

KELVIN Lim, founder and CEO of Pacific Integrated Logistics (PIL) stops in the middle of leading a warehouse tour to instruct a colleague to check the automated bottling machines. He tells us, humbly, that his operations have not achieved its full potential yet. Wait till we move to our new premises where everything will be automated, he says.

It is this sort of desire to remain one step ahead of the competition that has kept PIL on its toes. But automation is just one thing that the company is looking at to stay ahead. It also embraces an enlightened approach to its business – unlike most other third-party logistics providers for instance, it works closely with its clients to understand their logistics needs; and from there, designs integrated solutions which are tailored to each client.

It enjoys such a partnership with a US-based pump and valve-maker with which it has been working for about a decade. From purely providing freight services, PIL has, over the years, built up the range of its services to include warehousing, inventory management, kitting and packaging of the multinational (MNC) company's inbound and outbound freight.

"We slowly worked our way up their supply chain . . . Three years back, they outsourced the entire warehouse management to us (when) they decided to build on the core competencies of their business, which is the assembly of their valves," says Wendy Lim, global sales development director at PIL.

The team, however, decided to go beyond providing warehousing services when it found that there was yet another way that it could further fit itself into its partner's supply chain – by taking on the spray painting and sandblasting tasks, leaving the MNC to focus on sales and product assembly.

MAKING A PACT TO BENEFIT ALL

Under Spring's Partnerships for Capability Transformation (PACT) programme, PIL and its partner embarked on a collaboration project that consists of two components: the implementation of spray painting and sand blasting capabilities in PIL, and the upgrading of PIL's information technology (IT) infrastructure. The upgrading of its IT infrastructure was necessary for PIL to support the new operations and enable seamless tracking of all orders between PIL and its client.

"Previously, they had to pull (their stocks) from the store, send them to a painter, maybe in Woodlands, and transfer the product back here. It's not cost-effective because they have to pay for the transport, and it eats into their production lead time by about five days," says Ms Lim.

These savings add up – it is estimated that the arrangement saves the US client about S\$70,000 per year on transport savings alone. Meanwhile, potential capacity gain per annum with the reduced lead time and potential business gain per annum based on the increased production area is more than S\$7 million.

In turn, PIL projects that the increase in its own scope of activities could translate into a gain of between S\$1.8 million and S\$2.4 million per year. This year however, due to drops in volume, business has been a bit slow, concedes Mr Lim. Not that he begrudges the investment. After all, he is now able to extend this service to three other clients within a year of setting up this programme.

According to Kee Ai Nah, group director for

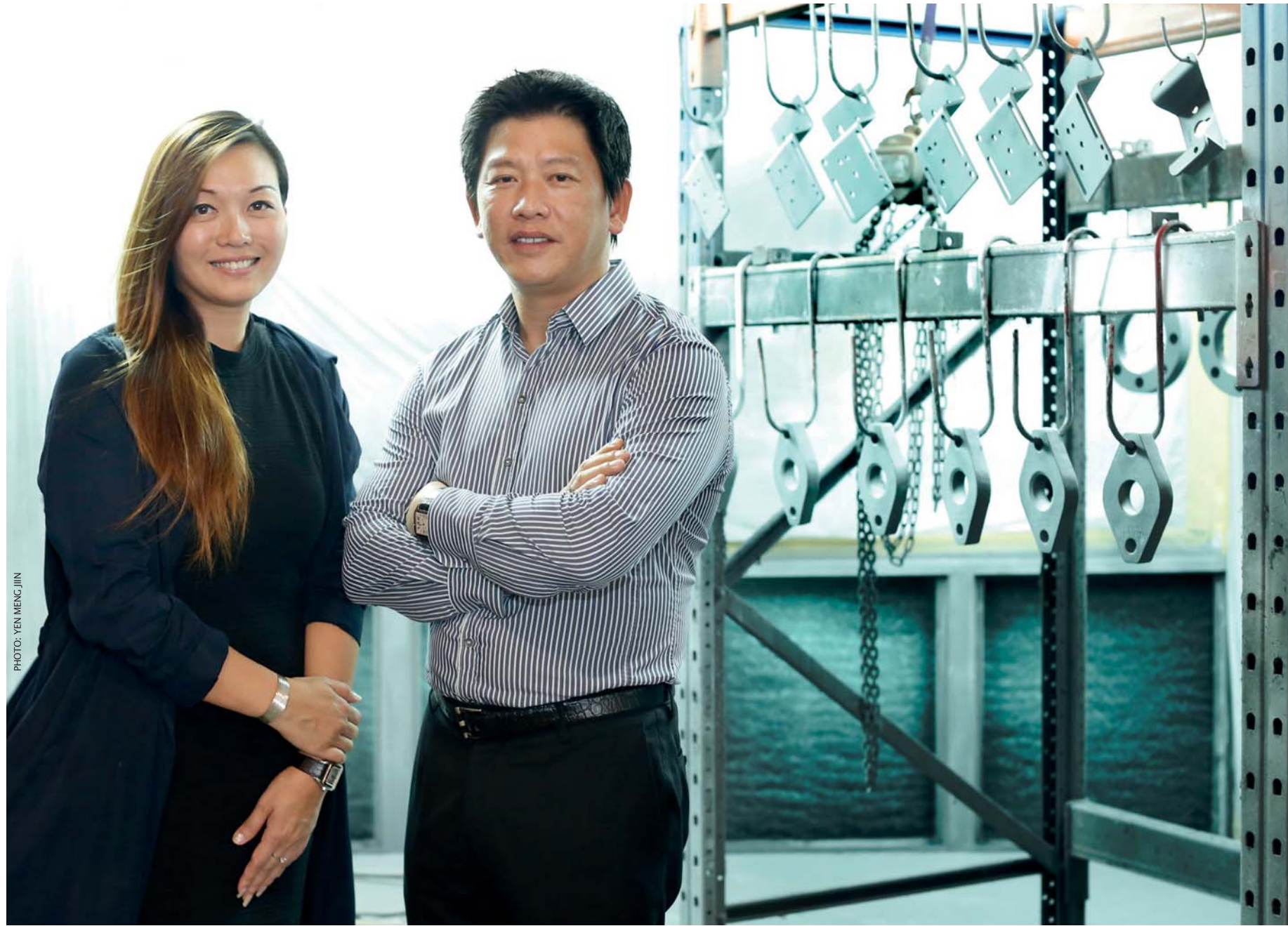


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◀ FILTER-DOWN EFFECTS
Mr Lim and Ms Lim note that their staff have benefited from retraining as their career profiles have expanded

DEVELOPING WIN-WIN SITUATIONS

Spring has supported 94 Partnerships for Capability Transformation (PACT) projects to date, benefiting 632 SMEs and startups in capability development since the programme's inception

industry and enterprise at Spring Singapore, close to 100 MNCs – mainly from the manufacturing, engineering, biomedical and business service sectors – have embarked on PACT projects with small and medium-sized enterprises (SMEs).

"We have observed that PACT projects in the area of co-innovation are by far most prevalent, followed by those in the area of partner development. However, we notice that PACT projects do cut across the various collaboration opportunities of partner development, knowledge transfer and co-innovation," says Ms Kee.

Staff at PIL have also benefited. In addition to hiring new staff to take on the new responsibilities, PIL has also retrained its current staff, giving them a chance to expand their career profile. "We multitask quite a bit, so the storeman can rotate to become a packer, and can also be a painter. We give them mobility (and they know that their) career will not be stagnant with us.

There are opportunities to move within the different departments," says Ms Lim.

It also provides them with a sense of security, points out Mr Lim. "If the economy is really bad, those that are (are able to) multitask and have multiple capabilities will of course get to stay compared with (a person who is) just a storeman."

"We're in an industry which is not that clean, so we do have to find ways to entice the new-age workforce. So we need to bring in things that are higher value . . . While painting is more intensive, because you need to be trained to read paint specifications (for example), it gives them a chance to learn something out of the regular work. So it's quite interesting. Our staff here are quite young."

A WIN-WIN SITUATION

MNCs are more keen to engage in open innovation

and tap research talents beyond their in-house research and technology (R&D) teams, notes Spring's Ms Kee. "This shows MNCs' recognition of the value that SMEs can bring. We also see more technology scouts based in Singapore and observe that there is strong interest from MNCs to set up corporate incubators to support our startups with new technologies."

MNCs have also shown that they are keen to build up the capabilities of their supply chain partners so that together, they can better serve the needs of their customers. For instance, Intel has partnered Spring under the PACT programme to provide support for both startups and SMEs that are interested in developing products and services around wearable technology and the Internet of Things (IoT).

SMEs with niche technologies are some of those that MNCs seek out to complement their own technologies as combined resources could well create integrated and new solutions to serve a wider customer market, she notes. "Generally, there is a shift in the way people view innovation and the way companies handle collaboration. Whether for niche technologies or local knowledge that SMEs are able to provide, the increased willingness of MNCs to work with these smaller companies is a positive sign of progress and trust," says Ms Kee.

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MAKING GOOD USE OF TECHNOLOGY
Dr Lee notes that RFID-based applications are the most popular technology adoptions, as they can be adopted across a wide spectrum of industries

WORKING TOGETHER

The Collaborative Industry Projects programme encourages cooperation between enterprises and industry partners to address common industry-specific business challenges

THE Collaborative Industry Projects (CIP) programme is another initiative that encourages cooperation between enterprises and industry partners to address common industry-specific business challenges.

Eager to help manufacturing firms make better use of technologies and techniques to improve their productivity, the Manufacturing Productivity Technology Centre (MPTC) at the Singapore Institute of Manufacturing Technology (SIMTech) partnered Spring Singapore for the CIP programme which lasted from October 2013 to January 2015, benefiting a total of 116 small and medium-sized enterprises (SMEs). Overall, the SMEs gained an estimated 20 per cent improvement in productivity after embarking on the series of programmes that MPTC rolled out.

"To enable as many adoptions and at the same time be cost-effective, particularly to get SMEs to consider technology adoptions, we had to redevelop the technologies and standardise the solutions so that the duration of adoption and the cost of adoption are visible to companies. This helps greatly in persuading companies to consider technology adoptions for productivity improvements," says Lee Eng Wah, director of MPTC.

These "bite-sized" programmes were identified from two perspectives – industry interests as gathered through industry roundtables and implementation timeline. Specifically, the technologies had to be implementable within a short duration (no more than three months, with some implementable in two to six weeks).

Dynamics Circuit, which specialises in industrial electronic repair as well as preventive/corrective maintenance for various electronics, medical, test-instrument and other manufacturing equipment, is one of the SMEs that has benefited from the programme. It heard about the radio frequency identification (RFID) barcode-based Item Management and Tracking System (IMTS) project during a networking session and decided to find out more. The company was then using stickers to manually track each individual item.

According to Kannan Rajahgopal, sales and service manager at Dynamics Circuit, the implementation of the system has improved labour productivity for stock taking by 30-60 per cent, which translates to about 25 man-days per year. Time spent searching for items in the workshop and

stock has been reduced, along with auditing efforts. "Currently, we are just using this RFID system for received customer units. We are planning to expand the usage for our small parts tracking (spares). We are under discussion with SIMTech and will work on this in future," he says.

Dr Lee notes that RFID-based applications like the item management and tracking system are the most popular technology adoptions, as they can be adopted across a wide spectrum of industries in diverse applications of track and trace. "It helps to reduce reliance on workers, as tracking is done automatically once the RFID system is put in place and the objects are already tagged. It helps in cutting time to do stock taking, tracking your assets; whether it be office assets or inventory in production or in warehouse," he says.

Another SME that has benefited from the programme is Techcom Technology, a fabricator of sheet metal, structural machining products and module sub-assembly. For Techcom, SIMTech trained key staff on production planning and shop floor tracking concepts and implemented the High Mix Low Volume (HMLV) Lite software based on the production planning and shop floor tracking operation scenarios.

"Before implementation of HMLV, we relied on humans to physically search for the parts along the process stream, ie every stage of the process from laser, bending, machining, welding, finishing, packing to delivery and handing over of parts to the next stage," says Mark Khoo, director at Techcom. "With the implementation of HMLV, we are able to know the status and location of each work in progress part from the HMLV system. This means that we can totally reduce the number of people doing the physical tracking to zero and re-deploy the worker to other roles."

Techcom has seen a reduction in missing parts by more than 70 per cent, and its on-time delivery to customers has improved from 70 per cent to more than 90 per cent. Mr Khoo adds: "Respective supervisors from each stage do not have to take over the parts from the previous stage of the process, thus allowing them to have more time in planning and managing their respective departments, and productivity increases." ■

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