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Machinery Monitoring «To Go»

Real-World Experiences with Mobile and Wearable Monitoring Apps for Manufacturing Environments

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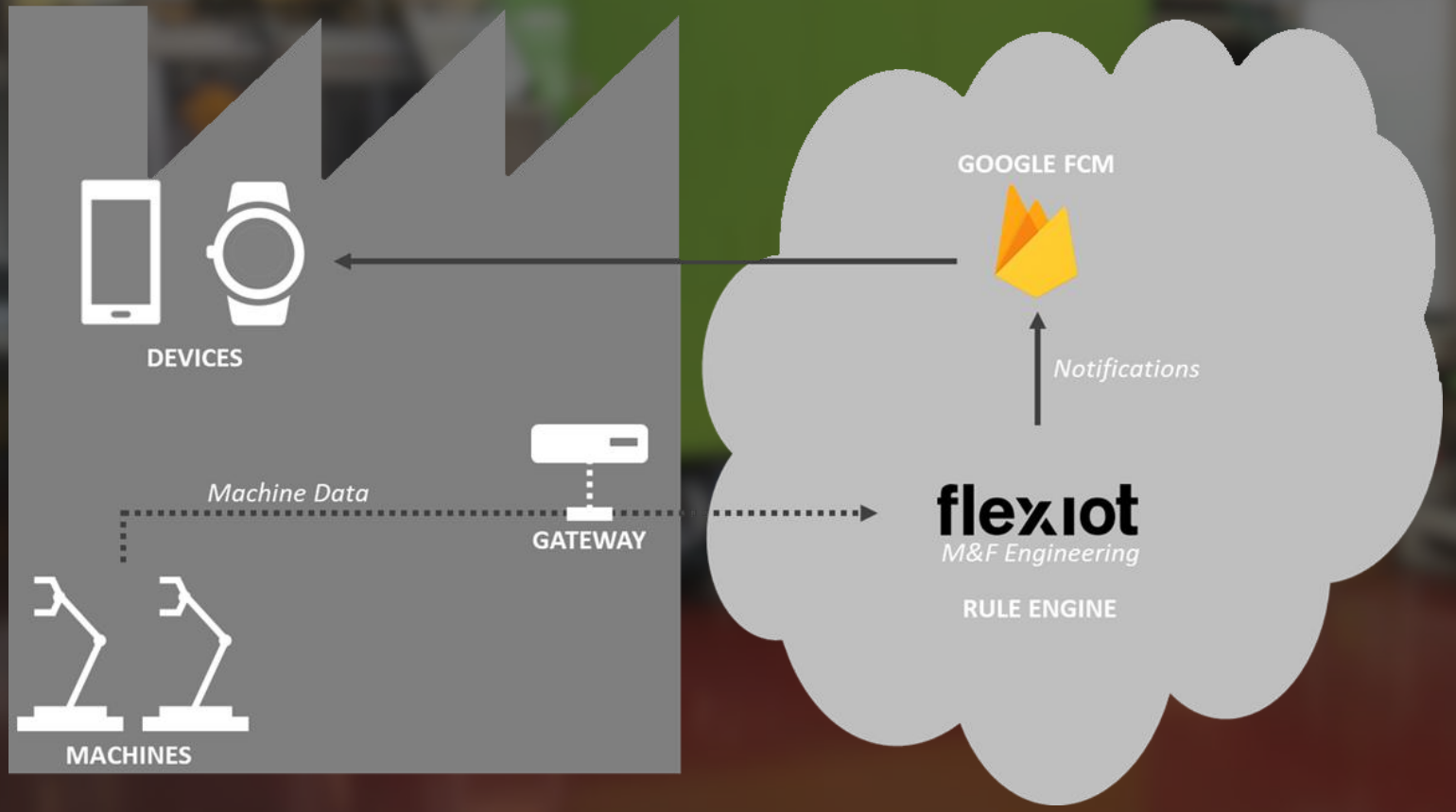
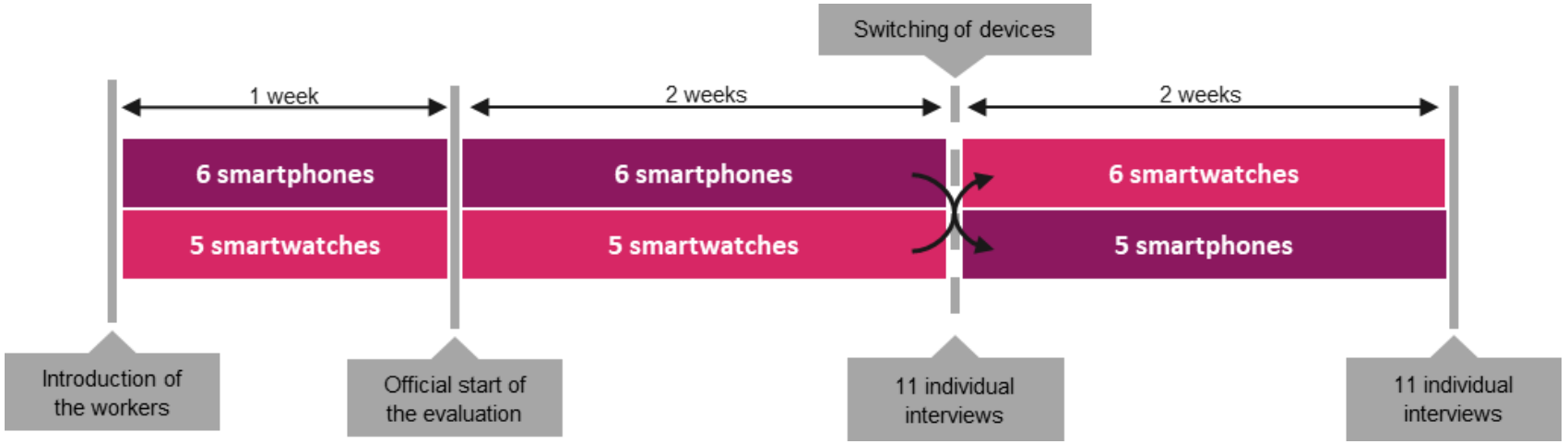
Monitoring Framework for Manufacturing Environments



Mobile and Wearable Monitoring Apps

App Evaluation

- **User Study under running production** at Geberit during May and June 2021
- 1 week **pre-test**:
  - Participating production workers became familiar with machinery monitoring apps
  - Solved potential technical problems which might occur under productive conditions
- **4 weeks study** with switching devices at half-time
- Semi-structured **individual interviews** regarding the participants' experiences with the app



Results

- Very high **SUS scores** for both apps (smartphone: 95.2 / smartwatch: 95.9)
- All participants emphasized the advantage of the monitoring apps for situations, "***when the machines are out of the worker's sight or cannot be heard***"
- "*Sometimes I'm completely focused on one machine, then the app is very helpful to keep an eye on the other machines*"
- All participants agreed that the **smartwatch is superior to the smartphone** for the purpose of machinery monitoring
- **Compact presentation** of the relevant information **without any additional input, confirmation**, etc. is key for worker satisfaction

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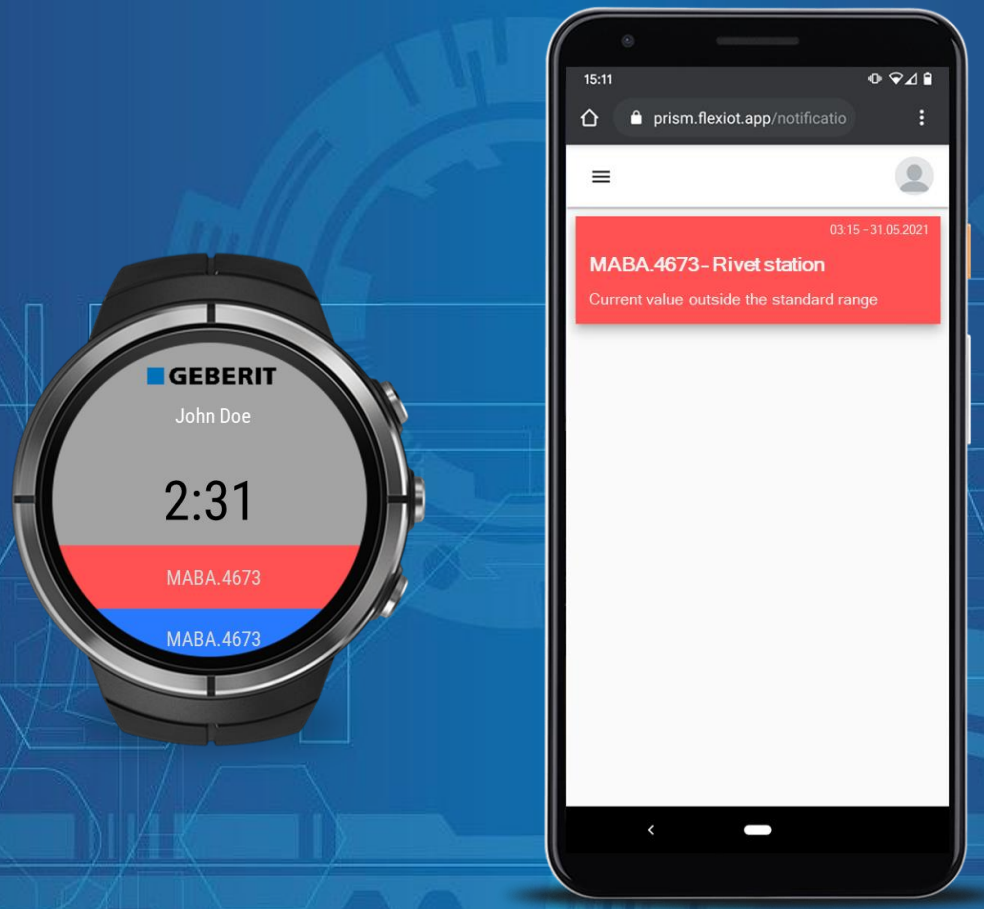

Website: **PRISM - Preventive Intervention in Smart Manufacturing**

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