OST Ostschweizer Fachhochschule



PRISM: Smart Assistance at the Shop Floor

Mobile and Wearable Machinery Monitoring

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GEBERIT



Current Situation and Goals

- Highly automated, increasingly connected production environments and constantly growing amounts of «industrial data»
- Several applications with complex information dashboards and for concrete maintenance tasks available, but ...

How can manufacturing workers at the shop floor be informed about the current production status and potential interventions?

Goals: improved processes at the shop floor, higher availability and reduced downtimes of machinery



Solution Approach

User-centered design including state-of-the-art technology

- Close involvement of production staff in the design process
- Development of functional prototypes for evaluations under real-world conditions

flexiot by M&F Engineering

- Secure transmission and management of machinery data in Azure cloud
- Rule engine for **flexible notification rules**
- Realtime push notifications for Web and mobile





Co-Design with Production Staff



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Evaluation of Functional Prototypes

Überblick Anmeldung

Mobile Monitoring Solution





Wearable Monitoring Solution



Results

- Mobile and wearable applications for monitoring factory machinery and enabling quicker human interventions
- Easy capturing of context information and workers' knowledge, e.g., reasons of failure and successful measures
- Userfriendly and efficient optimized for usage at the shop floor with the user group







Website:**PRISM - Preventive Intervention in Smart Manufacturing**Contact:Prof. Dr. Matthias Baldauf, IPM-OST

