

The Added Value of the eSymbiosis Platform

Ontology

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Industrial symbiosis scene

Ontology Engineering

Domain Ontology

Matching

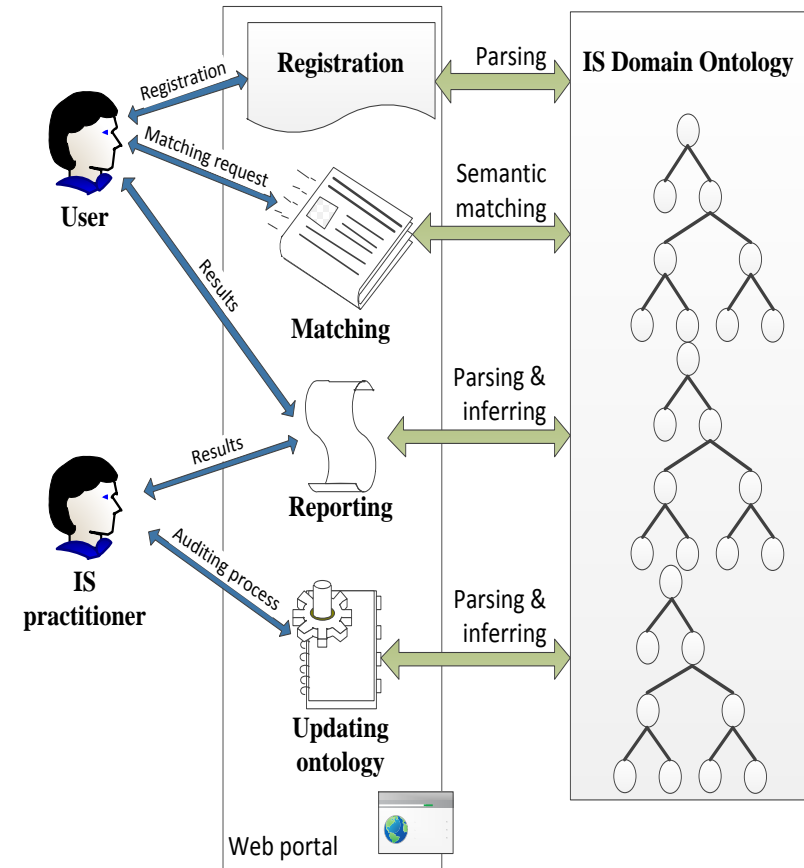
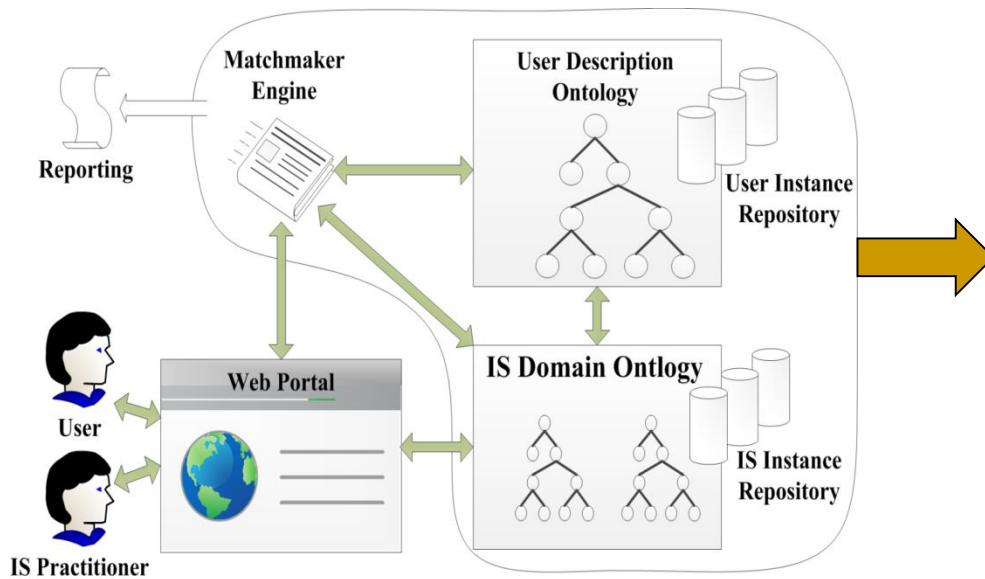
Implementation

Demonstration

eSymbiosis Platform

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Implementation (web service) and functionality:



Advances in IS operation

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IT support to IS: the first IT support using tacit knowledge – mimicking human operation:

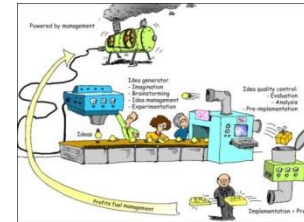
Innovation: Explores options beyond personal expertise, past experience and based on **technological** and **operational** relevance

Decision: enables **informed** decision for participations in IS – exploring all the options, their justification and possibly prediction of (some) benefits

Availability: as a **web service**, it is available anywhere and at any time

Language: a **multilingual** service bridging **language** and other **linguistic** and/or established **jargon** barriers

Open paradigm: enables access to everyone and everything and any stage, especially SMSs



Advances in IS operation

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Full IS support: Treats transportation and storage at equal (to other technologies) participation and their automated inclusion when needed.



Technical Aspects

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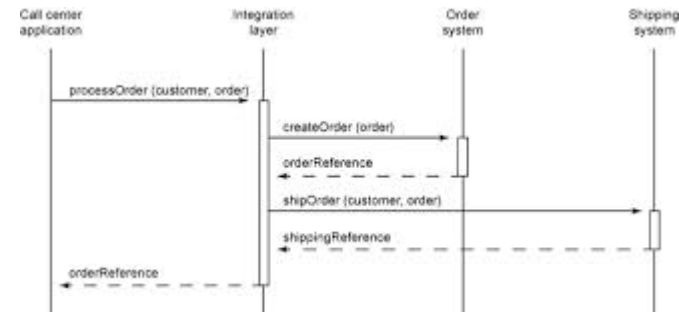
An intelligent **planning tool** serving:

- Industries/companies
- Local authorities and agencies
- IS practitioners



A verified paradigm for other aspects of **integration/composition**:

- Computer model integration;
- Process unit integration (process synthesis)



Knowledge **management** and **systematisation**:

- Full set of **waste** classification and characterisation (with possibility to **update** and **share**)
- Initial and first ever **technology** classification and characterisation (with possibility to **update** and **share**)



Development of a **fast matchmaker**

Academic Values

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Practical implementation of a **complex** ontology;

Knowledge in **waste** and processing **technology** classification and characterisation – new way of thinking

Framework for general aspects of integration and composition (model, process, supply chain)

Assessing/measuring/predicting of **environmental** effects: formulation and use of environmental metrics for practical use

Embedding semantic technologies in SMEs

Respective knowledge **advances** and **dissemination** – gaining research reputation

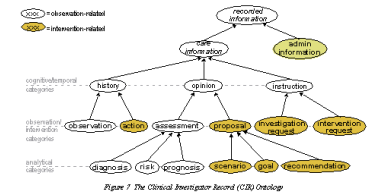
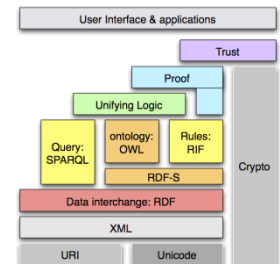
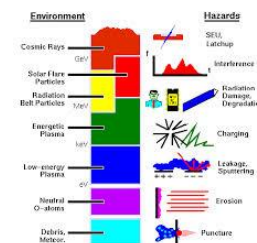
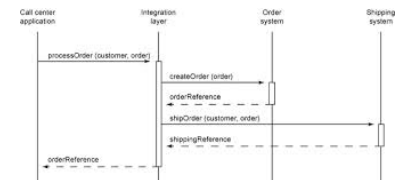


Figure 7 The Clinical Investigation Record (CIR) Ontology



eSymbiosis Project Values

Harmonisation of activities by partners with **diverse** expertise and background (industry – academia)

Integration of research and development activities

Promoting new technologies and paradigms within SMEs

Contributing (in many ways) to **greener** world

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