

FieldBots equips and controls swarms of robots for 21st century FM concepts





Today's robotics approaches in facility management are not satisfactory

No FM vision

Today's robotics approaches for building-vicinity services focus too much on hardware.

By focussing on replacing manual work, there is a lack of integrating robotics into holistic FM concepts in order to really develop professional operations in buildings.

Flood of isolated solutions

Each manufacturer focuses on robotics for their own FM niche discipline – without looking at the big picture. By doing this, it tries to "confine" the FM service provider and corporate real estate management to its own ecosystem.

High price, cheap effects

Service robots with humanoid concepts that are currently available on the market are becoming more and more expensive without even approaching their goal. Instead, cheap effects such as speech synthesis, futuristic designs and light effects are used as a means of distraction.

Lack of FM integration

Due to hardware centricity, the essential question as to integrating the organisations that are supposed to purchase, set up, control and maintain the devices is moved far into the background. How do you integrate real estate management and its FM service providers in a meaningful way?



The solution: swarms of robots that are equipped and controlled from the Cloud

🐜 Large number of small, inexpensive robots in today's manageable environments

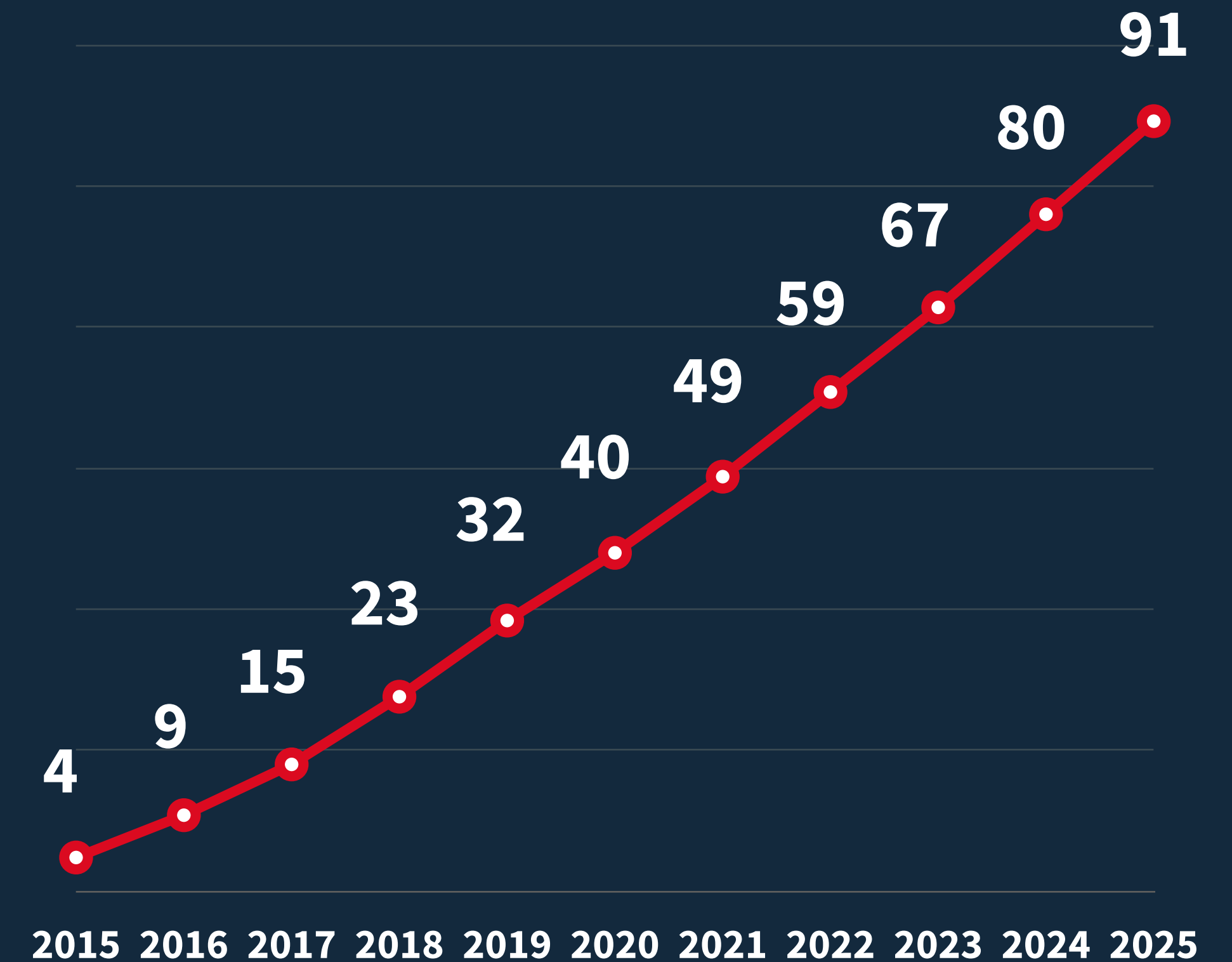
🌀 Integration to create an interdisciplinary swarm in the Cloud

🛍️ Simple purchase and reliable control from one interface

👍 Great benefits for real estate management, FM service providers and manufacturers

Number of household robots worldwide (in millions)

Loup Ventures 2017, accumulated at an assumed lifetime of 5 years





The market in Germany alone is huge



382 million square metres of offices

dena, Office Real Estate Study 2017



1.76 million places in care institutions

Destatis, care statistics 2019

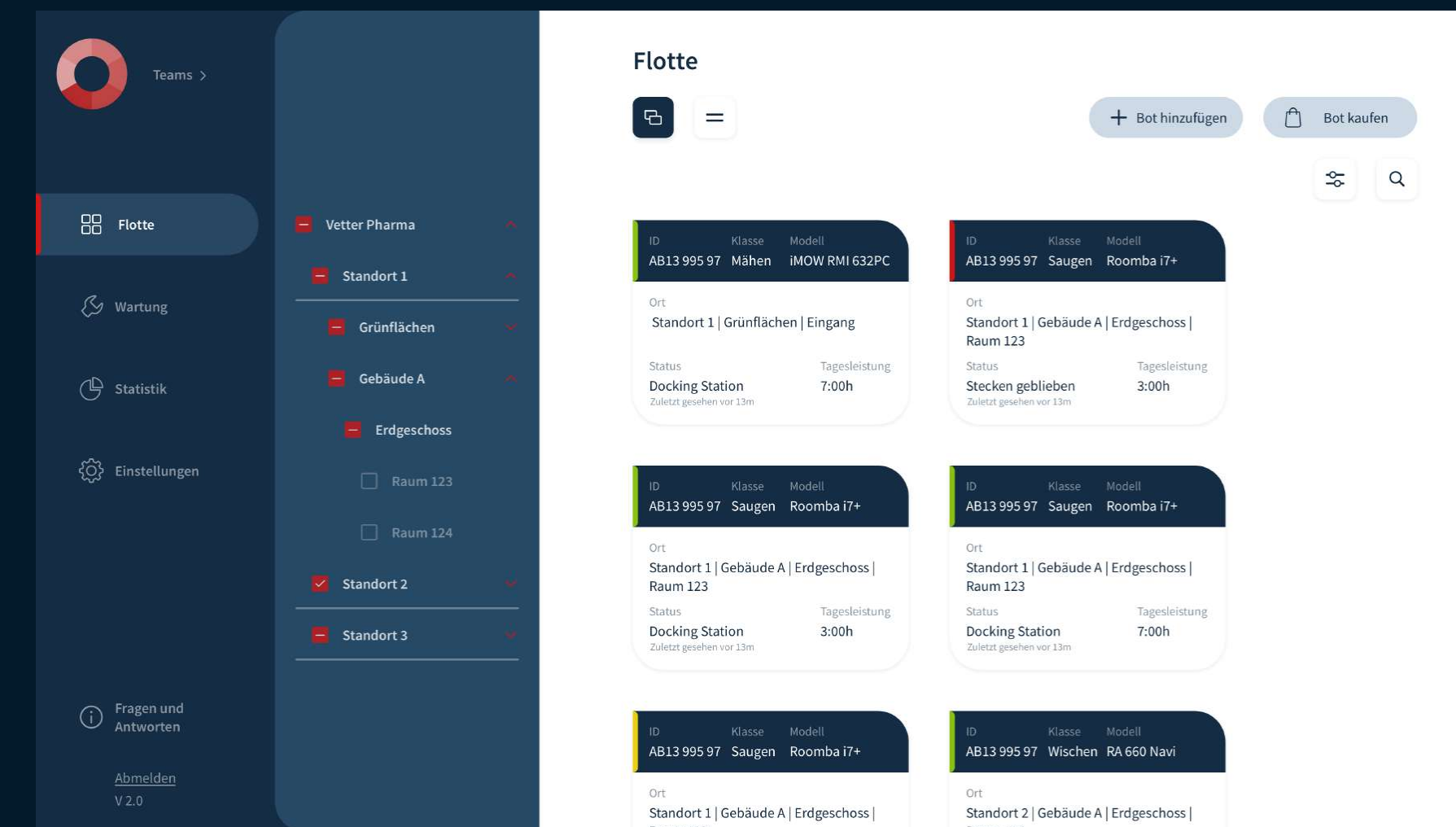
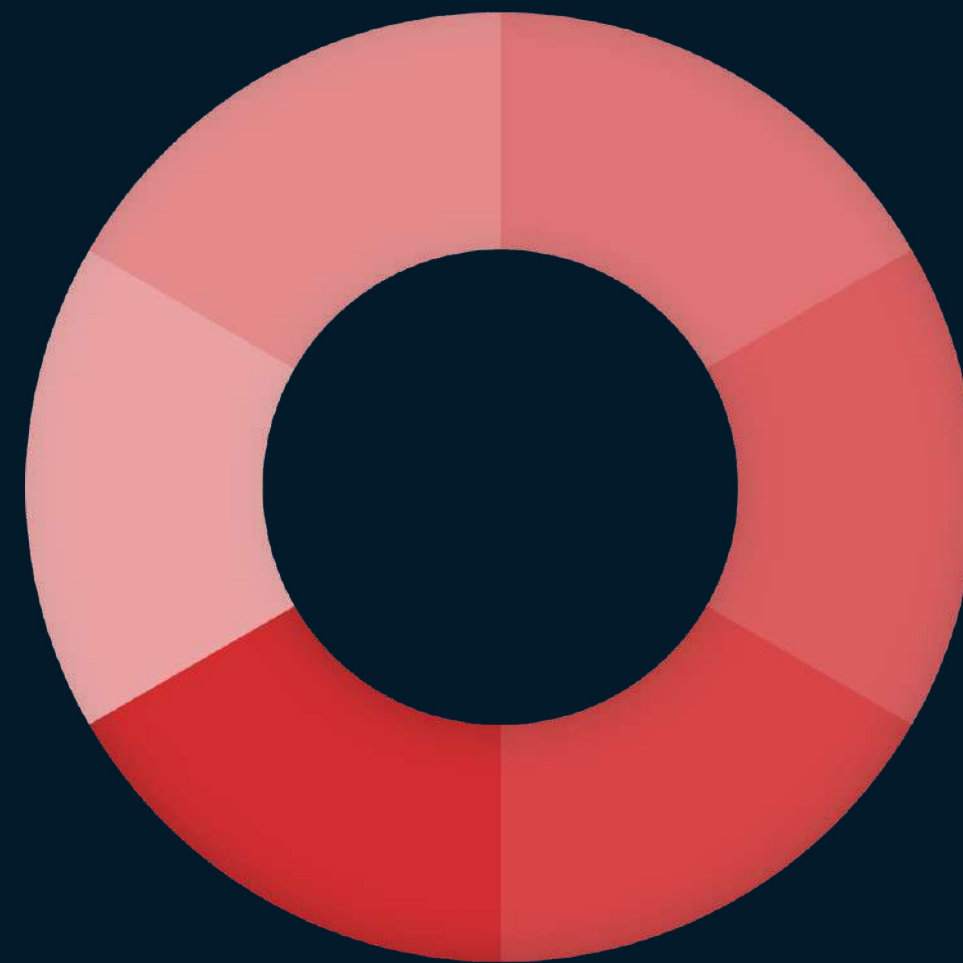
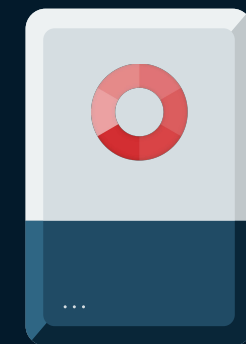
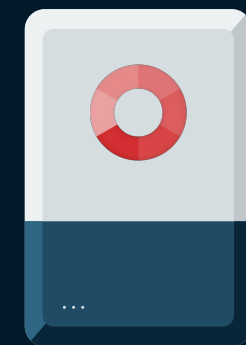
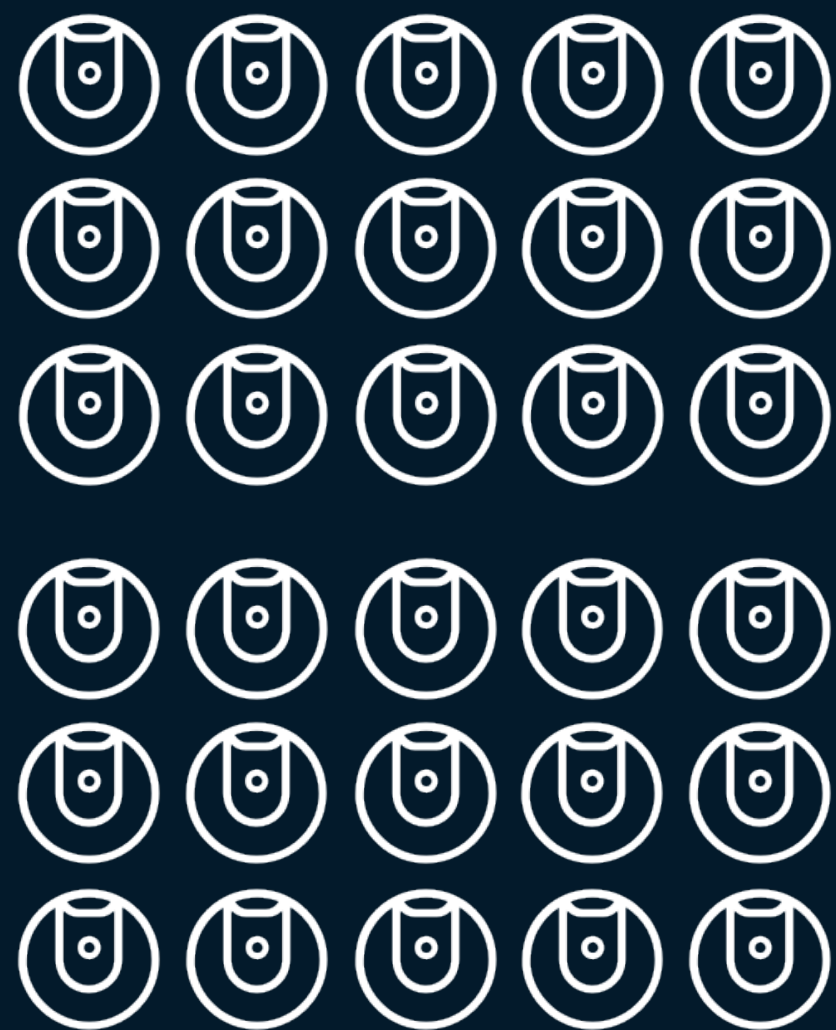


317.000 hotel rooms

Horwath HTL, European Chains & Hotels Report 2019



FieldBots bots, Bridges and Cloud



Bots

We support numerous prosumer devices, e.g. from iRobot and Xiaomi with suction stations.

Bridge

If a Cloud-to-Cloud connection is not possible or not desired for security reasons, Bridges can support bots' communication with the Cloud.

Cloud

The Cloud handles the exchange of data between the bots and the ecosystem. The data are processed uniformly and a Cloud-to-Cloud connection is maintained. For example, statistics can be viewed or commands sent to the bot.

Ecosystem


The ecosystem with web apps for smartphones, tablets and desktop computers allows for the swarms to be managed and maintained. The automatic supply of material and dashboards ensure FM-compatible operation.





Ecosystem


Swarm management

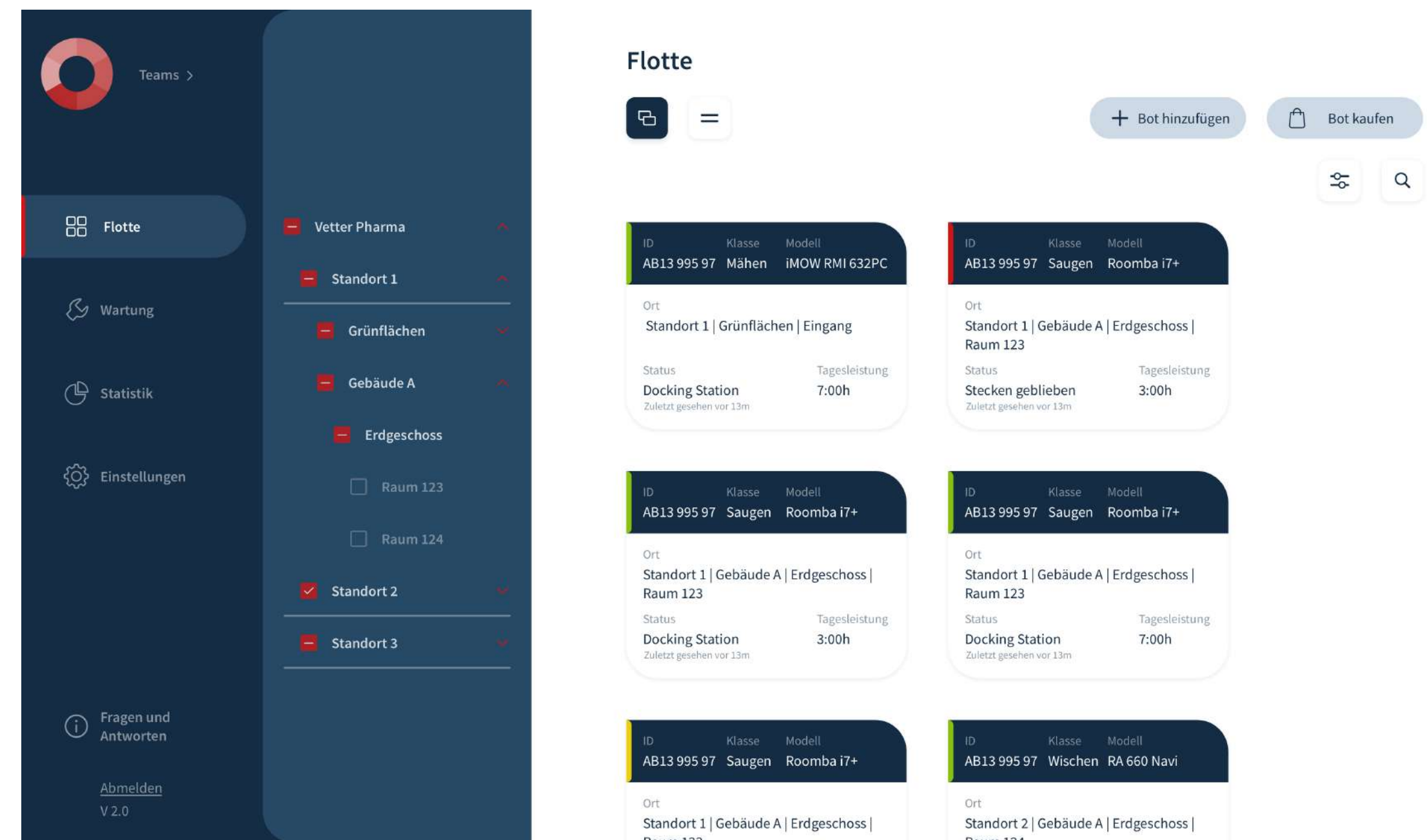
The FieldBots apps are your starting point for managing your robotics swarm fleet professionally. Even with hundreds or even thousands of robots, you, your employees and your service providers can keep track of your fleet, its whereabouts in the building and its operational readiness.

 **Central overview:** Permanent control over robots of all manufacturers and disciplines regardless of the size of their swarm

 **Room directory:** Room and location overview for localising the bots, even beyond office boundaries

 **Status information:** Daily performance of the respective bots and information on their operational readiness

 **Search and filter function:** Find robots quickly on the basis of ID, location or type.



The screenshot displays the FieldBots app interface, divided into two main sections: a left sidebar and a main content area.

Left Sidebar (Navigation):

- Teams >
- Flotte (selected)
- Wartung
- Statistik
- Einstellungen
- Fragen und Antworten
- Abmelden V 2.0

Main Content Area (Flotte):

Flotte

Buttons: + Bot hinzufügen, Bot kaufen

Search and filter icons: [Filter], [Search]


ID	Klasse	Modell	Ort	Status	Tagesleistung	Zuletzt gesehen vor
AB13 995 97	Mähen	iMOW RMI 632PC	Standort 1 Grünflächen Eingang	Docking Station	7:00h	Zuletzt gesehen vor 13m
AB13 995 97	Saugen	Roomba i7+	Standort 1 Gebäude A Erdgeschoss Raum 123	Stecken geblieben	3:00h	Zuletzt gesehen vor 13m
AB13 995 97	Saugen	Roomba i7+	Standort 1 Gebäude A Erdgeschoss Raum 123	Docking Station	3:00h	Zuletzt gesehen vor 13m
AB13 995 97	Saugen	Roomba i7+	Standort 1 Gebäude A Erdgeschoss Raum 123	Docking Station	7:00h	Zuletzt gesehen vor 13m
AB13 995 97	Wischen	RA 660 Nav1	Standort 2 Gebäude A Erdgeschoss Raum 124			




Ecosystem


Equipping from the shop

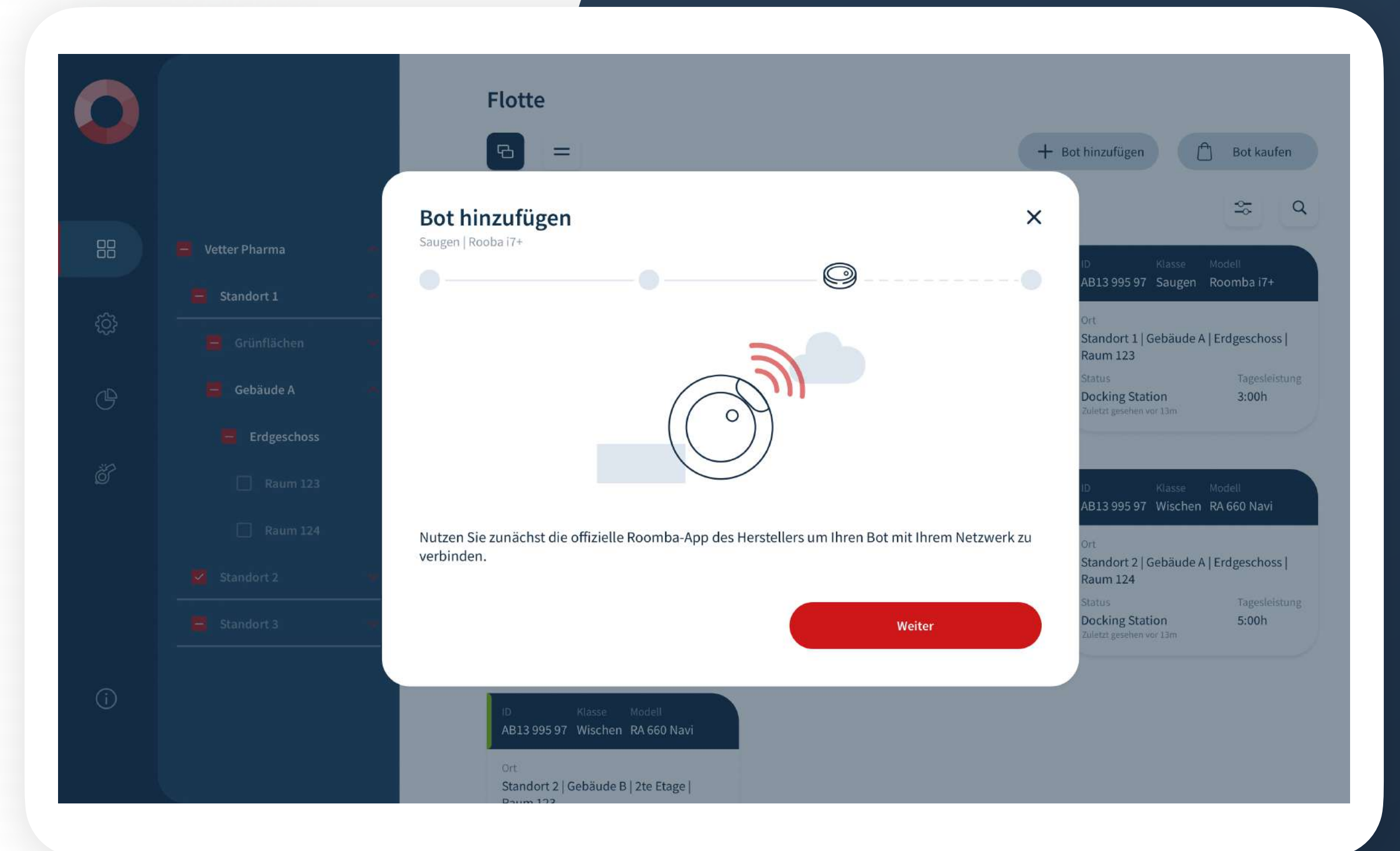
With FieldBots, you not only get access to the FieldBots Cloud and to controlling your robotics swarm, but also a way to expand your swarm easily and reliably. In doing so, FieldBots constantly keeps an eye on the development of new hardware for you.

 **Fleet expansion:** Purchase option for new bots that are immediately integrated into the swarm at the right location

 **Step-by-step processes:** Few clear steps to add a new device to your FieldBots swarm

 **Manufacturer independence:** Simple connection of bots from different manufacturers. Standardised view of the bots' status logics.

 **Observing the market:** With expansion of the overall fleet, FieldBots is closer than any other market participant to developing robotics for facility management






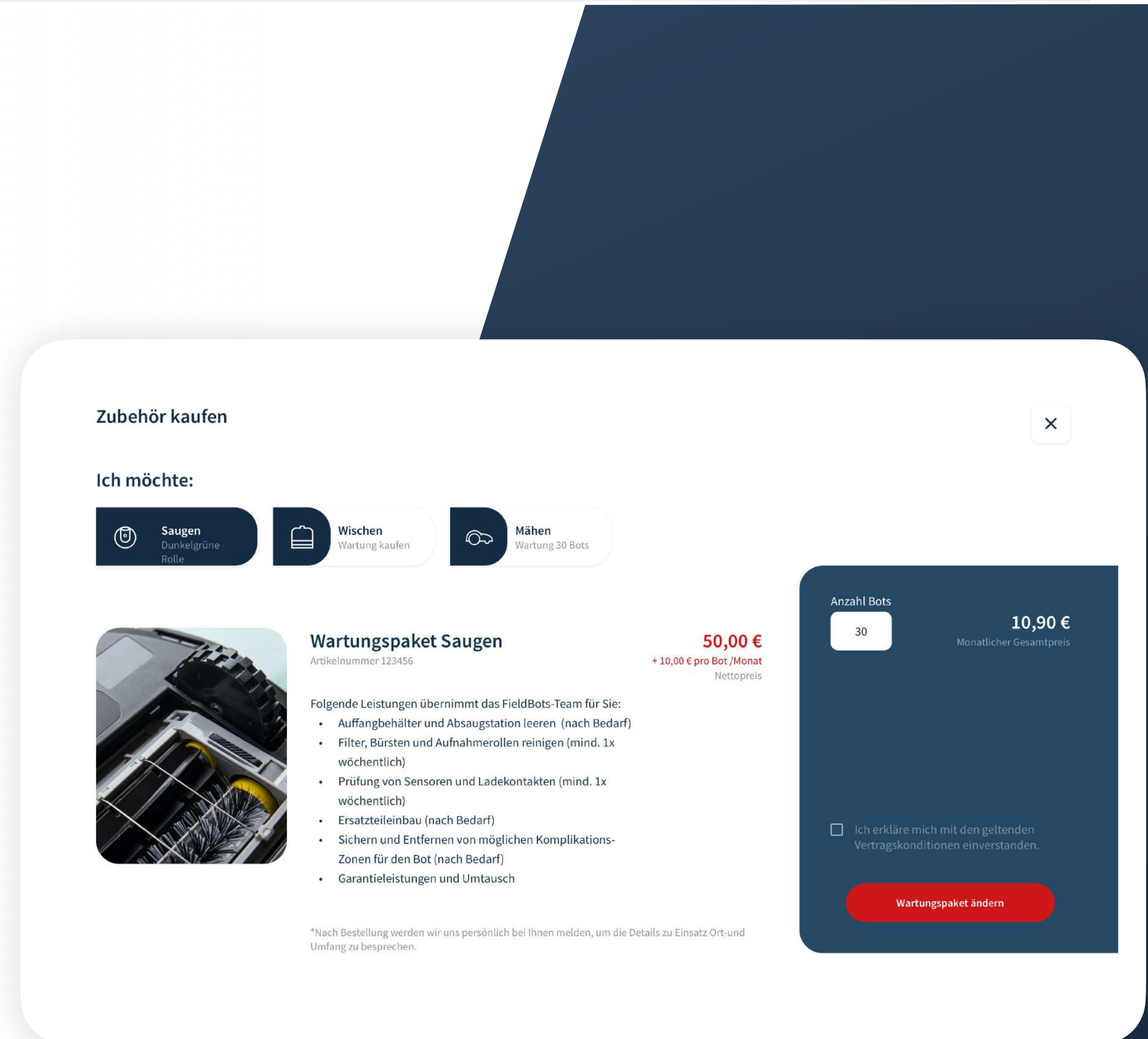
Ecosystem

Automatic dispatch of consumables and spare parts

With the FieldBots Cloud, you get a reliable supply of accessories, consumables and spare parts directly from the software.

 **Materials:** Automatic dispatch of consumables and wear materials based on usage statistics

 **Labelling with QR codes:** Upon request, bots and bases can be delivered with FieldBots' own QR codes for global identification



Zubehör kaufen

Ich möchte:

- Saugen**
Dunkelgrüne
Rolle
- Wischen**
Wartung kaufen
- Mähen**
Wartung 30 Bots

Wartungspaket Saugen
Artikelnummer 123456

50,00 €
+ 10,00 € pro Bot / Monat
Nettopreis

Folgende Leistungen übernimmt das FieldBots-Team für Sie:

- Auffangbehälter und Absaugstation leeren (nach Bedarf)
- Filter, Bürsten und Aufnahmerollen reinigen (mind. 1x wöchentlich)
- Prüfung von Sensoren und Ladekontakten (mind. 1x wöchentlich)
- Ersatzteileinbau (nach Bedarf)
- Sichern und Entfernen von möglichen Komplikationszonen für den Bot (nach Bedarf)
- Garantieleistungen und Umtausch

*Nach Bestellung werden wir uns persönlich bei Ihnen melden, um die Details zu Einsatz Ort- und Umfang zu besprechen.

Anzahl Bots:

10,90 €
Monatlicher Gesamtpreis

Ich erkläre mich mit den geltenden Vertragskonditionen einverstanden.

Wartungspaket ändern




Ecosystem

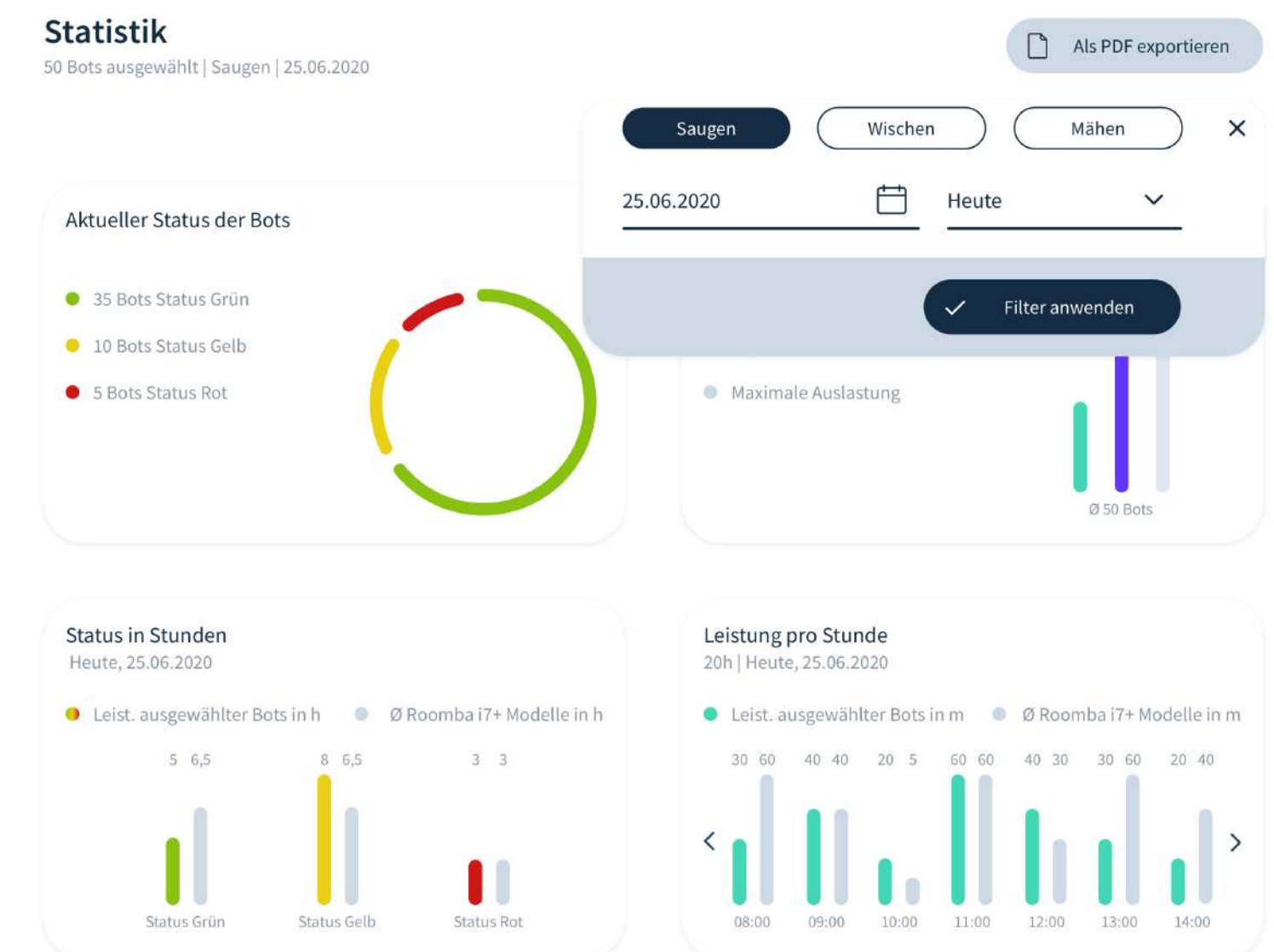
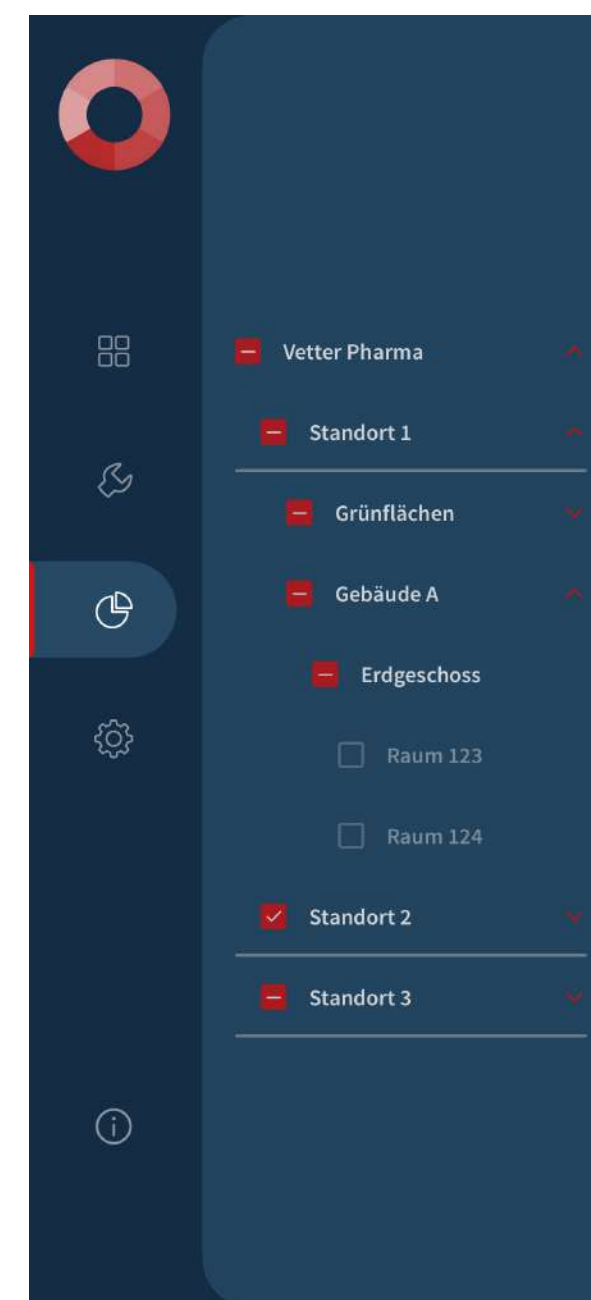
Analyses and maintenance overview

With the arrival of service robotics, it has never been easier to analyse the cleaning efficiency of your property portfolio on a global basis. In addition, you can see at a glance which bots currently need support at what location.

 **Proof of performance:** Aggregation and homogenisation of the performance data for comprehensive analysis

 **Exporting reports:** Downloading of reports as PDFs for service documentation and service provider discussions

 **Task overview:** Overview of maintenance tasks for internal or external service organisations





International references

Potential buyers

Office, Germany 

Office, Singapore 

Hotel industry, Poland 

Hotel industry, Hong Kong 

Product trials

Office, India 

Office, Switzerland 

Care institution, Norway 

Hotel industry, Japan 

Hotel industry, Switzerland 

Customers

Office, Germany 
Deployment of over 100 bots



The team behind FieldBots



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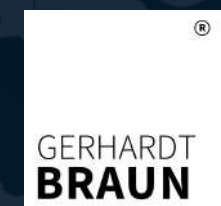


Fieldbots by Feil, Feil & Feil GmbH

90 employees in Stuttgart and in the Philippines

FieldBots isn't a startup but a robotics Cloud devised, financed and developed by Alexander and Philipp Feil. It is specially designed for facility management and integrates vacuum-cleaning, mopping, sweeping and mowing robots from different manufacturers. This is the only way of rolling out a holistic robotics concept in corporate real estate, care institutions, the hotel industry and green areas.

As early as 2016, Feil, Feil & Feil GmbH began implementing its first service robotics ecosystem on behalf of customers.



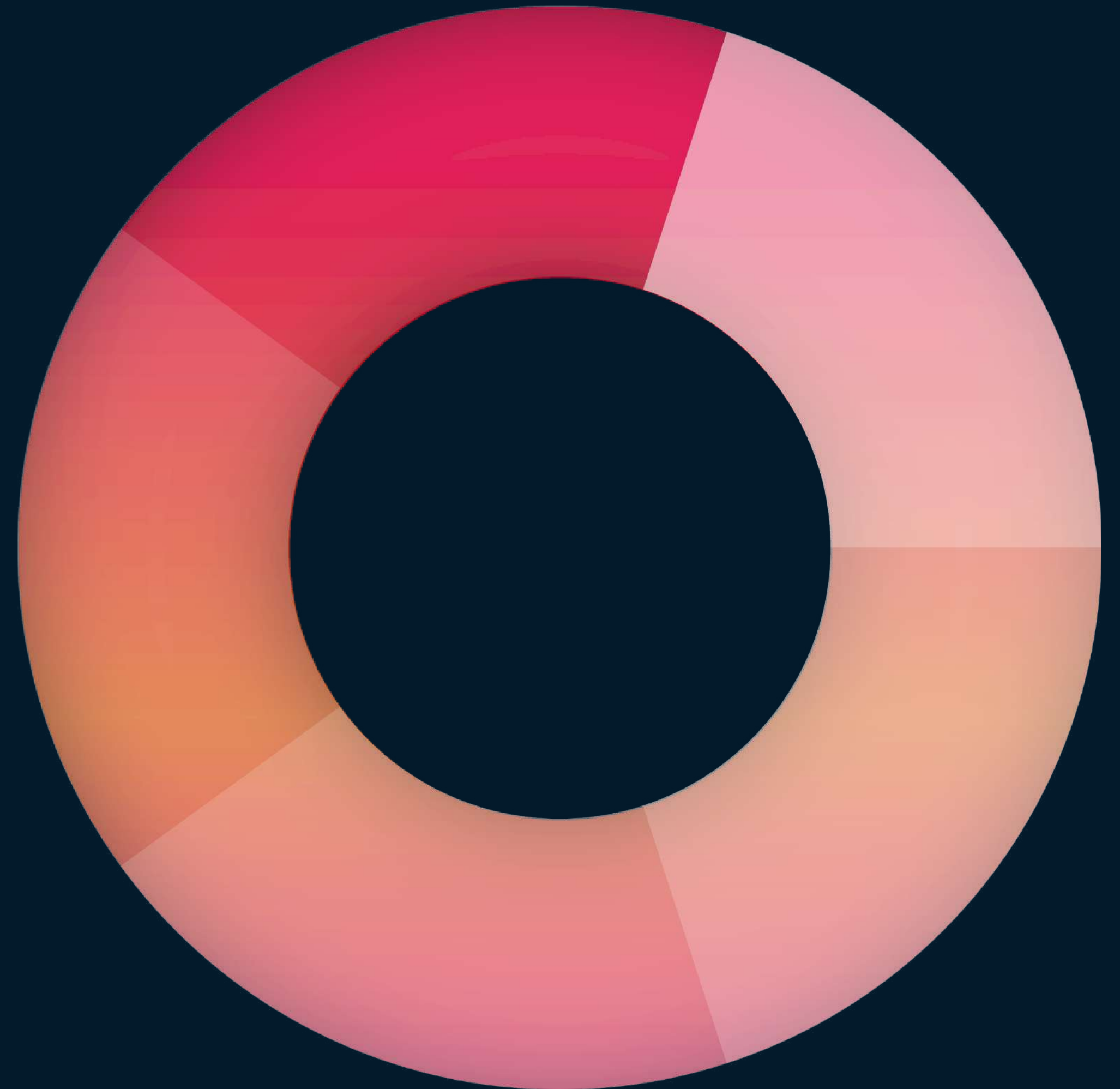


FieldPass GmbH

Cloud operating system for building operations

FieldPass GmbH has been developing and licensing the scalable Cloud operating system with the same name.

The FieldPass microservice infrastructure, which specialises in mapping building-vicinity services, has been developed over the past 10 years and has since been used in countless customer projects in the industry. FieldBots is also based on FieldPass.









Test Package

Take your next step now!

For a nominal fee of €1,000.00 you will receive between 1 to 3 carefully selected prosumer robots, if required a FieldBots Bridge for communication with the FieldBots Cloud, all necessary accessories and consumables, access to the FieldBots Cloud, information materials for your facility on site and our support.

After a maximum time of three months, simply send us back the test package – or use it for starting up a new FieldBots fleet. In this case, we will count the nominal fee for the test package towards the purchase of robots.

-  Viomi S9 with Intelligent dust collector
-  Bridge
-  FieldBots accounts
-  Technical support for installation

