SIEMENS
Ingenuity for life

MindSphere Open Space Challenge

Case Specification

Company

Dieffenbacher GmbH Maschinen- und Anlagenbau

Company Details

Industry	Wood-based panel industry / composites for automotive or aerospace
Size (empl. / turnover)	1700 / 460 million
Main products, innovation	Machinery and plant construction with hydraulic presses as core machine

Case Title

Let’s Bring some Fun into Smartphone-based Maintenance Ticketing

User Story

The service technician is able to set up a ticket for a plant component via smartphone by scanning in a QR code on the equipment/plant and then categorize and prioritize it.

The status of this ticket can be checked at any point: Who has viewed the ticket (as in WhatsApp)?, Who is currently working on it?, When is the service appointment scheduled?, Where is my spare part?

Other associates can "subscribe" to and process tickets: e.g. schedule maintenance; the tickets are filtered by equipment range or categories such as electrical, mechanical or by urgency. Documentation pertaining to the named equipment can be called up and the parts catalogue of the manufacturer (Dieffenbacher) can also be accessed if necessary. The service technician can then be presented with recommendations based on the assessment of similar problems, which have been resolved in other customer systems.

An intuitive APP solution is designed to motivate the service technicians to create tickets and it also rewards them for doing so (**Keyword: Gamification**)

The ticket can be escalated to a third party, or passed on, for example to Dieffenbacher. Tickets can also be generated automatically from the Siemens control.

Using MindSphere makes communication between users possible without a media break. Users are employees of the plant operator or also the equipment manufacturer or work with the service companies for the respective component.

Provisioning of the relevant information (identification of the equipment, video data, language files, photos, control data, spare part drawings) for the ticket are to be provided to the relevant user via MindSphere based on each individual case.

The back channel for processing the ticket is also via the platform, including tracking of the spare parts.

Statistical evaluations such as processing time per ticket, number of tickets per equipment, etc. could be offered as an additional benefit.

Problem Description

What are the problems you need to address?
Customers want to monitor the results of existing plants (Brown Field), with only limited data links, for their overall state and represent the results visually and clearly. Conventional ticket systems are usually overloaded and too bureaucratic and will not be accepted.

How is the problem currently handled?
Reactive telephone approach, as well as remote support for specific problems and system failure
An example developed (with less features) between Bosch and OSRAM:
https://www.bosch-si.com/de/fertigung/aktuelles/i40-referenzen/osram.html

Who is affected by the problem?
All plant operators

How critical are these topics for you and your customers?
In the worst cases, this can lead to production downtime.

Technical Provision

Type of machinery / plants?
Complete plants for the manufacturing of wood based panels (particle board, OSB, MDF, etc.) and their sub-assemblies or individual machines, as well as machines and plants for the manufacturing of fibre-reinforced plastic parts (e.g. carbon) for the automotive and aerospace industries

Is data already being evaluated?
Evaluation takes place at most wood chip plants for the most frequent error and fault signals and KPIs only upon request by the customer.

Questions?

MindSphere Forum
https://www.mindsphere.io/community/