



### Intro

With the fourth industrial revolution upon us, the rate at which technology develops seems to know no bounds.

For the cleaning industry, the speed and ubiquity of change is profound. Cleaning providers must be capable of continuously dealing with today's most pressing challenges: low profit margins, high staff turnover and absenteeism, frequent customer churn, and rapidly changing workplaces.

How can we take advantage of emerging technologies solutions to solve following challenges?

- Drive operational efficiency
- Enhance user experience and quality of service
- Boost cleaning staff engagement
- Reduce the environment impact of cleaning service

**“Cleaning service should drive the engagement and well-being of people – including employees, passengers or patients – by creating outstanding workplaces and great service moments”**





### Potential use cases

#### Data-driven cleaning

We would like to create new value through data-driven cleaning. Data-driven cleaning is one concrete example of the value that the IoT and advanced connectivity can create in the cleaning industry. By letting sensors throughout facilities collect data about visitor numbers, cleaning needs, and user experience in real time, service providers are empowered to improve their cleaning operations.

As static cleaning schedules are transformed into need-based work, the workforce can focus their time and attention on what is needed, where and when it is needed. Unnecessary tasks are eliminated, and cleaning resources can be optimized, with managers being able to feel safe that no over- or under-cleaning takes place.

#### Robots and automation

We would like to take advantage of advent of robots and automation. Robots and automation allow the cleaning industry to augment the workforce to drive productivity and performance. In many industries, automation has already proven itself as a way to go further with existing resources, collect and deliver performance data, standardize mundane and routine tasks, create better jobs, and improve the lives of employees. With robots and automation, tomorrow's cleaning industry will be able to automate manual, redundant work, freeing up staff to take on the more high-value work.

