

ProSEco- Collaborative Environment for Eco-Design of Product-Services and Production Processes Integrating Highly Personalised Innovative Functions



Context based Solution contact person

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Context based Solution

- Context Modelling Tool,
- Extraction Services,
- Context Methodology

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This solution is developed in the scope of ProSEco project, and is one of the key solutions to support the design and development of new Product Extension Services (PES).

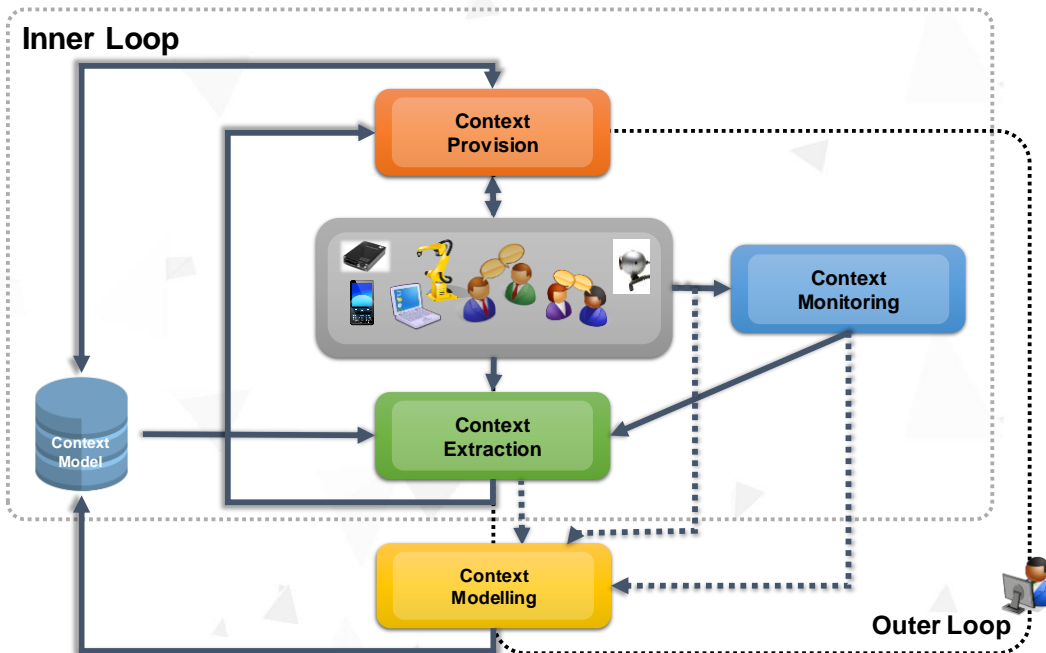


What's the Context based solution?

This solution is composed of an engineering tool to be used in the PES design phase to support PES designer in the Context Modelling and a set of core services that allow to Monitor and Extract the context of the situation where the PES is being used and by this improve the performance of PES. A methodology is guiding the process on how to define Context Model for a PES.

Context modelling engineering tool

The engineering tool supports the definition/design of PES by allowing to model the product use context. Thereby, the ProSEco context model shall not try to bring full description of context, but to index context to help to identify a current situation.



Context Extraction services

These core services are used for extract context during daily product use operation, and to provide the extracted context to the downstream services. Baseline for identifying current context is the context model. The context model describes circumstances under which a product is currently used, and by this allows adjustments of PES to dynamically meet specific needs of the users of the products. The context model is set of concepts and their relations which describe circumstances under which the product is currently used. The configuration of the extraction services is done in the design phase.

Methodology

The methodology for Context based Product-Services serves as guideline for the definition of context models needed for context sensitivity and personalisation of PES. Context sensitivity allows for observation of changes in circumstances in which a product / PES is used, which in turn allows for a dynamic adaptation of the product / PES to these varying conditions.

CHARACTERISTICS OF THE SOLUTION

Engineering Tool:

- Technology neutral definition of Context Model
- Modelling of Product Use context

Monitoring Services:

- Context extraction based on the PES use
- automatically adapt the PES outputs to the specific context under which the PES or product is used.

This solution supports the user in modelling of Context Models and identification of current product use context.