

In Conversation With



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Chief Operating Officer APAC
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One of the global leaders in robotics solution, SoftBank Robotics, opened its APAC office in Singapore in August 2019. The person instrumental in setting up the office and leading the APAC team is its Chief Operating Officer, Mr Lee Chin Yau (CY Lee). Since joining the team, CY has expanded SoftBank Robotics' footprints in the Asia Pacific markets - Australia, China, Hong Kong SAR and South Korea. CY also played an integral role in scaling up SoftBank Robotics' distribution networks beyond the traditional channels. Ageing Asia finds out more from CY.

Having over 20 years of experience leading teams in the technology sector, how has that translated to your leadership at SoftBank Robotics?

The key takeaways from growing both personally and professionally in the technology sector is that any product and/or service must first and foremost serve and benefit people. In addition to benefiting people, the product and/or service must adapt a solution-based approach.

At SoftBank Robotics, we are inspired by the power of robotics to benefit humanity. We relentlessly pursue the creation of everyday robots that assist people, making their lives easier, safer, and more connected. We developed commercial robotics solutions with the aim to address daily work challenges, automating the mundane or laborious work making it more efficient to increase productivity.

As a leader in robotics, we are driven by a unique “people first” approach. Our autonomous floor care sweeper Whiz is a perfect example of AI and robotics combined to provide consistent and predictable productivity whilst redefining workers. We believe putting “people first” and “solutions-based approach” in every step of the way is the key to reinforcing our market leadership in the long run.

As the COO overseeing the APAC market, could you share with us one key operational aspect that is important to you?

Putting “people first” applies to every aspect of our business – from planning and designing robots to deploying our solutions in the field. When overseeing a region as diverse

and varied as APAC, putting “people first” is both crucial and critical.

Listening to our customers and learning from the market is core to sustainable growth. Instead of theoretically guessing what our customers need in a automation solution, we go out to the field to gather firsthand accounts and real feedbacks on how to improve our products and services.

Whiz's operating system, powered by BrainOS®, the award-winning commercial robot operating system from Brain Corp, is just one example of how putting “people first” gets translated into action. We are constantly working towards new feature rollouts and improvements based on regional customer feedbacks received.

Another feature that reflects our “people first” approach is the smartphone app “Whiz Connect”. Together with cloud data visualization, cleaning reports, status reports on Whiz can be gathered and analysed. By using Whiz Connect, maintenance workers can see a transformation in their work with a shift from performing laborious cleaning task ie cleaning large floor area to understanding how cleaning data and reports can aid them to deliver an improvement in their cleaning service standard and optimize cleaning workflow.

In addition, we also believed in developing our people to let them be equipped with the right training, listening to their feedback on the ground and understanding how our robotics solutions can be better applied in different work scenarios. This will help us to constantly improve our robotics solution offerings.

With your experience in tech, what are some of the areas tech and innovation could be adopted to support the eldercare sector?

COVID-19 has shaped the world in many different socioeconomic ways. One of the most affected sectors is the healthcare industry. Beyond the humanitarian and health crisis the virus presents, medical and care staff have been working around the clock to keep people safe and healthy. Robots have been an essential tool to not only help staff keep their patients and the elderly in care homes safe, but robots have also been important in helping keep health guidelines in hospitals ie safe distancing and maintain contactless approach. SoftBank Robotics' Whiz and Pepper have also been in the frontlines at the height of this pandemic, tested in Brussels, Kanagawa, and Paris hospitals.

COVID-19 is understood as highly infectious is that it is spread through contact, with recent talks about the possibility of it being also contracted through airborne particles. Droplets from breathing, sneezing, talking can all be considered potential sources of infection. Another important factor of the pandemic is that older demographics are amongst the most vulnerable. In a study published by the USA's CDC (Center for Disease Control), the mortality rate is higher amongst the aging population. In every 100,000 USA hospitalizations, about 500 85+ years old people on average succumb to the illness.

In hospitals, reducing interaction or need for contact is important, due to the amount of cases hospitals have been experiencing. Finding ways to keep the elderly and other susceptible persons safe in hospitals and care homes has become a priority.

An increase in contactless and safe solutions to implement in hospitals via robotics is becoming the new norm, given the current circumstances we are living in today. There are several major functionalities and solutions that service robots provide that can help in today's environment.

Standardized Technical Cleaning

Whiz can clean areas up to 1,500sqm, the size of 3 basketball courts, for 3 hours on a 4-hour battery charge. The performance of Whiz is designed for commercial, industrial usage due to the extent of floor area cleaning coverage.

Over the 500 Whiz POC trials, we have always conducted A3 Lumitester Smart Test Kit, the cleanliness test before and after use of Whiz on floor surface. A3 test is to test on 3 types of living micro-organisms;
ATP adenosine triphosphate
ADP adenosine diphosphate
AMP adenosine monophosphate

In our recent Whiz POC survey results done across 50 sites in Singapore and Hong Kong, Whiz was found to be able to reduce the level of A3 reading (relative light unit measurement) to an average of 3000 – 4000 relative light unit, scoring an average of 70% decrease in overall A3 measurement.

Mask-checking, Patrolling, and Reception:

Humanoid robots like Pepper can help hospitals ensure that social distancing guidelines are being followed, and provide mask-wearing solutions that ensure visitors, patients, and staff are wearing their masks when on-premises. As discussed earlier, wearing masks and social distancing are paramount tools to fight off the spread of the virus.

The use of robotics in elderly care facilities help reduce the number of people admitted into the hospital. This solution helps staff and would ensure patients stay safe at the hospital and reduce the risk of contact.



Predominantly, SoftBank Robotics offer your applications for the fields of retail, tourism, healthcare, finance and education. What draws the team to expand into the APAC ageing market?

As medical and care staff are fighting off the virus at the frontlines in hospitals and care homes and patients accumulate, it becomes difficult for staff to keep up and stay safe.

Caretakers also find themselves in a difficult situation, as senior citizens in care homes are amongst the most vulnerable to the virus.

Service robots offer a multitude of solutions that can ease and reduce staff workload and stress, as well as offer more ways for everyone to keep safe in vulnerable situations, with solutions like technical cleaning, mask checking, and patrolling.

Robots will never replace the human touch of caretakers and medical staff, but they can help reduce workload and make their work easier and efficient.

What are some of the opportunities you have observed or are there any gaps that SoftBank Robotics want to address?

The Importance of Data-Driven Cleaning - There is an increased demand for higher cleaning quality and proof of those improvements. In this new normal, it is no longer enough for commercial companies to just check the boxes. They must not only improve their quality of cleaning, but also be able to prove it.

Because of this dramatic shift, data is quickly becoming a core differentiator for commercial cleaning businesses. In fact, data-driven cleaning is becoming a selling point to draw in new customers.

Data-driven cleaning is an ongoing process of tracking data and adjusting business practices accordingly to make meaningful improvements.

Tracking performance metrics doesn't just benefit your customers. When you track the right cleaning metrics, your business is empowered to make smarter decisions. This not only improves cleaning quality, but can also increase operational efficiency, maximize the effectiveness of teams, and optimize costs.

You have spearheaded many initiatives and action plans since joining the company, what is your plan for the APAC ageing market?

Making "Clean" an Industry Standard

Today, as the COVID-19 pandemic continues to leave its mark, companies that take action to make "clean and safe" a clear part of their value offering are better able to secure consumer trust and traffic. This is the reason why many leading hospitality organizations are now partnering with well-known cleaning brands. Hilton, for example, has partnered with Lysol parent company RB because, "the use

of its products assures consumers around the world of a safer stay." That perception of safety is now embodied in signage around Hilton properties worldwide.

Make "Clean" More Visible

One key strategy for making clean part of your brand is by making cleaning more visible. For example, offices have typically scheduled cleaning as an after work hours activity, but now building occupants want to see that level of cleaning throughout the day. People are also looking for other reminders that cleanliness is a part of your culture—hand sanitizer stations, portable air cleaners, and autonomous vacuum sweepers are some of the tools building owners can use to add to the visible perception of cleanliness. In fact, building occupants have reported that the soft hum of some vacuum sweepers at work has become a comforting reminder that cleaning is an ongoing process.

Confirm Cleanliness

Consumers may feel comfort in visible evidence of cleanliness, but there's enough misinformation being spread today that it's also important to provide some evidence that your solutions are working. This is where visible clean and communication can be a powerful combination.

Whiz features Whiz Connect, a cloud-based dashboard that provides operators detailed data on runtime, coverage distance, and robot assists at a given location. Through this dashboard, operators can provide cleaning reports that clearly communicate the effectiveness of an automated cleaning strategy.

By making "clean" more visible and backed by data, it has never become easier to make "clean" a standard in the ageing market.

What is the one word that you would use to describe SoftBank Robotics' journey in the ageing market?

The word "collaborative" would be used to describe SoftBank Robotics' journey in the ageing market.

Our vision is to develop robotics solutions to empower human beings to drive productivity at work and to accelerate robots collaborating with human, with an aim to transform cleaning industry sector.

What is your vision for SoftBank Robotics in the next 18 months?

The introduction of Whiz to APAC is a strategic decision. Through Whiz, we want to help our stakeholders boost their cleaning efficiency and productivity and make SoftBank Robotics a long-term partner choice.

To date, we have completed over 500 Whiz Proof of Concept (POC) trials across 16 cities in China, Hong Kong and Singapore. Such POC learnings will deepen our customer knowledge in understanding how Whiz should be deployed and complement and optimize the cleaning workflow procedure across different facilities and applications. We believe robots are here to collaborate human beings, drive productivity for them at work, upskill the workforce and empower the workforce with a data-analytics driven environment to aid them to perform their job with an aim to transform the cleaning industry. ■■