

# Printing in Hong Kong & China

## Leo Paper Group

Market challenges are conspiring to drive Leo Paper to transform its labor-intensive production into one that is focused on technology-based smart manufacturing. “We are targeting different aspects of continuous workflow across the production floor to enhance efficiencies while gearing up for a highly flexible production model. The result is a higher production capacity despite having fewer machines and workers around,” director Alvin Lai says, adding that capital investment and equipment upgrading is essential to reducing long-term reliance on labor and hand-assembly tasks.

To that end, the company has replaced seven outdated printing presses with five new ones, increasing production efficiency by nearly 50%. “We also invested in new folding machines with higher capacity, which doubled the efficiencies,” Lai says. “At the same time, quality has picked up significantly, thereby reducing errors and rework. Our upgraded board book

production line with enhanced gluing process, for instance, has reduced the probability of warping issues.”

In 2014, Leo Paper adopted “leagility,” the integration of lean thinking and agile manufacturing, with the whole factory strategically laid out to meet specific client and product needs. “The best part of leagility is that now we have shorter makeready time and improved production speed and efficiencies,” says Henry Woo, general manager of the OEM business department. “Wastage from rework is further reduced with the implementation of new technologies and better material-matching processes. By customizing the production workflow and mixing and matching equipment usage, our response time to specific client requirements or product needs is much faster,” he adds.

The next step toward being a smart factory is to enhance the agility and data interconnectivity across production lines and logistics in the supply chain. “We have been streamlining and enhancing our operations by the application of sensing technology and the Internet of things,” Lai says. “It means having data-driven operations that are capable of exchanging information, triggering actions, and independently controlling each other. In the longer term, this transformation goal will be based on product characteristics that will in turn drive various levels of operational implementation to achieve optimal overall production.” The strategies include upgrading the company’s IT system to facilitate real-time data capture for driving corresponding actions and decisions promptly, intensifying the implementation of standardization, and continuing to reduce dependency on manual labor.

Lai says the company’s slogan, “Transforming the Future,” is as much about addressing product innovation as it is about enhancing and changing everything to do with managing the supply chain. “Swift market and product changes require equally swift response on our part,” Lai says. “Being a smart company that focuses on innovation and supply chain efficiencies is a big part in meeting those challenges.”



(L. to r.) Alvin Lai, Henry Woo, and Andy Lau of Leo Paper Group

## Project Showcase

### ‘Listen and Learn First English Words’

Enhancing Usborne’s original idea of learning-by-touch with fun activities was Leo Paper’s goal for this particular project. “We ended up with an interactive product in a unique format for listening, learning, and logical thinking that can be applied to different subject matters in different languages,” says general manager for sales Andy Lau. “In this case, our Haptic Magic technology—covering sound, light, and motion for print—allows children to select a card, slot it into the book’s special frame, and press on any illustration to hear the word read aloud. We enhanced the touch-button sensitivity of the printed cards to suit young kids and their light touch. Aside from optimizing the product value, we turn the concept and application into one that is easily adapted to suit different titles and quickly produced to increase speed to market.”

