THE FUTURE OF TRADE IN ASIA

PG 11

MR WANG ZHENHUI

GOODBYE AMAZON EMPIRE, HELLO TO THE NEW KID ON THE BLOCK

PG 19
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Myanmar’s trade with ASEAN member countries reaches US$9.6bn

Myanmar’s trade with member countries of ASEAN hit US$9.6bn in the fiscal year of 2016-17, which ended in March.

Myanmar’s export to the region’s trading partners stood at US$3.09bn, while its import from them represented US$6.51bn.

Thailand topped the list of Myanmar’s five ASEAN trade partners with US$4.28bn during the year, followed by Singapore with US$2.97bn, Malaysia with US$980m, Indonesia with US$827m, Vietnam with US$494m and the Philippines with US$56m.

China-ASEAN trade to hit US$1tr by 2020

The total trade volume of Association of Southeast Asian Nations (ASEAN) with China is projected to increase to US$1tr ($1.4tr) by 2020, said AKP Mochtan, deputy secretary-general of ASEAN for Community and Corporate Affairs.

The seminar on ASEAN Community Building and China-ASEAN Relations, aimed at boosting Sino-ASEAN relations, took place during the Belt and Road Forum for International Cooperation.

As the sixth-largest economy in the world, ASEAN is now finalising regional comprehensive economy partnerships with six free trade area counterparts — China, Japan, Korea, Australia, New Zealand and India. This would add up to over half of the world’s population, and in turn, bring huge opportunities, he added.

Asia manufacturing turns dips

The recovery of Asian manufacturing proved to be short-lived. Of the 12 economies tracked by The Nikkei across the region, seven registered slower growth and three saw contractions in May. Analysts noted that the downturn has much to do with weaker demand from China, whose credit has tightened and construction slackened.

The Nikkei ASEAN Manufacturing Purchasing Managers’ Index in May – which tracks the Philippines, Myanmar, Vietnam, Indonesia, Thailand, Malaysia and Singapore – slipped 0.6 point from a month earlier to 50.5.

A number of the countries mentioned saw growth in orders slowing down. Business confidence therefore sank to its lowest in more than four years, while stepped-up purchasing activity, likely driven by sticky inflation in input costs, did not translate into more production.

Nikkei Purchasing Managers’ Index

<table>
<thead>
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<td>Manufacturing</td>
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World Bank says trade & manufacturing to boost 2017 global growth

The World Bank maintained its forecast that global growth will improve to 2.7 per cent this year, citing a pick-up in manufacturing and trade, improved market confidence and a recovery in commodity prices.

The update marked the first time in several years that its June forecasts were not reduced from those published in January due to rising growth risks. The World Bank’s 2017 global growth forecast of 2.7 per cent compares to its 2.4 per cent estimate for 2016, a figure that was increased by a tenth of a percentage point since January.

The World Bank said advanced economies were showing signs of improvement, especially Japan and Europe, while the seven largest emerging markets – China, Brazil, Mexico, India, Indonesia, Turkey and Russia – were again helping to drive global growth.

Pharmaceutical robots market expected to reach US$119.5m by 2021

The pharmaceutical robots market is projected to reach US$119.5m by 2021 from US$64.4m in 2016, at a CAGR of 13.2 per cent. While traditional robots segment is expected to command the largest share of the global market in 2016, Asia Pacific is expected to be the region to account for the largest share of the global pharmaceutical robots market.

The large share and high growth of Asia Pacific can be attributed to the increase in domestic industrial robot companies, flourishing pharmaceutical industry, increasing number of conferences and exhibitions, investment and funding in the industrial robots industry, and Japan’s Robot Strategy.

The market witnesses high competitive intensity, as there are several big and small firms with similar product offerings. These companies adopt various strategies to increase their market shares and establish a strong foothold in the global pharmaceutical robots market.

How Amazon Australia will affect existing supply chains

Amazon’s entry into the Australian retail next year is already hitting retailers hard. But it is not just bricks and mortar stores that will be hurt. The goods Amazon will be shipping, either from their own warehouses or from resellers, will need to get to customers. That means warehouses, planes and trucks will be needed - and it will put entire supply chains and logistics providers under new pressure.

Couriers Please’s COO, Mr Hoy Yen Hooper, points out that Australia’s geography and population distribution is far different to that of the US, Amazon’s home market. That means the company will need to create relationships with local logistics providers.

To cover those distances, Mr Hooper says it is likely Amazon will negotiate with some key players in the market to support their Australian efforts. That will mean scanning the market to find a small number of key providers to assist them with getting goods across the country. Otherwise, chances are Amazon may look to build their own distribution network. For local logistics companies, Mr Hooper says there is no doubt there will be opportunities that come from Amazon’s retail entry.
Vietnam faces dire shortage of logistics personnel

Recent surveys by the HCM City Research and Development Institute show that 53 per cent of the total enterprises in the country are lacking professionally-trained logistics staff. Only major enterprises that have their own staff training departments are able to provide training for their logistics, while small-and-medium enterprises have to send their staff to study training courses organised by the VLA.

It will take 100 years to train 200,000 logistics staff with the country’s current speed and quality of logistics training, said Mr Tran Chi Dung, vice president of the Viet Nam Logistics Research and Development Institute. Other universities and colleges do provide logistics training programmes but they are often incorporated into degrees of business management, transportation economics, foreign trade, commerce and tourism. This results in students only being equipped with basic knowledge of commerce and transportation but may find themselves confused about their duties when accepted into logistics enterprises.

Forwarder polls predict peak season, tech as competitive edge

Two freight forwarding industry surveys show that forwarders predict a strong east-west peak season and believe digitalisation, which will “future-proof” their business, is inevitable.

More than 40 per cent of respondents to a survey that will be built into the APAC Forwarding Index expected volumes to be higher in August than in May on ocean lanes to and from the Asia Pacific, while a similar amount predicted volume would remain the same, the survey found.

In keeping with the traditional peak season surge in the third quarter, two-thirds of survey respondents forecast that Asia-Europe westbound volumes would be higher in August than they were in May. On the headhaul Asia-North America trade, 44 per cent also predicted higher volume over the same period, with only 11 per cent expecting box numbers to fall.

Shipping shortcuts put Southeast Asia in the express lane

New types of cross-border ground shipping services are emerging in Southeast Asia to support the growing multinational production networks here. Many Japanese automotive and electronics companies have supply chains spanning the Greater Mekong region, which have seen a rapid increase in the outsourcing of manufacturing processes once concentrated in China. Better courier services within ASEAN are likely to speed up this division of labour.

Japan’s Nippon Express, for instance, has launched regularly scheduled truck transport – a rarity in the region – originating from Bangkok. The service connects points on a 1,600km route between Bangkok and Kuala Lumpur, and a 1,500km route between Bangkok and Hanoi.

Each truck carries goods from multiple customers, accommodating low-volume consignments from small and mid-sized companies. The trucks operate on a set schedule, departing even if not full of cargo, so customers can ship goods regularly for a predetermined price.
SingPost unveils SmartPost initiative

Singapore Post (SingPost) has announced SmartPost, a transformational initiative that will be at the leading edge in harnessing wireless and digital technologies to raise postal service quality and improve operational efficiency.

SmartPost is an integrated suite of solutions that has been developed to enhance service levels and customer satisfaction. Amalgamating near-field communication (NFC), radio frequency identification (RFID), digital imaging and electronic notifications, SmartPost will equip SingPost’s postal staff with new skills and tools to elevate their operational capability and efficiency across the entire postal operation: from collection to sorting, last mile delivery and quality assurance.

Mr Paul Coutts, SingPost’s Group Chief Executive Officer, said: “I have joined SingPost for just over a week and from what I have seen in those few days, SingPost is a very innovative company. SmartPost is one of many innovations SingPost is using to exploit and leverage the proliferation of digital technology, this time to address traditional postal challenges and take a disruptive step forward to meet evolving expectations for faster and more flexible deliveries, especially for e-commerce.”

Banking on Cambodia’s logistics sector

Over recent years, Cambodia has benefited greatly from rising production costs in China and the resultant realignments in the supply chain.

It has emerged as a competitive alternative manufacturing base for light manufacturing relocation within Southeast Asia. Cambodia’s garment and footwear industry accounts for over 70 per cent of the country’s exports, which is the country’s main user and driver of logistics activities.

Moving forward, it is expected that Cambodia’s trade levels will increase further still. This is partly due to the aforementioned ongoing adjustments in regional supply chains. Additionally, the ASEAN region is becoming increasingly competitive, due to the trade bloc’s continued drive towards regional integration.

Crown rolls out efficient automation technology in Southeast Asia

Crown Equipment is giving order pickers their greatest update ever with new technology for the company’s pallet trucks that offers a substantial efficiency boost.

The Crown QuickPick™ Remote Order Picking Technology utilises a special glove that remotely controls the movement of the pallet truck and is now being rolled out throughout the Southeast Asia region. The system uses task-automating technologies to simplify workflow and optimise the order picking process, thereby increasing productivity and reducing operator fatigue.

QuickPick™ Remote is compatible with the Crown PC 4500 Series centre console rider pallet trucks and GPC 3060 Series low level order pickers.
Fast-changing policies within the global trade stage have stirred predictions of a large trade vacuum to fill. A number of exporters and importers are looking for stronger trade ties to the Asia Pacific region to complete what may be a large void. That leap may just pay off. As of April, the Asia Pacific region has noted some of its best export gains in recent years – a move that has been essentially blocked by policy makers’ thoughts about the future direction of global trade.

China released data in April that showed a 16 per cent increase in exports in March. In addition, a 20 per cent rise in exports has motivated Chinese businesses, according to World Economy News.

South Korea’s exports saw their third straight double-digit gain in March. Moreover, Taiwan’s exports climbed by 15 per cent in the first quarter, according to trade economists.

One part of the world looking to take a leadership role is the Asia Pacific region led by the ten members of the Association of Southeast Asian Nations (ASEAN). In 2014, its total GDP reached US$2.6tr, making it the seventh largest economy in the world, while its total trade was US$2.5tr – the majority of which was intra-ASEAN trade.

To help bolster further growth and cooperation across the region for growth, Asia has a number of new and existing trade deals in the works to boost imports and exports in the near future.

Take China’s One Belt, One Road (OBOR), an economic and diplomatic initiative that could transform trade. China’s OBOR initiative aims to further boost trade links with ASEAN, Middle Eastern, and European countries. The initiative is designed to connect China to the world by building high-speed trains and highways through international geographic corridors.

When it comes to trade deals, as noted in a May report from Reuters, China, Japan and South Korea are already in the initial stages of discussing a trilateral trade agreement to resist all forms of protectionism, taking a stronger stand than G20 major economies against any US protectionist policies.

Even as TPP (which excluded China) was negotiated, another extensive trade agreement has been under negotiation. China and 15 other Asia Pacific Rim countries have been negotiating the Regional Comprehensive Economic Partnership (RCEP) agreement since 2012.

RCEP involves the 10 members of ASEAN – Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam – and their six regional trading partners: China, India, Japan, South Korea, Australia and New Zealand.
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The timing of the RCEP push matches the growth of China’s trade influence with ASEAN. According to data provided by the ASEAN website, total trade with China amounted to US$345bn in 2015, representing a 15.2 per cent share of total ASEAN trade in that year. If implemented, RCEP could transform the region into a market representing US$22tr in economic activities and of the world’s population.

Japan also announced in early June that it is working with Mexico to push for the TPP to take effect without the US. Mexico is willing to strengthen trade and investment ties with Japan and other Pacific countries.

ASEAN is now an integral part of the Asian FTA landscape, having FTAs with China, India, Japan, Korea, Australia and New Zealand, as well as being a central part of the proposed RCEP.

New initiatives pay off

China’s imports and exports grew in the first two months of this year after weakening toward the end of 2016, according to The Associated Press. In fact, China’s exports rose four per cent from a year earlier in January and February to US$302.8bn, rebounding from a 6.1 per cent contraction in December, according to US Customs. Imports rose 26.4 per cent to US$260.6bn, accelerating from December’s 3.1 per cent growth.

South-Korean shipments have increased for three months in a row this year. Surveys reveal strong export pipelines in Japan, Singapore and Taiwan. Japan’s exports rose for the first time in 15 months in December on strong sales of electronics and car parts, a positive sign for the export-reliant economy according to the country’s Ministry of Finance. The data also shows that exports rose 5.4 per cent year-on-year in December, compared with a 1.2 per cent annual increase expected by economists in a Reuter’s poll. The volume of shipments also rose 8.4 per cent from a year earlier, up for a second straight month, underlining a pick-up in external demand.

Asian trade stronger with new deals, free trade agreements & compliance

With increased trade comes the challenge of remaining compliant with regional and local rules and regulations. Companies within the Asia Pacific arena can boost their trade dominance with a robust modern compliance programme, which helps them operate fast and nimble supply chains while also avoiding audits by Customs authorities.

And it need not be difficult – modern tools can enable two key compliance areas that will take an organisation a long way to being a beneficiary of trade agreements and safe from non-compliant shipments.

**Accurate classification**

Compliance’s basic focus starts with Classification. Accurate and up-to-date tariff classification plays a large role in market access, costs and profits. Poor classification impacts supply networks dramatically with shipment clearance times blowing out, potential fines, and general rework of shipment transactions. Corporate compliance leaders with a central governance role are responsible for managing the tracking of regulation updates in a territory and updating the relevant internal functions in a timely manner.

Timeliness is the key word. There can be insufficient time from publication of regulatory updates to communication within the supply chain, a roadblock for import and export business-driven deadlines. The 2017 World Customs Organization Tariff (WCO) changes modernise Tariff Chapters for the modern products and services seen today. However, 2017 WCO Tariff changes have a varied roll-out by territory – hence planning to implement the changes in an organisation’s supply chain is complex. This is where compliance automation assists companies by managing their classification. In addition, data centrally managed allows for wide and quick dissemination.

**Free trade agreements**

ASEAN companies have great opportunities with Free Trade Agreements (FTAs) – however, surveys show that many companies in international trade do not use them. Why would a company pass up paying lower duty fees? Usually, simply, it is due to transaction complexity and management in the supply chain.

Utilising FTAs means more opportunities for businesses – but there is also pressure. All current and potential future trade agreements have one thing in common: they expose a company to potential trade compliance issues. Companies cannot afford penalties, delays or reputational damages that will affect their business. These are just a few consequences of violations of trade regulations.

Trade regulations and non-compliance penalties will continue to vary by country until all members adopt ASEAN-wide standards. This means that ASEAN companies now trade with a multitude of regulations and requirements within the region. The number of trade rules and administrative effort make data accuracy and visibility more important than ever.

Increasingly, companies are moving to automation of FTA Rule of Origin analysis as one method to ensure compliance and maintain fully auditable records of every transaction. These business processes are also proactive and generate “right first time” information. Compliance professionals focus on looking for new FTA benefit opportunities in new trade lanes, rather than addressing issues with current product or trade lane shipments.

Asia’s trade will continue to grow and expand if trends are correct. The region has a number of new and existing trade agreements in place to promote international trade and create a region that is a true global trade leader. Companies will benefit from modernisation of their own trade processes by getting the basics right in an easy and timely manner to maximise the cost benefits of FTA usage. Modern best practice supply compliance is available in Asia; and the best are doing this already.

**About the Author**

With more than 30 years in the leadership of businesses across the Asia Pacific region, James Meares has extensive experience developing and delivering solutions for clients and is responsible for all Integration Point activities in Asia Pacific, working with client senior management in developing strategies and delivering solutions.
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Jim Chamberlain, Sr. Director, Industrial Engg. & Continual Improvement
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For the past few years, growth in the volume of world trade has been sluggish with an annual growth averaged at around three per cent. Whereas GDP growth has been recovering from the Global Financial Crisis, one can hardly say the same for international trade. While factors, such as low investment, rebalancing in China and mounting protectionist pressure are certainly accountable for the trade slowdown, we should not ignore the long-standing problem of trade finance shortage, especially for small-and-medium enterprises (SMEs), which has become increasingly pronounced.

A need to tackle financial challenges

Following a tighter regulatory environment in the aftermath of the Global Financial Crisis, banks all over the world are forced to conform to a more stringent set of requirements. Although this has inevitably driven up financing costs for big and small firms alike, the impact is not uniform. Data and surveys conducted by ICC have shown that SMEs are hit the hardest and many have found it more challenging to access financing options from banks than do large conglomerates. In fact, 53 per cent of SMEs’ trade finance proposals are rejected vis-à-vis a 79 per cent acceptance rate for large corporates.

Given that SMEs comprise 95 per cent of enterprises in the world and provide around 60 per cent of the jobs in the private sector, there is a sense of urgency to address this issue because global trade is integral to the alleviation of poverty and a pillar of long-term global economic growth. The financing gap is particularly wide in developing regions, such as Africa and Asia, where such financial products are needed the most. Like many other times in the past, unmet needs always give rise to new business opportunities. Fintech, the buzzword for the past year, has begun to show real potential in solving the challenges we face. With the advent of InsurTech, RegTech, blockchain and many more, the nascent industry has already enjoyed a vibrant scene with regulators and financial institutions alike looking into what promises the wave of financial innovation holds for us in the coming years.
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The importance of building trust

The rapid progress in technological innovation has shrunken the world considerably. As we enter an era of unprecedented connectivity and efficiency, the flow of goods and capital has accelerated as well. Banks, with obsolete protocols, do need new technologies to stay relevant in new dynamics of trade finance. Of all the financial innovations, the idea about blockchain is a grand one and paints a nice picture of seamless integration between different parties. A prominent appeal of blockchain is the idea of ‘trustlessness’ – participants on the network do not have to fully trust each other before trade begins.

The use of a shared ledger, blockchain, in trade finance can establish three key parameters of a legitimate flow – underlying physical goods flow, trade data flow and financing/money flow. Various processes moving along the trade value chain include the event when the cargo is loaded, the title of goods is transferred or an invoice has been financed. Third-party certifiers, shippers and customs are the key players in the trade finance cycle. Currently, the back-end systems of different stakeholders are not integrated and therefore there is not a single point of truth, resulting in inefficiency in information exchange and difficulty in establishing the authenticity of documents. If all participants are on the same blockchain network, resulting trade flow and transparency will be achievable.

The value of using blockchain is not only about creating an immutable record of trade flow but also about establishing a digital identity for each stakeholder along the entire supply chain. It is the traceable digital identity that opens door to endless possibilities. For example, suppliers can selectively disclose the past transactions that he has had with buyers, establishing his credibility. With blockchain, buyers will be able to verify the veracity of those information. Such a record helps to unlock potential international trades where the difficulty in establishing trust with new partners has always been an insurmountable barrier for exploring new trade opportunities. In addition, having digital records of the actions performed by different parties demarks responsibility and therefore encourages accountability. Because updates of trades are pushed onto blockchain in real time, payments can also be triggered automatically by the event stream as opposed to the current manual presentation of documents. Similarly, with easily verifiable data, trade-related insurance products can be structured with dynamic pricing models taking into account clients’ credit and trade history. With trading parties all on the same blockchain, KYC/AML checks can be less expensive because transactions can be monitored and relevant parties can be determined with ease.

It is important to bear in mind that any Fintech solution must be rooted in inclusivity, serving the underserved and helping the underbanked. Helping SMEs be equipped with new knowledge, skillsets and adopt new technologies will enable them to stay ahead of the curve and thrive in this new digital economy. Because empowering SMEs is the only way to create the next momentum for our economies to forge ahead.

About the Author

JED is a digital trade platform that connects suppliers, buyers and lenders with the aim of making trade and working capital flow more efficiently for businesses. It is built on a combination of smart data architecture to facilitate dynamic trading mechanisms between trade partners; and an early-stage blockchain proof-of-concept to register important trade and financing interactions.
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GOODBYE AMAZON EMPIRE, HELLO TO THE NEW KID ON THE BLOCK

It goes without saying that the Chinese e-commerce market is soaring. According to Statista, e-commerce B2C sales in the country have reached US$378bn, with the market expected to grow at a CAGR of 30.62 per cent during the period of 2016-2020. It is quickly catching up to the United States’ US$394bn market.

Despite the thriving landscape however, the Chinese market stays predominantly in the hands of its local companies. Even American heavyweight Amazon has a less than one per cent market share in China.

In fact, there is a new kid on the block that not only keeps out challenges from overseas, but is also quickly threatening the position of one of the world’s largest e-commerce companies that generates more gross merchandise volume than Amazon and eBay combined.

In this special feature, Supply Chain Asia had a chat with Mr Wang Zhenhui, CEO of JD Logistics, to discuss the rise of JD.com, the official formation of its logistics unit, as well as the exciting local and global e-commerce landscape.
Analysing the different big league boys

Everyone knows Amazon and Tmall.com by Alibaba. But what about JD.com? It may not be quite a global household name yet, but it is quickly getting there. The statistics below speak for itself:

<table>
<thead>
<tr>
<th></th>
<th>Amazon</th>
<th>Alibaba.com</th>
<th>JD.com</th>
</tr>
</thead>
<tbody>
<tr>
<td>Started in</td>
<td>1994</td>
<td>1999</td>
<td>2004</td>
</tr>
<tr>
<td>Warehouses</td>
<td>120</td>
<td>No warehouses</td>
<td>263</td>
</tr>
<tr>
<td>Employees</td>
<td>2,000</td>
<td>50,092</td>
<td>122,405</td>
</tr>
<tr>
<td>Active accounts</td>
<td>310 million</td>
<td>279 million</td>
<td>236.5 million</td>
</tr>
</tbody>
</table>

The name Alibaba easily comes to mind once someone mentions e-commerce in China. However, Alibaba’s revenue only comes out to less than US$23bn compared to JD.com's US$37.5bn. With Amazon's revenue in China only equating to US$3.6bn, when it comes to revenue and market share, JD.com is the obvious winner.

In 2016, JD.com entered the Fortune 500 list, making it the first Chinese internet company to make the list. As the list is based on revenues achieved, China’s other top internet companies, such as Alibaba, Tencent, and Baidu, missed the mark. Obviously, this is quite a feat for a young company that was relatively unknown until just a couple of years ago.
"We spent the first 10 years building our own nationwide fulfilment and logistics network that today covers 98 per cent of the Chinese population. The reason why we had to create everything ourselves was because 10 years ago, the industry did not have the robust logistics solutions available that could support JD.com’s rapid business growth at that time. At a time when Chinese consumers do not trust buying online due to high possibility of counterfeits and third-party logistics providers taking a long time to deliver parcels, we took the challenge into our own hands and invested in our own logistics network from scratch in order to have better control over fulfilment and timely deliveries to our customers," explains Mr Wang, who oversees JD.com’s comprehensive logistics solutions, including warehousing, transportation, delivery, and after-sales services, as well as the smart logistics and cross-border logistics.

Alibaba and JD.com operate two very different business models. Alibaba operates similarly to eBay by offering several e-commerce platforms, including Alibaba.com, Tmall.com, and Taobao.com, that third-party consumers and businesses can use to buy and sell products. Thus, Alibaba does not own any warehouse space, unlike JD.com that builds and owns its own warehouses.

JD.com, however, has a similar business model to Amazon by selling carefully vetted merchandise directly to consumers from warehouses across China and from dozens of countries around the world. JD.com’s strong nationwide logistics network means that it can offer same- or next-day delivery as standard. This level of service makes it difficult for even the likes of Amazon to effectively penetrate the market at this stage.

The importance of logistics

JD.com has recently created a new business group, JD Logistics, further cementing the importance of its delivery and warehouse infrastructure. Establishing this business unit also allows the company to speed up the development of its infrastructure, and leverage its advanced technology and logistics expertise to explore business opportunities. JD Logistics will offer integrated supply chain solutions, like warehousing, transportation, delivery and after-sale services, to e-commerce sellers and other companies.

“While we may choose to continue to rely on our partners for air freight related deliveries, we will continue to develop our last-mile capability in China. We are dedicated to ensuring that all our customers receive their purchases within the timeframe they expect," says the CEO of JD Logistics, who first joined JD.com in April 2010 as General Manager of the company’s North China region.

Talent recruitment and development are a strong component for JD.com, with the company setting up an office in Silicon Valley to recruit local talents. With 122,405 full-time employees (including warehouse workers, deliverymen and customer service staff), the company is dedicated to maintaining its manpower strength to ensure smooth daily operations of its end-to-end logistics network.
Unrivalled delivery network

With Amazon’s Prime Air still yet to get off the ground due to federal regulations on commercial drone use, JD.com already has a fleet of drones carrying out thousands of deliveries in the outskirts of Beijing and other provinces. JD.com is also researching in heavyload drones that can carry a payload weighing more than a ton.

But JD.com’s drones function differently from Amazon’s. Instead of delivering straight to each individual customer, JD.com’s drones fly along fixed routes from a major delivery station to special landing zones in the respective villages. From there, a local contractor (also known as village promoter) will pick up the goods from the drones and deliver the packages right to the customers’ doorsteps.
Drones are not the only factor putting JD.com ahead of its rivals. By building its own entire logistics network, including warehouses, technologies and its own fleet of delivery vehicles, the company is able to make speed another of its differentiating factor. JD.com’s focus on developing their own proprietary technologies further reaffirms the company’s aggressive investment in innovation.

“We already offer same-day delivery on most orders, where someone can buy an item in the morning and have it delivered by that same afternoon. We want to continue enhancing our technology and the efficiency of our logistics network, and building our sophisticated data-driven delivery approach, to continue enhancing this level of service,” explains Mr Wang, who, prior to joining the company, held senior executive roles at the Lenovo Group and Eternal Asia Supply Chain Company.

Mr Wang’s dedication to the supply and logistics industry shows that JD Logistics is in good hands. After all, only someone with enormous passion will keep coming back to the same industry.

“I used to golf, but now all my free time is dedicated to my two sons. I don’t need any other hobbies to be honest. I’m having fun at my job and enjoying my work, and that is really all I need,” says the 42-year-old father.

JD.com to build largest drone logistics network and R&D campus in China

JD.com has reached an agreement with the provincial government of Shaanxi to build China’s largest low-altitude drone logistics network.

Spanning a 300 kilometre radius, the network will include hundreds of routes and drone air bases throughout the entire province for e-commerce shipments and more. Heavy-load drones are expected to be able to carry more than a ton, transporting high-quality products to remote areas and agricultural produce to cities.

JD.com will also establish a research and development campus in partnership with the Xi’an National Civil Aerospace Industrial Base (XCAIB), where unmanned systems will be developed, manufactured and tested. The campus will be the first of its kind in China, and will include a global headquarters for JD Logistics, a centre for unmanned systems, and a facility for JD’s cloud computing and big data operations. XCAIB will provide five kilometres of pipeline airspace, 1,500 square-metres of drone R&D space, and more than 30 acres for flight tests, greatly increasing JD’s drone testing and deployment capabilities.

The partnership is expected to help promote economic development in Shaanxi by providing more high-tech employment and modernise industries in the region.
JD.com began developing its drone delivery program in October 2015 and has successfully completed thousands of test flights since starting trials in June 2016. Today the program is believed to be the first broad commercial ecommerce application of drone technology in the world.

Using proprietary technology developed at JDX, JD.com’s research and logistics innovation lab, the JD Drone program aims to bring the benefits and advantages of ecommerce to remote rural communities in China, a population that is currently underserved by the ecommerce industry.

In areas where complex terrain and poor infrastructure makes last mile logistics challenging, JD drones can deliver orders from regional delivery stations to JD’s dedicated “village promoters” in each village, who then distribute the orders directly to customers, shortening delivery times and reducing costs. JD.com currently has about 300,000 village promoters across the country.

For Singles Day 2016, JD has launched four drone bases in remote parts of Beijing, Jiangsu, Shaanxi and Sichuan, making it easier for local villagers in those areas to tap into China’s largest sales festival.
JD.com’s drone delivery program is a safe, cost-effective and scalable way to expand the benefits of ecommerce to rural residents in China. The company’s current fleet of more than 30 drones, all developed by engineers in the company’s JDX labs and built to their specifications, includes five different models. They can transport and deliver packages weighing between five kilos and 15 kilos and cover distances as far as 50 kilometers.

**CURRENT MODELS**

**M-TC2**
- **Power:** Battery
- **Load weight:** 10KG
- **Reach:** 10 km per charge
- **Maximum speed:** 100km/h
- **Usage:** Automatic discharge; high-speed

**M-TB1**
- **Power:** Battery
- **Load weight:** 5KG
- **Reach:** 10 km per charge
- **Maximum speed:** 72km/h
- **Usage:** ‘Short-hop’ delivery

**M-SC1**
- **Power:** Battery
- **Load weight:** 8KG
- **Reach:** 8 km per charge
- **Maximum speed:** 80km/h
- **Usage:** ‘Short-hop’ delivery

**V-FA1**
- **Power:** Battery
- **Load weight:** 5KG
- **Reach:** 30 - 50 km per charge
- **Maximum speed:** 90km/h
- **Usage:** High-speed; long-distance delivery

**CT-120**
- **Power:** Gasoline
- **Load weight:** 15KG
- **Reach:** 30 km per charge
- **Maximum speed:** 54km/h
- **Usage:** Heavy-load; long-endurance
MR GARY SO
DEPUTY MANAGING DIRECTOR
KERRY LOGISTICS
One Belt, One Road (OBOR), frequently referred to as a game-changer in the region, is an ambitious development plan to link Asia to Europe with an unbroken chain of modern infrastructure. The initiative encourages the development of railways, bridges and ports, among other infrastructure, to foster trade and connectivity. It is no wonder that supply chain and logistics players, such as Kerry Logistics, are eager to be part of this regional plan. For example, there are plans for Kerry Logistics to acquire Commonwealth of Independent States (CIS) to significantly expand the company’s coverage in Central Asia.

“OBOR is not a completely new concept but a traditional trade link with more efficient vehicles, which offers customers an alternative to ocean freight and new business opportunities across China, Central Asia and Europe. China-Europe rail freight services have been in the market for decades. It is the new technology that facilitates faster rail freight services, making it a more viable and economic option to international customers,” says Mr Gary So, Deputy Managing Director of Kerry Logistics.

In this issue of Supply Chain Asia magazine, Mr So discusses his role at the company, OBOR’s impact on air and ocean freights, as well as his vision for the logistics of the next century.
After nine years with Kerry Logistics, you left to pursue other interests before returning in 2015. Can you share with us more about this?

The year 2000 was the time the logistics industry really started to take shape in the Hong Kong market, which was when I first joined the company. I spent the first three years in Hong Kong, then relocated to Shanghai to kickstart the business there. Following which, I was relocated to Taiwan in 2009 to develop the logistics and express business after the acquisition of T-Join.

I left Kerry Logistics in 2010 for a change in scenery and took up a regional management role based in Shanghai for a global 3PL headquartered in the US for two years, before subsequently joining a Fortune 500 company engaged in pulp and paper business for three years.

I was invited to re-join the Kerry Logistics family in 2015 when the company initiated the development of an Asian-wide express network. We are currently offering domestic and cross-border express services in six countries, including Thailand, Vietnam, Malaysia, Cambodia, Taiwan and Hong Kong. I also look after the road freight business under the brand name of KART, a China-ASEAN road transportation network covering China, Thailand, Vietnam, Malaysia, Singapore, Cambodia, Laos and Myanmar.

Kerry Logistics has launched ‘One Belt, One Road’ UK-China rail services. In your opinion, do you think global air and ocean freights will drop drastically due to OBOR? Why or why not? Who will benefit most from OBOR?

Both the falling global demand and the slowing economy in China has affected the global air and ocean freight market in the past five years. The global rise of protectionist and anti-globalisation sentiments will further impact the global economy in the near future. Nonetheless, the strong growth of cross-border e-commerce in recent years has generated new opportunities for the global air freight industry and the trend will continue to grow in the coming years.
OBOR is not a completely new concept but a traditional trade link with more efficient vehicles, which offers customers an alternative to ocean freight and new business opportunities across China, Central Asia and Europe. China-Europe rail freight services have been in the market for decades. It is the new technology that facilitates faster rail freight services, making it a more viable and economic option to international customers.

Neighbouring countries of China, in particular developing countries, are expected to benefit most from OBOR riding on the multi-million dollar infrastructure and investment projects on the agenda.

Kerry Logistics has been involved in numerous mergers and acquisitions (M&A) activities, such as the acquisition of Bofill & Arman and Multi Logistics. What are the Group’s M&A strategies and how does the company intend to assimilate its new businesses into the overall service offerings? Is KLN expecting more M&A activities soon?

Kerry Logistics is devoted to growing organically and through selective mergers and acquisitions to strengthen our global network and service capabilities.

As part of our long-term international freight forwarding strategy, we have acquired a majority stake in APEX in June 2016 and the business integration progressed as planned, continuously benefiting our international freight forwarding business by virtue of the increased capacity and a broadened client base.

Greater China remains at our core and the OBOR Initiative will continue to provide a framework for Kerry Logistics’ expansion. We plan to further establish our presence in five of the international economic co-operation corridors to seize new opportunities in project, rail and multimodal logistics businesses. Leveraging mainland China’s increasing connectivity with the rest of the world, we will continue to seek for appropriate M&A opportunities and targets to open the door to potential markets with growth prospects.
Like other 3PLs, Kerry Logistics is intent on riding the e-commerce boom in APAC, particularly China. What sets Kerry Logistics’ e-commerce offerings apart from its competitors?

It is definitely our cross-border e-commerce logistics capability and network across China and ASEAN as well as our domestic last-mile delivery in individual countries, including Thailand, Vietnam, Malaysia, Cambodia, Taiwan and Hong Kong.

Our current set-up includes an import e-commerce hub in Ningbo, serving the two biggest China e-retailers, an export e-commerce hub in southern China, e-commerce consolidation hubs in Hong Kong and Shenzhen, and various express centres in Thailand, Vietnam, Malaysia, Taiwan, Hong Kong and recently in Indonesia.

E-commerce will continue to be a key growth driver for Kerry Logistics, with particularly strong demand momentum driven by cross-border e-commerce between Greater China and ASEAN.

How does Kerry Logistics position itself vis-a-vis international, regional and local players?

Kerry Logistics is a fast growing global 3PL with a strong network in Asia. We are serving many top 100 brands and fortune 500 companies across various industries – from fashion & lifestyle, electronics & technology, F&B to FMCG, pharmaceutical & healthcare, industrial & material science and automotive. Our unique regional network in Greater China and Asia as a whole is setting a high level of standard very few could match.
What are your thoughts on the regional trade growth for 2017? Will it be a repeat of weak global demand like last year? Why or why not?

Traditional trade patterns will not see significant growth, such as air and ocean freight. Cross-border e-commerce will continue to drive regional business growth across Asia. With various uncertainties in the macro-environment, global economic growth is expected to remain soft in 2017 and first half of 2018.

How do you envision logistics of the next century?

I foresee warehouse operations will be highly automated or even be dominated by robots in the next two decades. Back in 2015, we introduced seven fully automated and programmed robotic butlers at our flagship facility PC in Hong Kong. Kerry Logistics is one of the first third-party logistics in Asia to adopt robotic butlers in its operations to enhance fulfillment efficiency and accuracy.

The robotic butlers operate 24/7 and can pick at a rate four times faster than in the normal course. The solution is ideal for retail brands, which sell a wide variety of consumer products with potentially expanding e-commerce business. In China, some large express players are already trial running robot sorting systems in their sorting hubs, which means this will no doubt trending towards full automation.

What are your thoughts on talent development in Asia (China + SEA)? In your opinion, is there enough talent in the region?

Internally, our talent supply is stable and secure through efforts in our group management trainee development programmes as well as specialised trainee programmes in local markets across the world in the past two decades. We have built a talented supply chain within the group on a global level.

In general, we found that there is not enough talent in the market, in particular within Asia. For instance, the talent supply in Greater China is at an acceptable level, but there are not enough young talents readily available in the ASEAN region.

I believe one of the reasons is logistics/global supply chain/transportation tertiary academic curriculum is not available or comprehensive enough in the region. Moreover, the new generation seems more enthusiastic in starting new businesses than getting a job or working in the logistics operations.

In some Asian countries, when we were launching management trainee programmes and designing the programme promotion strategies, we found it difficult to identify the target group, i.e. suitable institutes with logistics-related academic curriculums. The younger generation is also not familiar with the concept supply chain or logistics, which may hinder them from starting a career in the industry.
Findings from the Frost & Sullivan report say that despite challenging economic times, Southeast Asia is poised to become one of the world’s fastest-growing regions for e-commerce revenues, exceeding US$25bn by 2020.

While on one hand, complex geographies, such as Indonesia and the Philippines, with lack of logistics infrastructure, impede the growth of the e-commerce industry in Southeast Asia, the Chinese e-commerce market on the other hand, is providing impetus to growth of online retail in the region.

As the warehouse industry embraces cloud adoption and Internet of Things (IoT), it is now migrating to on-demand, Software-as-a-Service (SaaS) warehouse management systems to save on costs, in terms of warehouse personnel requirement and on-premise equipments.

According to a news report by Cerasis, featuring infographic from Vero Solutions, it is projected that by 2030, warehouses will be part of an initiative to achieve zero-net energy. A net zero building is one that generates as much energy as it uses within a year.

By devising strategies to save on costs and prevent harmful emissions, the warehouses in future will be designed with sustainability goals in mind. Among other eco-conscious initiatives, the industry is looking at recycling of packaging materials during shipping and cutting down on energy consumption through the purchase of high-efficiency equipment.

The e-commerce boom and technological revolution witnessed across industries globally, and more so in Asia Pacific, has fuelled the need for warehouses to speed up logistics operations and streamline supply chain management processes, leading to transformed warehouse operations in recent times.

While a typical warehouse in the past saw workers running aisle to aisle, manually stocking shelves, sorting out items and doing paperwork to ensure accurate inventory management, today, the use of artificial intelligence (AI) tools, robots, RFID (radio frequency identification technology) scanners and printers, automated delivery drones and self-driving vehicles have revolutionised warehouse workings.

While more people continue to be displaced and robots taking charge, so are new job roles being created for skilled and talented professionals to work alongside robots, streamline logistic operations and expedite product delivery. It is projected that by 2025, the warehouse of the future will see increased levels of efficiency and production.

Foreseeing future through facts & findings

While the growing e-commerce industry has fuelled growth in sales volumes, and heightened customer demands from the marketplace, customers requiring same-day or definite-time deliveries require logistics to accommodate diverse e-commerce requirements.
Towards building a smarter warehouse

Exponential growth of omnichannel shopping and burgeoning demand for faster merchandise deliveries has created the need for “smarter warehouses” to meet the growing demands of today’s connected consumer. The technology-enhanced warehouse of the future will bring unprecedented levels of real-time visibility into organisations assets, people and transactions across myriad industries, says findings in Warehouse Vision 2020 Report by Zebra Technologies.

The report further states, 74 per cent of APAC IT decision makers will increase warehouse technology investments in the next five years, and by 2020, only 40 per cent of the respondents will use legacy warehouse management systems, thus foreseeing a drop in the future, from the current 81 per cent.

Transformation in the supply chain ecosystem has further prompted professionals to take a closer look at their warehouse operations and bridge productivity gaps, while slashing down on logistics costs and streamline merchandise shipment delivery.

Over the next five years, warehouse executives will expand the use of cross-docking, which will minimise material handling by eliminating the unnecessary put away. The goal here will be to increase inventory throughput and decrease delivery times without the need for additional storage capacity.

Leveraging on technology: The path forward

A report by DHL, titled Augmented Reality (AR) in Logistics, shows companies using AR systems for optimised picking and warehouse planning. They have seen significant improvements in productivity and warehouse operations. For example, constant picking validation can decrease errors by as much as 40 per cent. Also, use of AR in warehouse planning processes can help visualise any planned rearrangements in full scale.

In the near future, IoT will help facilitate real-time warehouse workforce interaction to improve productivity and performance, while adding a new level of precision and transparency in inventory management and goods handling throughout the supply chain process.

As the logistic industry in Asia Pacific transforms to see the integration of new technologies in SCM processes, thus eliminating the need for low-skilled labour, what do you think will be the path forward for aspirants seeking a career in SCM and logistics? What will be the new job roles created, as more humans work alongside robots in warehouses?

Skills on demand in the Warehouse of the Future

- **Data Warehouse Analysts** are those who are able to harness technology and make inroads to a full-fledged career in warehouse system management, the logistics industry in Asia Pacific sets the stage right to foresee demand for data warehouse analysts in time. Data warehouse analysts are skilled professionals, who possess the unique ability to analyse, mine and help businesses leverage information stored in the data warehouses. The job role of a data warehouse analyst requires collaboration with developers and business intelligence to translate business requirements into data models. To qualify for this job, candidates should possess solid SQL and Oracle database skills, plus a certificate in data management would be a value-add for most employers.

- **Warehouse executives** in the future will turn to load optimisation technology solutions to maximise efficiency and agility in packing systems, loading and unloading of goods, staging and shipping. By harnessing real-time analytics, the pack and load solutions will be offered to enhance worker productivity and reduce labour costs through use of automation and IoT.

- **Solution Design Experts** with knowledge of automation technologies and analytical skills will be in demand to design warehousing and transportation solutions. These experts will help transform regular warehouses from a high-quality facility to a highly-effective logistics hub.

- As research and clinical trial work expands in Singapore, the logistics industry in particular is facing shortage of skilled healthcare logistics professionals to manage cold chain rooms in state-of-the-art warehouses. Technically skilled professionals with knowledge of healthcare industry can seek a career in healthcare logistics.

Bridging the new-age skills gap

Recently, Mr S Iswaran, Minister for Trade and Industry (Industry) unveiled the Logistics Industry Transformation Map (ITM) to reinforce Singapore’s position as a global leading logistics hub through operations excellence, innovation and a strong Singaporean core. Transformation of the logistics industry is expected to achieve a value-add of S$8.3bn and introduce 2,000 new PMET jobs by 2020.

To bolster the logistics innovation ecosystem in Singapore, the Government will work with research institutions and universities to develop world-class capabilities in the logistics and supply chain management domains.

The government will also continue to promote Singapore as a location of choice for leading manufacturers and brand owners to base their supply chain management activities and decision making.

The Logistics Professional Conversion Programmes (PCP) by Workforce Singapore under the ‘Adapt and Grow’ initiative by the Government will help mid-career professionals from other sectors to smoothly transition into the industry. A Logistics Skills Framework led by SkillsFuture Singapore will provide comprehensive information on career pathways, in consultation with unions, government agencies and industry leaders.

**About the Author**

Ben Chew is a serial entrepreneur with 15 years of experience in the HR/Recruitment space. He currently has several HR tech projects, including a leading Recruitment & Executive Search Group – Talentvis Singapore Pte Ltd. He is also the Managing Director of Strategia Ventures. Ben is also involved in many community initiatives in the local startup ecosystem, including start-up Jobs Asia.
QUESTIONING THE VALUE OF PROCUREMENT

by Sebastian Keith Chua, Head of Procurement, Health Promotion Board (Singapore)

Is your procurement's focus still primarily on compliance to the policies, calling of tenders and quotations, processing of purchase orders and prevention of lapses and fraud? If so, the full value of the procurement discipline is not consistently recognised and therefore, not optimally leveraged in achieving business commitments and success.

In the digital age, is procurement future-ready to earn that "seat at the table" to transform business strategy and discover the game-changing innovations? Digitalisation has changed every aspect of our personal lives, including reshaping the way we work. From the way we engage with colleagues and trading partners, to the way buying and selling gets done. It becomes essentially critical for procurement to unlock new ways to manage spend, strengthen supplier relationship and deliver even more value to our organisations. Procurement therefore has to transform to communicate its value beyond compliance, uncover new opportunities to stay relevant and become a strategic business partner for the organisation to succeed.

Transforming procurement from a tactical to strategic function

Due to the set-up of procurement in some organisations as a compliance and transactional function, the stakeholders perceive the role as a gatekeeper and an operational bottleneck with long processing lead-time. The perception is a reactive one where procurement only responded upon user’s request, resulting in an ad-hoc relationship. There is also a lack of true partnership between procurement and its stakeholders in understanding each other’s deeper concerns, leading to misalignment of commitment and business needs. Moreover, the challenge of overcoming the failure of stakeholders at all levels to internalise the procurement principles, which resulted in major audit lapses. Often, the business focus was mainly on delivering the Key Performance Indicators without considering the merits of Value-for-Money (VFM) through Demand Aggregation (DA), Market Sourcing, Supplier Enabled Innovation or Mobile & Digital Technology. The silos in operations and lack of collaboration resulted in duplicated efforts in procurement without economies of scale, leading to operational inefficiency, higher purchasing cost and slower time-to-market.

The pressing question we need to ask ourselves is: do we want to take action? Some believe that the solution is already present, but it is just not seen. Indeed, the right procurement person has the keys to unlocking these values, not the tools and processes, just a change in our procurement attitudes.

Communicating procurement values beyond compliance

Procurement has a choice when it comes to stakeholder relationship – reactive or proactive. In order to transform, we need to focus on these ethos to move procurement beyond compliance –

(a) Be closer to stakeholders and suppliers by collaborating and building up market capabilities,
(b) Buy cheaper by delivering VFM,
(c) Enable faster time-to-market by shortening procurement lead-time,
(d) Make simpler by driving process automation and programme excellence.
procurement needs to be revolutionary and leads change, rather than adapting to change. A lot has been said of artificial intelligence and data analytics, artificial intelligence and data analytics, which alone cannot transform any business. We need both human skills and digital technology to transform our jobs. Procurement should learn to challenge assumptions and benchmark competition to look at what other companies are doing and what can be done differently. We must have the curiosity to understand the business needs and market capabilities, and the intellect to link both with solutions. The adoption of a flexible approach to stakeholders is also key to stakeholder management. We should always begin the stakeholder engagement journey with an end objective of a true partnership. Eventually, we should aim towards offering a delighting user experience to “wow” our stakeholders and embedding a service culture into our Procurement “Way of Working”.

In the new age of technology, procurement has to continuously evolve and play a bigger role in the digital strategy in order to make its service to the stakeholders awesome again. A shift to digital sourcing is beneficial for customers and businesses alike, not only in delighting customers with an interactive, user-friendly digital experience, but also by extending digital transformation efforts to attain operational excellence, realise cost efficiencies and achieve business agility.

Procurement needs to value services. In order to transform the business sees procurement just as a function with no other added value. The business perception of procurement has got to do with not properly managing the stakeholders for the better of the organisation’s goals, and adopting a holistic approach to deliver value procurement. The new brand sets the tone for procurement to be a trusted partner for the stakeholders. It guides the team to focus on value creation beyond their transactional and compliance roles.

The theory of success says that the quality of conversation determines the quality of action/decision. The procurement partnership with the stakeholders therefore starts with a quality conversation. The first rule of any procurement is to listen to the customers (i.e. stakeholders). A large part of procurement work involves persuading, challenging and influencing the stakeholders for the better of the decisions. The success is often defined by how well procurement shapes and manages the web of relationship.

When we embarked on the transformation, we ask our stakeholders, “What are your best interaction with procurement?” Their replies were “No interaction”. What has gone wrong? To be honest, quite a lot. It has got to do with not properly managing the business perception of procurement. The business sees procurement just as a governance function with no other added value services. In order to transform procurement, it is essential to make it easier for people to come to procurement, make it fun and interactive. We could have a mandatory policy to set procurement in place, but once that is achieved make people ‘want’ to come to you instead of ‘having to’.

The most common issue for procurement is the ongoing challenge of not only extracting value, but of communicating this value to our key stakeholders. Value is ultimately in the eye of the beholder. We should drive procurement innovation by putting the end-customer and stakeholder’s values first. If we save money and diminish our stakeholder’s ability to succeed, then we are being counter-productive. We must show the business that procurement cares and is willing to get involved. There is no magic trick in winning over business confidence. It requires core behavioural competencies to solve business problems and build credibility by delivering wins. These wins may be small initially, but will grow as we become more engaged in the business. When we start to win, people believe in us. This is where collaboration begins, which is key to transformation. A lot of times people have failed or are discouraged to innovate when they look out for big steps that will make all the differences or try to attempt the impossible task of doing everything at once. We should not underestimate the magic of winning small, as it can lead to winning big or larger changes when we work on small steps in the right direction.

No one would deny that procurement needs to follow the right process, but should this be what defines us? The best-in-class procurement function creates a new brand with a clear vision, mission statement and insight to align its commitment with the organisation’s goals, and adopts a holistic approach to deliver value procurement. The new brand sets the tone for procurement to be a trusted partner for the stakeholders. It guides the team to focus on value creation beyond their transactional and compliance roles.
In the late 1980s, Dr Brian F. Harris, a former university professor at the University of Southern California (USC), originated the concept of category management. He coined the term “Category Management” to reflect the ideal state where manufacturers and retailers should partner to manage a consumer-defined category and implement initiatives to grow the revenues. This alters the relationship between retailer and supplier from a cost only relationship into one of collaboration, with exchange of information, and joint business building model. The fundamental of defining a category is the focus on the consumers, instead of on the manufacturer or retailer. In 1990, Dr Harris started a consultation services firm in Cincinnati called the Partnering Group. The Partnering Group introduced the eight-step industry standard model for category management in retail.

Applying category management to organisation purchasing activities, it structures the organisation procurement resources to focus on spend families, reduce risk in supply disruption, and gain access to more industry innovation. The benefits are a highly standardised procurement supported by requisition to pay systems based on catalogue. Hence, the buying process is highly regulated to support spend analytics and shape future demand, which all are from a central platform.

According to European Institute of Purchasing Management (EIPM), category manager and lead buyer are the responsible requestors for all decisions made regarding one of more family of products. They analyse the market dynamics. They are supported by a centralised system that stores all framework and project agreement. This centralised platform is accessible by respective regional procurement who supports sales to provide proposal to meet local clients demand. In fact, public organisations have also adopted category management as procurement transformation tool.

In 2010, Sir Philip Green, Chairman of Arcadia Group, recommended that centralised procurement for common categories, producing accurate spend and consumption data, and pricing common items in his review of UK government spending and procurement in his Efficiency Review. Typical categories cited are fixed line telecoms, mobile contracts, printing, and office supplies where price and terms variations are seen across departments.

In 2014, Mr Thomas Sharpe, Commissioner, Federal Acquisition Service U.S. at General Services Administration posted in a blog, “The Future FAS: Categorically the Right Thing to do for Taxpayers”, echoed similar comments. He said, “Our current, fragmented acquisition landscape leads to many agencies duplicating efforts and establishing redundant acquisition programs. There are more than 500 different departments and agencies all

The category management 8-step process introduced by The Partnering Group
making purchases amounting to more than S$500bn annually. These redundancies are driving up our collective operating costs and needlessly wasting valuable taxpayer dollars.”

Embracing six-sigma and procurement model

The “As Is” metric of organisation buying behavior form the baseline for the future model. For six-sigma practitioner, DMAIC methodology is a data and process driven improvement tool used for continual improvement. It consists of five phases: define, measure, analyse, improve and control. Recent year, there is an additional phase DMAIC-R. The R phase recognise the efforts put by the six-sigma team in pursuit of excellence. In six-sigma project, operational knowledge is critical to successful implementation. Operational knowledge, such as using classification of products and services, United Nations Standard Products and Services Coding scheme, facilitates commerce between buyers and sellers. Large companies are using the code to purchase and analyse their purchases. When every purchase order is tagged with a common set of product identifiers, procurement is able to spot buy patterns across departments.

Domain expertise is important to define the scope and future model. Category experts have evolved over time to drive a strategic approach to procurement where it expand to supplier collaboration and shaping future demand. Category plans need to be segment strategic focus, and always thinking from client perspective. Category management execution base on what is valuable to client, is itself a new aspect for redefining the role of procurement. Management sponsors are absolutely necessary for embarking procurement transformation in category.

The Kraljic Portfolio Purchasing Model created by Peter Kraljic is widely used in category management. It was first appeared in the Harvest Business Review in 1983. Today, it is still a popular and useful model used in many global companies. It plots the profit potential against supply complexity. The fundamental of category management, Kraljic Portfolio Purchasing Model are commonly used together with Porter’s five force analysis in determine the supply segmentation.

Learning from the fallen

The most recent global category management survey from Future Purchasing highlights that 72 per cent of the 323 firms that participated, admitted that their category management process had fallen short. The survey found characteristics of an organisation is doing tactical sourcing at best, not category management, if the procurement team does not

- lead cross functional teams, with business sponsorship
- have a single standardised toolkit, used pragmatically (and that does not mean ignored most of the time)
- systematically look at all value levers via a standard approach on price, cost, revenue, risk
- have the time to build up a rigorous facts and data profile to build creative strategies
- have a team capable of building inspiring and creative strategies
- have the time or inclination to move beyond tendering, negotiation and contracting activity
- does not invest in stakeholder training as well as procurement team training

Accordingly to Procurement Leaders, respondents report that, on average, it takes 2.4 years to complete a procurement transformation, and around one-third (30 per cent) of the procurement staff’s available time is absorbed by the transformation. Therefore, it is imperative that all procurement leaders should share their stories and experiences with the industry.

About the Author

Michael Koh is the Head of Procurement, Asia Pacific at Dimension Data. As a member of the NTT Group, we accelerate our clients’ ambitions through digital infrastructure, hybrid cloud, workspaces for tomorrow, and cybersecurity. Prior to his role, Michael served as the Head of Procurement, Asia Pacific at T-Systems and Schneider Electric ITB.
INDUSTRY 4.0: INTEROPERABILITY
WHAT IS IT AND WHY SHOULD YOU CARE?

by Dickson Yeo, Senior Logistic Consultant, WDS Southeast Asia, Swisslog

What does interoperability mean for the future of your warehouse? Interoperability is the ability of systems to transact with other systems. Typically, this happens using industry-standard methods or protocols.

It sounds simple, but discussions about interoperability can quickly devolve into highly technical references to standards, protocols and APIs. Those are necessary at some point, but for now, we will keep the tech talk to a minimum and focus on:

- The challenges of managing systems that are not interoperable
- The role interoperability will play in Industry 4.0
- The steps you can take to enable interoperability

Interoperability is a challenge because many of the systems in warehouses today use proprietary communication protocols. These usually require expensive custom code to interface with other systems. Even worse, it makes it quite challenging to use data across systems to create automated reports.

For example, imagine your boss wants an answer to a question that requires you to pull a report from the ERP system. The ERP system does not have all of the data you need so you also have to pull information from the WMS and LMS, which is output in Excel format. Then you find out you need data from a legacy AS400 system, which requires you to beg the one remaining AS400 programmer to help you.

Finally, you find you also need data from a production machine, which is sent to the MES but gets purged hourly. The machine provides logs in a proprietary format, so they have to be converted to Excel before you can merge the spreadsheets and do the calculations. You do the calculations, produce the required graphs and insert them into PowerPoint for your boss.

He is happy and gives you a pat on the back. Everything worked out fine, right?

It is not actually. You spent hours compiling a report that could have been produced automatically if all the systems were interoperable. And, if that report proves useful, you may be stuck doing the same exercise every week for the rest of your career.

In the long run, interoperability is absolutely essential to transforming data into wisdom. Without it, it is simply too costly to manually generate the required reports.

But when we can easily access data across the supply chain, along with unstructured data from sources such as social media, it can be consolidated and analysed at a lower transaction cost. You can then realise the vision of transforming data into information, and information into institutional wisdom. That wisdom, derived from both humans and machines, is essential to the intelligent, adaptive material handling systems that will emerge in Industry 4.0.
Interoperability & Industry 4.0

The evolution to Industry 4.0 is already beginning and will accelerate in the coming years. Digital devices, such as accelerometers, thermal sensors, vision systems, navigation sensors, and scanners are proliferating on everything from individual products to material handling equipment, robots and wearable devices.

These IoT-enabled devices will generate enormous amounts of information, which when collected and aggregated, create the opportunity for collaboration across equipment and robots, as well as support real-time decision-making.

Ultimately, interoperability will enable the consolidation of the “digital exhaust” from every process, machine, and human across the supply chain. This will allow the transformation of material handling equipment and software into a smart warehouse that anticipates demand and makes fulfillment decisions autonomously based on the “wisdom” derived from data. That is the promise of Industry 4.0 and it is dependent on interoperability.

System-wide interoperability will not happen without planning. Here are three things you can do now as you move down the path to Industry 4.0:

1. **Assess your current platforms** Audit your existing systems and processes to identify systems that have proprietary protocols and those that use standard protocols and offer open APIs. In almost every case, it will be preferable to move away from proprietary systems as they can lock you into a single-vendor strategy or require expensive customer coding. Enough of the industry has already moved to standard protocols that there is not a strong business case for proprietary systems today.

2. **Do a Pilot Project with clear objectives but limited in scope** Prioritise the business issues where interoperability can deliver the most value in your organisation. Speed, cost, accuracy, productivity, and uptime are all important, to some degree, to almost every fulfillment operation. This can quickly turn into trying to boil the ocean. Choose a project with a compelling business case, such as achieving a desired improvement in fulfillment times. Then, focus on interoperability across those systems that directly impact that metric. Key to the success of such a project is building a team of believers with a senior champion to clear roadblocks.

3. **Create a long-term roadmap** If you have not already, create a vision for the future of your operation optimised for collaboration and real-time decision-making. This vision will help ensure the investments you make in the coming years will support, rather than impede, future adoption of Industry 4.0 technologies.

Industry 4.0’s core tenets are already emerging within the supply chain today in the form of increased use of data and automation. Understanding where it is going — and the role interoperability will play in its evolution — is essential to capitalising on its potential.

**About the Author**

Dickson Yeo has joined as the Senior Logistic Consultant of the Warehouse and Distribution Division of Swisslog since November 2016. He is providing specialist support in logistics operations, translating client’s requirement and processes into the automation designs and project realisations in Southeast Asia region.

Prior to this, Dickson was a client and user of Swisslog solutions and systems for 12 years. He has implemented an Automated Storage & Caddy Pick Distribution Centre using Swisslog technologies in 2014; with a 52,000 pallets storage capacity and picking throughput of 120,000 cartons per day.
Now is the best time as any to be in the supply chain and logistics sector. With the rise of Asia as the new economic powerhouse, organisations are continually looking towards the region to expand their business. There is a surge of investments and trade agreements, which means the Asian region needs to move swiftly to accommodate incoming interests.

In addition, the growth of e-retailing customers are increasingly demanding rapid delivery of their goods. This demand has created a breadth of opportunities for today’s logistics and supply chain graduates.

Even traditionally held roles, such as distribution managers, that ensure the effective organisation, storage and distribution of products and purchases, play an increasingly vital role in the success of the retail industry. With the constant technological advancement of online operations, their work has never been more important nor their skills more sought after.

In this current climate, the supply chain and logistics sector cannot get any more exciting or meaningful.

Potential to collaborate with robots

Do you like to work with robots and intelligence machines? In the coming years, more and more jobs with a high degree of physical activity will be replaced by the machines.

With autonomous vehicles, the jobs of long haul truck drivers are in trouble. Amazon Go is a classic case of how a store can be operated with no human labour. Use of drones and robots in warehouses eliminates the need for humans picking, putting away, or counting inventories. While this means a good portion of workforce today will need to upgrade their skills, it also opens up a whole different spectrum of job roles. Future employees will be placed in charge of creating and maintaining the IT infrastructure and making sure the robots are doing all the hard work and tedious jobs.

Supply chain organisations will need to evolve and make use of big data analytics and cognitive computing in its operations. Beyond the physical labour, with the rise of prescriptive analytics, machines evolve beyond decision support to decision-making.

All in all, humans at all levels will need to retool their skills and continue learning. If you have passion or interest in technology, then moving to the next level in your supply chain career is a no-brainer.
Switch your roles often

Talk to most senior supply chain executives and you will realise that their career paths do not resemble narrow, ladder-like pathways; they consist of broad, irregular landscapes. Whether you are a new recruit or a seasoned practitioner, it is highly unlikely that you will rise through the ranks in a complete vertical ascension. So if you are staying in a job and have been waiting for a promotion for a couple of years, maybe it is time to pack up and look out for different opportunities. Do not be afraid to have a diverse and colourful background, even if your job title does not have the phrase “supply chain” in it.

This is because the supply chain management department is not an island by any means. A company’s supply chain management efforts are interwoven throughout the entire organisation. So wherever you are going in the company, you are learning new business aspects and operations. Over time, your accumulated experience and learning process will help you to manage a company’s overall supply chain operations, and even the company itself. Top chief executive officers, such as Tim Cook from Apple, Mary Barra from General Motors and Alan George Lafley from P&G, have had supply chain experience in their resumes.

Do not be shy to network

Networking has taken on a new significance in today’s cross-functional, global work environment. It is no longer enough to confine your professional circle to the function in which you operate. These days, your networking circle should include colleagues in other departments and geographies. Even if you are not in their organisational hierarchy, leaders of other teams and departments can still vouch for you when promotions are under discussion. LinkedIn can be helpful in this aspect, but effort is still required to make a meaningful connection.

Looking beyond your immediate functional area or locale is becoming especially important in the supply chain field. Operational teams are often dispersed across multiple countries and cultures. What’s more, supply chain often connects with other disciplines such as finance and marketing. The likelihood that you will be involved in cross-functional teams or initiatives is greater than ever.

Many people do not like to network. It can be boring and even terrifying, but it is important to network in today’s era. Just remember that when it comes to networking, it is a two-way street. This means that whenever you meet someone, you need to ask them as much as possible regarding their business, as well as informing them about yours. Start the conversion with the basics – your name, your company, affiliation and position – and take it from there.

You do not need to have a scheme or be sneaky to climb the career ladder. Simple and straightforward behaviours like a good attitude and actions that show your involvement and interest will go a long way to helping you achieve your career ambitions.

Ultimately, as long as you are passionate for the industry and continue to learn, you will remain a valuable member of the supply chain workforce.
GAPS IN SUPPLY CHAIN TALENT

TALENT MANAGEMENT IS A CRITICAL ISSUE

The importance of supply chain talent management continues to increase as supply chain becomes a more strategic function and many senior supply chain professionals prepare to retire. In June 2013, APQC conducted a survey to find out which areas of supply chain have the largest talent gaps and the steps organizations are taking to close those gaps.

THE SUPPLY CHAIN TALENT POOL

THE SKILL...

Recent supply chain job candidates are most prepared in more tactical areas of the field.

DOESN’T MATCH THE NEED

Yet organizations rate softer skills as most important for their supply chain talent.

PROCUREMENT

INVENTORY MANAGEMENT

SUPPLIER MANAGEMENT

RECRUITMENT AND RETENTION

Organizations consider strategic level supply chain positions the most difficult to fill and the most difficult for retaining employees.

BUSINESS ETHICS

PROBLEM SOLVING

CUSTOMER FOCUS

Recruiting Difficulty Retention Difficulty

THE ROLE OF INFORMAL TRAINING

Organizations are looking to informal training to develop the skills of supply chain employees. The methods used most focus on practical experience and learning from more tenured employees.

CROSS-FUNCTIONAL EXPERIENCE

58% Organizations often assign employees to different functions or geographical regions on a temporary basis.

MENTORING

56% Many organizations pair high-potential employees with members of senior management.

STRETCH ASSIGNMENTS

48% Some organizations use a learn-by-do-teach model of training.

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The digital transformation sweeping through the supply chain management industry presents both exciting opportunities and major headaches for medium-sized third-party logistics (3PLs). Logistics providers can now leverage technologies to help their customers significantly reduce the costs and complexities of managing their global supply chains. But for medium-sized organisations, that is easier said than done. The industry giants can offer technologies they develop in-house to provide shippers with real-time visibility over their entire supply chains. As a result, shippers have come to expect this service from all their logistics providers. That is creating a 3PL Technology Gap between what shippers demand, and what most medium-sized 3PLs are able to deliver. Closing this gap is critical to long-term growth. So, the primary question for medium-sized 3PLs is: “do we build our own technologies, or buy from an outside developer?” Figuring out the answer requires you to examine the benefits and challenges to both approaches.

3PLs represent a veritable warehouse of market information and strategic insights for their customers. This data can help shippers meet their core challenges of managing volatility and fragmentation in their global supply chains. Facilitating that effort transforms a 3PL from being just another service provider into a true strategic business partner.
The widening 3PL Tech Gap

The largest companies like DHL and FedEx now provide shipper with a compelling mix of technology, expertise, and managed services. These companies have thousands of employees and can afford to invest in developing their technology products and services, and are able to scale to work with businesses of any size. They can not only offer their customers end-to-end supply chain solutions, they can also lead the installation and user training processes for their customers, and are responsible for ongoing maintenance, troubleshooting and rolling out new features.

Medium-sized 3PL companies typically do not have the same budgetary or manpower resources at their disposal. They continue to rely on outdated technologies and processes, like legacy systems and manually updating spreadsheets, that were never designed to manage the complexities of today’s global supply chains.

Imagine the competitive advantages you could gain by providing your customers with real-time input to their demand planning and sales forecasting functions. Or mine your wealth of data to create new product bundles, value-added services, and delivery options based on actual consumer needs. Doing this requires first determining whether you want to develop third-party developer.

D.I.Y.

The maturation of public cloud computing, also known as Software-as-a-Service (SaaS) platforms, makes the development process easier and more cost effective than it would have been just a few years ago. Using online tools to develop your solutions eliminates the need for you to spend money and time installing and maintaining the necessary IT systems. You should also consider making your solutions available to customers in the cloud to reduce their CAPEX and OPEX.

There are downsides to this approach. You are still responsible for the entire development process. That will likely require you to hire additional IT staff with expertise in software engineering and application development. You will also have to regularly train your sales team on how to sell your solutions to customers, handle all customer service-related issues, and ensure future updates that offer new features and functionalities roll-out to customers on-time and without disrupting their businesses.

Buy, don’t build

Alternately, you can offload all those costs and risks by partnering with a vendor that provides your customers with a customisable cloud platform and the expertise to guide them to how best to incorporate these new functions and capabilities. The vendor leads the effort to quickly ramp up your customers with the right solutions and technologies that address their unique needs. The vendor can deliver a system that provides a complete, live view of global supply chains, produces reports, and offers dashboards that provide shippers with real-time information and enables them to communicate instantly with their supply chain partners 24/7 anywhere in the world.

Mitigating partnership risks

There are no guarantees about the long-term viability of a vendor’s products, or even the vendor itself. Consider these three key criteria during the evaluation stage:

1. **Industry expertise**: Look for an executive leadership team that has experience in helping companies manage their supply chains. They will understand first-hand the challenges you face.

2. **Ease of implementation**: It is critical that the solutions provider oversee the implementation and on-going maintenance and update of processes for your customers. They’re the software developers, you’re the logistics provider.

3. **Immediate cost-savings**: The benefits of cloud computing are negated if you or your customer have to install and manage expensive systems on-premises. So, look to a cloud platform provider that does not require you or your customers to make a significant upfront investment in hardware or software. Ideally, you can first take the product for a test drive to conduct your due diligence. Ask the provider if you can also invite any of your internal stakeholders or customers you would like to participate.

About the Author

Chief Operating Officer Darren Palfrey has nearly 20 years of experience in the supply chain industry, and too often found himself recently asking “why, in an age of cloud computing, Big Data and powerful mobile devices do companies still rely on outdated tech to manage their supply chains?” Too often the answer was the same; “Because we’ve always done it this way,” Darren co-founded Gravity to change that.
CAN E-TEXTILES TAKE THE NEXT STEP TOWARDS THE MASS MARKET?

Although e-textile wearables have been around for over a decade, the market has not reached the mass-scale tipping point yet. Despite the initial excitement over wearables like Apple Watch, it remains a long way behind the adoption rates of other wearables. However, with annual apparel volumes estimated at over 50 billion units and with the acceptance of body-worn technology increasing, e-textiles are now being viewed by the technology industry as a key opportunity for future growth.

Also known as smart fabrics, e-textiles are the fabrics that have electronics and digital components embedded in them. These are the fabrics that can sense stimuli from environment and adapt and react to those stimuli in a predetermined manner. Smart fabrics can incorporate sensors, communication and processing for applications in various sectors, such as consumer products and health monitoring.

Over the past 20 years, e-textiles have progressed from an academic curiosity to an important technology platform generating revenue for companies globally. In particular, the industry saw strong growth for several years up to 2015, with successful launches of many new products from a series of players. IDTechEx Research’s most recent report, E-Textiles 2017-2027: Technologies, Markets, Players, found that the market has grown to around US$100m in annual wholesale revenue from e-textile products today.
The future of high-tech fabrics

Before fashion, humans wore clothes to protect themselves from natural elements, such as freezing winter and the hot sun. Even with fashion, branding, and commercialism thousands of years later, it seems nothing much has changed. Clothes are still being designed to keep us drier, warmer, cooler, or safer; a far cry from what most of us would consider smart, tech-infused clothing.

With the advent of the smartphone however, its vast connectivity and eventual ubiquity, meant that suddenly, everyone has a handheld computer that could connect to, monitor, and control other things. It changed the way companies thought about smart products. Sports shoes with pedometers built in were suddenly possible. T-shirts could monitor our heartbeat. Glasses could be connected online to show wearer the shortest route to the nearest gas station.

Now, in 2017, we seem to be at the next level of e-textile wearables. Nanotechnology has made fibers smarter. Conductive yarns mean the fabrics that we wear and sit and sleep in can suddenly communicate with our devices.

One spectacular example is the collaboration between Google and Levi’s. Dubbed Project Jacquard, the two Bay area companies are pairing up to produce fabrics that can conduct electricity, with the ultimate goal of enabling touch and gesture interactivity.

By integrating Jacquard technology into The Levi’s® Commuter™ Trucker Jacket, designed specifically for urban bike commuters, it allows wearers to control their mobile experience and connect to a variety of services, such as music or maps, directly from the jacket. This is especially useful when it might be difficult to use the smartphone, like when you are riding on your bike. Imagine answering a phonecall by tapping the sleeve of your jacket. The possibilities are endless.

Not just for personal use

Recently, wearable devices are increasingly being implemented in warehouse operations. Wearable devices are beneficial as they are connected to an internet connection and allow workers to complete tasks on a hands-free device.

One example is the Crown QuickPick™ Remote Order Picking Technology, which utilises a special glove that remotely controls the movement of the pallet truck and is currently being rolled out throughout the Southeast Asia region. The system uses task-automating technologies to simplify workflow and optimise the order picking process, thereby increasing productivity and reducing operator fatigue.

The report forecasts that worldwide shipments for enterprise and industrial wearables will increase from 2.3 million units in 2015 to 66.4 million units annually by 2021, a more than 30-fold increase in just six years. Over that period, a cumulative total of 171.9 million wearables are projected to be shipped for use in enterprise and industrial environments.

While these devices in the supply chain are mostly present in pick and pack services, there is a growing interest in this new technology, with more areas in the supply chain seeing the potential of these wearable devices. This new technology assists in providing improved and enhanced logistics services.

Mixing AR with wearable technology

Augmented reality (AR) picking using wearable technology combines the very best of vision- and voice-guided picking to produce a faster, hands-free solution for industrial environments.

Augmented reality picking uses smart glasses to merge virtual images and information with an operator’s surrounding environment. The operator wears the glasses, follows the commands given, and scans product barcodes all within the glasses’ display. The combination of real-world and virtual information provides speed and accuracy beyond previous warehouse picking technologies. DHL had concluded a pilot project that tested smart glasses and augmented reality systems in a warehouse in the Netherlands; the result was a 25 per cent efficiency increase during the picking process.

Communication in the warehouse can also be improved through smart glasses or voice command devices. Step-by-step manufacturing instructions can be transmitted visually through smart glasses, while two-way audio headsets can give users real-time notifications pertinent to their activities on the floor. Productivity increases from wearable voice command tools can increase warehouse efficiencies up to 30 per cent, according to vendors of the technology. Other wearables can monitor health and stress levels of employees through fitness trackers, while GPS and beacon technology can easily locate employees and prevent them from entering a dangerous zone, such as machine cages and boilers.
Looking at security concerns

As wearables gain a foothold in manufacturing, security concerns will have to be addressed. The same security concerns inherent in other digital applications apply, including phishing, malware attacks, and network overloads. Just like your laptop, your smart glass could get a software virus. Wearables collect specific data for manufacturing use, but they never turn off, collecting extraneous data that could be harmful if used incorrectly. Privacy is also a concern because wearables can be used to collect data on personal habits, behaviours, and the health of employees.

Making this data secure, and abiding by government standards, is of paramount concern if wearables are to become widespread. Addressing these includes a variety of tactics, starting with secure software and hardware development, and by creating proprietary tools that cannot easily be infiltrated.

Today, many of the most prominent e-textile brands remain relatively young, driven either by recent start-ups, spin-outs from larger companies lower in the value chain, or generally companies outside of the mass-market consumer sector in either textiles or electronics. This is the most significant factor which is poised to change in the coming years. The early hype following the early commercial success may be starting to fade, but behind the scenes growing manufacturing know-how and efficiency means that a mass-market order for e-textiles will soon be possible.
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There has been a lot of buzz about artificial intelligence (AI). After all, the AI market is making its stamp on the industry. Recent research puts it as a $5bn market by 2020, and Gartner estimates that six billion connected “things” will require AI support by 2018.

But AI is not just about snazzy robots taking over our jobs and doing our housework. AI can include connected machines, wearables, and other business tools, such as voice assistants, which are already boosting productivity not only at work but also at home.

For the past decade or so, AI has already been a staple in the background of processes, mostly handling mundane things, such as repetitive tasks, data processing or number crunching. This is why the first step to understand if your business is ready for the next step in AI is if big data analytics is a major component in your business processes. AI is more than just the hardware and software, but also the information that you feed into the system.
Embrace big data analytics

The objective of big data analytics is to find hidden patterns, correlations and present actionable solutions that businesses can use to their advantage. For example, if you want to predict the outcome of a decision, you can feed an existing data, such as the past year’s performance or a country’s annual trade report, and input your choices or limitations. The AI does the rest of the work and churns out multiple possible scenarios. Following which, you just need to select the desired scenario and the system will show the outcome.

Take for example, your company wants to predict the outcome of a decision it is about to make. You feed the AI data like past year performance, and other related data. The AI then crunches through the presented data and churns out multiple possible scenarios. All that is left for you to do, is to pick out your desired scenario, and the solution that provided the outcome.

More than 90 per cent of companies today, however, use very basic analytics, more accurately termed as descriptive analytics. There are four types of analytics that the industry has generally agreed on.

**Descriptive Analytics** This is the basic analytics that you get from your web server through tools, like Google Analytics. You can quickly read and understand reports based on a given period to verify if a campaign was successful or not based on simple parameters, such as the number of banner advertisement clicks and page views.

**Diagnostic Analytics** This means you want to delve deeper into the data you have collected in order to understand why some things happened. You can use business intelligence tools to get some insights, but it can be a tedious task that gives you limited actionable insights. It is ideal, however, if you require an extensive understanding of a limited piece of the problem.

**Predictive Analytics** If you have been collecting contextual data and correlating it with other user behaviour datasets, as well as expanding user data beyond what you can get from your web servers, you enter a new level where you can get real insights. Over time, you can predict what will happen if you continue to actively collect data.

**Prescriptive Analytics** This is the point where you can accurately analyse your data to predict what is going to happen. The system will also churn out solutions to your problems. By this time, you are very close to being able to understand what you should do in order to potentially maximise good outcomes and also bad outcomes. This is on the edge of innovation today and the final stage of analytics.

By understanding which stage of analytics your business is in, it will provide a relatively accurate indicator of whether your company are ready for the next level in AI.
Iron out your strategic goals

List which are crucial items in your business plan, and which are the biggest challenges you are trying to overcome. Start all projects with a situational analysis to understand the present situation as well as strategic objectives. From there, you will be able to determine where AI can assist your business to achieve your goals and overcome the challenges.

Matching your strategic objectives and challenges to what AI can actually do is critical before you can even decide what type of AI would be beneficial to your business. Bear in mind that humans are still a necessary part of the equation in many areas, such as building the IT infrastructure, identifying what data is relevant and usable, cleaning the data, building the algorithms and training the model and then to iterate it.

Look at starting small. AI works best when the challenge or objective is well defined and understood, and where the data is available to be analysed to make the decisions required.

Next step, AI

After considering other factors, such as financial means, you may now be ready to explore what AI can do for you. AI systems are not just about structured data. Unstructured data, such as social media, call centre notes, images, and open-ended surveys, can also make a big difference. It is the reason e-commerce companies, such as, Amazon, can recommend products to consumers before they even know what they want using machine learning techniques. This unstructured data further strengthens the company’s actions on top of its strong, centralised collection of structured analytics, such as payment details and purchase history.

AI is already in our lives more than we even realise, such as in chat interactions and smarter self-service capabilities around customer service. AI is being extended to the use of virtual assistants to augment overall customer engagement strategies, and will likely be deployed for workforce optimisation too.

Now is the best time to jump into the AI bandwagon if you are ready. Elon Musk, CEO of Tesla was recently quoted saying: “There will be fewer and fewer jobs a robot cannot do better.”

Even smaller organisations are following suit. Across industries, small businesses are figuring out how AI can help them drive down costs, better accommodate customers, and remain competitive with their increasingly tech-driven peers. Although small businesses may be daunted by AI, by adopting a strategic approach, small businesses can get a head start on harnessing AI and reaping the benefits it offers.

The Most Important Benefit that an AI-Powered Solution Should Provide

- 38% Predictions on activity related to machines, customers or business health
- 14% Monitoring and alerts to provide assessments on the state of your business
- 27% Automation of manual and repetitive tasks
- 10% Increase quality of communications with customers
- 7% Recommendations related to internal issues or customer facing efforts

Outlook on Artificial Intelligence in the Enterprise 2016 Presented by Narrative Science in partnership with National Business Research Institute
The Innovation Playground

The Supply Chain & Logistics Innovation Playground (SCLIP) is designed to host displays of the latest applied logistics and supply chain technologies and solutions in the industry.

The Innovation Playground aims to become a place for trial, testing and launching of new and innovative solutions for the industry by bringing together accelerators, integrators, technology and equipment companies, start-ups, academic and research institutions.

The platform will display and test new logistics and supply chain developments and applications by targeting innovations that could be adopted for faster, more flexible, and ecologically sound logistics and supply chain of the future.

Launching soon, stay tuned
Public nomination is now open.

http://supplychainasia.org/sca-events/awards-2017/

16 November 2017 | Mandarin Orchard Hotel Singapore

Supply Chain Asia Industry Night Annual Awards Gala Dinner 2017

Public Nomination is now open
# Supply Chain Innovation of the Year Awards

## Nomination Form - Corporate Awards

Innovation is the theme for Supply Chain Asia Awards 2017. This year, we aim to recognise and award companies that have made the initiative to invest in innovative strategies and adopt effective technologies. All projects must be newly implemented during the period: 1 January 2016 – 30 June 2017. Nomination period will start in July 2017 and close by 22 September 2017.

**Infrastructure**  
Supply Chain Innovation (Infrastructure) of the Year award is given to a company whose operations are infrastructure-related in terms of Port (air and sea) operations, distribution or logistics park and facilities. To qualify for this nomination, the relevant companies must show the innovation successfully applied and adopted in its set-up.

<table>
<thead>
<tr>
<th>Nominee:</th>
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**Software & Systems**  
Supply Chain Innovation (Software & Systems) of the Year award is given to a company that is focused on the provision of software and system applications related to the supply chain and logistics industry. To qualify for this nomination, the relevant companies must show the innovation successfully applied and adopted by its customers.

<table>
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<tr>
<th>Nominee:</th>
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**Material Handling Equipment**  
Supply Chain Innovation (Material Handling Equipment) of the Year award is given to a company that is focused on the provision of material handling equipment and hardware applications related to the supply chain and logistics industry. To qualify for this nomination, the relevant companies must show the innovation successfully applied and adopted by its customers.

<table>
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<th>Nominee:</th>
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**LSP (SME)**  
Supply Chain Innovation (LSP) of the Year award is given to a third-party logistics company and is in the business of providing services and solutions related to the logistics and supply chain industry. To qualify for this nomination, the relevant companies must show the innovation successfully applied and adopted by its customers.

<table>
<thead>
<tr>
<th>Nominee:</th>
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**LSP (LLE/MNC)**  
Supply Chain Innovation (LSP) of the Year award is given to a third-party logistics company and is in the business of providing services and solutions related to the logistics and supply chain industry. To qualify for this nomination, the relevant companies must show the innovation successfully applied and adopted by its customers.

<table>
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<th>Nominee:</th>
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**Asian 3PL of the Year**  
Asian 3PL of the Year award is given to a third-party logistics company with an Asia Pacific presence in North and Southeast Asia and is in the business of providing services and solutions related to the supply chain and logistics industry. To qualify for this nomination, the relevant companies must show the innovation successfully applied and adopted by its customers in the Asia Pacific region.

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<th>Nominee:</th>
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**Global 3PL of the Year**  
Global 3PL of the Year award is given to a third-party logistics company with presence in at least 2 continents and an Asia Pacific HQ. The company’s business must be in the provision of services and solutions related to the supply chain and logistics industry. To qualify for this nomination, the relevant companies must show the innovation successfully applied and adopted by its customers globally.

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<th>Nominee:</th>
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**Your Particulars**

- **Name:**
- **Company:**
- **Appointment:**
- **Email:**
- **Country:**

If you do not wish to nominate a company for any of the categories, please leave it blank.  
To nominate, please scan and email this voting slip to admin@scasia.org.  
Online voting is available at http://supplychainasia.org/sca-events/awards-2017/.
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