

Solare Datensysteme GmbH

The Company behind Solar-Log™ and LOGan



LOGan – Personality in advertising

An employee of the first hour works as brand figure for the HW- and SW-solutions





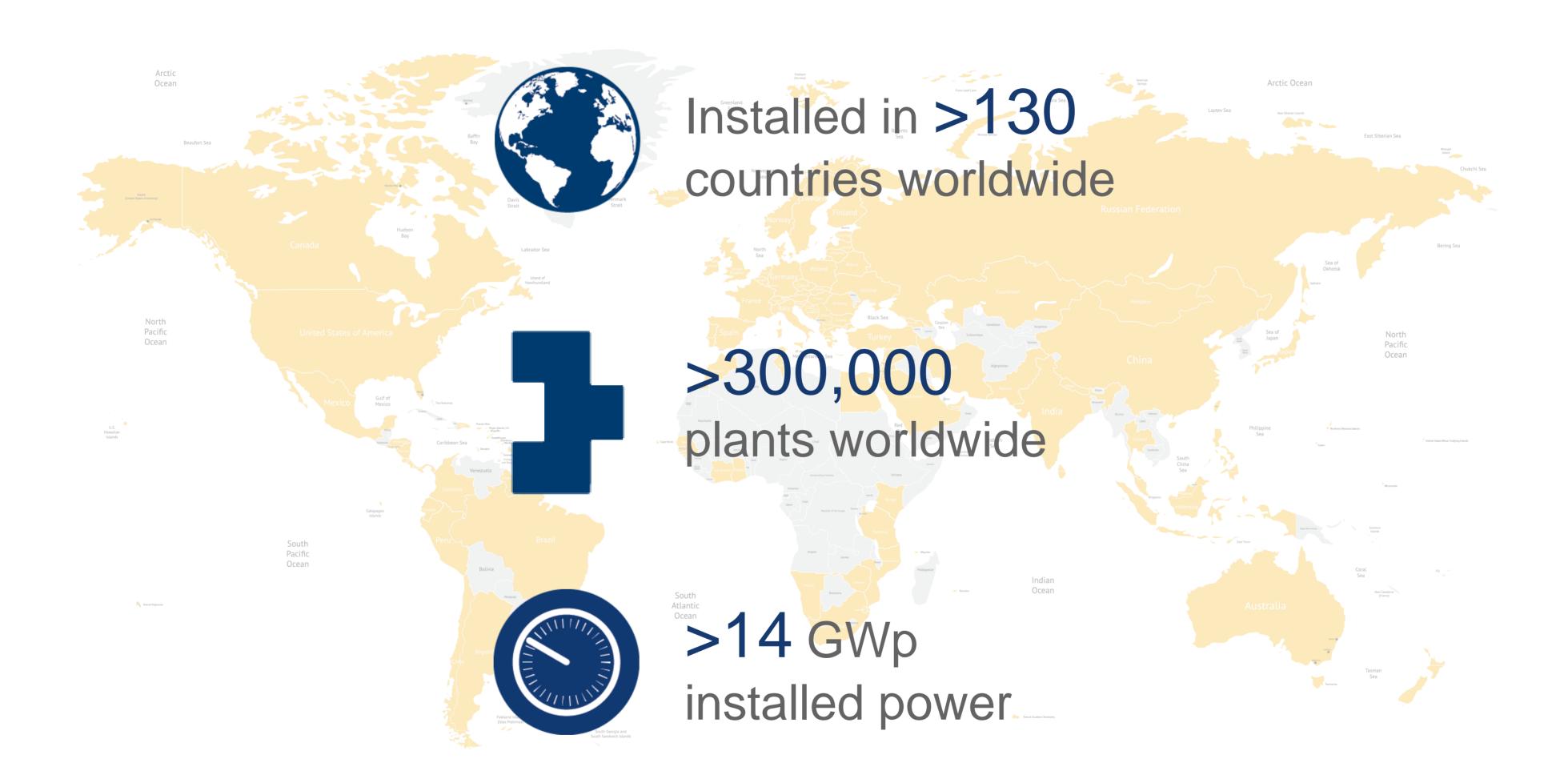




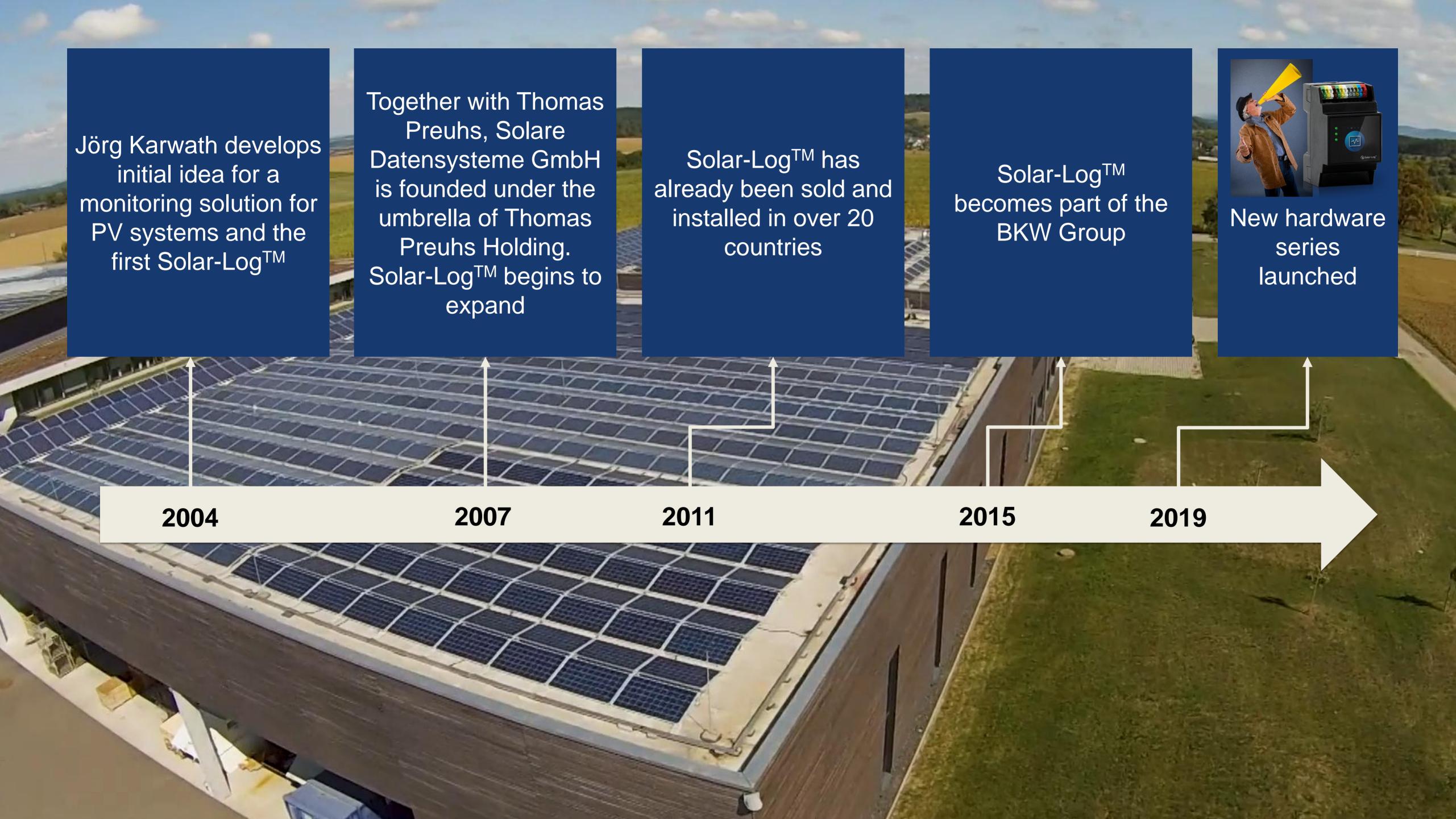


Our experience in PV monitoring

Global orientation – High scalability – Strong portfolio









Solare Datensysteme GmbH

CEO

Brigitte Beck

Owner

BKW Group, www.bkw.ch

Headquarters

72351 Geislingen-Binsdorf, Germany

Product and market experience

> 10 years

BKW Energie AG



- Internationally active energy and infrastructure company
- Founded in 1909 in Bern, Switzerland
- > 10,000 employees worldwide
- Supplies approx. 1 million people with electricity





If you want to be more than just a monitoring solution...

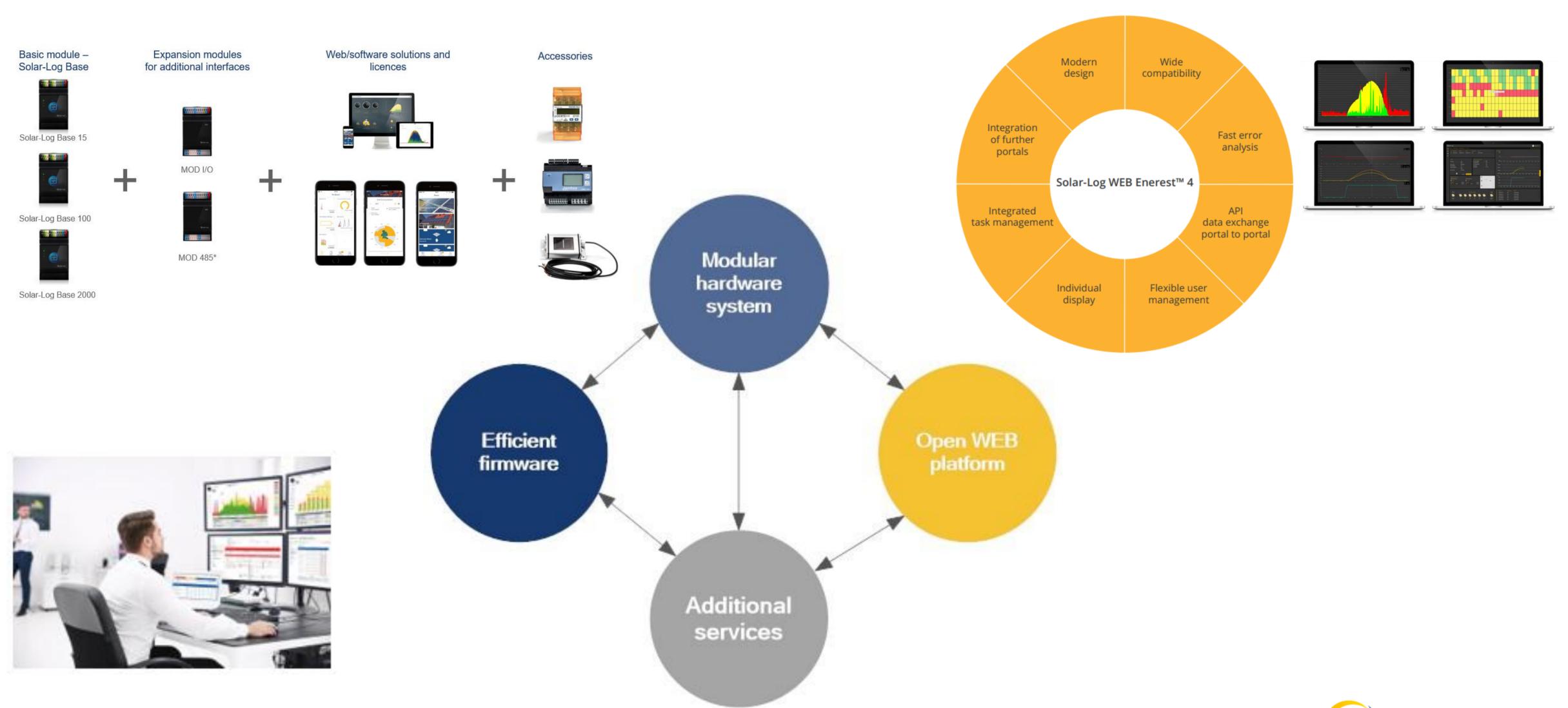
Different interests/requirements also require different solutions





...you need a flexible portfolio!

Different interests/requirements also require different solutions



Solution partners























Inverter manufacturers

























































MASTERVOLT









SUN TENSION
Photovoltais Systems
and Components











定

GEFRAN



IDS

HUAWEI



HOET M



PrimeVOLT

PLATINUM°



SANTERNO



SOCOMEC Innovative Power Solutions Silar





VOLTWERK outperforming the sun





CMSGroup





















ATEN



CONVERTEAM













SIEL







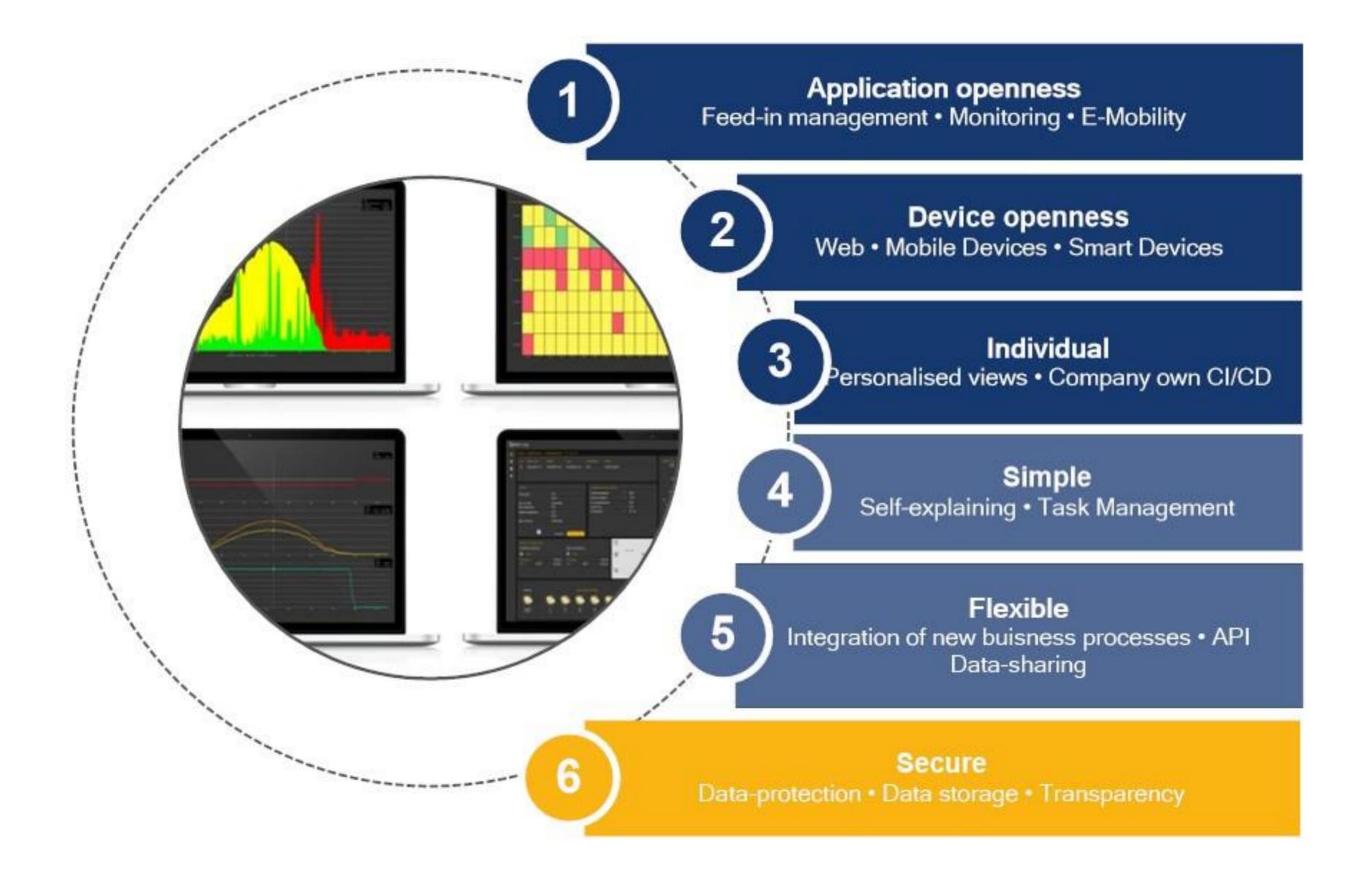




Many years of experience in integrating partners and their processes!



Solar-Log[™] - powerful hardware meets flexible software





How to develop our products/services further?

Market-/Competitive pressure • Customer expectations • Capabilities • Technological evolution

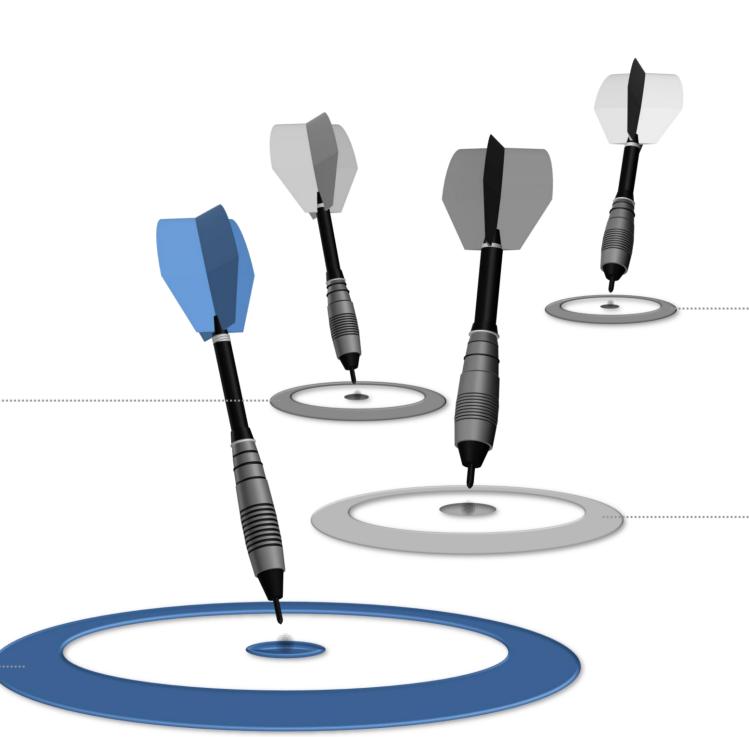
Hardware

Security, Sustainability and cost efficiency

WEB-Plattform

Customer expectations

Sustainability and technological evolution



Future

The next..."One more thing?"

Services

Added value and cost efficiency



PV Magazin

Creating a new Product

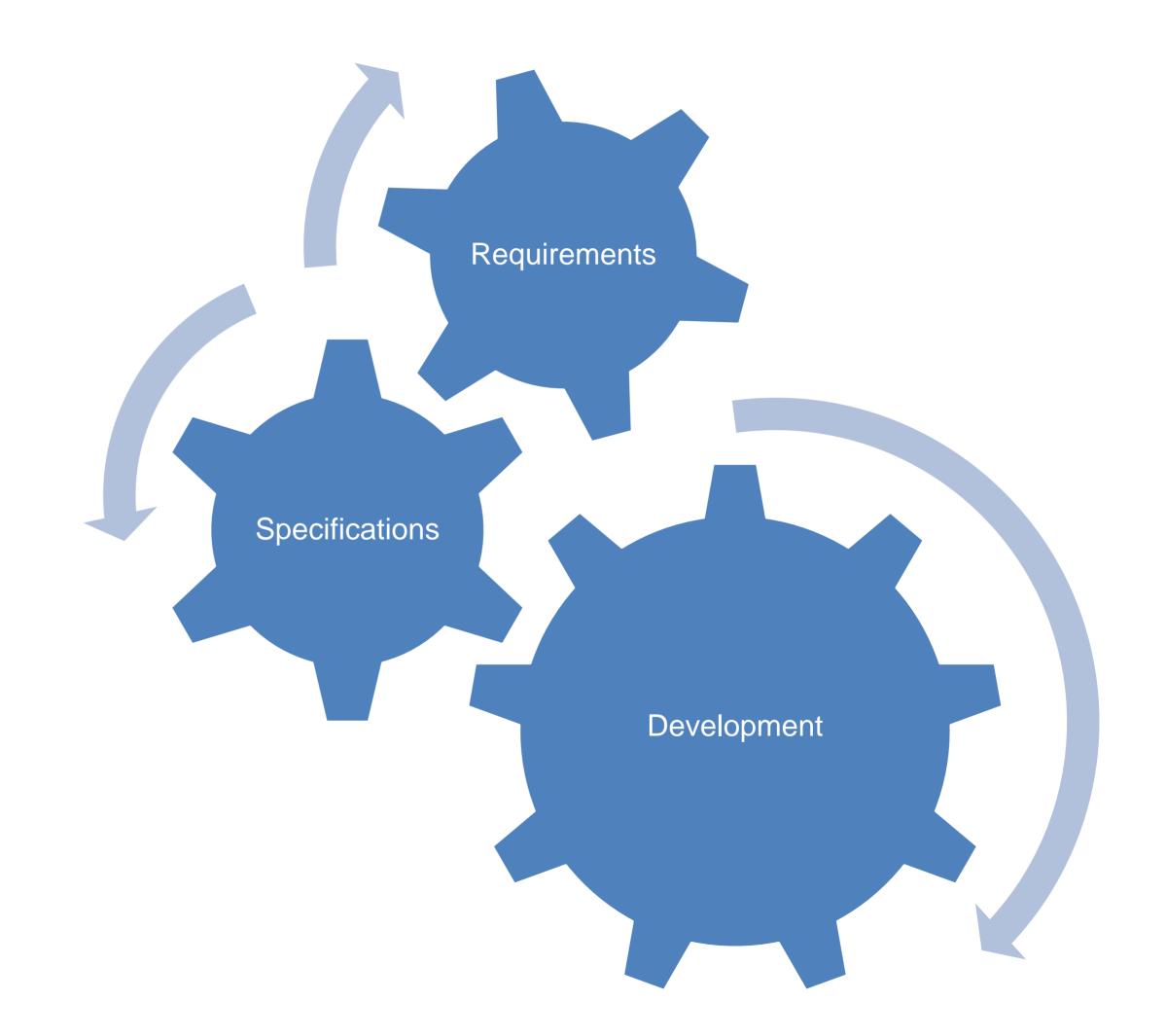




Find out requirements

I'd like to drive from A to B.

- Fast
- With more than one person
- Steerable
- Navigation system
- Blue car body
- Fresh air





Functions

I'd like to drive from A to B.

- Fast
- With more than one person
- Steerable
- Navigation system
- Blue car body
- Fresh air





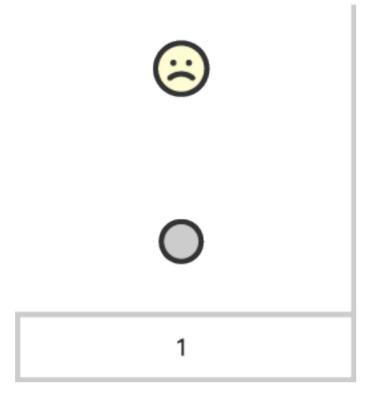
Timing

Nokia and Microsoft

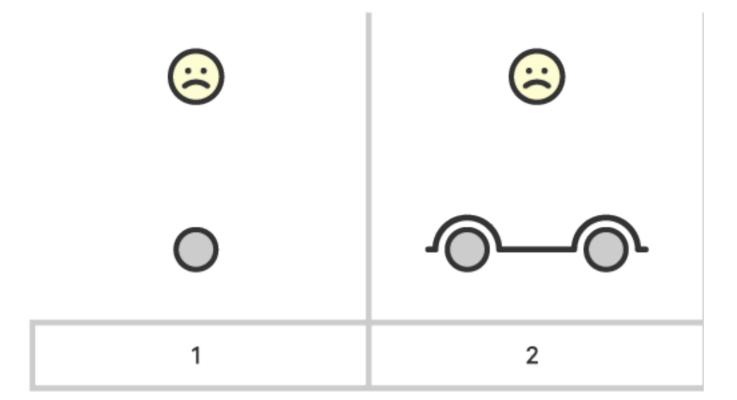




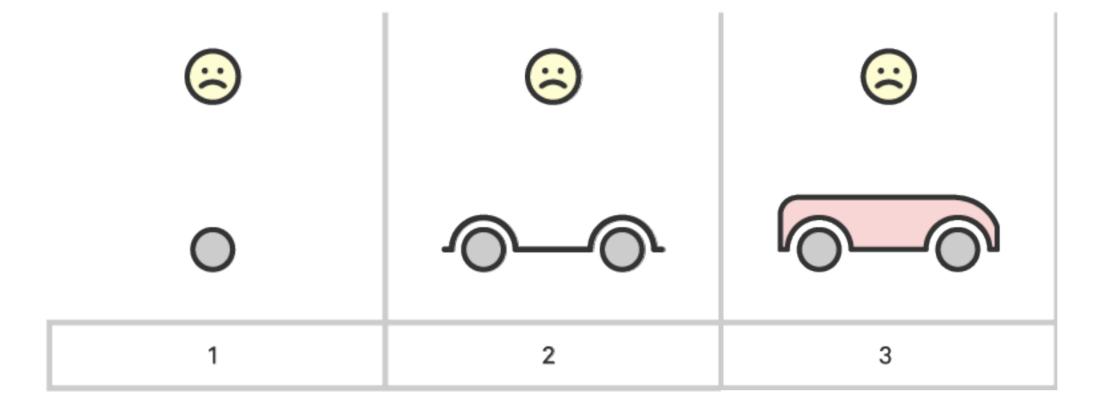




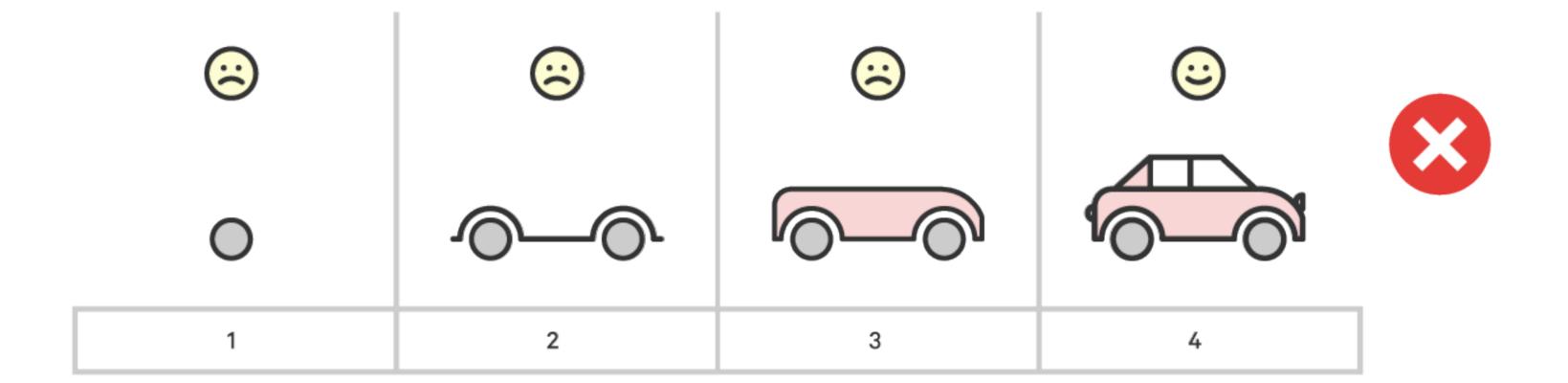




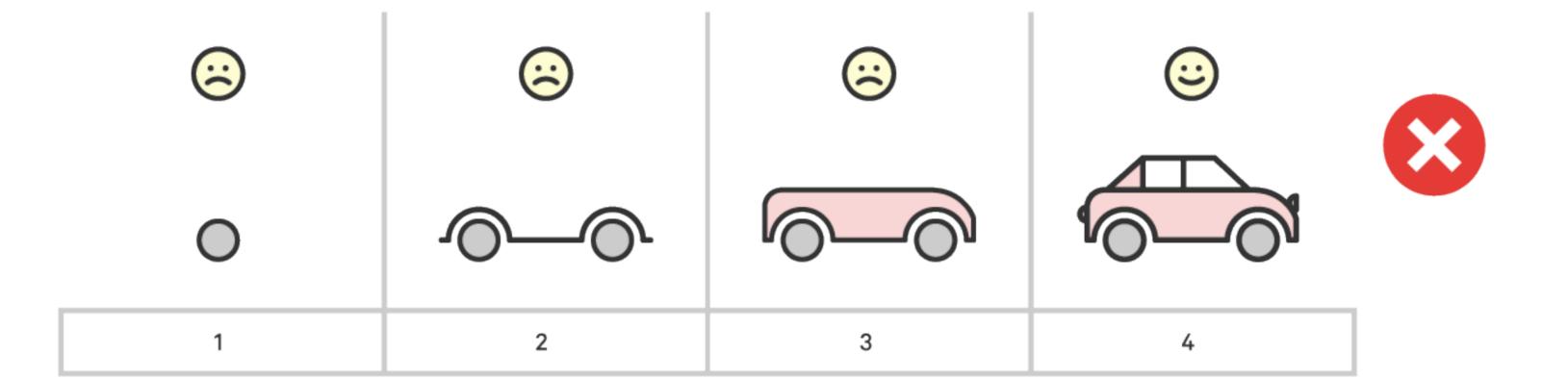


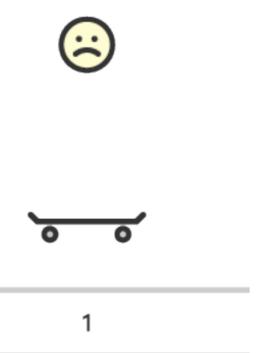




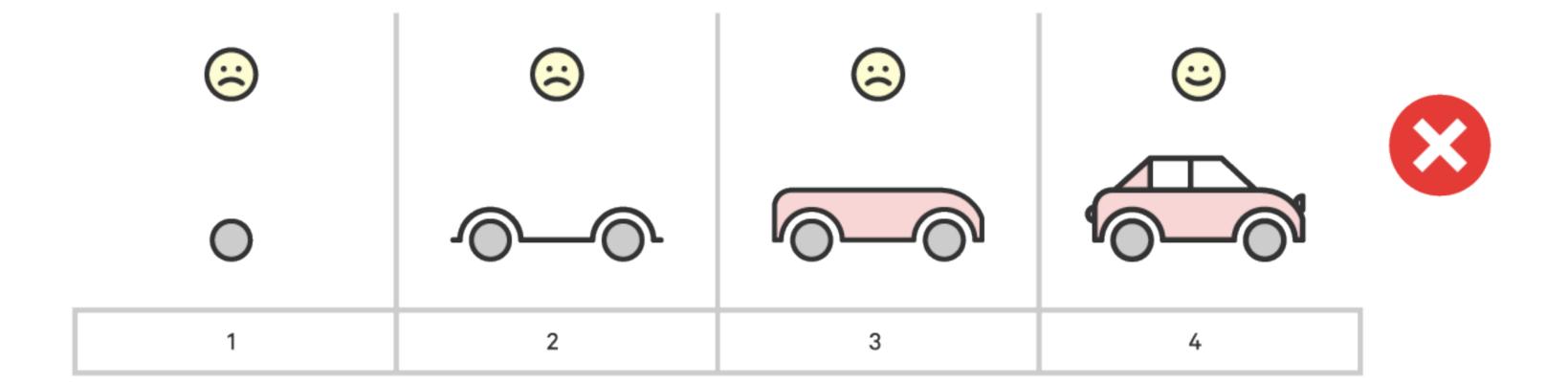


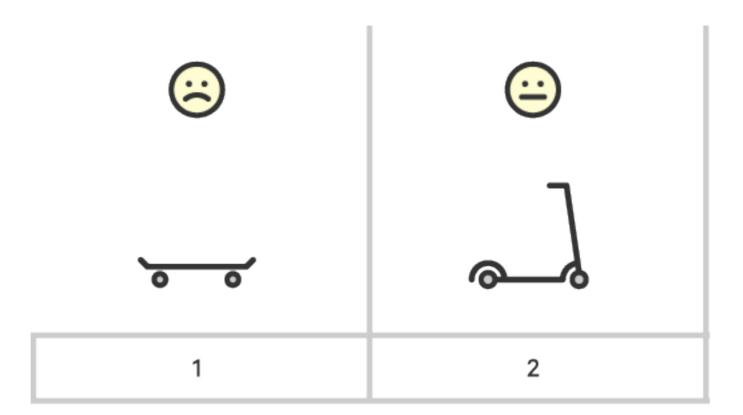




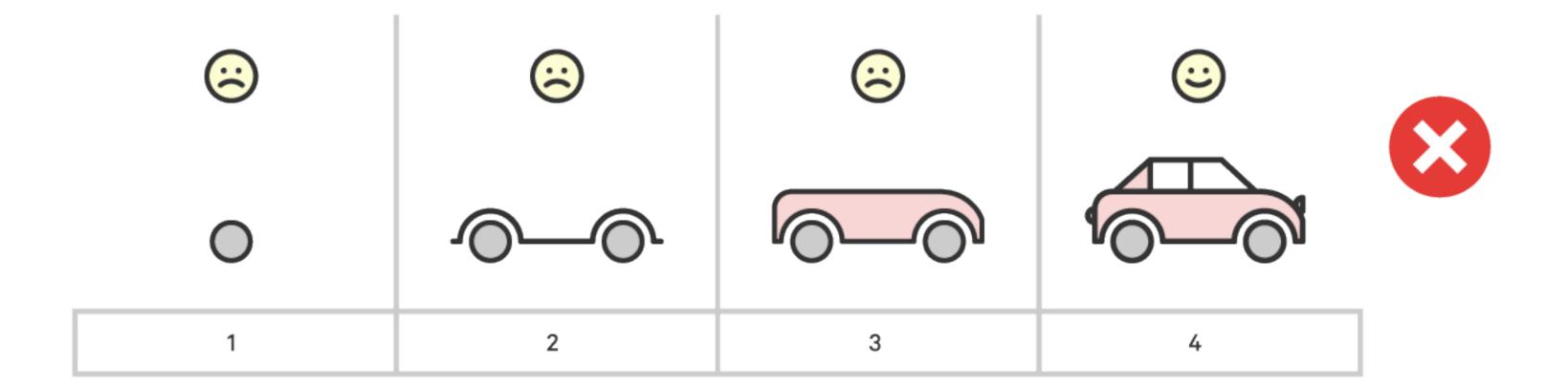


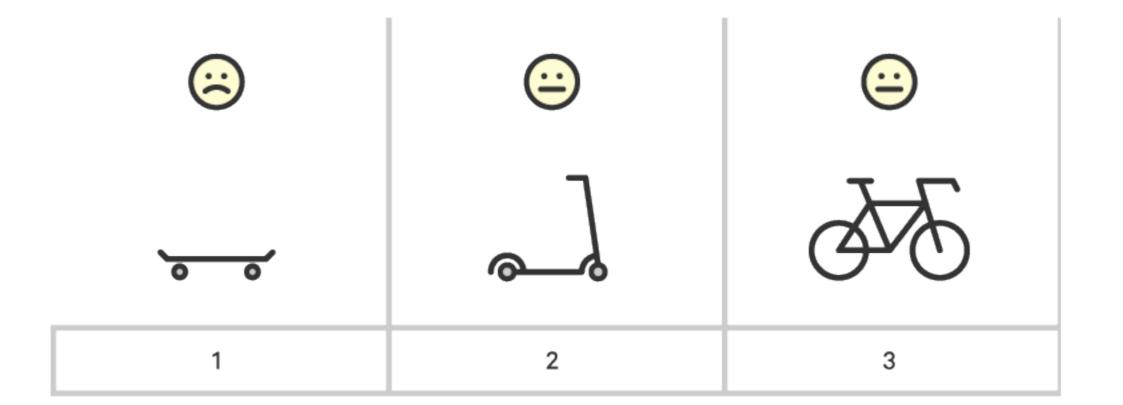




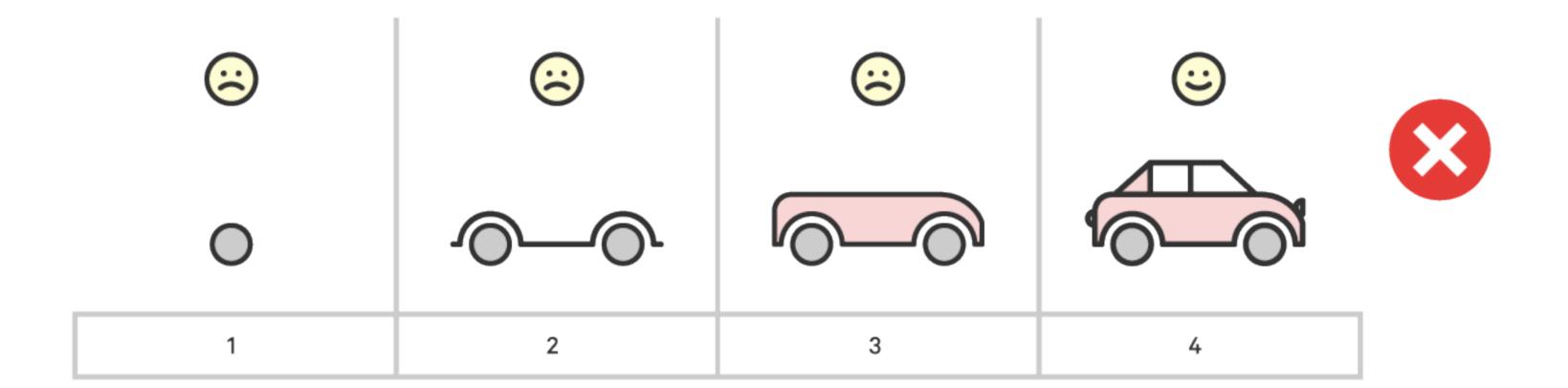


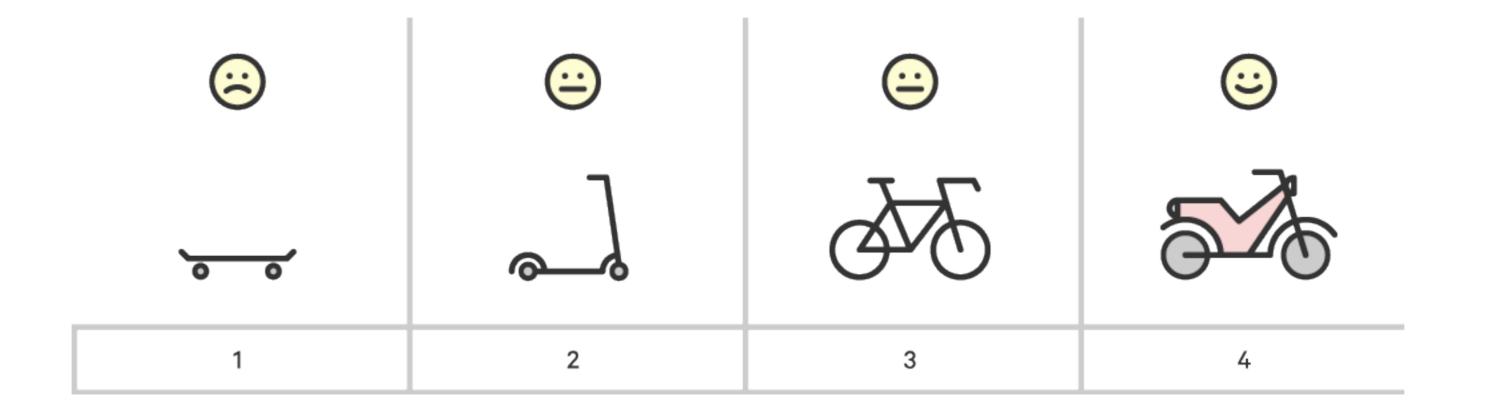




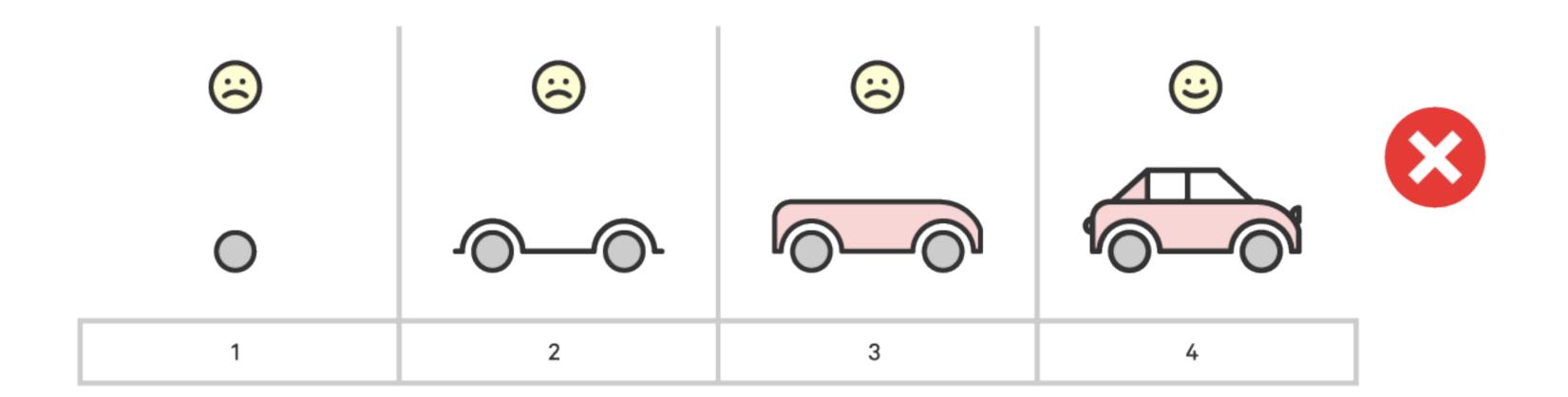




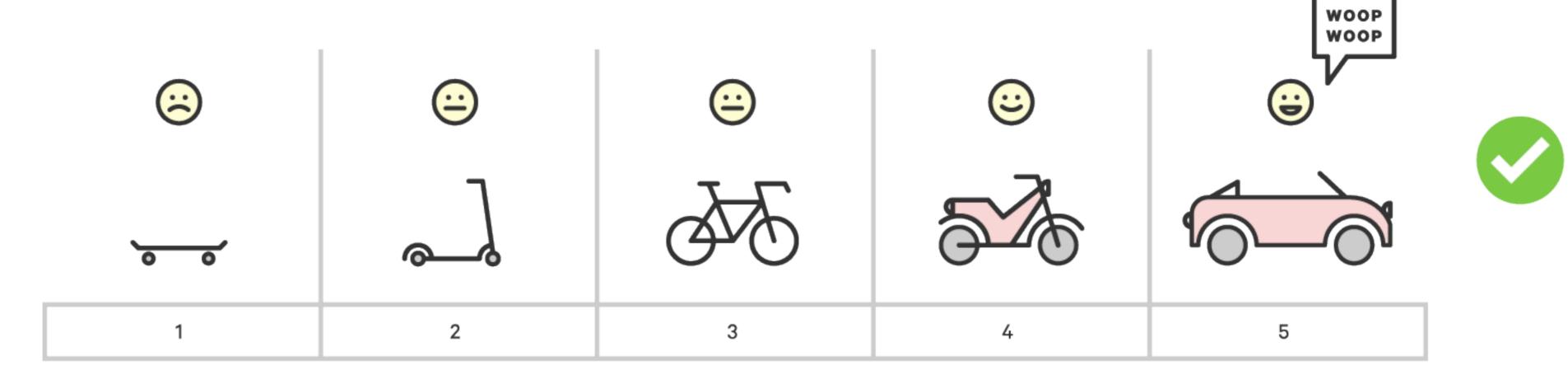








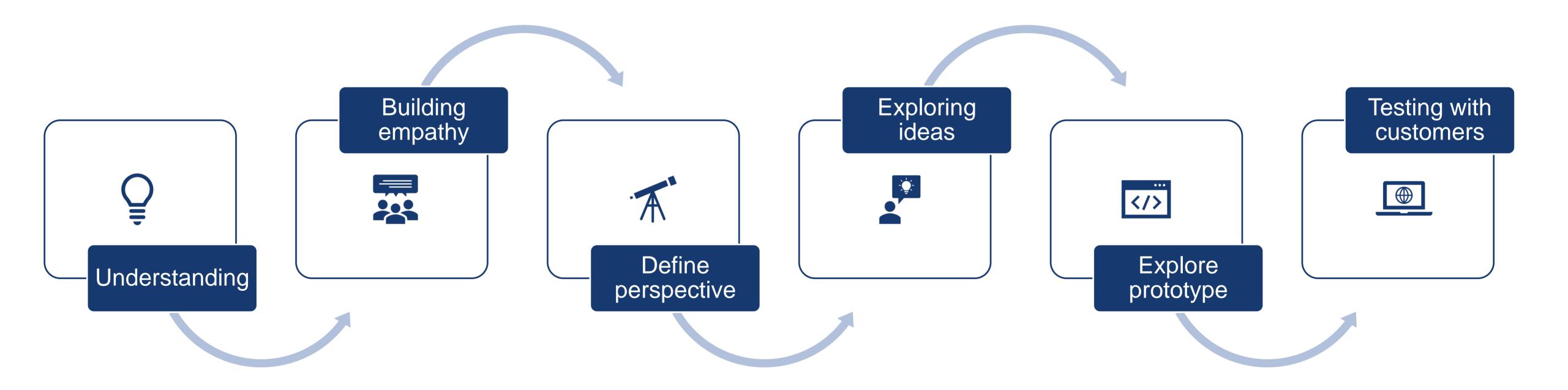
Currently: Releases every 2 – 4 weeks







Procedure





Understanding, building empathy and finding perspective

Understanding customers

There are four bars





Understanding customers





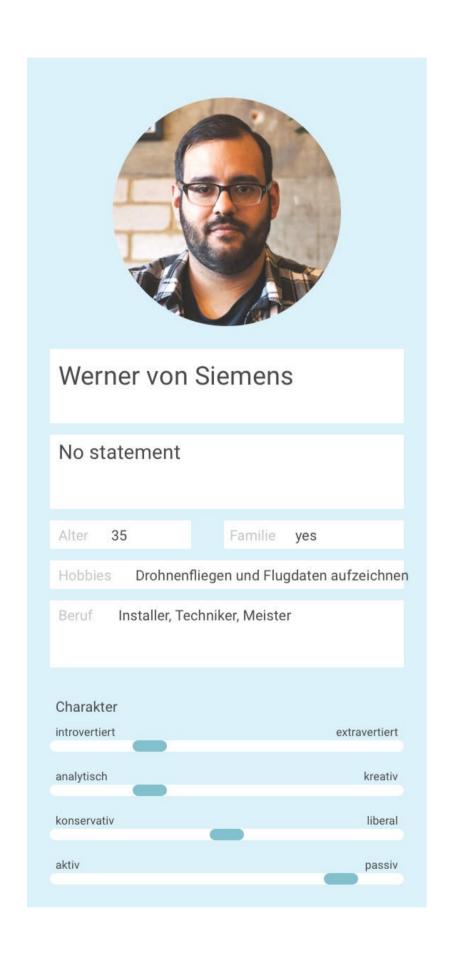
Understanding customers





Who is the product actually for?

The Personas



iele.

Gewissenhaft arbeiten, Aufgaben/Probleme kontrollieren und lösen Am Ende des Tages sicher sein, dass alles funktioniert Goals

Working conscientiously, control and solve tasks/problems
At the end of the day be sure that it all works

Motivationen / Erwartungen Klare Strukturen Prozesse sauber erfüllen – abhacken Mathematische Präzision Motivations / expectations
Clear Structures
Fulfill processes cleanly - chop off
Mathematical precision

Frustrationen

Plötzliche Probleme Langsame Prozesse – alles dauert ewig ohne klares Ziel Frustrations
Sudden problems

Slow processes - time consuming without a clear goal

Technologien

Smartphone/Tablet - probiert neue Techniken gerne aus

Technologies Interested

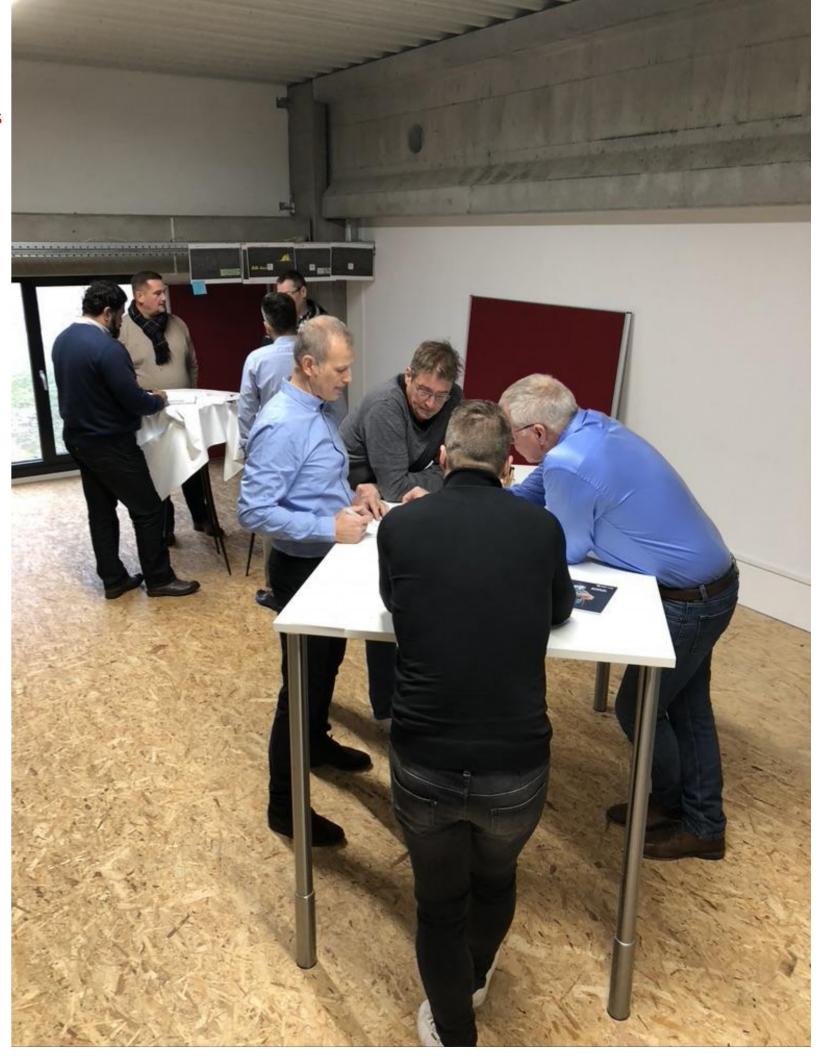
Smartphone/Tablet - likes to try out new technologies

Liebt / mag / hat / Brands

Wandern - Drohnenbilder schiessen

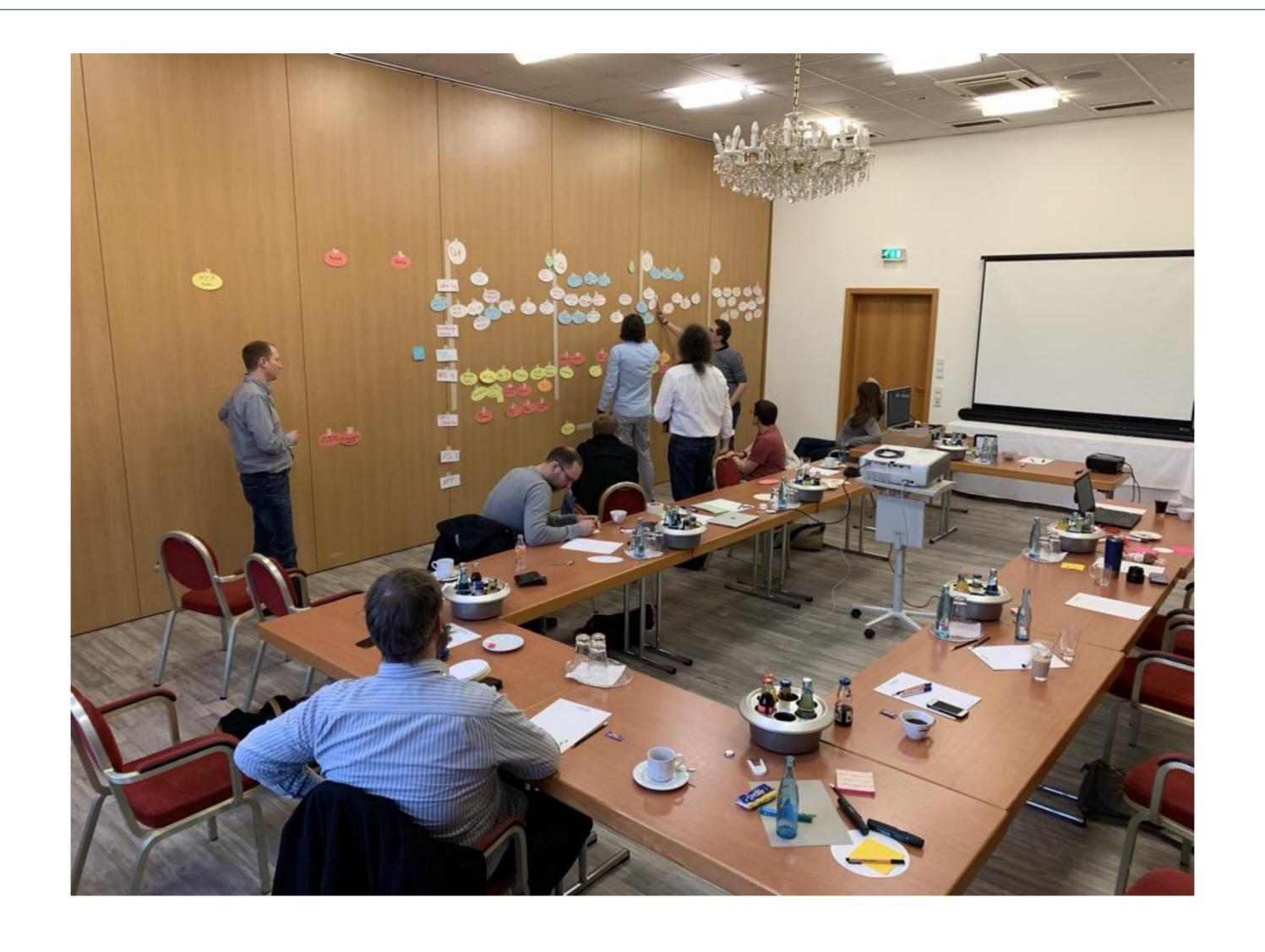
Loves / likes / has / brands wander - shoot drone pictures

Bereich / Gruppe Installer Monitoring





Workshop



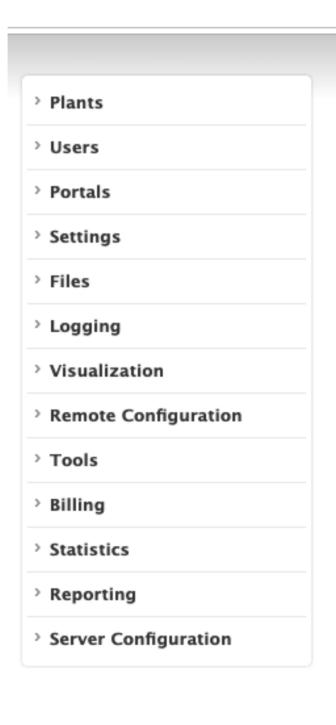


Previous Web Platform



Administration and Settings

Plant and User Management, Logging, Billing and Options



What would you like to do?



Manage Plants

You can manage your plants or add new ones. In additional to the standard information, own contact details, or inverter details, a wide range of other information and documents can be added for every plant and viewed.



Manage Users

Manage user data or add new users. You can also set which users have administration rights.



Edit Options

You can change your page's background color, add your logo or edit the information that is shown in the legal notice page.



Manage Files

Manage images and documents that have already been updated or add new files. Create the directory structure, according to your needs.



View Logs

Monitor all of the plants at the same time and and register all malfunctions in the plant logbook. The event log of all of the messages from all of the connected inverters is also available for detailed error analysis.



Remote Configuration

You can perform the Solar-Log™ Setup Configuration or later setting changes by remote configuration. In this way, you can transfer the configuration data to the Solar-Log™ without being on site.



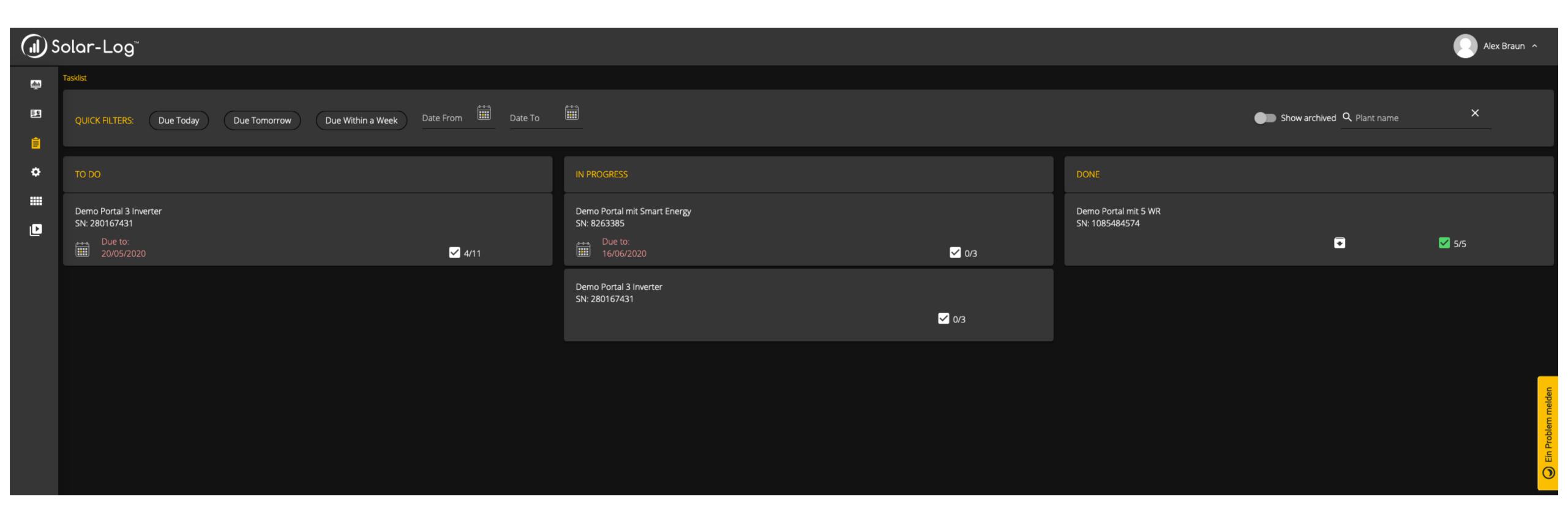
Requirements

- Find errors quickly
- Track errors
- Flexible system for analyses
- Flexible system for representations
- Categorizable asset groups
- Provide interfaces to other systems
- Suitable for mobile devices



Ticket System

Our assumptions changed

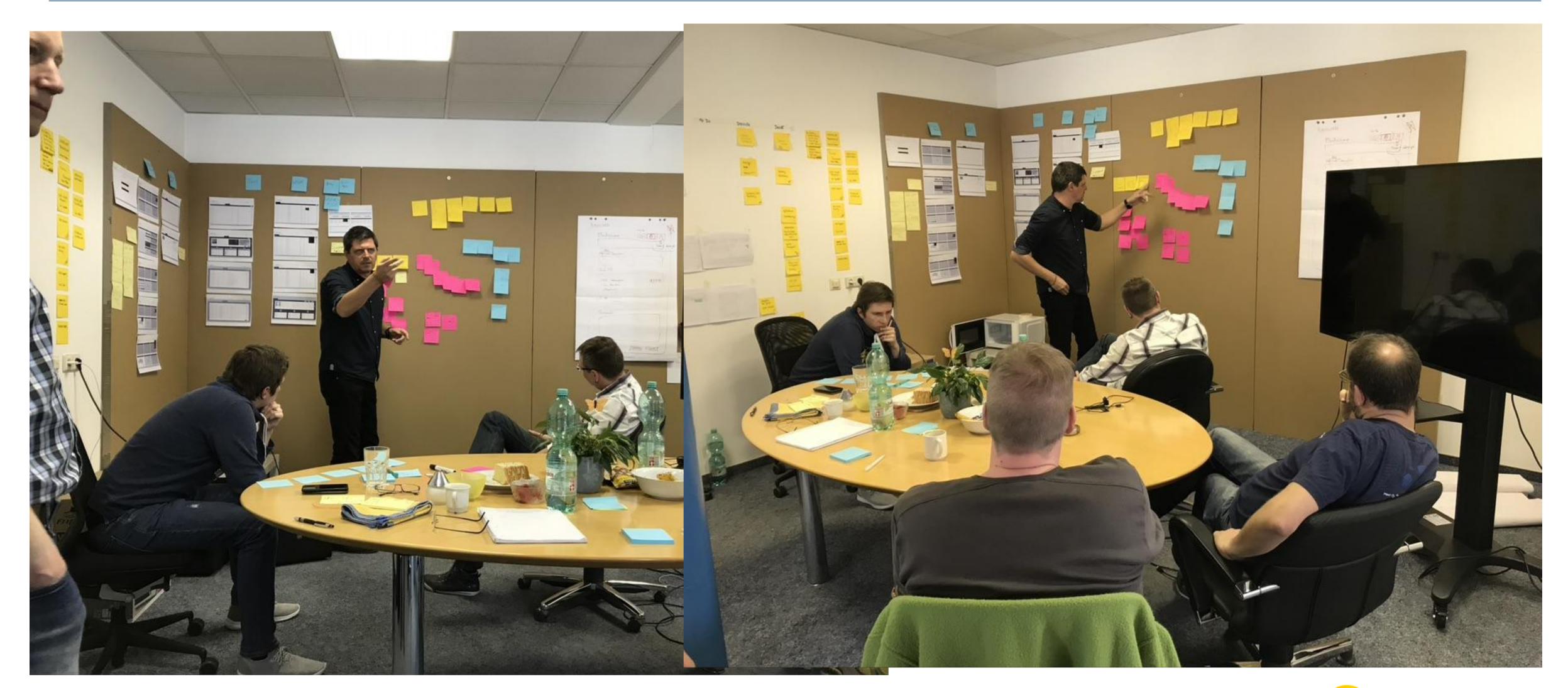




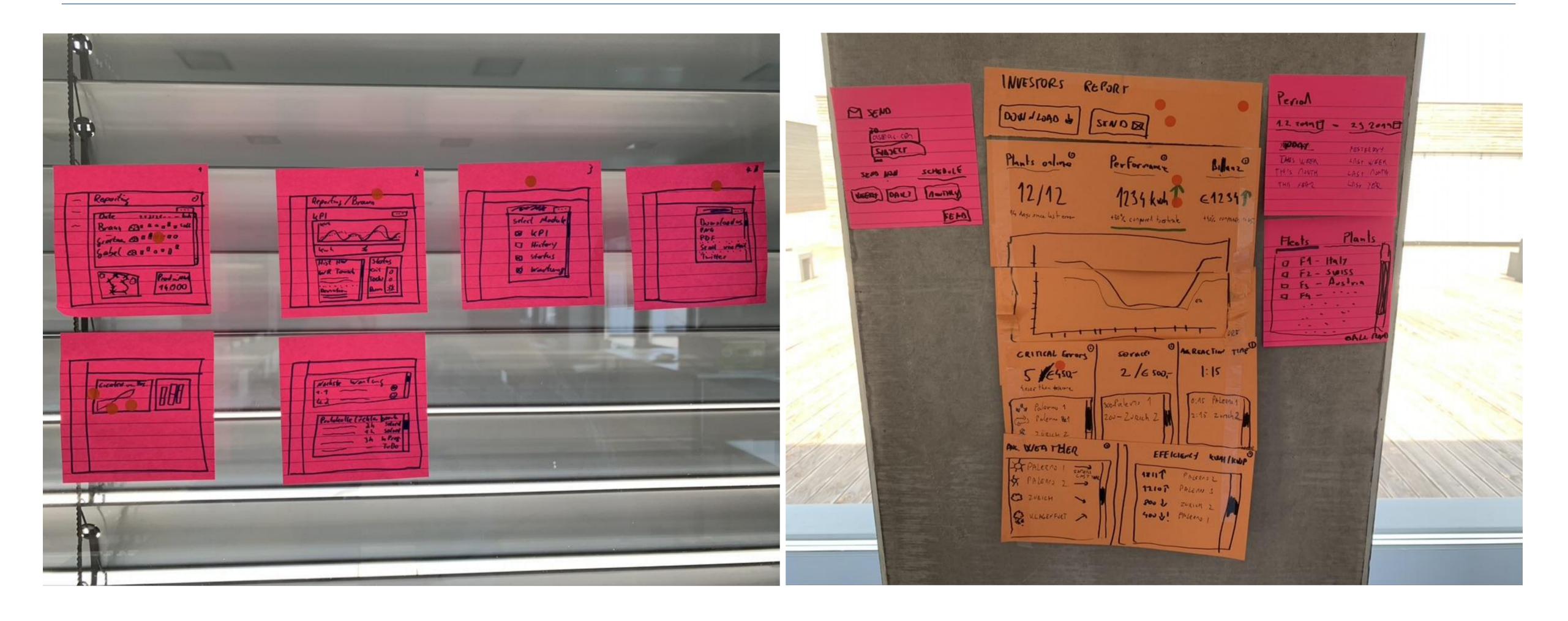
Exploring ideas, building a prototype, testing

Pinboard

First discussions







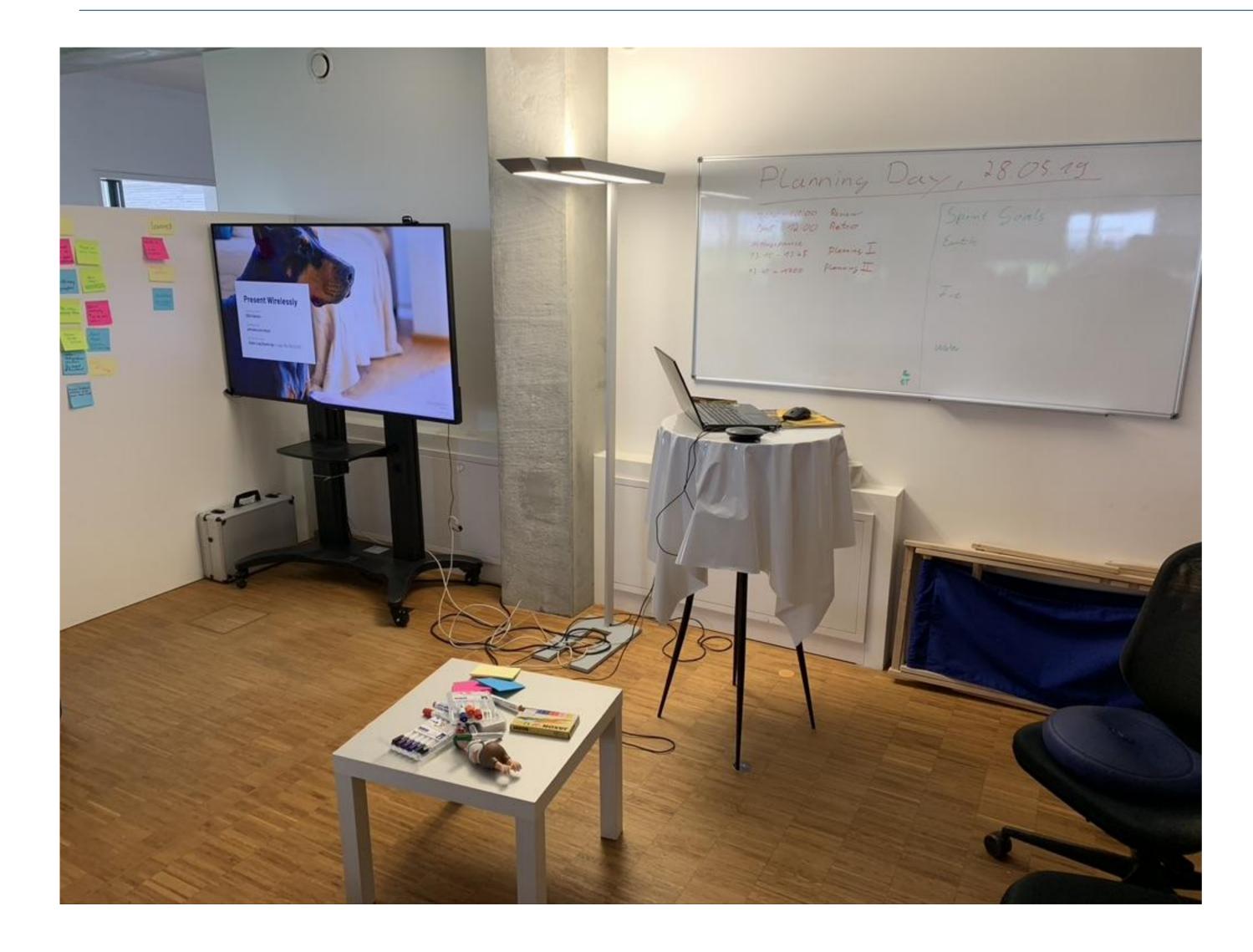








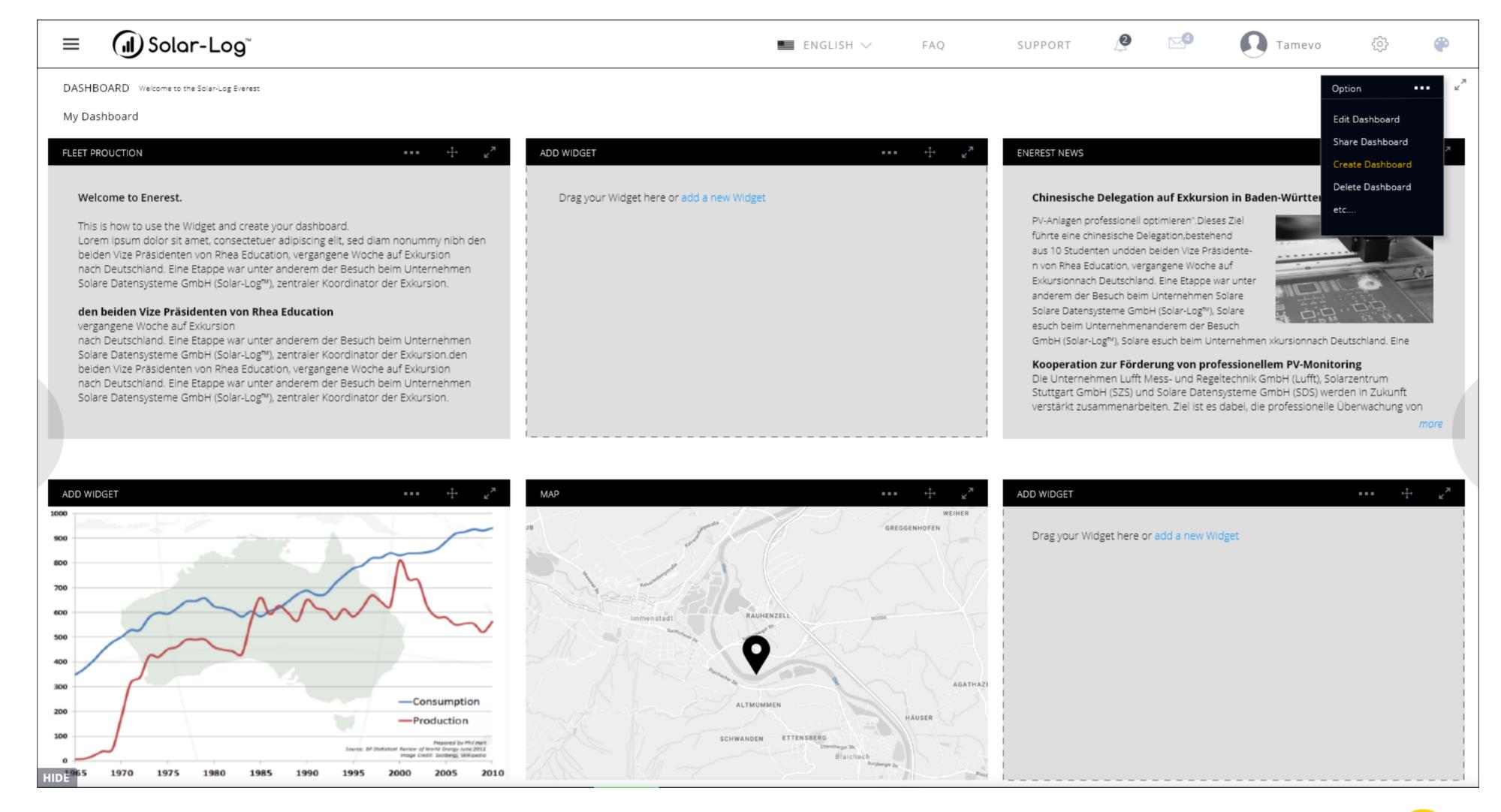






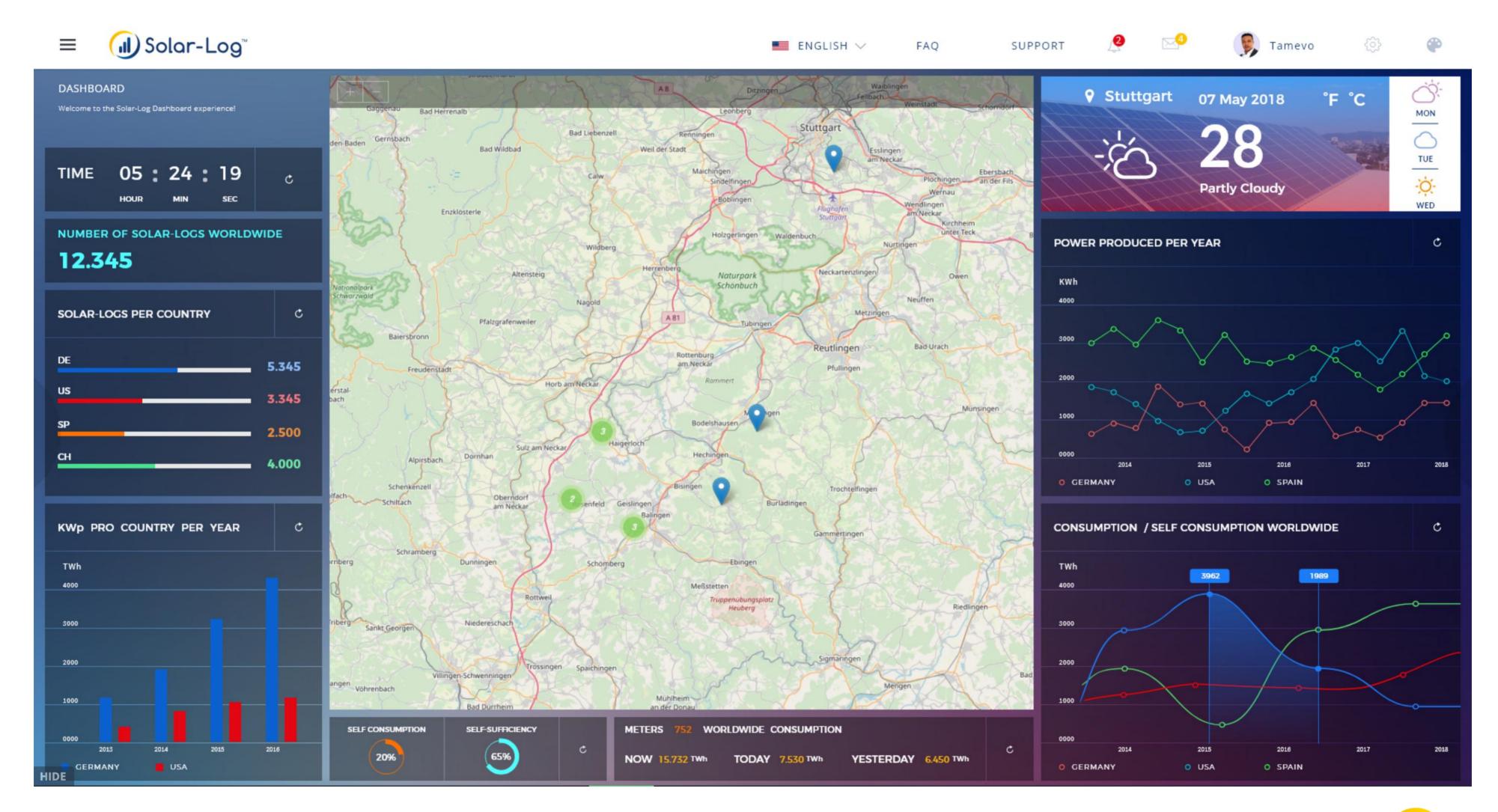


Prototype



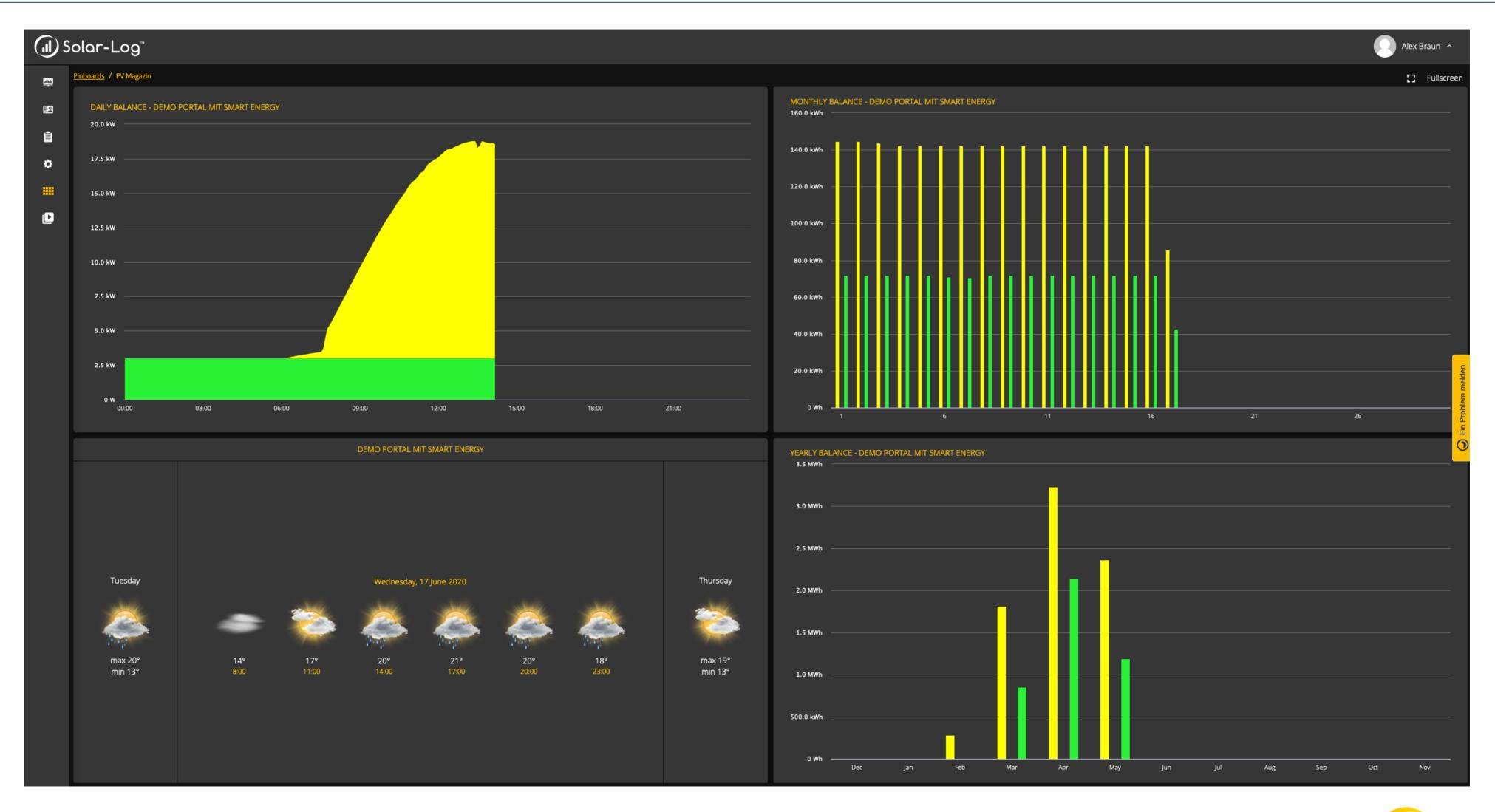


Designed Prototype



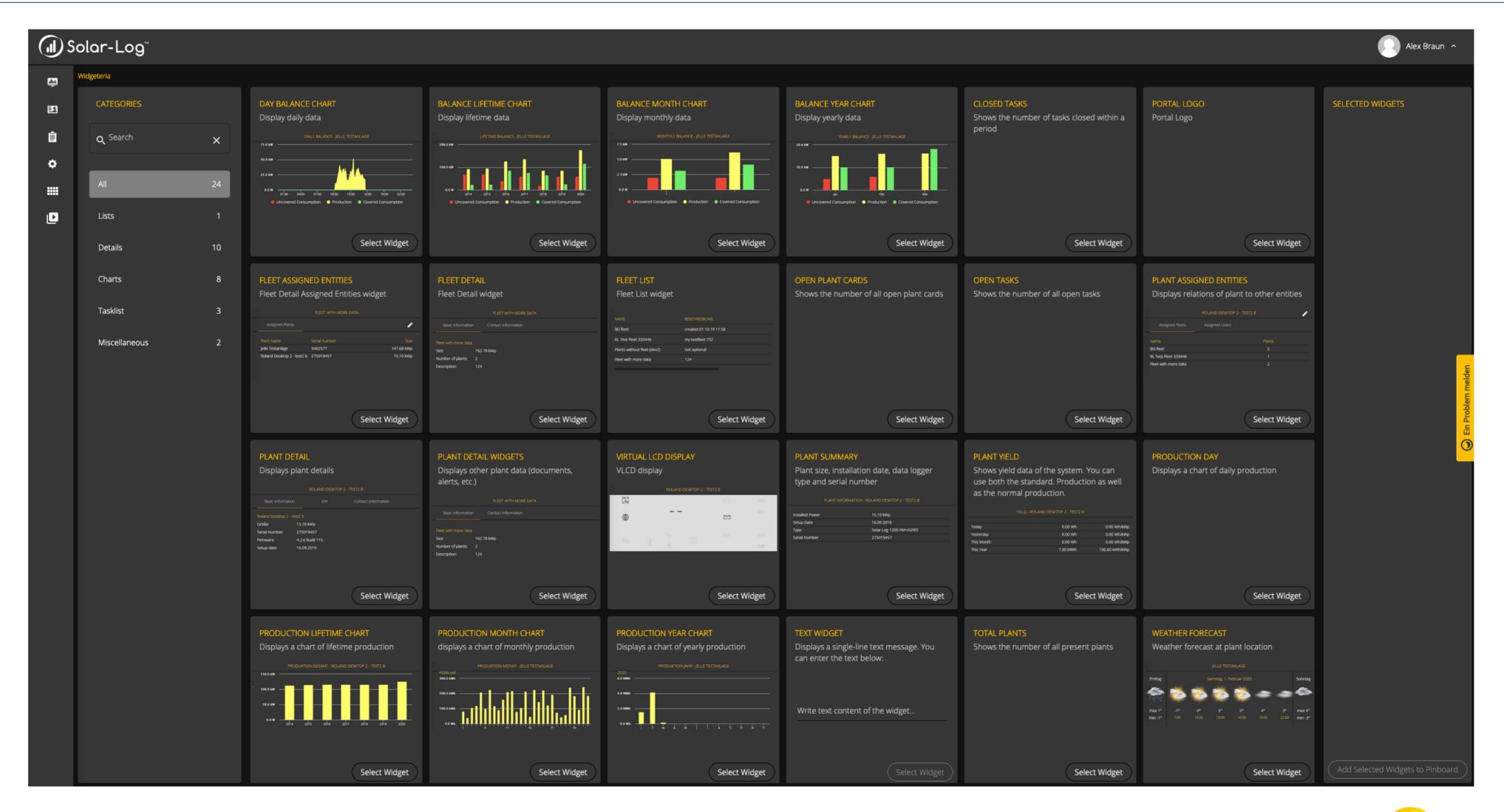


Released Product





Released Product

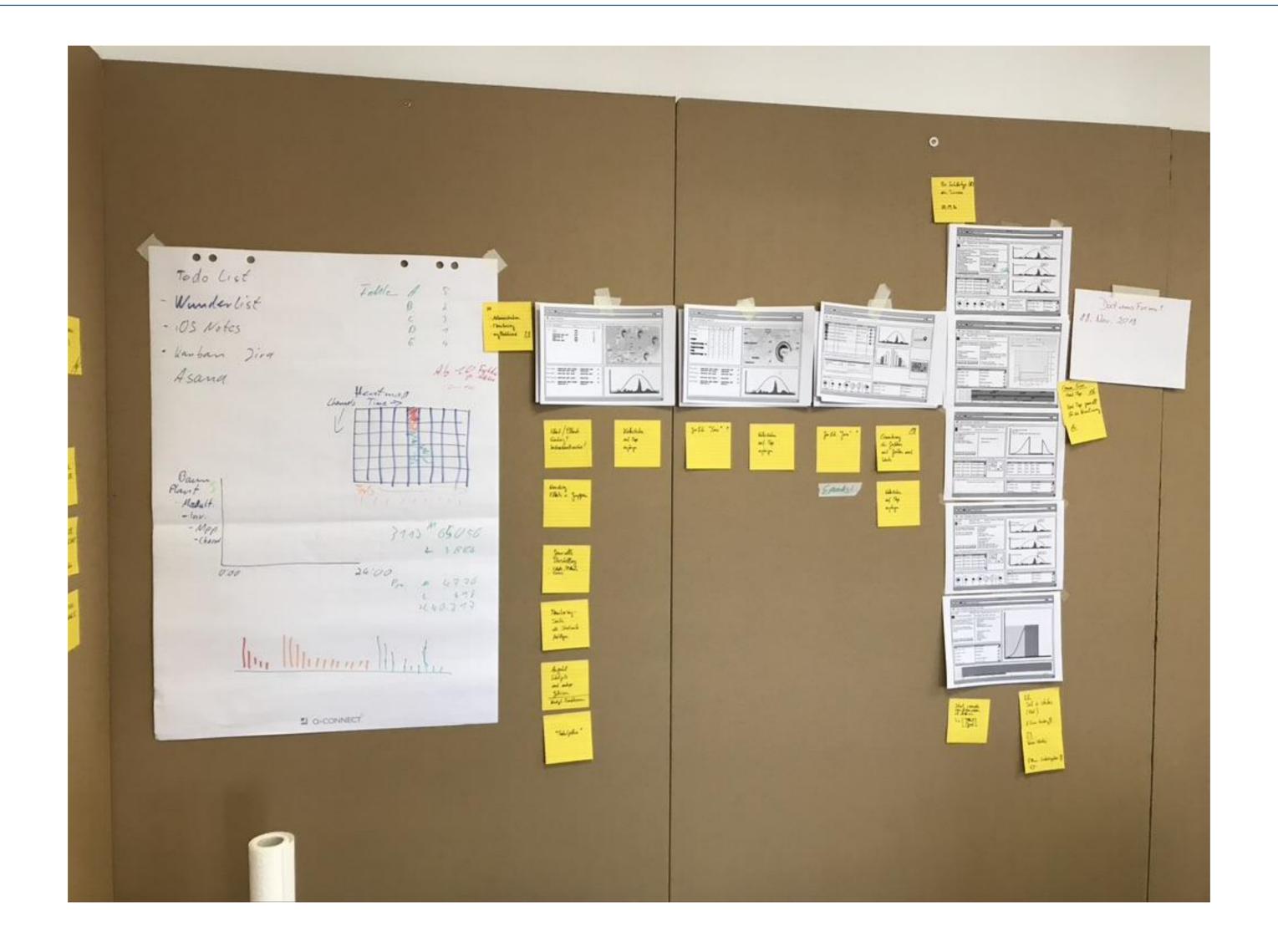




Exploring ideas, building a prototype, testing

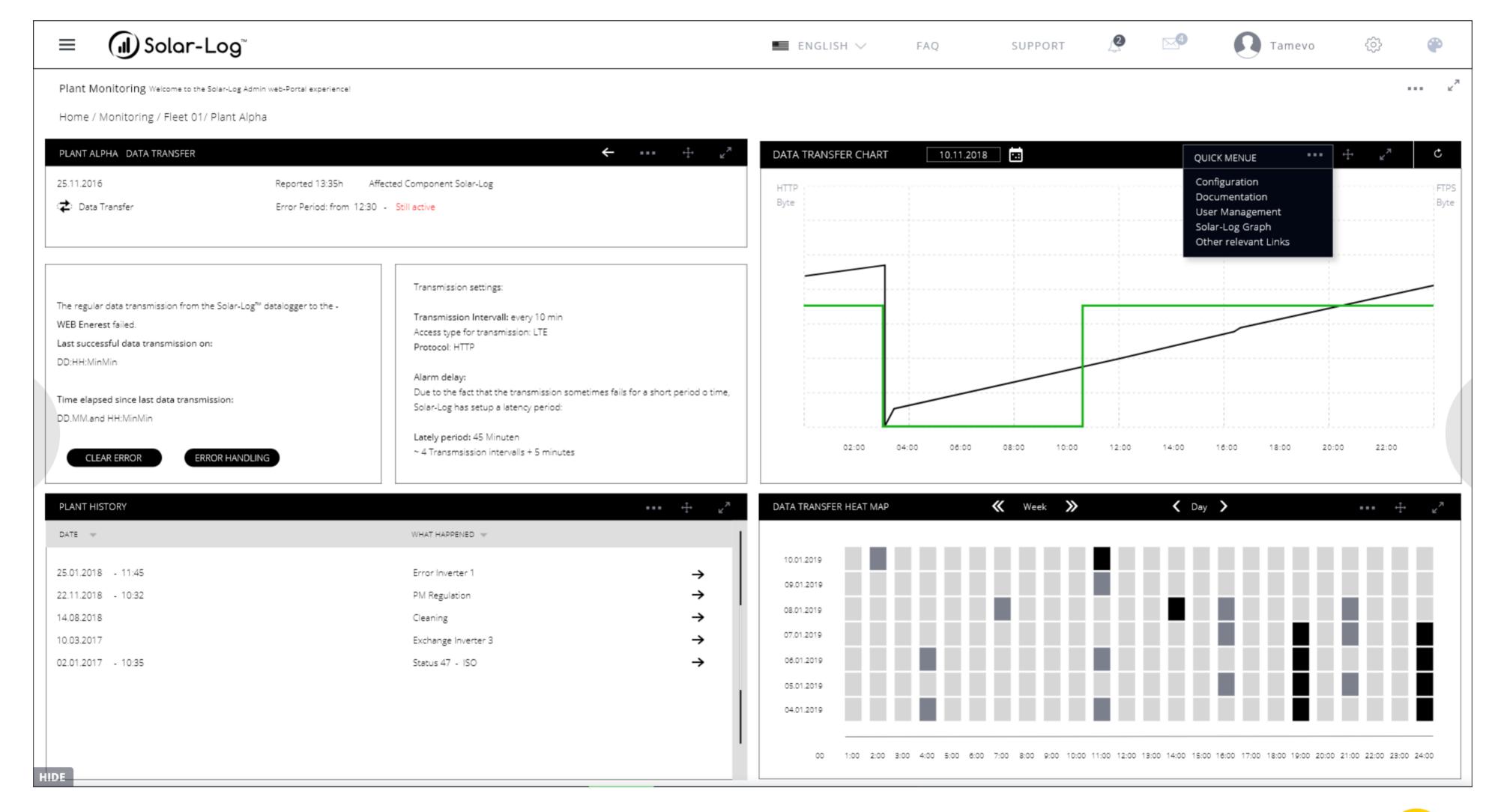
Monitoring

Workshop



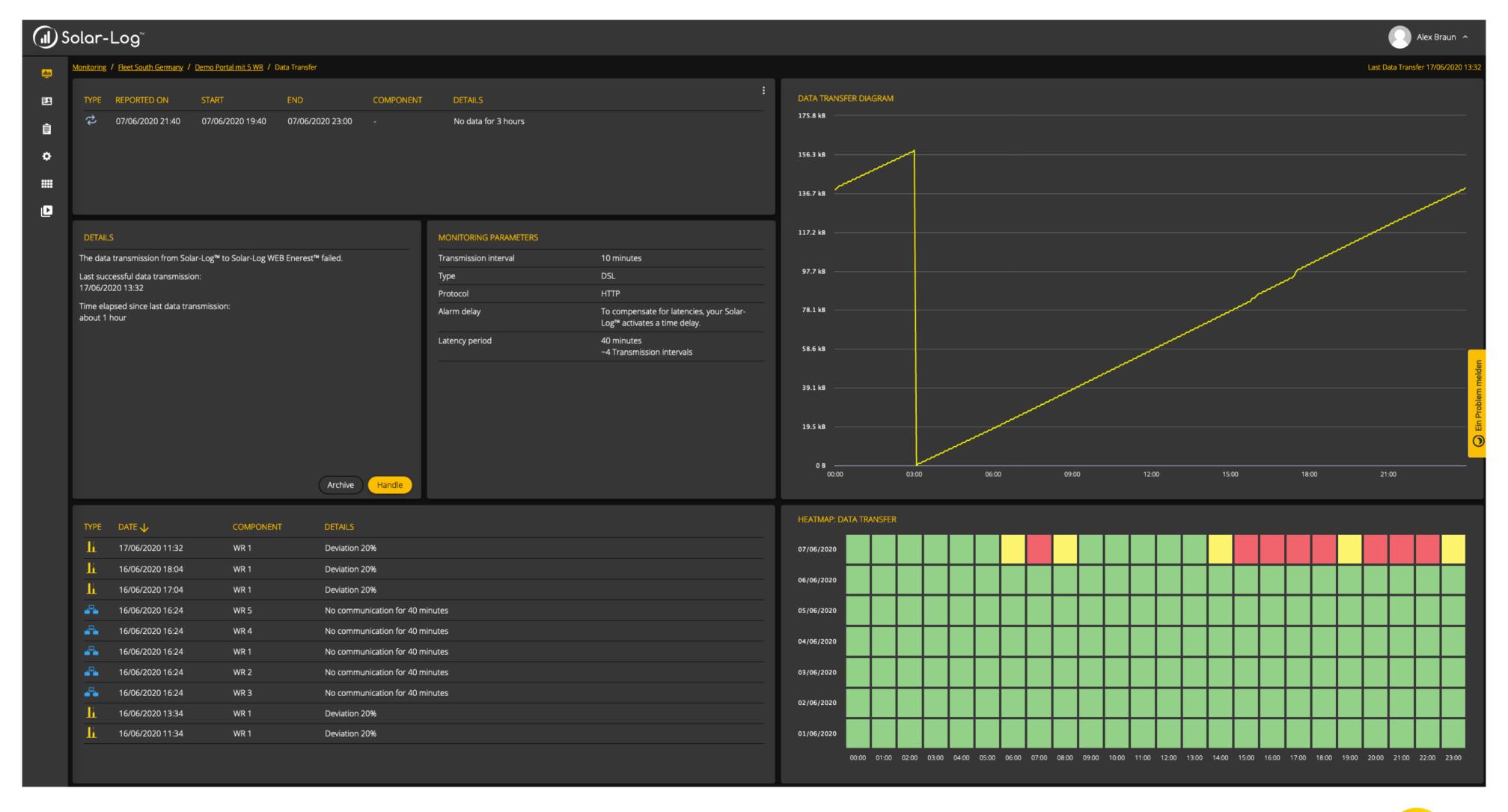


Prototype

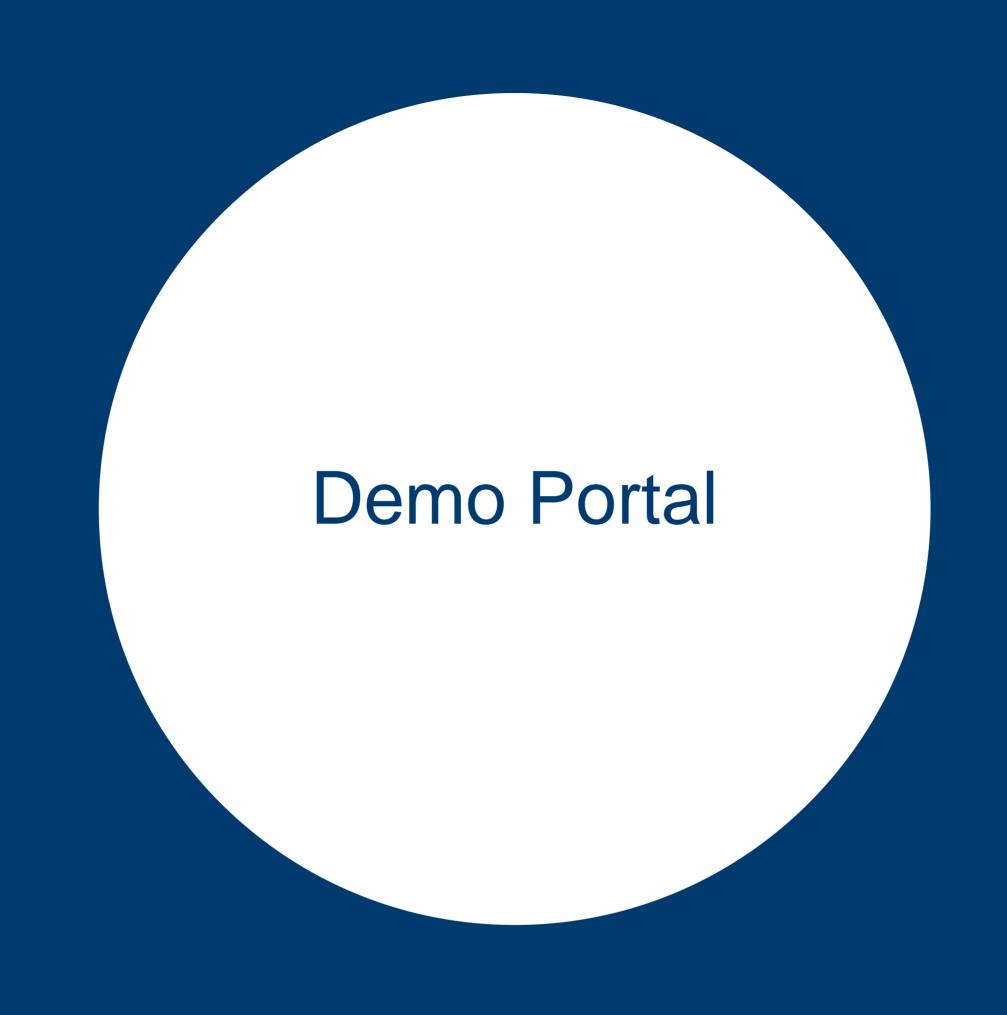




Released Product

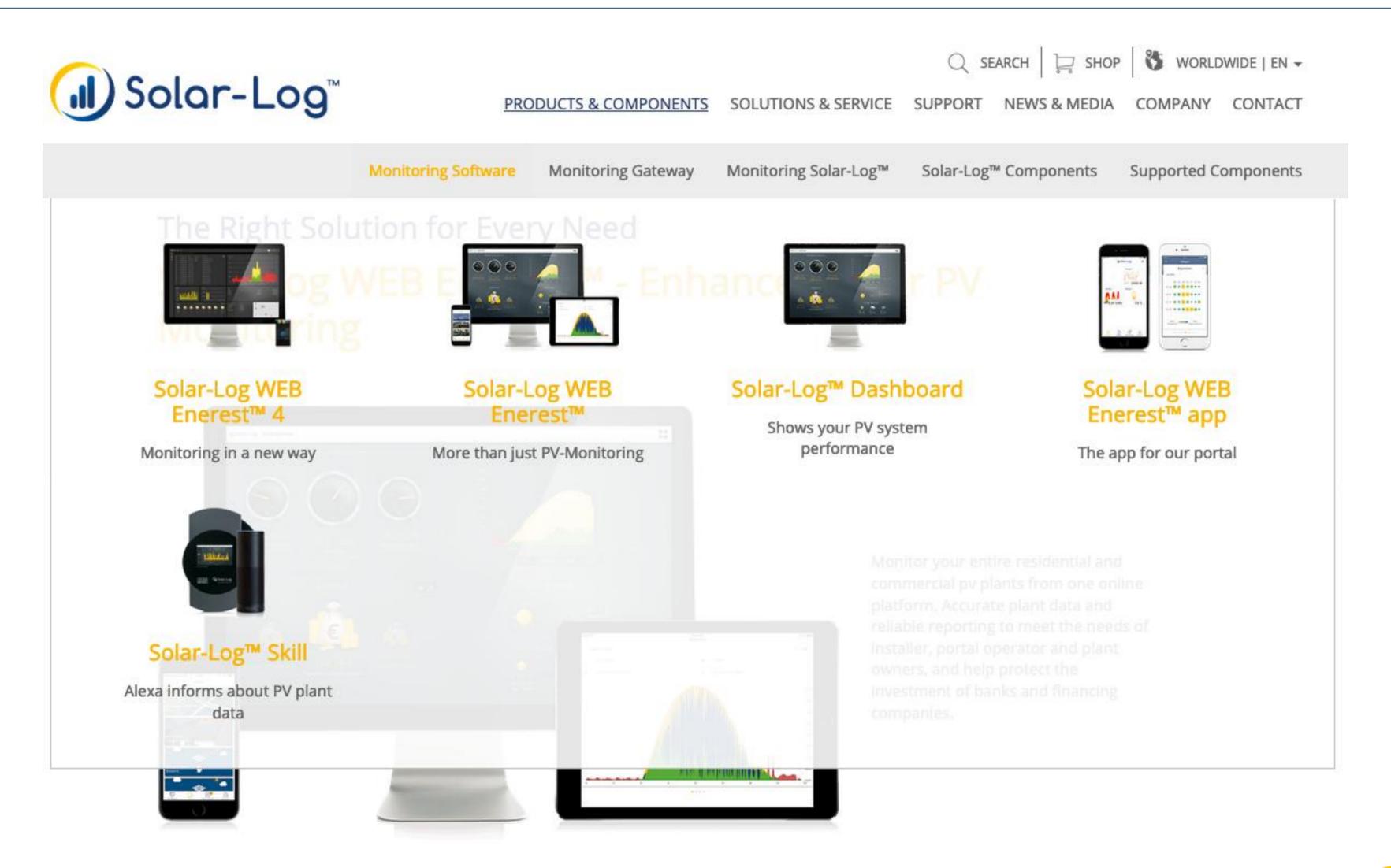






Demo Portal

www.solar-log.com





Ideas portal

Creating transparency



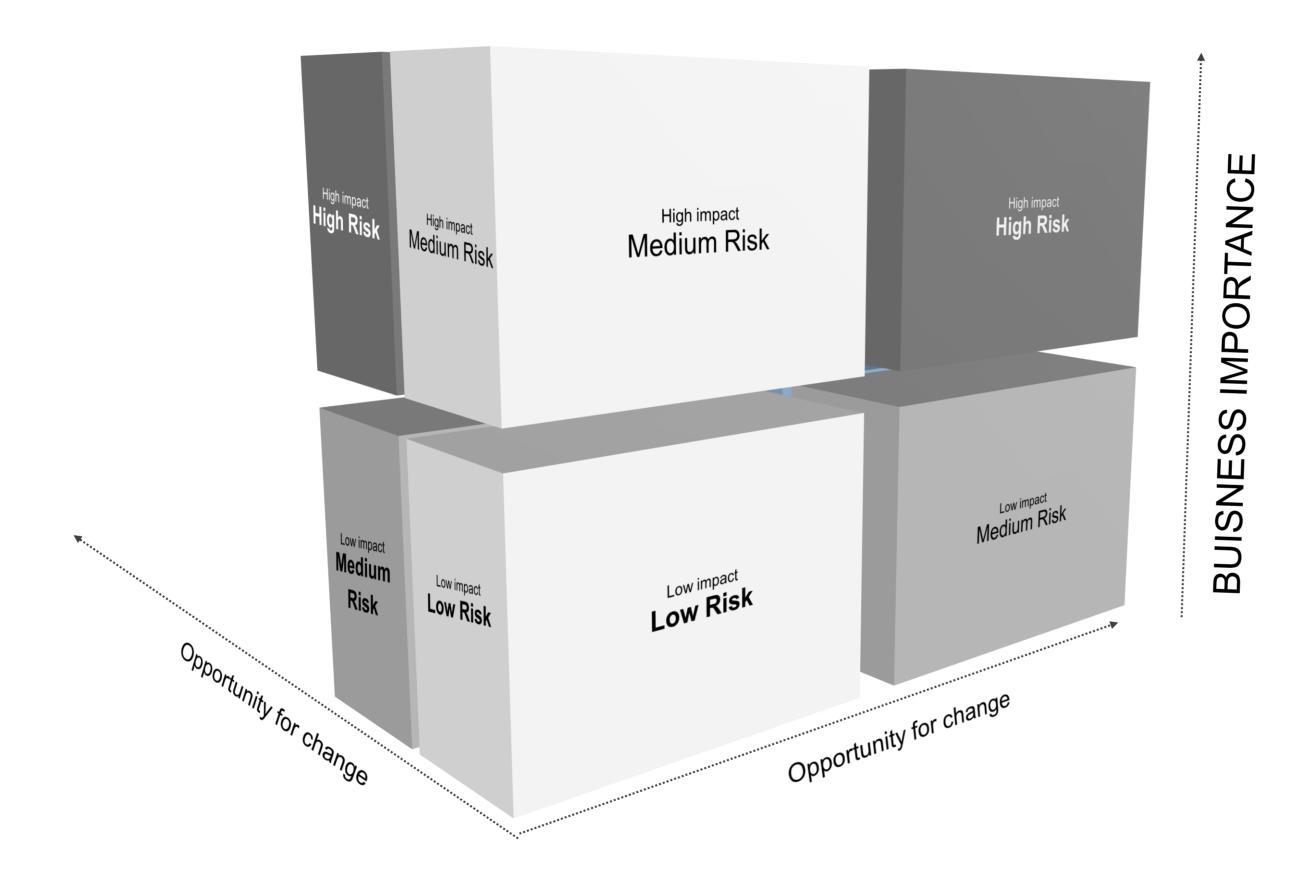




How will Solar-Log[™] continue?

Opportunities and their importance

Which opportunities must we take? Will our abilities reach this? Are we still creating benefits for the customer?

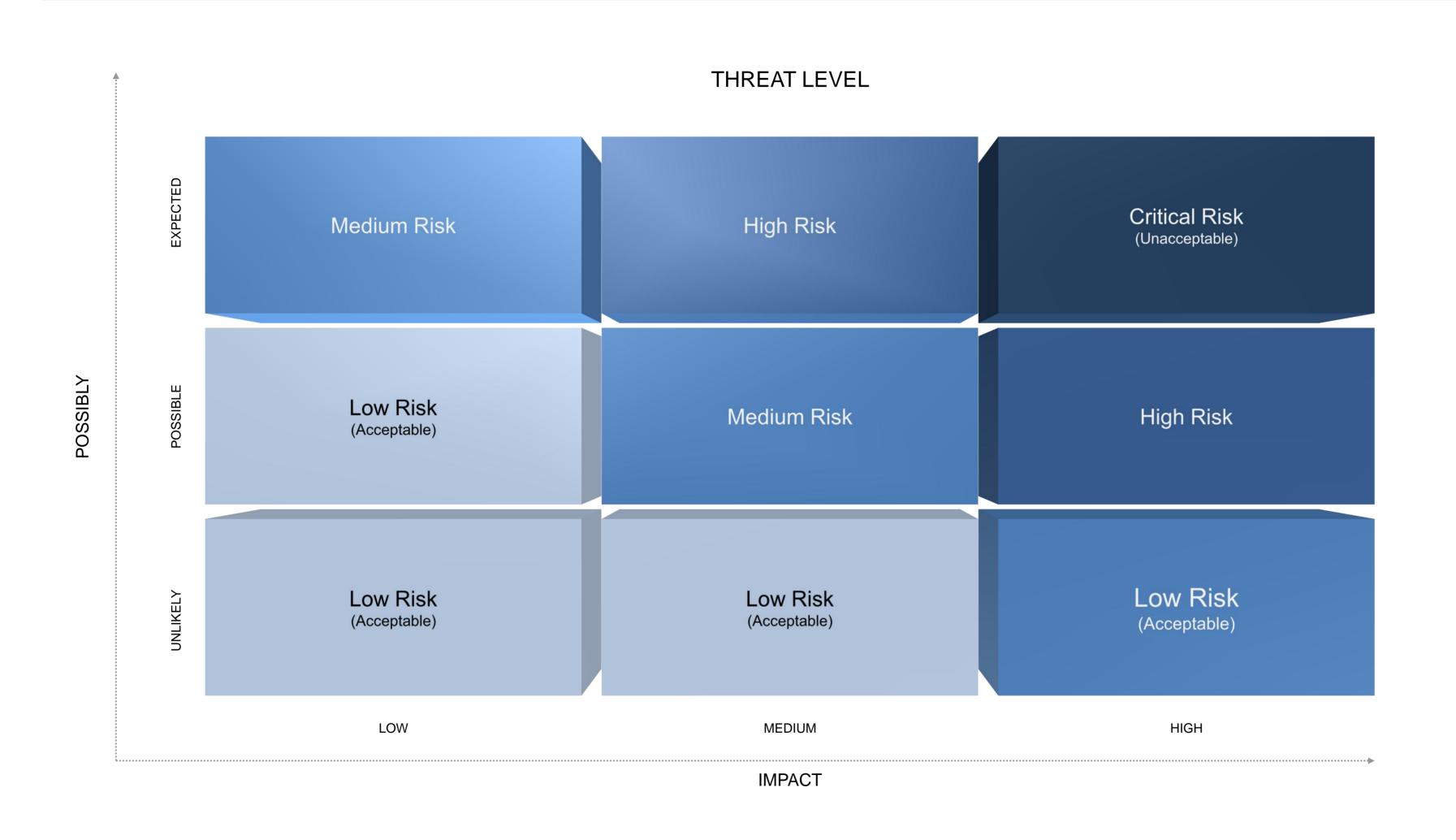


- In the past many changes were demanded of us and not fully planned
- Today and in the future, we are confronted with more and fast changing conditions
- This also involves our customers (z.B. COVID-19; changes in subsidy programs)



Markets and their players continue to develop

In the past, there were clearly separated areas in which each player found himself, but these are no longer there today



- Player with a higher compatibility of components appears on the market.
- Component manufacturers continue to expand their product-specific solutions.
- More competitors with a similar solution become more active in the market.
- Complex energy management is gaining more importance.
- Due to changed data protection regulations, no more site data can be created and stored.
- Changes in the legal framework require a much higher level of data protection as today.



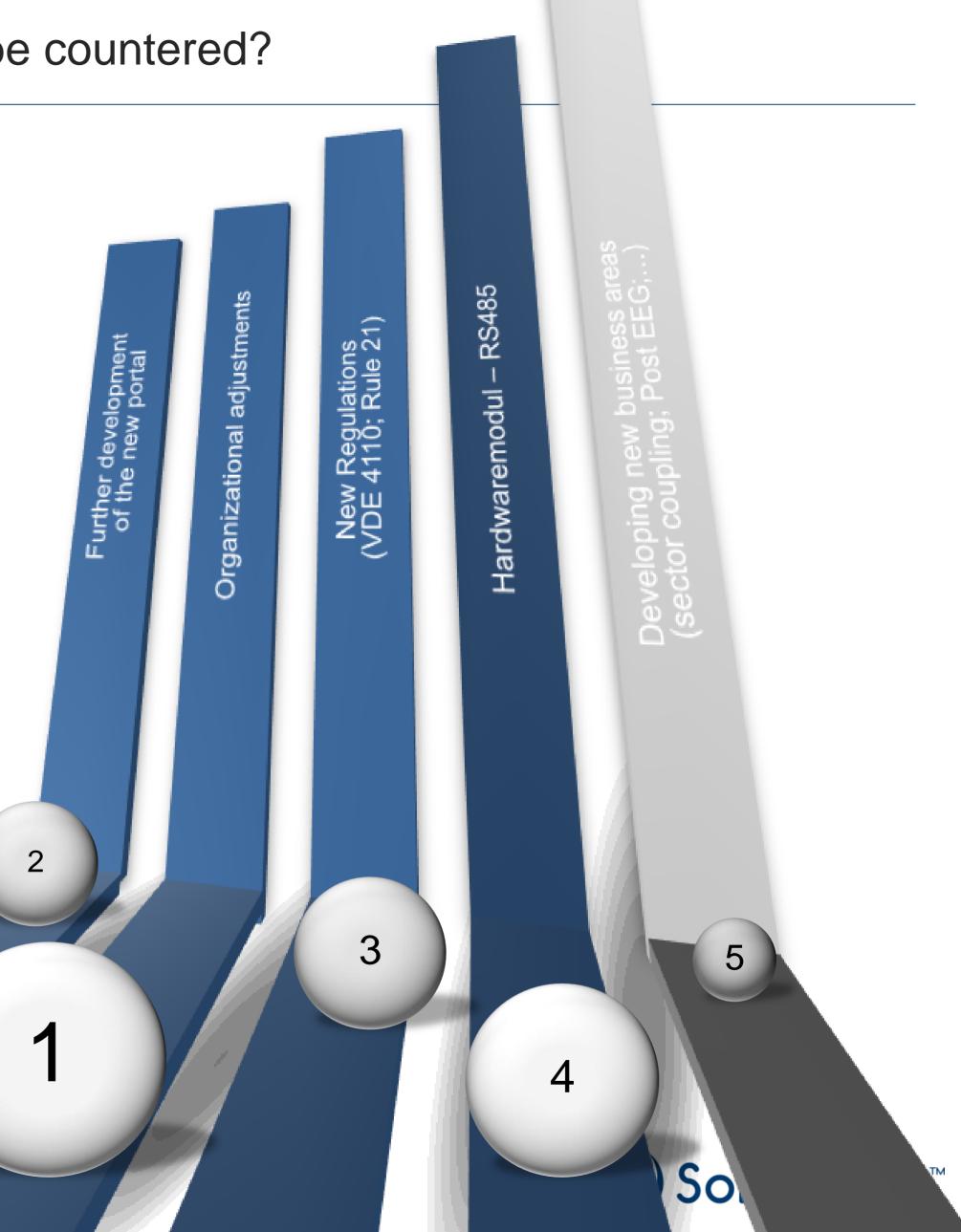
Looking ahead

How can the complex network of opportunities – risks and threats be countered?

In the future there will no longer be one solution to the problem.

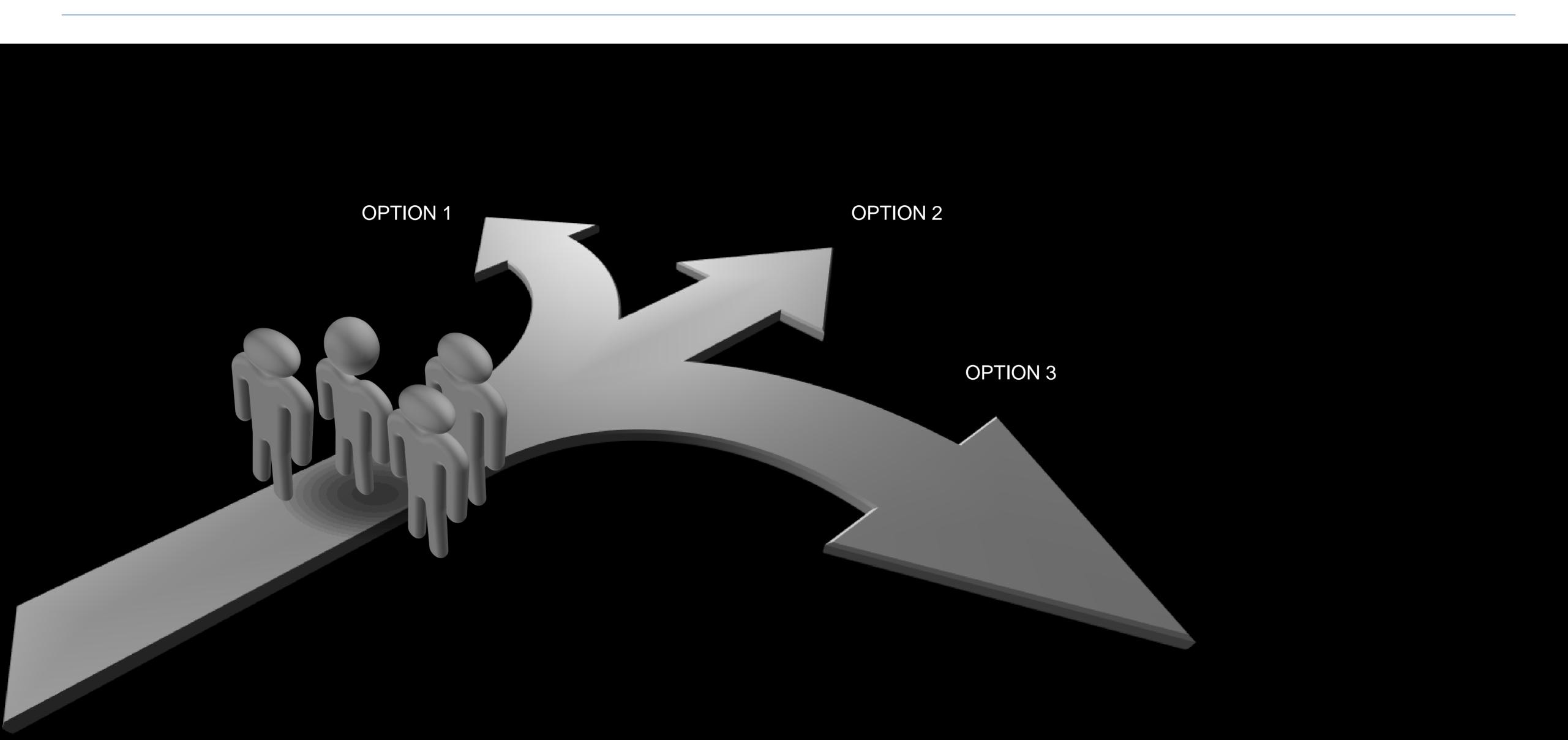
Systems will be interconnected across all sectors.

The speed and pressure to innovate will remain high or even increase.



Customer as part of the strategy

How we develop our products and services in the future will continue to be actively shaped by our customers!



We will continue to be the partner for PV system monitoring in the future

