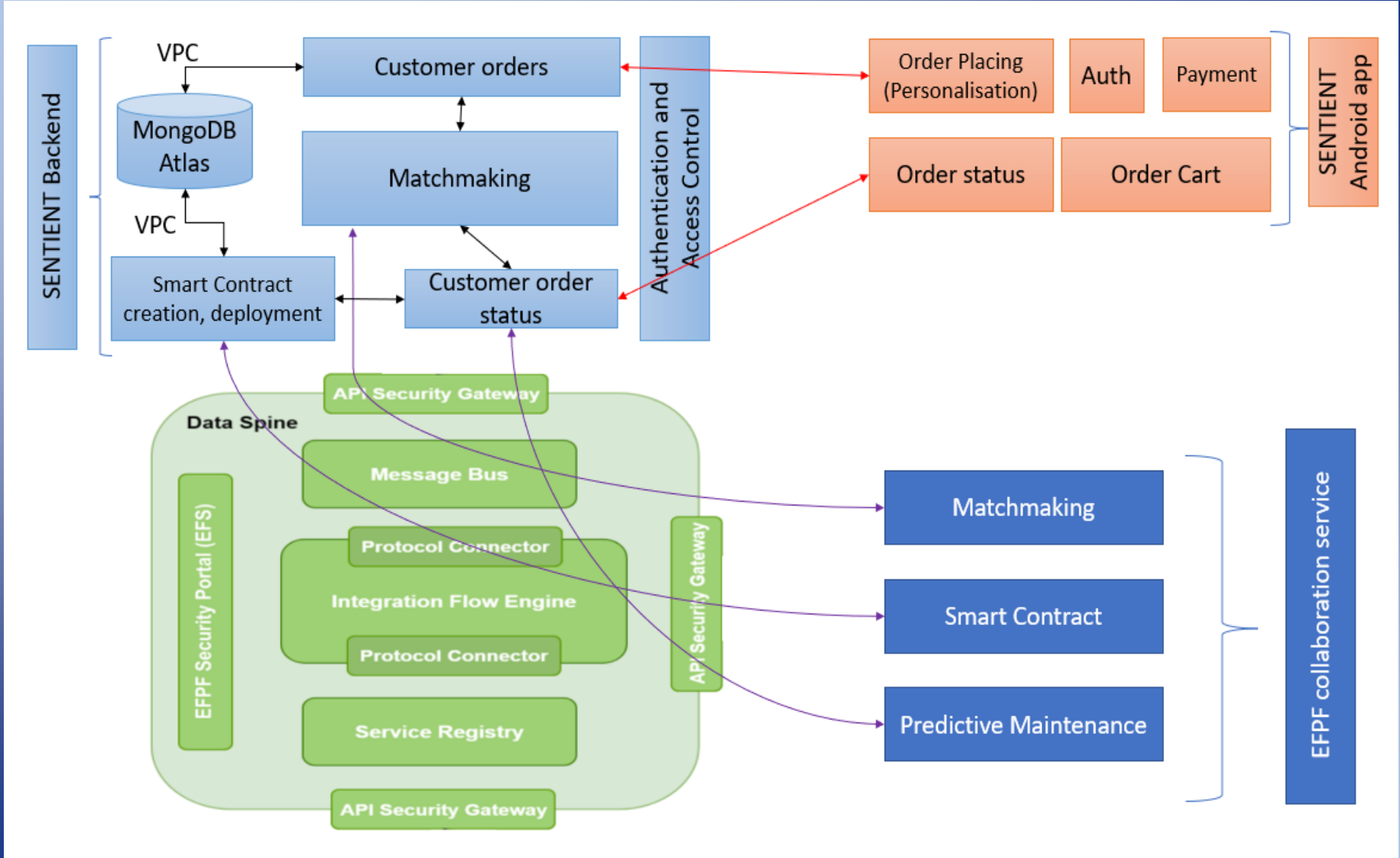
- Digiotech is a deep-tech SME developing sustainable solutions for European industries using its cloud based secure Paradise Platform.
- Clients from – Portugal, Hungary, Cyprus, UK, Serbia, USA, India, Malaysia.
- 2M+ € funding raised.

- **Main idea/concept**

- Enabling personalisation and lot-size-one manufacturing in Europe.
- Ad-hoc matching of manufacturer with suppliers and logistic partners.
- Contracting among all parties through smart contract deployed on a blockchain.
- Easy access to ordering and payment through secure payment solutions.

- **Overall objective**
  - **Develop a secure, interoperable, end-to-end service to realize lot-size-one manufacturing**
- **Specific objectives**
  - Blockchain powered smart contract creation and deployment for ad-hoc supply network
  - Real-time, holistic view with of a customer order through an Android app
  - Develop a SaaS business model tailored to LSO manufacturing
  - Adopt & contribute to standards relevant to EFPP reducing fragmentation and promoting interoperability
    - Adopt – RAMI 4.0
    - Contribute to – IEEE P2963 WG on smart contract

# Technical Achievements - Architecture



# Technical Achievements - Demo



# Technical Achievements – Novel Aspects

- Compared to SENTIENT competitors – ad-hoc contract creation and deployment (among suppliers/manufacturer or logistic partner/customer) is a new feature
- The proposed set of **requirements, data formats, JSON data schema, and reference implementation** for smart contract creation and deployment is new for Standard Development Organisations.

# Technical Achievements - KPIs

KPI #	Description	Achievement
1	SENTIENT Android app feature validation with end users	More than 20 end users (IFA 2022)
2	SENTIENT listing in EFPF marketplace and B2B adoption	4 expressions-of-interest received till date (IFA)
3	SENTIENT Android app demonstration in a European B2B conference	IEEE ICCE-Berlin 2002 and IFA 2022 (Berlin, Germany)
4	SENTIENT smart contract service demonstration in a European B2B conference	
5	Adopting RAMI 4.0 standard Contributing to IEEE P2963 WG on smart contract	RAMI 4.0 – completed IEEE P2963 – D2.3
6	Business plan development	Reported in D3.4.

- **Work plan deviation and mitigation**
  - During the workplan preparation, IEEE P2963 Working Group (WG) on Standard for Data Formats for Smart Legal Contracts was considered for disseminating the contribution on blockchain based smart contract for standardisation. **However, during the project, several attempts to establish a contact with the sponsor committee and responsible for the WG did not yield any result.**
  - After a consultation with the project mentor, it was jointly decided that this deliverable will summarise the contributions that would have been disseminated to the IEEE P2963 WG. The work was presented in Deliverable 2.3.



# Impact Achievements - Dissemination



Hannover Expo, 30 May – 2 Jun 2022

Disseminating SENTIENT concept and networking with prospective customers

# Impact Achievements - Dissemination



## IEEE ICCE-Berlin and IFA, 2-6 September 2022

**Paper title** – Secure, Interoperable, End-to-end Industry 4.0 Service Platform for Lot-Size-One Manufacturing | **DOI** - <https://doi.org/10.5281/zenodo.7108219> (**open access**)

**Technology demonstration and networking with prospective customers**

# Impact Achievements - Exploitation

## Expression-of-interest

- Samsung
- Siemens
- Ritherdon

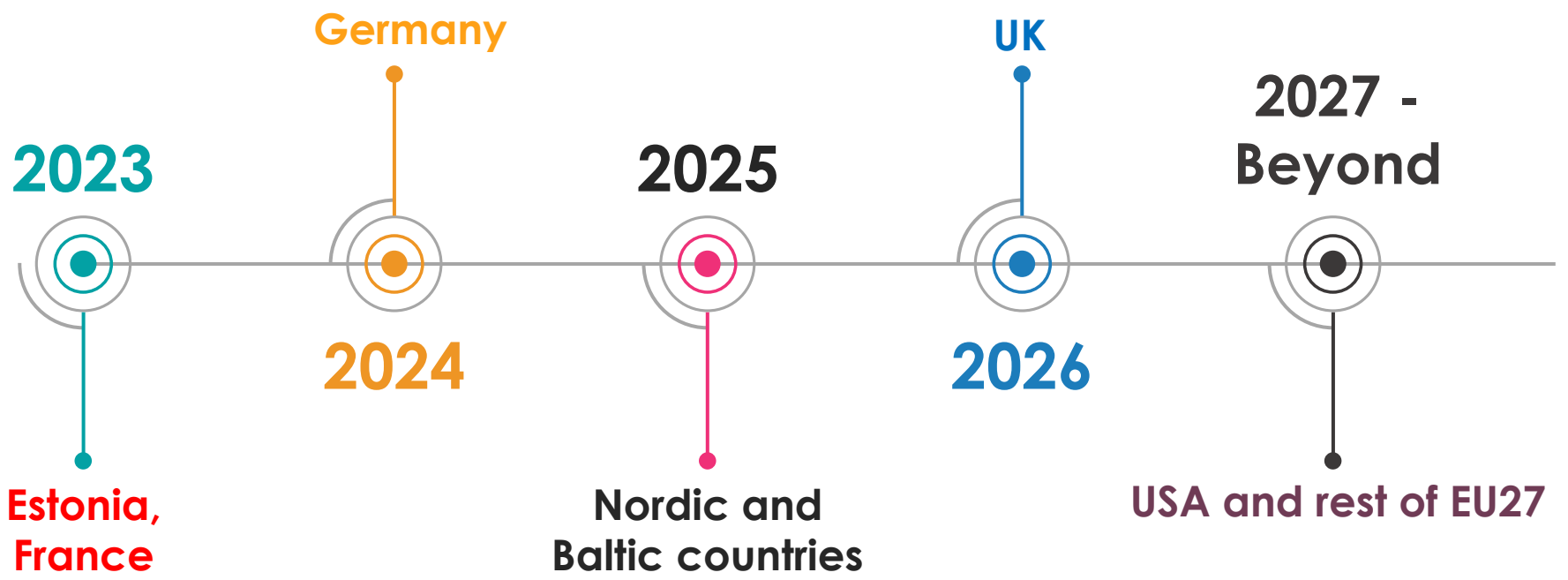
## Angel investment

**EstBAN**

250K € for productisation in Furniture and EV markets

## Impact from EFPF

12 Man-months, ~150K € saved by reusing EFPF components



# Conclusion – EFPF Experience

- By reusing the EFPF components, we saved at-least 12 Person-Months and focused on the SENTIENT development.
- Digiotech will now development a fully integrated solution for life cycle management of smart contracts. It will be SENTIENT's core USP.
- Commercial exploitation of EFPF marketplace will be performed progressively.
- **Additional feedback – listing privacy and data protection policies of the EFPF components.**
- **A big thanks to our Mentor Stefano Modafferi and EFPF colleagues for helping the implementation with their feedbacks and debugging.**



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Thank you for your attention!