

## Transforming Places & Destinations into Exceptional Experiences

Smart Places Technology in Practice

Monstarlab ::

From Smart Building, to Smart Infrastructure to Smart Cities, Smart Places are growing in importance, using innovative communications and the Internet of Things (IoT) technology to improve people's everyday lives. From construction companies to building management companies to local governments, all those involved in developing Smart Places have the opportunity to use the latest technologies to provide a greater quality of life for their customers. We want your customers to enjoy experiencing the spaces that you create for them.

Monstarlab has significant experience and expertise in creating Smart Places which are a joy to live, work and visit. We understand that building them is challenging and complex. However, our global experts have successfully created innovative solutions with prominent clients that address some of the key challenges in society which include inclusivity and accessibility, sustainability and technological agility.



# 1. Inclusivity and Accessibility

Inclusivity and accessibility are key requirements when developing smart places to ensure the place where we live, work and visit can be accessed by every member of society.

## Supporting the Ageing Population

Population ageing is a global phenomenon. In the UK, we currently have over 12 million people aged 65+ and this statistic is rising. This creates challenges of how the existing places where we live, work and visit can continue to provide a quality experience for older citizens.

#### Case: Remote Monitoring for Seniors Living on their Own

Japan is just one country with a densely populated number of senior citizens who desire to continue living independently.

Working with Hitachi Global Life Solutions, Inc. Monstarlab developed Doshiteru—a remote monitoring service for unaccompanied seniors. They approached us after they discovered there was a need for a monitoring system for seniors living independently after conducting user research to see how they could enhance their living experience.

Activity sensors were installed in the home of the resident which can detect human presence and activity level. Family members can then remotely monitor activity in real-time via the dedicated mobile application. The app detects high and low activity levels with high level activity displayed as a walking avatar. In the case of low level activity, like sitting while watching tv, a sitting avatar is shown indicating motionlessness.







## Safe Access to Shared Spaces

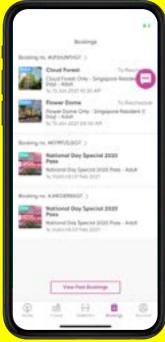
Freedom of movement and access to visitor attractions is hugely beneficial for both physical and mental health. With the world reopening after the pandemic, the promotion of safe mobility became a priority.

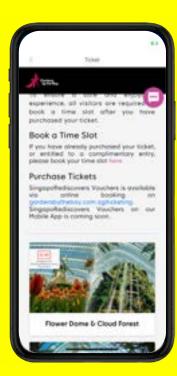
#### Case: Reimagining Visitor Experience in a Contactless World

As Singapore was preparing to come out of lockdown in 2021, Monstarlab worked with its biggest tourist attraction, Gardens by the Bay. The partnership aimed to provide a seamless, digital visitor experience to reduce physical human interaction and keep visitors safe during their visit.

Combining augmented reality wayfinding with contactless ticket purchasing, shopping and on-site parking, we built a customer focussed, native mobile app that inspires confidence in visitors.







## 2. Sustainability

Sustainability is a global challenge. The responsibility of resource management falls on the shoulders of large organisations down to the individual. Using technology can support society to become more sustainable.

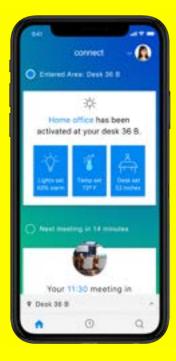
### Maximizing Existing Facilities

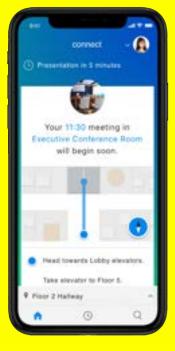
Upgrading or digitising facilities allows developers and property owners to reinvigorate existing infrastructure. This also reduces costs and increases efficiency of resources.

#### **Case: Upgrading Existing Elevators System**

Monstarlab conducted extensive research into smart office solutions and an Internet of Things (IoT) ecosystem to develop the office buildings of the future. We partnered with the world's largest and oldest elevator company, Otis, to create the eCall IoT platform.

Our team created mobile SDKs, robust APIs and comprehensive developer documentation so that third parties can seamlessly integrate the eCall platform into their own digital ecosystem. The platform now integrates with over 2 million elevators around the world. As smart offices surge in popularity, eCall offers a more sophisticated and economical elevator control and management system.







"The service technology we're developing challenges the industry status quo. Our approach is creating a global-digital ecosystem to provide the customer with more information and improved uptime."

Tony Black, President Otis Services

## Monitoring Personal Resource Consumption

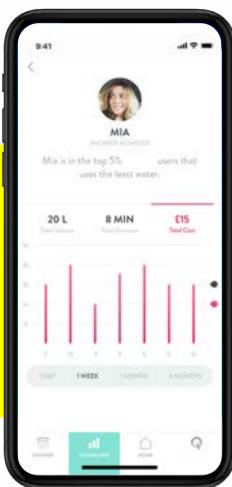
To become more sustainable, individuals need to take responsibility for their own actions. We need to ensure we are being efficient with our resources, incousing water consumption.

#### **Case: Monitoring and Controlling Smart Showers**

Monstarlab partnered with a leading shower manufacturing brand to create a smart shower and accompanying mobile apps that allows customers to monitor and control their shower experience. Monstarlab built a platform designed to scale, capable of handling millions of requests and be flexible enough to support multiple smart home vendors and integrations.

With the smart shower, customers have a seamless, personalised experience. They are able to benefit from self-diagnostics, saved shower programmes, and have complete control and insight into their water consumption to get the optimal shower experience every single time.





# 3. Technological Agility

The ability to quickly pivot during critical times should be part of your business' DNA. Setting up your tech infrastructure in a way that allows flexibility and adaptability is essential to stay ahead of your competitors.

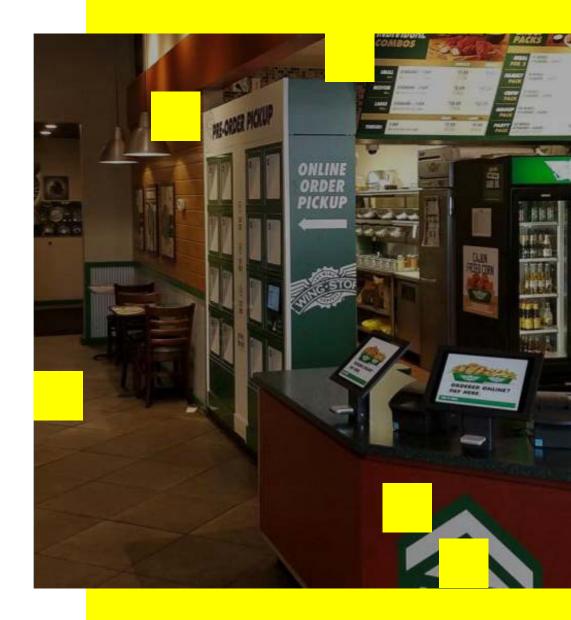
## Redefining Value of Physical Spaces

Restaurants and food vendors will continue to use their physical spaces as a centrepiece for customer experience. But, consumers now expect a blend of digital and physical ways to interact with spaces, while still receiving a seamless service.

#### Case: Convenient Self-Service End-to-End Experience

Wingstop, a forward-thinking American chain of restaurants, approached Monstarlab to maximise their physical spaces by using them as food pick-up venues. We created a contactless end-to-end solution which could be accessed on mobile apps and included a scalable backend.

Even before the pandemic hit, the chain launched a pilot where customers placed orders in advance via a mobile app, paid at the venues, and then picked up their order from special lockers. This allowed for safer, more efficient customer transactions while making full use of their venues as fully functioning hybrid logistic hubs.



## Recalibrating Amenities of Physical Spaces

Businesses that rely heavily on the use of physical venues to provide on-premise services need to offer frictionless customer experiences.

#### Case: A Self-Service Gym and Retail Experience

Monstarlab worked with a leading value gym chain with 80 locations across the US. With ambitious expansion plans that required a 'Front Porch' solution which offered members an easier check in process.

We partnered with their product and experience teams to understand their challenges and requirements of their customers and employees. This resulted in the creation of an innovative ecosystem, based on their existing architecture which was accessible across web and mobile devices. Gym members were empowered to be more self-sufficient which allowed employees to spend more time with members.



# We can do awesome things together.

Whether developing a city from scratch, upgrading your existing infrastructure or recalibrating your technologies, we can work with you to create extraordinary experiences that delight customers and offer an enhanced quality of life in the places where we live, work and visit.

Read more about our experts' thoughts on Smart Places here.



#### Get in touch with us









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### About Monstarlab

Monstarlab is a digital experience partner focused on accelerating growth for ambitious clients. We achieve this through our human-centred design, engineering expertise, and open partnership approach.

Across 31 offices, our global network of 1300 strategists, designers, and engineers work at pace to make sure your investment makes a meaningful impact. Specialising in end-to-end enterprise-level digital solutions, the company has successfully delivered hundreds of projects, including for world-renowned corporations such as Alibaba Group, PwC, and The Met.

