# SWYCS

# Parnassia optimizes occupancy rate of care locations with IoT solution

## How to increase employee satisfaction and still save costs through efficient use of buildings

**Serge Mulders**
Real Estate Manager, Parnassia Group

**Grow occupancy rate from 40% to 70%**

**Real-time** Insight in the availability of the treatment rooms

**Employee**
Satisfaction has increased enormously

**PARNASSIA GROUP:** Mental Health Care, treating and guiding adults and the elderly at 600 locations, with a total of 180,000 clients for treatment and residential care centers.

**USE CASE:** Real-time monitoring of building and space occupancy, air climate control (temperature, humidity, and brightness), and energy management.

**CHALLENGE:** More insight into the use and occupancy of buildings and workplaces based on hard data, real-time, to improve the occupancy rate.

**SOLUTION:** Fully equip buildings with sensors for real-time monitoring of building and space occupancy from one central dashboard. Occupancy for management and users is visible on screens at the location. One central system - the Internet-of-Things platform SWYCS - linked to the IWMS system Planon.

**RESULTS:** More insight into the availability of treatment rooms, with more effective use of the locations. Parnassia purchased the SWYCS Internet-of-Things systems and has already earned back their entire investment costs. SWYCS is already saving Parnassia money but there is further to go. To obtain a cost-neutral space, the occupancy rate of the building needs to reach 70%. SWYCS is helping them to reach this goal. Employee satisfaction has increased enormously and resident resistance to implementing changes in building usage has disappeared.

## PARNASSIA GROUP | Property management

The Parnassia Group, rooted in The Hague, is a major provider of mental health care in the Netherlands. With the treatment of adults and the elderly in more than 600 of our locations, with a total of 180,000 clients and with residential care facilities for 700 residents, it goes without saying that this is a significant facility challenge. After all, housing facilities have a major impact on the social well-being of residents.

The proper organization of all facilities is also of great importance for health care workers to be able to provide good care. This is what makes the work so interesting for Serge Mulders. Mulders is a real estate manager at Parnassia and has worked in the healthcare psychiatric sector throughout his career.

At Parnassia, organizational management has opted to outsource the hard services for building design and maintenance as much as possible. As a result, Mulders focuses mainly on the facilities on the healthcare side and on the use of innovation to provide maximum support for healthcare. SWYCS' Internet-of-Things provides a significant innovation that helps overcome challenges within the healthcare sector.

## THE CHALLENGE | A great shortage of workplaces and yet vacant?!

The financial pressure in mental healthcare is high. This situation has existed for quite some time. It is important to organize the facilities properly, but also efficiently. This entails the necessary challenges, says Serge Mulders.

One of those challenges was the increasing number of complaints about lack of space at the locations. "Many of our healthcare employees feel that there is not enough space at the locations. On the other hand, we experience a lot of vacancies", he explains. "Tuesdays and Thursdays are always busy days. We know that. Then you don't always have an overview of the entire location." Many employees wondered why everything had to be done more efficiently.

### "Many of our healthcare employees feel that there is nowhere enough space at the locations. On the other hand, we experience a lot of vacancies."

Still, the facility organization was convinced that there were sufficient places available at the locations. There were even significant vacancies. The perception was therefore quite divergent, with far-reaching consequences. Mulders: "Too little space also means: not hiring staff. After all, there is no place in the buildings to treat more clients. For example, the waiting lists grew, while we were unable to provide hard figures to show that a lot of space was empty."

Every effort was made to map this out properly: from walking physical rounds to connecting computers. A room would be occupied when the computer was on. The practice turned out to be unruly: computers were on, but there was no one in the room. As a result, the demand for more space remained.

The need had to be clearer. As the American business administrator John Kotter stated in the first step of his 8 step change model: "If people don't feel that something needs to change, they won't want to change."

### "If people don't feel that something needs to change, they won't want to change either."

## THE SOLUTION | Real-time insight into the availability of spaces for users

A system was needed that could clearly show which rooms of a building were occupied and which rooms were vacant in real-time. Users in the building had to receive immediate feedback where space was available.

The solution was found in sensor data. A building was fully equipped with sensors to be able to monitor both building and workplace occupancy at any time of the day. That information can then be read centrally, in one dashboard. "Think of screens in the hall of the location," explains Mulders. "Employees could then see what was empty at the location throughout the day."

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This step turned out to be the bull's eye. There were even doubts as to whether the sensors were working properly. Rooms, which were occupied according to the timetable, turned out to be empty for a long time in practice! Real-time monitoring of occupancy was exactly what the facility organization had been looking for. It turned out to be the way to facilitate space for all employees. At the same time, a more efficient location design could be implemented.

## Resistance

However, the use of sensor data did not come about without a struggle, Serge explains. "From now on, nobody had their own room anymore. Previously, care workers already had their own rooms for a few working days a week which were decorated with personal plants, picture frames, and even furniture. Now you entered a building, and you just had to sit somewhere. That raised a lot of resistance.

We took a few steps back as we started to wonder how we could involve people in this. We wanted to make them aware of the current occupancies. The hall's screens gave employees a view of the vacancies and available spaces. This made it easier for them to find a workplace. Compare it with the parking garages at IKEA, where available spaces are indicated. People like that very much."

It also told them what a room cost on an annual basis: 10,000 euros. This was easy to explain to care providers who are responsible for their own budget and turnover target. "The more pressure on the finances, the more turnover they have to generate," says Serge simply. "With an occupancy rate of 40 percent, the vacancy rate was soon at 100 rooms! That works out to one million euros, or so, for one location. Every cent that is spent on the front end must be recouped by the emergency services. "

**"In this way, we finally had a comprehensive, factual system, in which there was a direct view of where space was and where there was not."**
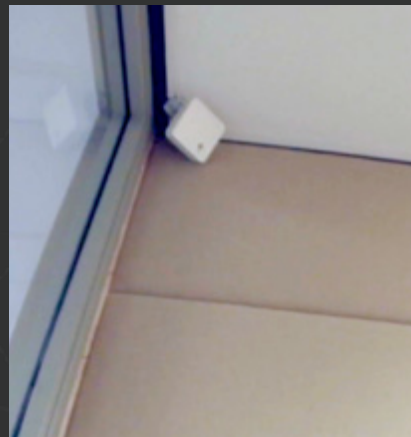
After first implementing a pilot location, the sensor solution has been rolled out across five other locations. The need was clear. At the location's management dashboards, the occupancy is displayed and linked into the system that tracks absenteeism and waiting lists. "In this way, we finally had a comprehensive, factual system, in which there was a direct view of where space was and where there was not," he says with relief.

## POINTS FOR ATTENTION | In search for the solution

It was very important for facilities that the sensors did not have to be connected to the electrical network. By opting for the SWYCS sensor solution, these could be placed anywhere, without being connected to the main circuits. In this way, we made huge savings in implementation costs. A nice extra is that the in-house maintenance team can replace sensors.

The sensors can also do more than just turn on and off. "For example, they measure the temperature in a room. We can read the ten hottest rooms in the dashboard and see why it is so hot there. This could be due to a broken sunblind or because the installation system is switched off. With the same view, we also look at the least used rooms and try to clarify why they are so rarely used. We can read in much more information: from temperature and $CO_2$ to light intensity", says Mulders. Not an unnecessary luxury, with 600 locations in the country.
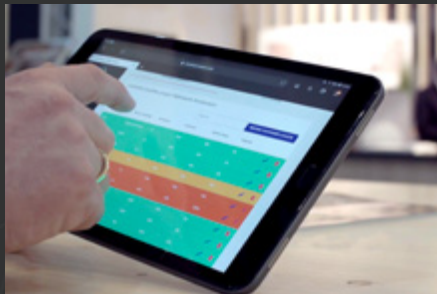


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## THE RESULTS | Towards a cost-effective real estate solution with satisfied users

Serge Mulders is pleased with the results. "Our care colleagues have been given a handle as a result. They can now look at the dashboard themselves and plan when they can best be present at the location".

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## Spread of occupation

This also allows us to tackle large peaks and troughs at locations. Tuesday and Thursday were always busy, but we are now trying to level that out. Aid workers work partly on location and partly from home." The latter appears to be possible, according to a survey conducted. By offering more space to work remotely, the optimal - cost-neutral - occupancy rate comes within reach and significant steps are therefore being taken.

## Optimal occupancy is cost neutral

Facilities can now respond more quickly to occupancy rate fluctuations. With an occupancy rate of 70 percent, the use of space is out of the cost. That is also the most realistic aim. "With an occupancy rate of 80 percent, we have to rent extra space to be able to accommodate everyone properly", explains Mulders. "When we have a view of a significantly lower occupancy rate, we can dispose of buildings, when contracts expire or opt for subletting to relevant parties, such as social partners."

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"We are not actively involved in subletting. We only use this option for a certain amount of rooms or, for example, an entire floor. The SWYCS IoT platform then makes it perfectly possible to realistically visualize and calculate costs incurred up to 100 percent. "

**"In this way, we can gradually grow our occupancy rate from 40 to 70 percent of our 300,000 square meter portfolio in three years."**

### The business case is made in no time

As far as Serge Mulders is concerned, the biggest gain is that employee resistance to the change in the use of rooms has disappeared: "In this way, we can gradually grow our occupancy rate from 40 to 70 percent of our 300,000 square meter portfolio in three years. Reality shows how easy it is to save. Then you are quickly talking about tons per year for one location. In a healthcare institution of some size, such as us, it quickly becomes interesting. But it is also worthwhile for locations of limited size. If we manage to save a few rooms, the system will pay for itself within a year. All doubts about this space tracking solution have therefore disappeared."

## THE NEXT STEPS | More new applications

Mulders sees that sensors have laid the basis for new innovations. This includes, for example, tackling the CO2 content at the Parnassia locations.

"Air quality has thus become an extra theme. But we have linked many more things together. For example, fewer floors open on quiet days."



We also want to link the intensity of the cleaning to the use of the space. By using the sensors, a cleaner knows when a trash can needs to be emptied. The cleaning rounds of the toilets are also linked to the use. This way we can now combine things more easily. Also, consider fire closing rounds. We now make about ten to twelve thousand a year. The security guard checks the building and closes the door. This is now possible remotely. We can see at the location whether it is empty. Even with an intruder, you can see exactly where they are. We will certainly use these kinds of applications in the future. "

## LINK WITH FMIS

In summary, Mulders can only say that he is happy that Parnassia has taken these steps.

"For us, it is not the question of whether you should do this. We cannot close our eyes to innovation. This is what comes to us and then the question is how you deal with it. It is practice and we want to intelligently find our way. It is very important to find the right partner. We were looking for a sensor solution that matched an FMIS system. We found it with SWYCS and that's great. Now we can link things together. It is extra nice that you find a software company that can translate to a healthcare organization. Communication is very important here. SWYCS is very flexible and maneuverable. They think along with you, handle things quickly and before you know it, it will be on your dashboard. That works very well."

## "We were looking for a sensor solution that matched an FMIS system. We found it with SWYCS and that's great."

What tips would he give a fellow healthcare organization: "Start simple! Start with the most basic and make sure it works. Once the base is in place and properly set up, you can continue to build on it."



## "For us, it is not the question of whether you should do this. Still, the most important tip is: start simple! Start with the most basic. Once the base is in place, you can continue to build on it."

Would you like to see Internet-of-Things in action and learn how SWYCS could support your healthcare facilities? If so, book a free 30 or 60 minute demo of IoT-platform SWYCS.

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