RAJANT

sDesk

A cutting edge IoT application for a flexible usage of workspace, better comfort and lower operational costs

sDesk is an IoT application for Activity Based Working, that enables a higher efficiency usage of workplace resources, while boosting performance and adding degrees of freedom to the evolution of the environment, as workforce needs and company policies change.

Benefits

FLEXIBILITY

Booking status display
Get immediate visual information of each meeting room, open space, common area or workstation status (available, usable, booked) associating with them sQuare sensors equipped with visual interface.

Lower operational costs
Get real-time information about the actual usage of every area and send prompt messages to cleaning and maintenance teams, requesting interventions only when and where necessary.

Dynamic & optimized space-usage
Use any on-site wireless sensor and external events information (e.g., weather, calendar) to provide real-time visual information and allow a true dynamic assignation of workspace.

No integration effort
Use sQuare family devices to wirelessly authorize accesses, open doors, turn on/off electrical equipment and manage information transmitted by any other BLE device in the area.

COMFORT & SAFETY

Improved Quality of Living
Collect and analyze environmental data such as temperature, humidity, air quality, etc and signal with notifications and visual feedback if the climate is not in the pre-set range.

Better comfort
Allow workers to choose the space that best supports their activity considering, for example, the proximity to physical resources or the best environmental conditions to boost comfort and efficiency.

Safety and Security
Wirelessly manage restricted areas and get automatic notifications when unauthorized people enter dangerous areas or rooms where sensitive data is stored.

Risk Mitigation
Monitor workers safety, check environmental parameters and air quality, keep under control excessive crowding in complete respect of pre-set corporate policy rules.

EASY AND CENTRALIZED CONTROL

Advanced reporting
Receive aggregate data on environmental parameters, space usage, accesses, and various other surveys based on the needs of efficiency and effectiveness

Advanced monitoring and maintenance
Keep devices monitored through the platform, control them remotely and prompt-fix faults to mitigate risks.

One platform, many applications
Balance between desk and meeting room availability and resource consumption, boosting sustainability and lowering costs.

Enhanced data collection
Use sensor fusion to combine data, get sophisticated information from the environment and integrate local and external events.
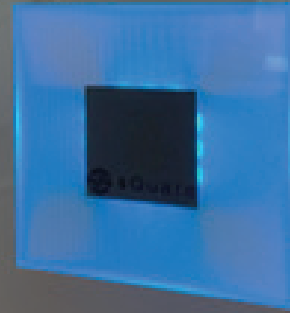
Fields of application

- Co-Working Spaces
- Commercial & Retail
- Public Sector & Smart Cities
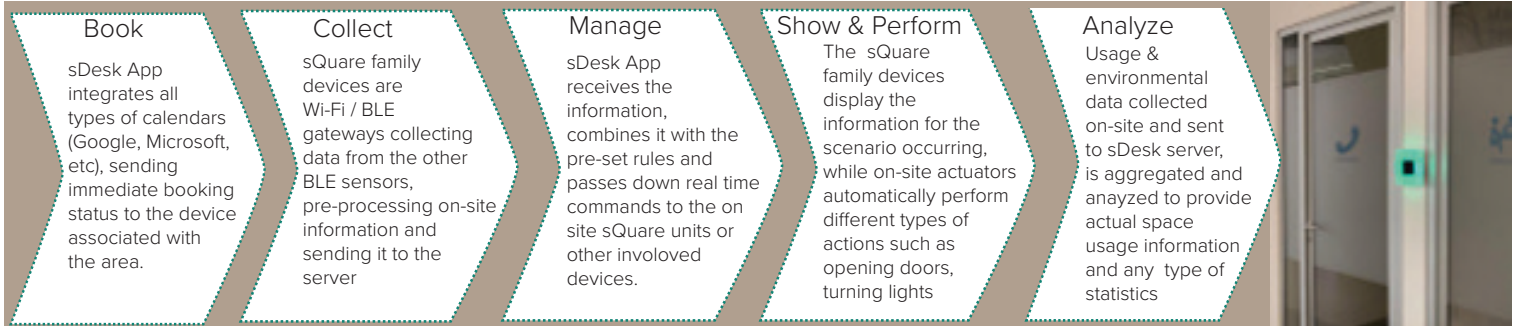- Business Centers
- Culture & Entertainment

sDesk at work

sQuare sensors are wall, ceiling or desk devices that can be associated with any desk, meeting room or area to enable IoT features, and allow a flexible management of meeting rooms and desks. Equipped with LED visual interface, it adjusts its color depending on the area's status, thus providing sensorial feedback showing, for example, if a desk or an area is available or booked, if there are environmental anomalies or other pre-set information.

sDesk in Details

Communication technology and dynamics

Book
sDesk App integrates all types of calendars (Google, Microsoft, etc), sending immediate booking status to the device associated with the area.

Collect
sQuare family devices are Wi-Fi / BLE gateways collecting data from the other BLE sensors, pre-processing on-site information and sending it to the server

Manage
sDesk App receives the information, combines it with the pre-set rules and passes down real time commands to the on site sQuare units or other involoved devices.

Show & Perform
The sQuare family devices display the information for the scenario occurring, while on-site actuators automatically perform different types of actions such as opening doors, turning lights

Analyze
Usage & environmental data collected on-site and sent to sDesk server, is aggregated and anayzed to provide actual space usage information and any type of statistics

Devices and sensors

ED Server
Device that configures, manages and monitors all system devices. Connected via LAN, it stores MySQL database, MQTT broker and the virtualization protocol.

Environmental Sensors
Wireless devices that detect the level of luminosity, people presence and passage, air quality, temperature, humidity and any other parameter. All type of environmental sensors are Ultra-Low-Power and use BLE protocol to communicate with the platform.
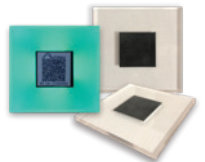
Actuators
Wi-Fi/BLE actuators perform the actions required by the system, tacking action when and where necessary (e.g. opening shutters in a room before a booked meeting, switching on/off HVAC depending on a meeting attendance, etc)

sQuare® - The emotional IoT Assistant
Wall or ceiling mounted Wi-Fi / BLE gateways that can be associated to any area to enable IoT features.
Equipped with LED visual interface, these devices provide a sensorial feedback showing each area's status, for example, if a meeting room or an area is available, if there are environmental anomalies such as high or low temperature or any other pre-set information.
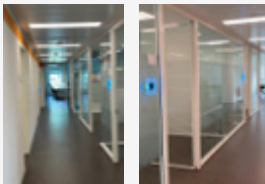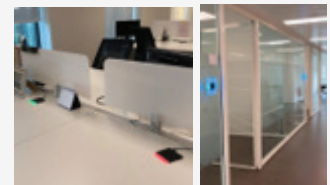
sQuareDesk®
Specifically designed to be placed on desks, tables or other flat supports, these sensors provide the same functions & sensorial feedback as sQuare Emotional IoT Assistant.

Use Case

sDesk for the Executive floors of a Global Service Provider

A leading innovative global service provider in Customer Management, with 30 years' experience, requested a system to facilitate the introduction of an activity-based working for their two executive floors, with the aim to give immediate feedback of desks and meeting rooms status, control office space costs, monitor environmental parameters and better understand the real usage of each area.

Rajant's Reios delivered IoT devices and a platform that allowed to:
- Have immediate visual feedback on available/ not available meeting rooms and desks
- Manage access control of restricted areas (with real-time alarms in case of violations) and elevators
- Monitor environmental parameters
- Integrate meeting rooms and desks reservation apps in sDesk platform
- Get weekly reports on meeting rooms / desks actual usage vs bookings
- Collect and deliver raw data while enabling activity-based working procedures