Plant Model Services for Mobile Process Maintenance Engineer

PLAMOS

As mill owners are outsourcing parts of their operations or otherwise decreasing number of maintenance personnel on site, new business opportunities occur in industrial services. Decreasing the amount of on-site maintenance personnel increases need for intuitive tools for locating the equipments and viewing the product and process information. There is a need to be able to use the information through unified, standardised interfaces, regardless of what application the information is stored in. Plamos aims one step beyond that: we want to introduce new concepts for accessing data from any plant applications using intuitive mobile user interfaces.

Benefits

Benefits of plant model services are:

- For service providers, maintenance workers will be able to connect to the plant information systems using standard interfaces by mobile terminals, without having to adapt to different user interfaces in each plant.
- Remote maintenance workers can ask for advice from an expert in a remote maintenance centre. Both parties have simultaneous access to all data repositories.
- For software vendors: Plamos offers new opportunities for smaller local companies that can offer specialised software and services.

For Finnish service and software providers, Plamos offers new possibilities to compete with large international companies.

Steps

Following work packages are done in the first phase of Plamos project:

- Work package 1. Market survey and conceptual design
- Work package 2. Service architecture for plant models and value added information services
- Work package 3. Visual browsing and image augmenting
- Work package 4. Mobile user interfaces
- Work package 5. Prototype implementation

If results of the first phase are promising, and there are still unsolved technical or business problems, second phase will be started together with industry.

If this technology is still promising after second phase, a product development process can be started by companies involved. After that, the services developed in Plamos project can be commercialized.

Results

The results of Plamos project are:

- Market survey, needs and business opportunities of the organisations involved in the service business.
- Technical specification of service framework for a mobile maintenance engineer
- User interfaces, which are developed with the aid of human-centred design methods.
- Knowledge of how to implement “ambient intelligence” in industrial settings.
- Results will be demonstrated in “laboratory environment”, where an augmented reality view of process is generated for a process operation and maintenance engineer.

Funding

- First phase of Plamos project is entirely funded by VTT. Budget is about 720k€. Duration: 9/2005 – 6/2007.
- Second phase will be jointly funded by industry, VTT and TEKES/EU

Contact

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