



SUSTAINING INNOVATION

The TAL Group began with a Hong Kong cotton mill run by CC Lee in the 1940s. Today, it's a multinational that makes over 50 million garments a year. Long-known for its product innovation, the group, currently steered by chief executive Roger Lee, is now making inroads with hi-tech services businesses and big sustainability initiatives, while expanding its international manufacturing base.

STORY **MAGGIE CHEN**

On the fourth floor of the TAL Building in Tsim Sha Tsui, dozens of shirts, blouses, suits and dresses in different hues and fabrics line racks and shelves. Many of the garments on display at the TAL Apparel showroom feature innovations pioneered by the company, such as non-iron shirts, linen that's not prone to creasing and water repellent fleece tops.

"As a garment manufacturer, we are known as an engineering company," says Roger Lee, TAL Group's chief executive, who obtained a bachelor's degree in engineering at Bristol University and an MBA at Imperial College. "People came to us because we worked very hard in our processes and innovation."

It's such innovation that's helped the business – which began with a cotton spinning mill in Hong Kong founded by CC Lee, Lee's grandfather's brother, in 1947 – become a major manufacturer which produces more than 50 million garments a year.

One in six dress shirts sold in the United States are made by Hong Kong-headquartered TAL Apparel. For shirts that retail for more than US\$50, that proportion goes up to 60 per cent, says Lee, who was appointed chief executive in 2012. TAL Apparel is both Brooks Brothers' and Burberry's largest garment supplier. Its highest-end customers include names such as Gieves & Hawkes and Givenchy.

How did a business started by the youngest son of a Shanghai industrialist almost 70 years ago become a multinational player with 25,000 employees today? The story of how CC Lee grew TAL involved savvy business decisions during tough times, adaption, reinvention, international relationship-building and good succession planning.

After starting out in cotton textiles, he branched out into the garment business, building up a vertically integrated company. He started expanding the business abroad from the 1960s, setting up in operations in Thailand, Taiwan and Malaysia. CC Lee fostered fruitful partnerships with the Jardine Matheson group and Japanese companies Toray and C Itoh (now Itochu Corporation), companies which also invested in the business, helping it see through times of economic crisis. With Japanese backing, the business expanded into new fibers and yarns. The name TAL came about when CC Lee merged his companies with Jardine Dyeing & Finishing Company, creating the Textile Alliance Group (TAL) in 1962.

The business built up a reputation for reliability and quality. "Buyers were always confident they could get a lot of orders. We became famous for our quality," said KH Woo, an employee who worked for CC for more than 40 years, in *CC Lee: The Textile Man* (2011).

ENGINEERED FOR SUCCESS

By the time CC Lee retired at the age of 72 in 1983, he passed on the running of a flourishing enterprise to the next generation. One of his sons, Dr Richard Lee, who started working at TAL in 1964 in his mid-twenties, became chairman. Dr Harry Lee, Richard's cousin (and Roger Lee's father), who joined the company in the late 1970s, became the managing director.

Both have impressive engineering credentials: Richard graduated with a bachelor's degree in engineering and a PhD in electrical engineering, both from Imperial College in London; while Harry earned a degree in electrical engineering from Imperial before getting a doctorate in electrical science from Brown University.

Under their leadership, the company updated its factories and systems, improving efficiency, and became big on innovation. In 1998, it created the first 100 per cent cotton wrinkle-free shirt. Since then, its innovations have included anti-microbial and anti-UV shirts, machine-washing wool pants and shirts with stain-resistant collars and cuffs. It also continues to improve on existing products: for example, its wrinkle-free cotton shirt is a lot softer today, says Lee.

TAL Apparel's R&D division is still headed by Harry Lee, who, after stepping down as chief executive (his title changed from the British title of managing director to the US system title of chief executive a few years ago, Lee explains) in 2012, became TAL's chairman.

"That's always been [Harry Lee's] passion – invention and innovation," says Lee. That year, Dr Richard Lee, who had been chairman, became honorary chairman.

Since 2010, Dr Delman Lee, a son of Dr Richard Lee who joined the company in 2000, has been president and chief technology officer at TAL Apparel. Delman studied electrical engineering from Imperial College, before obtaining a doctorate from the University of Oxford.

Delman oversaw the rollout of integrated computer systems across their factories soon after joining the company, drives TAL's technology strategies and IT projects, and heads up the group's new services division.



INNOVATIONS FOR THE FUTURE

For Lee, 43, working at TAL business was not a foregone conclusion. After working in a US-based role in IT consulting for a decade, he quit to move back to Hong Kong to be closer to family. Before deciding whether or not to accept an offer to work at TAL, he spent two weeks touring its factories in Thailand, Indonesia, Malaysia and China.

"For me, knowledge is king. I really want to get to know a business properly," says Lee. After joining in 2005, he worked as group process improvement manager based in Penang, before taking up a Hong Kong-based role in sales, which involved looking after the company's biggest client, Brooks Brothers.

The decision to appoint Lee as chief executive was made at an executive committee succession planning meeting held several years after he joined. Lee makes a point of saying he doesn't own any shares in TAL Group, in which Dr Richard Lee remains the major shareholder. "I'm purely a professional manager," he says.

Lee calls the situation "unique," adding "because my father has been working in it for many years, I feel it's family in some ways." Apart from being taken along to factory visits when he was a kid, Lee – who learnt to play tennis when he was six – recalls playing doubles with father and clients as a youngster.

But Lee has strong views about running TAL as a modern, forward-looking business. "We run it as a multinational," says Lee. "We limit how many family members are allowed in the company. In our generation, it's three, including myself." Apart from Delman, another cousin, Eugene, is a director.

"I have always said, 'We have

to give promotions based on merit," says Lee, adding he does not believe his successor will necessarily be a family member, but "the best person for the job".

Apart from its product innovation, the other main area in which TAL focuses on to differentiate itself from its competitors, says Lee, is supply chain management. TAL Apparel created a system that reads customer sales data such that, rather than requiring further purchase orders from customers, TAL automatically manages retail inventories to minimise excess stock. Retailers were impressed.

"We had customers approach us, saying, 'We love what you do for shirts; we want this for shoes, bags. Could you help us?'" says Lee. The answer was "No" – that is, until TAL established Weave Services, a consulting company that provides supply chain replenishment solutions, five years ago.

It's not the only new business TAL Group has branched into as part of its services division. Size Stream, established three years ago, creates 3D body scanning booths which can provide quick, detailed body measurements. Retailers such as Brooks Brothers have one, but most of its customers are in the medical industry, where the technology is used for items such as compression garments. Lee thinks it's a space to watch. "Eventually, you'll be able to scan your body at home, using a webcam," he predicts.

Lee believes 3D printing is one of two major advances, the other being automation, that will revolutionise the garment industry. But, at the moment, what one can 3D print at home cannot compete with the cost and quality of manufactured items, and he predicts this will remain



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— Roger Lee, TAL Group

CLOCKWISE FROM TOP RIGHT
CC Lee with Hong Kong Governor Murray MacLehose in 1975; sewing workers at one of TAL Apparel's Malaysian factories; CC Lee at one of his factories in Hong Kong in the 1950s





the case for some decades. He also thinks it will be a long time before automation takes over.

“When a sewing worker handles different types of fabric, they have a hard time to adjust, because it’s all about the tactile feel of the fingers,” says Lee. “So a robot must be able to understand and feel different fabrics to adjust the sewing tension, movement, everything, to make sure if comes out right ... That’s why our industry is one of the last to be automated.”

A NEW GLOBAL FOOTPRINT

TAL Apparel’s biggest challenge now is keeping costs down. Lee observes that garments retail for less now than they did 20 years ago in the US. At the same time, costs continue to climb. “Minimum wage goes up; raw materials go up; everything goes up. Our profit margins get squeezed every year,” says Lee. “Our customers always come to us and say, ‘We love your product, we love your services, but you’re the most expensive’.”

With this in mind, Lee started looking at TAL’s global operations

five years ago. TAL Apparel currently has two factories in China, three in Thailand, two in Vietnam, two in Malaysia and one in Indonesia. After struggling with staff shortages, one of TAL’s Thai factories closed in 2014. But the company has been expanding in Vietnam, where it opened a second factory this year. A third plant, a textile mill, is set to open there in 18 months, marking TAL’s foray back into textiles (it sold the textile side of the business to Toray in 1983).

Garments made in Vietnam are cheaper to bring into the US, where import duty for cotton dress shirts is normally 19.7 per cent. Under the Trans-Pacific Partnership (TPP) – a trade deal signed in February by the US, Australia, New Zealand, Canada, Vietnam, Malaysia, Singapore, Japan, Mexico, Peru, Chile and Brunei – many import duties will be eliminated.

The TPP won’t come into effect until the relevant countries implement its terms. “There’s still some uncertainty with TPP,” says

Lee. “But if that goes through, then we’ll have a big base in Vietnam that will be duty free.”

TAL is also opening a factory in Ethiopia at the end of the year. Why Ethiopia? “Africa is basically what people call ‘the last frontier’: the last continent that has not really grown in the textile apparel industry,” says Lee. Importantly, it is a low-cost place for manufacturing: China, Malaysia, Thailand and Indonesia are high-cost locations, and Vietnam is a mid-cost location, says Lee.

In addition, under the US African Growth and Opportunity Act (AGOA), it’s one of the countries that can bring garments duty-free into the US. In deciding which African country to venture into first, TAL looked at a range of factors, including population to support a workforce, logistics infrastructure and existence of a decent minimum wage. The Ethiopian government, which has opened an industrial park for the textile and apparel industry, has also shown support for these sectors, says Lee.

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— Roger Lee, TAL Group



EYES ON SUSTAINABILITY

For Lee, taking a sustainable, responsible approach to the environment stems from TAL’s core values. “CC Lee believed that education was important [for] everyone. He also believed that ethically, we should be operating correctly,” he says. Since 2010, TAL Apparel – which has been fully owned by the founding Lee family since 2002, when it bought out Toray’s 20 per cent stake – has produced detailed biannual sustainability reports. “There are a lot of things we do to ensure that

we don’t harm the environment. That’s always been in our DNA.”

“From day one, we treat making sure that the place we operate in is cleaner than before we arrived as our responsibility. This takes money and commitment.” For example, the process of making wrinkle-free garments involves using and discharging water, Lee explains. “From the very beginning, we had our own waste water treatment plant. More often than not, the water that we release out to the system is cleaner than what came in originally.”

Two key benchmarks that TAL Apparel strives to improve are its greenhouse gas (GHG) emissions footprint intensity and water usage intensity in relation to the production of each garment. By the end of 2015, it achieved a 36 per cent reduction in its water footprint intensity compared to its 2011 baseline, exceeding an original target to save 15 per cent by the end of 2014. From 2010 to 2014, it reduced its CO2 output by 29,464 tons, translating to a 26 per cent GHG intensity reduction, and exceeding an initial target of a 21 per cent reduction from 2009.

In 2011, TAL became one of the founding members of the global Sustainable Apparel Coalition (SAC). SAC’s main focus has been building the Higg Index, a suite of self-assessment tools used to measure the environmental, social and labour impacts and sustainability performance of a product or company. TAL has adopted the index in each of its factories and has been working on developing a verification process.

It’s Lee’s hope that one day, garments around the world will have a label that provides more information about where it came from – not just the country, but the factory and how well the latter measures up to sustainability benchmarks.

“Eventually, we should have one common standard across all brands, that says, ‘This product was made in a factory with a Higg Index of A, B, C,’ for example, to educate a consumer about what kind of sustainable practices were employed in the making the garment,” says Lee. “There hasn’t been nearly enough education for the consumer about where garments come from.”

TOP
TAL Apparel
factory in
Dongguan, China