

THE ROLE OF AI AND ROBOTICS IN THE FUTURE OF CONTRACT CLEANING

The multi-tasking capabilities of robotic floor cleaners, which can clean and track data in real time, offer new levels of control and service excellence for the industry.

The rise of artificial intelligence (AI) and robotics is one of the biggest advancements to hit the contract cleaning industry in recent years. Although it's still a fairly new concept in South Africa, large equipment manufacturers in Europe and the United States, like Nilfisk and Tennant, are already putting some of this equipment to market, with an emphasis on vacuum cleaners and auto-scrubbers. Some of these autonomous floor scrubbers even check stock levels on supermarket shelves while cleaning the floors!

Another exciting development is the trend of using 'intelligent' equipment to collate and share data with clients. This application is far reaching as we can now monitor the productivity of a machine on a live App.

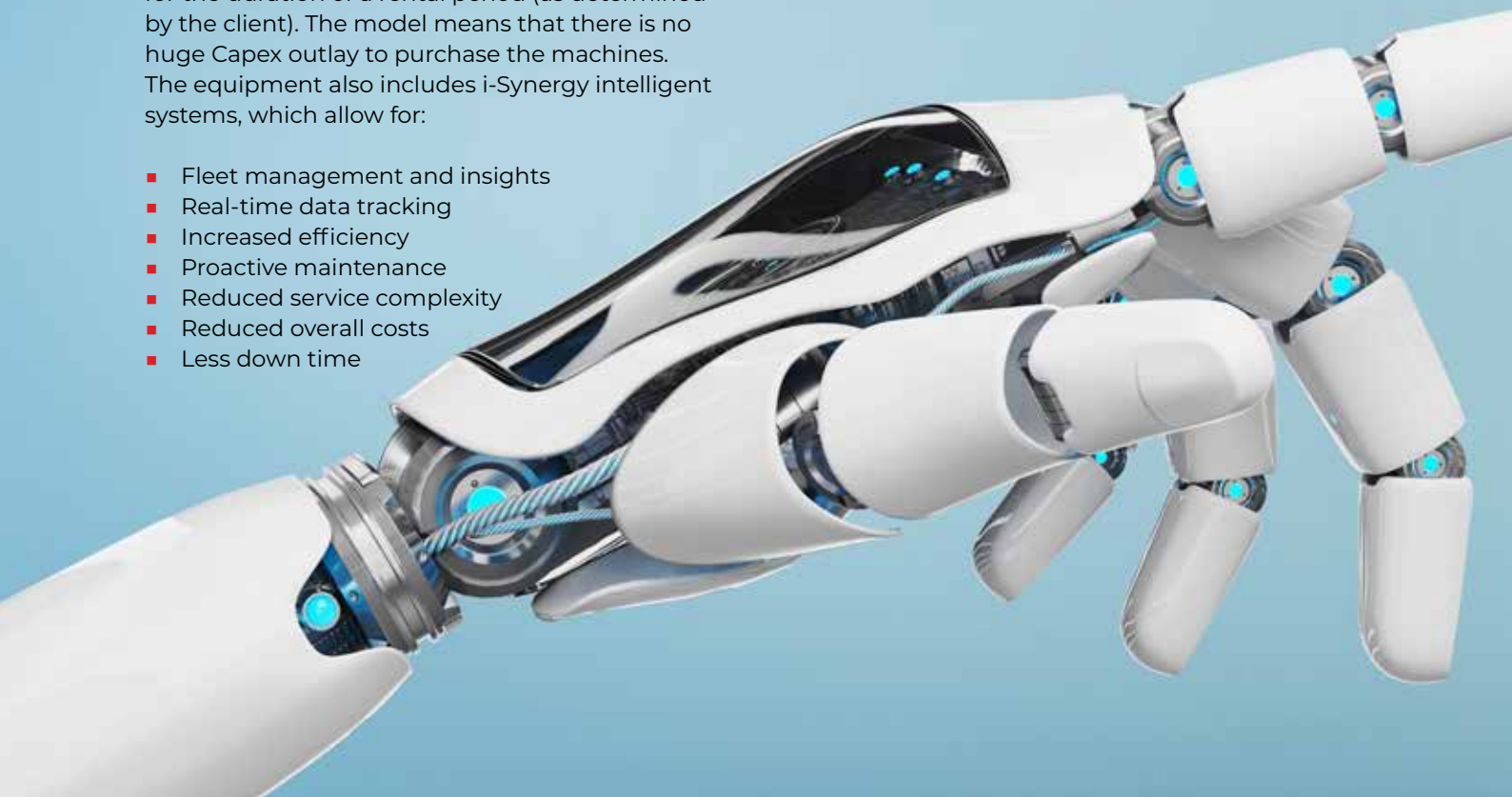
The Tsebo Inland Team recently attended the launch of a new range of floor cleaning equipment available from Ice Robotics in Bedfordview. Their business model is quite unique in South Africa. It provides the client with an all-inclusive, fixed monthly cost for the duration of a rental period (as determined by the client). The model means that there is no huge Capex outlay to purchase the machines. The equipment also includes i-Synergy intelligent systems, which allow for:

- Fleet management and insights
- Real-time data tracking
- Increased efficiency
- Proactive maintenance
- Reduced service complexity
- Reduced overall costs
- Less down time

The relevant data generated by the equipment is uploaded to a cloud-based platform that is monitored by the Ice Robotics Client Care Team, and can also be viewed by the client in real time. Any malfunction is communicated to the team, who in turn offer virtual assistance to the operator, or arrange for a service technician to visit the site. If the machine can't be repaired on site, it is removed and replaced with a loan machine to prevent any down time for the client.

The App, meanwhile, allows the Client Care Team (and client) to monitor whether the machine is cleaning or on charge, the duration it cleans, and the square meterage covered in the time. It also monitors the battery life. Because the system operates in real time, you can immediately see if there are any deviations from the planned cleaning schedule.

By: Johan le Roux – Divisional Manager, Specialised Cleaning



IT'S A WHIZ!

Among the new products offered by Ice Robotics is the Whiz vacuum cleaner, an intelligent and innovative solution for autonomous cleaning that can support cleaning teams on larger sites. Cloud connections allow for storage of multiple site maps, while a camera and sophisticated on-board computer vision system allow the Whiz to navigate around people and obstacles. If there is an obstacle, the Whiz will move around it and return once the obstacle has been removed.

Advantages of the Whiz

- **Performance:** It delivers a deeper carpet clean to consistently high standards that can be tracked and monitored.
- **Productivity:** The Whiz is consistent and efficient every time.

The Whiz can be programmed to start itself at a specific time, vacuum the carpets in a scheduled area and park itself once completed. If the vacuum bag needs to be replaced during operation, it will notify the supervisor to replace the bag. It is the first vacuum sweeper that offers real data of each clean.



The Tsebo Inland Team at Ice Robotics' new premises in Bedfordview.



Live display on the App.



A wide range of floor scrubbers and ride-on sweepers are available.

By taking advantage of the innovative technology available, the industry is able to enhance its service excellence through data tracking and verification. By allowing robots to tackle the mundane jobs it frees up existing staff to perform more complex tasks such as in-depth, detailed cleaning.