



Smart tech enhances restroom maintenance

An intelligent investment to improve the user experience

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By Bruce Ferguson

It's well known that poorly cleaned and maintained restrooms, regardless of facility type or industry, can damage reputation, negatively affect perception and impact a business's ability to attract and retain tenants/customers. Still, many companies fail to recognize the significance of this threat to their bottom line. Those that do are turning risk into opportunity, and focusing on leveraging their approach to restroom service and maintenance as a point of differentiation.

Setting the bar

Benchmarks need to be established in order to identify improvement opportunities and measure success in achieving goals. When it comes to reporting on restroom maintenance and patron satisfaction, those benchmarks have typically been set by surveying restroom users. While that may be the best way to identify issues and measure improvement, it is costly and time-consuming. Moreover, its validity relies on sufficient levels of participation and frequency. Even then, the data can be skewed by one-off events and short-term conditions.

Acquiring and analyzing reliable data in sufficient quantities is a challenge; however, there's no shortage of innovation, from proprietary Internet of Things (IoT) solutions and manual rating systems to advanced touchscreen technology, to help overcome the difficulty of monitoring restroom maintenance. These options offer a variety of ways to not only improve the quality and efficiency of restroom maintenance but enable ongoing data capture for results measurement, trend analysis and predictive analytics that increase patron satisfaction, improve labour allocation and decrease overall costs.

Internet of more and more things

Many industry leaders in the away-from-home towel and tissue, hand hygiene and cleaning chemistry markets are developing or already have IoT systems that monitor restroom conditions through the status of dispensing units (operationally and product fill levels) to indicate service and requirements. Some of the systems also capture traffic data via door sensors to enable more robust analysis and predictive modelling. These proprietary dispensing systems transmit data to the cloud, where it is stored and then accessed by facilities maintenance teams for appropriate action.

Advantages of using these systems include the ability to improve efficiency through labour allocation, report on quality and customer satisfaction, and identify cleaning and maintenance issues for proactive action and/or follow-up. However, because the systems are proprietary, a specific brand of product must be used throughout the facility.

Voice of the customer

Manual rating systems are currently appearing at restroom entrances. Patrons indicate their degree of satisfaction by pressing a button. Results are tracked and measured over time to improve quality and customer experience.

Unfortunately, this tool does not produce a particularly accurate representation of overall user satisfaction since customers more commonly comment when dissatisfied; however, it can provide a good indication of the frequency of user dissatisfaction with restroom conditions (although not the specific cause).

Digital restroom attendants

Digital restroom attendant systems are replacing antiquated restroom wall log sheets with advanced touchscreen technology and door sensors that not only record cleaning and maintenance activities and restroom traffic but also direct user feedback. Restroom patrons can identify supply or cleaning issues using an antimicrobial touchscreen, or provide an assessment of the quality of their experience. Alert messages are sent directly to cleaning staff for immediate action. Use thresholds can be set for each restroom so that service requests and replenishment notifications are sent directly to cleaning staff once restrooms have been used by a specific number of patrons.

Dashboards and real-time reporting can then be employed to analyze data over extended periods, generate predictive analytics and enable cleaning staff to proactively address restroom needs before they become a source of tenant/customer dissatisfaction and, ultimately, complaints. The data can be used for performance management, staff training and monitoring of patron satisfaction. It provides facility managers and building service contractors the opportunity to increase efficiency through better labour planning and allocation, address service issues to improve customer satisfaction, adjust activities and implement process improvements, and regularly measure and report on quality and customer satisfaction.

Digital restroom attendants, by their very existence, communicate to tenants, customers of building service contractors and restroom patrons that a facility's management team is committed to quality and the provision of positive customer experiences. This has been validated by a University of Alberta study of 12 of the most trafficked restrooms at Edmonton International Airport, where digital restroom attendants have been in place since 2015. The study examined the effect of placing a digital restroom attendant system outside one set of restrooms and not outside an identical set. Patrons were asked which restroom they believed to be cleaner. Seventy-five per cent selected the restrooms with the digital restroom attendant, citing the display of the last cleaning time and that cleaning activities were being monitored.

The digital restroom attendant system provides an ongoing indication of the level of restroom patron satisfaction throughout the airport. According to Shilendra Singh, general manager of Carillion Canada, the system has helped the maintenance provider better understand traffic trends and enabled his team to fine tune scheduling and resource allocation while being more proactive around stocking soap, toilet tissue and other supplies. Since its installation, he has seen a significant drop in the number of e-mails maintenance staff receives, which has declined to an average of 20 per month from 60 to 70.

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