LSCM continues to push technology frontier

Once more, the LSCM Logistics Summit this year was a shining success. This summit featured the up-and-coming 'Internet of Things', which is steadily gaining international attention from various industries, academia, and government organisations.

Many notable professionals from the industry presented keynote speeches at the summit, offering their insights into the new and exciting technologies that will fuel the industry's further development.

Tommy Lui, Chairman of the LSCM Board of Directors, unveiled the summit. Also present were top government officials and industry representatives, who were also keen to speak about the many innovations featured at the summit, including Janet Wong, JP, Commissioner for Innovation and Technology, the Hon Frankie Yick, Legislative Councillor (Transport), Lorenzo Simonelli, President and CEO of GE Transportation, John Chai, Executive Director, Projects,

Airport Authority Hong Kong, Ir Lee Shing See, GBS, OBE, JP, Chairman of Construction Industry Council and the Hon Charles Mok, Legislative Councillor (Information Technology). The presence of these high-ranking, respected individuals not only bolstered the summit, but also presented an opportunity for individuals in these various sectors to pool their talents and resources, and collaborate and co-operate on projects in the near future.

Many technological innovations were on display at the summit, but the most memorable and outstanding ideas tackled an array of common, everyday problems. One example was the issue of safety on construction sites. While the overall rate of industrial accidents for every 1,000 workers has dropped over the last decade, the trend still shows room for improvement. This is where PCMS (Pro-active Construction Management System) and BIM (Building Information Modelling) come in.

Information technology has been highly beneficial to the construction industry; it has increased productivity, revamped economic and business growth models, and has also reinforced worker safety. PCMS technology can detect potential hazards and provide warnings to workers who find themselves in a potentially dangerous situation through simulation technologies.

BIM serves a slightly different purpose, but can also be used to reduce accidents in the workplace. This particular technology illustrates the planning, design, and construction of a structure with a 3D model, which allows workers to better plan and co-ordinate the construction process, and potentially spot hazards or any other structural issues.

Another technology showcase was the 'Product Authentication' service. The LSCM R&D Centre worked with 13 retailers to execute a research project named 'LSCM Authen√Tick™'.

To tackle the counterfeit problem that is rife in this part of the world, an RFID (radio frequency identification) tag is embedded in a package's contents, which is linked to a secured product authentication network. Within seconds, this system will be able to verify the authenticity of a product.

The potential and usage of RFID technology is almost endless and can be applied in nearly any sector, such as healthcare. Under a carefully monitored pilot scheme being undertaken at Hong Kong Adventist Hospital, RFID tags have been used to monitor the safety of newborn babies. If any unauthorized individual cuts off these straps, a built-in sensor will immediately detect this and alert the authorities. These tags aren't limited to newborns, RFID tags can be used to monitor patients, medical staff, equipment, and medication.

It doesn't end there. RFID technology can also be utilised in large indoor spaces, like shopping malls and airports. The LSCM R&D Centre has partnered with the Hong Kong International Airport (HKIA) in a joint project to develop an indoor positioning system.

This system could benefit the 55 million plus travellers who pass through HKIA annually. Airport staff can accurately track passengers, such as those who haven't made it to their departure gate. Instant indoor positioning can also reduce the stress of navigating the airport, which is an astonishing 710,000 metres square, by determining within seconds the best route possible to your desired destination.

Commercial potential also exists in this technology; some vendors envisage a 'Smart Guide' for Hong Kong's abundant shopping malls, to provide directions and prompt location-based advertisements for consumers.

The LSCM R&D Centre also envisages technology to benefit the logistics industry as the application of information technology has made its mark on the shipping and logistics industry, and will certainly continue to do so in the future.

The latest pilot scheme is the Advance Arrival Info Infrastructure scheme, which was initiated by the HKIA Carrier Liaison Group

by accurately monitoring the arrival of incoming trucks through advanced alerts. As a result, the operational performance of a cargo terminal can be largely improved. Should this scheme prove successful, it could be widely applied to other areas of the local shipping industry, and benefit the day-to-day operations of terminals and transportation links. Perhaps the commercial 'Smart Guide' can be installed in cargo terminals and allow for easier and more efficient navigation of these large sites; the possibilities are endless.

Hong Kong is currently ranked as one of the top exporters of containerised cargo, just behind China, the United States, and Japan, so LSCM's scientific know-how is also necessary if Hong Kong's shipping industry hopes to remain its role as a leading exporter and importer on the world stage.

As LSCM continues to develop new and exciting technologies, the logistics industry stands to benefit from these technological innovations. The potential for the application of LSCM's contributions will be far-reaching.