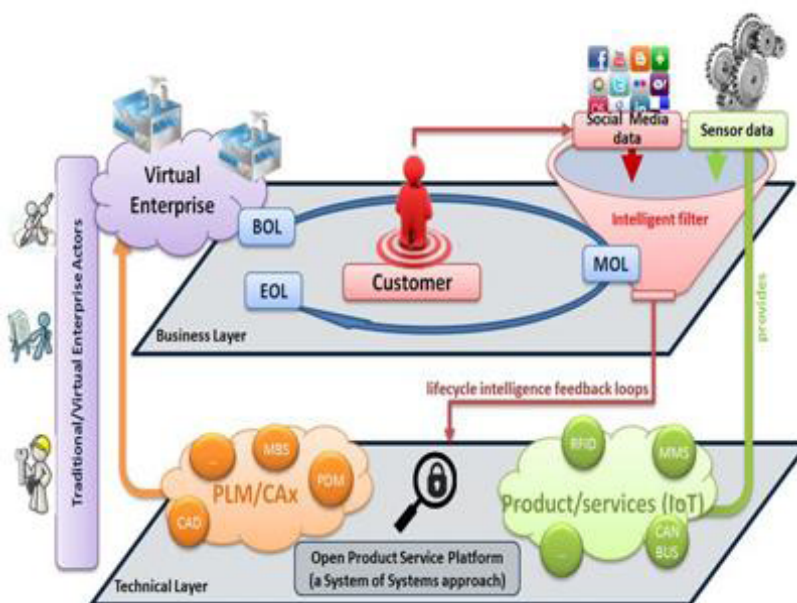


1) PROFILE - Personalised design by manufacturing Lifecycle feedback loop; i-Deal S.R.L., Italy

EXPERIMENT DESCRIPTION

PROFILE experiment aims demonstrating the potential for design and manufacturing by exploiting Knowage tool and Orion Context Broker to implement the industrial feedback loop through the whole clothing product life.

The experiment is related to Smart Product reference scenario. Cross border experimentation have been carried out in collaboration with VTT Technical Research Center for Real Time Stream Data Analytics.



The simulations are based on 3 datasets, acquired by i-Deal:

- consumer morphology 3D measures and preferences (acquired by ISizeYou app);
- clothing production measures and fitting trends (acquired from the clothing manufacturers);
- e-commerce filtering and analysis (developed in Somatch H2020 project).

The experiment enables this loop by providing 3 levels of modeling and simulation:

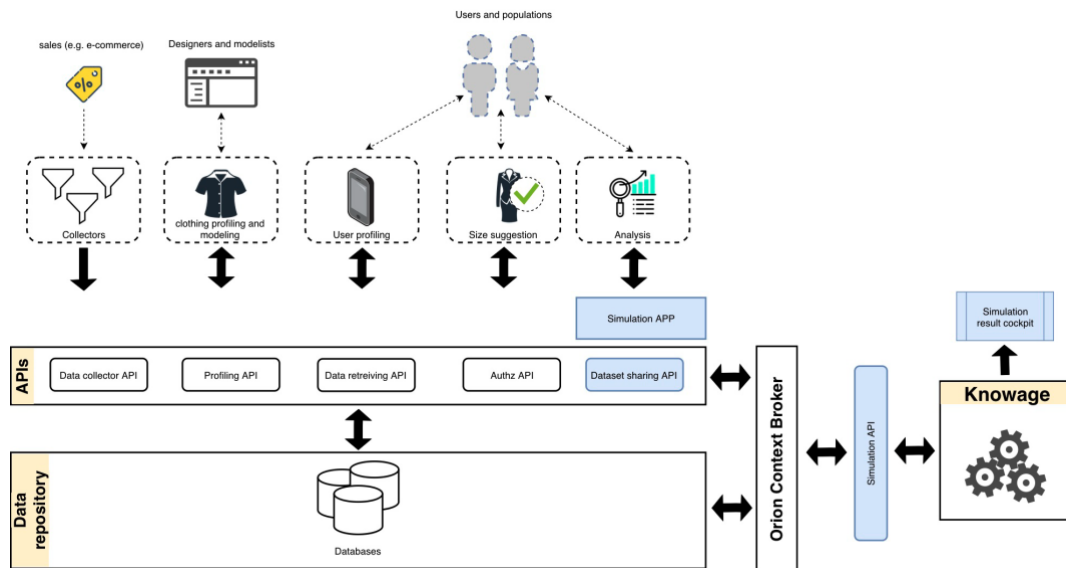
- current design VS present consumers;
- new design VS present consumers;
- new design VS new target consumers;

TECHNICAL IMPACT

The components developed during the MIDIH experiment are:

- Simulation APP: a web application to show datasets, launch simulations and show related results;
- Dataset sharing API: an API to share datasets from I-Deal to Orion Context Broker;
- Simulation API: an API to get data from Orion Context Broker, perform simulations and get back the results;
- Simulation result cockpit: a graphical interface to show simulation results by table and a set of charts, built directly on Knowage

The obtained results demonstrated that experiment had success and it is possible to offer a business service to clothing designers in order to reduce the collection failures.



ECONOMICAL/BUSINESS IMPACT

PROFILE experiment has led to the implementation of a real time delivery of the 3 levels of simulation required to support the design a new clothing collection on the basis of i-Deal services: current design VS present consumers (reference success rate of present product), new design VS present consumers (simulated success of the new collection), new design VS new target consumers (simulated success rate of new collection in a new market).

The real time release of the results of them has removed a significant bottleneck to i-Deal service exploitation, which will start from its established customers: Piacenza (active in the field of traditional clothing), Sparco (sport technical apparel) and Grassi (worker protection clothing).

Demonstrated the technical feasibility the additional efforts required will be focuses on the creation of the proper user interface, in the first period dedicated to the internal operators of i-deal to better define and test them. In a second time they will be adapted for the eventual direct use by customers designers.

For more info please click [here](#)

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