













Patrick Abel

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CLEANING ROBOTIC

We are using an fully automated **cleaning robot (wet & dry)**, the **Adlatus CR700 and** additionally, we are testing a smaller fleet of cleaning robots, 1 **Vorwerk and 20 iRobot small vacuum cleaning robots**

Our goal is to further develop this technology together with our service provider and the manufacturer of the equipment, by sharing our experience and new requirements as to push the topic as a "driver" in the cleaning industry









SENSOR TECHNOLOGY

We installed visitor registration unit at the doors of sanitary rooms, tea kitchens and functional rooms like prayer room, parent-child-room, roof terrace, etc. in order to count the visitors who enter a room via light barrier sensor.

The Corporate Real Estate Business Unit uses the registration of visitors to adjust the frequency of cleaning to the frequency of use,

This is called "service on demand", only if cleaning is required, cleaning is carried out by the staff and not if a certain room is not used or only used to a limited extent and therefore cleaning would not be necessary





SMART WASHROOM

All sanitary rooms are equipped with the following sensor-equipped sanitary dispensers:

- towel paper dispensers
- soap dispensers
- toilet paper dispensers

The cleaning staff are equipped with tablets on their cleaning trolleys so that they receive realtime data on the cleaning requirements.

There are yellow and red statuses in the app that allow early detection of which dispenser is next empty so that cleaning personnel can respond when needed.

This gives the advantage of constant availability of hygiene consumables, as the fill level is checked in real time and alarms are issued if the fill level is too low.

There is no need for time-consuming checks to see if there is enough toilet paper, towel paper, etc. in every remaining sanitary room.











FEEDBACK / SERVICE BOXES

Our employees can use the feedback boxes to assess the cleanliness of the room or request a special deposited service.

The cleaning trolleys of the cleaning staff are equipped with tablets and a corresponding app. The information from the feedback boxes

flows into the app in real time. We have agreed service levels and reaction times with the service provider.



Report a malfunction

Cleaning necessary

New towels are needed

A caretaker is needed

Consumables are needed (milk, kitchen rolls, tea, crockery, cutlery)

(coffee machine, water dispenser, etc.)

The service requests are available at sanitary rooms, tea kitchens, living rooms, showers and basketball court

If the red or yellow smiley is pressed a few times within a certain time, the clean staff receives the information on its tablet and must carry out a visual inspection and, if necessary, a cleaning.









SUMMARY

In previous tenders, the focus of us a Corporate Real Estate Department was strongly on the technical, functional area. Particularly in the context of the opening of the New Headquarter (BHQ) we as the Corporate Real Estate teams and the closely involved Indirect Procurement Department wanted to focus on innovations taking into account the best price-performance ratio and the sustainability approach.

What was the result?

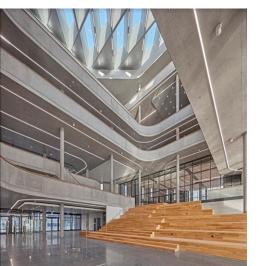
New innovative multi-stage tendering process

(which was successfully managed by the responsible strategic Buyer Robert Meyer, Sr. Sourcing Manager FM & PM)

- 1. Solution finding -> Kick-off event with bidders; Review and evaluation; Professional Bidder conversations
- 2. Commercial negotiation -> Request for commercial bids; Commercial negotiations; Selection and contracting







COMMERCIAL ASPECTS

A budget saving of 11.5% was achieved in the commercial negotiations. e.g. due to 1x fully automated cleaning robot & 7x small vacuum cleaning robots free of charge.

Since the sensors and washroom equipment were purchased directly from the manufacturer, a discount of 15% could also be achieved.

SUSTAINABILITY

Especially with regard to sustainability, is the reduced quantity of paper.

1400 VE towel to 536 VE towel paper, or 450 VE ToPa compared to 183 VE ToPa.

The new packaging is also much smaller, so we save storage capacity and, of course, significantly less volume transported on the roads.

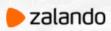












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