

## Client

At NTT DATA we are committed to looking for new ways to improve our own way of working and also, how we serve our clients. Settling for the status quo would only undermine our ability to work as a team to deliver the future of society.

Back in 2018 we celebrated our 30th anniversary and marked the year NTT DATA was created by Japanese information technology service and consulting company NTT. Today, NTT DATA alone has over 150.000 employees working across over 50 countries.

**NTT Data** 

Adding value through digital transformation is part of our DNA. Recently, we have taken a step forward with our Zero Trust Security Service, a global initiative that helps organizations tailor their working environment to the flexible working style of the "new normal" and ensures a high level of security across in-office and at-home devices.

Our focus on helping organizations navigate the current business environment is also seen in our move to join the Green Software Foundation as a Steering Member, the first company in Asia to do so. It supports our goal to achieve carbon neutrality by 2050.

Delivering the workplace of the future considering the changes in how we work and the need to be environmentally conscious, were major motivators in our decision to integrate Habität, an advanced solution developed in-house.



# The Challenge

To create a workspace that meets the needs of employees and their current work preferences, is easily adaptable for future developments and is a cost-effective asset to the business, **is challenging but necessary for any industry leading business.** What constitutes a fit-for-purpose, sustainable and cost-reductive office space has changed significantly in the past few years.

The predictability of assigned desks on a 9-5 Monday to Friday schedule had disappeared due to remote working. So as assigned desks became inefficient for most employees, the task arose to manage communal areas with a hybrid workforce.

While challenging, these changes also presented us with an opportunity to search for ways to make the most of our spaces in the most efficient and sustainable way. The traditional approach to office management relies on manual monitoring and reporting which is timely, costly and vulnerable to human error. The identification of issues and application of solutions are inherently slow. As a result, we instead decided to implement Habität in our Madrid offices back in October of 2021.

The goal was to provide enough working areas to service employees who were in the office while not wasting space and energy on unused work areas. Available desks needed to be easily accessible by staff while managing environmental factors such as air conditioning, lighting, at the time of implementation, safety by maintaining social distancing rules and other COVID19 restrictions. **All this needed to be achieved in an energy and cost-efficient manner**.

## The Solution

The solution was to create a data-driven workplace by implementing the working ecosystem of the future. The first step was to install an IoT neural network with sensors to monitor occupancy in key areas. We implemented movement sensors on ceilings to monitor rooms and under desks to monitor stalls, determining whether a place is occupied or not. This information was then fed into a central dashboard used by office management that reported on many factors such as whether lighting and air conditioning needed to be switched on because the space was temporarily empty.

From the company's point of view, the occupancy reporting of each work area gave insights into which areas needed expansion, transformation or elimination altogether, ensuring every working space was used to its full potential. The data collected was also used by employees who wanted to manage bookings. They could use a platform integrated with Office 365 to reserve rooms or desks, elevating the employee experience.

Additionally, the sensors were used to manage capacity in line with COVID19 policies. Processing real time data meant that over-capacity set off an alert and the issue could be dealt with straight away.

As a result, in our first year of usage we have been able to recover our full investment due to the effective optimization of our offices. We have closed unused spaces to avoid waste, from closing certain spaces during vacation periods to shutting down plants that weren't needed.

Furthermore, optimization has cut costs in environmental management such as air conditioning. When our employees weren't using spaces, we sublet them to maximize the use and cost-effectiveness of our workplace. Such advanced monitoring has allowed us to make data-driven decisions for optimal property management, reducing structural cost and energy wastage.





## **Benefits**

Here are some of the main ones:

#### Advanced customization

Habität is designed to be adapted to optimize the various workplaces businesses in their operation. As it is a modular system, users can decide which modules they implement and which are unnecessary for their way of working. The modules include site monitoring, occupancy, booking and a module for environmental monitoring including temperature, humidity and Co2. Therefore, if a workplace doesn't have any common areas for hot desking or meetings, the occupancy and booking modules aren't needed and won't be included in their Habitat implementation.

We have reported many benefits to using Habität for workplace optimization.

### Improves employee experience

Employee satisfaction is more important than ever due during this new era in how we work. Now more than ever, people expect more from employers, especially if they are required to come into the office. Elevating the work environment is essential to keeping employees happy. Implementing common areas and innovative practices like hot desking is one way to achieve that if the transition to the new way of working is made easy for employees to utilize through an online booking system as Habität provides.

### Leverages automation

Previously, monitoring occupation, environment and other workplace factors involved time-consuming manual checking. Habität takes human labor out of the equation and provides an automatic picture of the workplace through advanced sensors, cameras and reporting systems with integrations to key company tools like Office 365. This makes monitoring even detailed factors like temperature convenient instead of adding to the property manager's workload.

#### Environmental impact

Environmental considerations are a priority for all businesses, not only as an expectation of consumers but partners in the supply chain. Reducing energy consumption through advanced optimization using a cloud-based system is an achievable way to make an immediate difference to the environmental impact of a company.

Habität does more than optimize the workplace. It elevates employee satisfaction, environmental efforts and efficient processing. And other benefits of this tool are still being developed.

The potential for Habität to develop further applications is endless as supportive technologies like data analysis, IoT, machine learning and artificial intelligence progress.



# **Next steps**

With data collection, comes data analysis which has massive potential to advance the optimization capabilities of Habität. By measuring all the collected data, we can develop a **predictive model**. With a vision of the future, a prescriptive analysis can be conducted to generate advice on the future use of resources based on real-time data for a specific workplace. This transforms property management from reactive to proactive so optimization can be implemented in advance and waste can be avoided altogether.

The environmental application can also be developed further. Habität can be advanced to measure the carbon footprint of companies, driving them to be more sustainable through an accurate picture of current environmental impact. Furthermore, it can be programmed to apply carbon footprint reducing policies and measure the success of such changes for active management of environmental impact.

For more information

To find out more about how NTT DATA can help your organization: Contact your NTT DATA representative, send us an email to: IoT\_habitat\_comercial@nttdata.com, or visit: https://nttdata.com

