



The Hong Kong  
Shippers'  
Council  
香港付貨人委員會



Willy Lin  
Chairman

# Why do we need Logistics 4.0?

## EXECUTIVE COMMITTEE 2017

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Last month, I visited several institutes in Fraunhofer, Germany, which is known as the institution where Industry 4.0 originated.

As well as continuing to set the standards for Industry 4.0, Fraunhofer plays an important role in its promulgation and adoption. Industry 4.0, also known as Made in China 2025 and Internet Plus in China, Manufacturing Innovation 3.0 Strategy in Korea and Industrial Value Chain Initiative (IVI) in Japan, outlines future changes and trends of transformation of industrial markets; it also provides roadmaps for stakeholders to cope with whatever changes may come.

It is likely that you have already come across many of these "new" concepts and changes, such as Real-time Data, Real-time Supply Chain, Real-time Economy, Seamless Business Connectivity, Personalisation and Customisation, Interoperability, Interconnection, Connectivity, Information Transparency, Smart Manufacturing, Robotics, Data Mining, Data Bank, Data Analytics, Block Chain, Autonomous Decision, Artificial Intelligence, Actionable Intelligence, etc. I do not wish to overwhelm you with explanations of this jargon, but I must inform you that they will affect our industry and our daily life in a rapid and substantial manner.

Industry 4.0 is about digital transformation of the industry in a

holistic way. The essential elements of smart logistics, smart logistics management and smart supply chain management in industry, are often known as Logistics 4.0. While customers and all other stakeholders in supply chains are undertaking rapid changes, the logistics industry will have to go through similar transformations.

Indeed, clients and users of the logistics industry will be demanding these changes, and those who fail to meet the demands will be left out. In short, the adoption of Logistics 4.0 is essentially a matter of maintaining competitiveness – or survival in the near future.

The core of Logistics 4.0 is not only technological; it is also about data and information.

At the heart of it, it is about different systems that are commonly employed at present such as Warehouse Management System (WMS), Enterprise Resource Planning (ERP), Track and Trace System, etc. are linked up and become inter-operational. It also considers how they are connected to systems of other stakeholders including business and authorities, how autonomous intelligence and decisions are achieved and how real-time supply chains are constructed and managed by autonomous, partially autonomous and human systems.





Down to applications, it looks at driverless transportation on road, air and sea, and automatic warehouses, smart containers, smart shelves, paperless documentation and transmission, route planning, picking and contracting of operators, partners and sub-contractors as well as payments and settlements. However, not all processes can be made automatic and it is still necessary to look at the interfaces between humans and automated systems.

As far as adoption of Logistics 4.0 in Hong Kong is concerned, many questions come to mind: is the Hong Kong logistics industry ready for these changes? What approach should the industry adopt to meet these challenges? Should we leave everything to the private sector? There is also the role of the government to consider, such as constructing the necessary eco-systems, introducing the right technologies, the application of said technologies, removing cross-border trade obstacles and inefficiencies and helping with financial and other forms of assistance and incentives.

I understand that not all companies are at the same level of maturity, but I also believe the correct approach is to find out where the Hong Kong logistics companies are first – this means determining how many companies are still at Logistics 2.0, 2.5, 3.0 or getting close to 4.0.

We also need to benchmark with our competitors to ascertain our strengths and weaknesses, as we must find out the hurdles for these companies and how they should equip themselves to meet future demand. It is also necessary to understand the needs and plans of their clients to ensure the industry is taking the right moves. Last but not least, it is necessary to work out road maps for the industry and its individual players.

The SAR Government should take fast action to help the industry to meet these challenges. Most of the operators that I have come across, perhaps with the exception of the multinational corporations, are totally unprepared for these obstacles.

The traditional Hong Kong logistics industry thrives from the fact that the Pearl River Delta (PRD) is “the Factory of the World” and that Shenzhen is the leading producer of IT products. However, with the transformation of the PRD and relocation of manufacturing activities, clients’ needs are changing. On the other hand, China is the world’s largest and fastest e-commerce market. With rapidly changing and integrating sourcing on a global scale, procurement, production, transportation, handling, marketing,

consumption and distribution systems, there are new opportunities for the Hong Kong logistics industry to grasp. However, to ride on top of these “disruptive” tides is no easy task.

Technologies could be expensive, and so are process and systems changes. Moreover, it is a global thing and many developments are beyond control of local companies. The SAR Government should take an early and active role to help the industry, especially the small-to-medium enterprises (SMEs).

I am glad that in her Policy Address, the Chief Executive has placed a lot of emphasis on technology research and development. I believe Logistics 4.0 should be one of the focuses, for the sake of our logistics sector and its future.

