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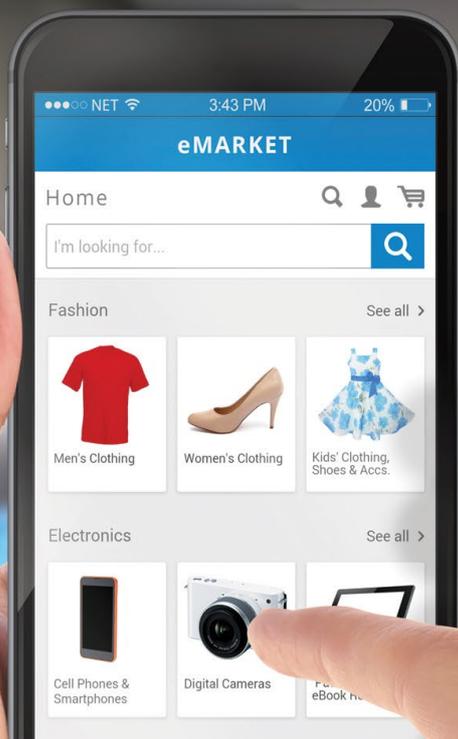
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# LogiSYM

The Magazine for Supply Chain Executives

## How Supply Chains Will Play a Future Role in Helping to Change the Face of Luxury Brand Retailing



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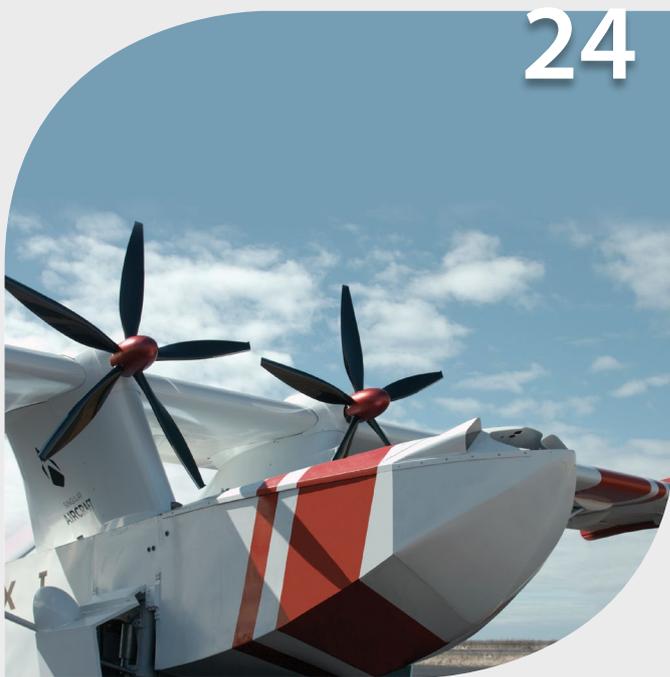
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from the editor

## .....are you seeing your playing field change & your business paradigms shift?

Dear Readers,

The upturn in economic activity is without doubt improving. And with less bad news around, it can only be good for the next few quarters. But as this new positive cycle begins, one should seriously ask two key questions,

*- am I driving this or is something driving me?  
- am I in control of the shifts in the cycle or am I losing pace?*

It is a well known factor that as an upturn in an economic cycle starts, things are not the same as during the downturn stages. Yet it is still surprising how unprepared many Companies are. No Industry is immune from shifts in paradigms and in the way Companies need to readapt their businesses to the new realities.

The challenges we face, are the shorter frequencies of the economic cycles and the changes they bring. The supply chain industry, is the first to see the changes. The change in the flow of goods, in the business momentum and in the prices of goods and services across the industrial spectrum. Yet no matter how many times one experiences these cycles, the re-adaptation to the new conditions are a key challenge for many.

The signals are often missed if you do not recognise them. How many examples can we recall? Companies who were leaders became followers and in the end died. The key words to remember are Adaptation, Re-Adaptation and continuous Adaptation.

*.....but how can we sustain these challenges of change and adaptation?*

Indeed we have talked about Disruption in previous articles. Yet again we have to correlate that change is about adapting to disruptive elements in our business. It is not an easy task to achieve. However, the sustainable option will come from within the organisation, where each will have their own unique approach.

But fundamentally organisations will need to be innovative in their approach to dealing with paradigm shifts, agile to deploy a plan of play and able to leverage on technology to consolidate an edge in their adaptation processes. These are important check points that will only be possible if an organisation identifies their positioning in the game.

In this month's issue, the featured article by Paolo Traisci – GM SEA BGroup, On Supply Chain Challenges in the luxury goods and a 3D Technology paper by Yves Wang – Snr Research Manager –IDC China – make good reading on what is happening out there and how you can adapt to the new realities!

As usual I look forward to receiving your feedback at [info@lscms.org](mailto:info@lscms.org) and even publishing an article of yours.

**Joe Lombardo**  
International Editor





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## a word from the president

# Attitude without the Aptitude

In the last few weeks, I have had the opportunity to embark and explore a number of new businesses and opportunities. This has taken me away from the comfort of my office and forced me to meet a number of different people and sometimes attend up to 6 or 7 meetings a day with salaryman, business owners, consultants, students and many so-called experts in their field.

Much of these meetings have been a complete waste of time. This is not because there has not been a meeting of the minds but rather because in my opinion, many of these individuals simply have no depth or idea what they are doing but think nothing about pretending that they do. I always thought that I was good at separating the wheat from the chaff but these last few weeks have been an eye opener. Some people today are simply very good at posturing and giving the impression that they have the right attitude (whatever that is) but simply lack the aptitude, ability or capability to deliver.

This is a scary phenomenon. I am not quite sure how we will prevent it's spread but I hope we are able to curb it before it simply becomes too difficult to engage in meaningful commerce. Maybe I am just being cynical - and I hope that is all it is. The question remains though. Whilst preventing it may be difficult but even if one can see through it, how do you

expose this without appearing as a naysayer for the good of the organisation? Something to ponder on a little more and I will let you know if ever I come up with a solution to this quandary.

On a positive note, we are a few weeks away from our flagship event in Singapore and this year's Organising Committee, has been doing an excellent job in ensuring that we have the best speakers and exhibitors so you will not need to go through what I have described in the preceding paragraphs. Even the Cocktail reception on Day 1 of LogiSYM will have a special twist so if you have not booked your ticket, please log on to our website and do so.

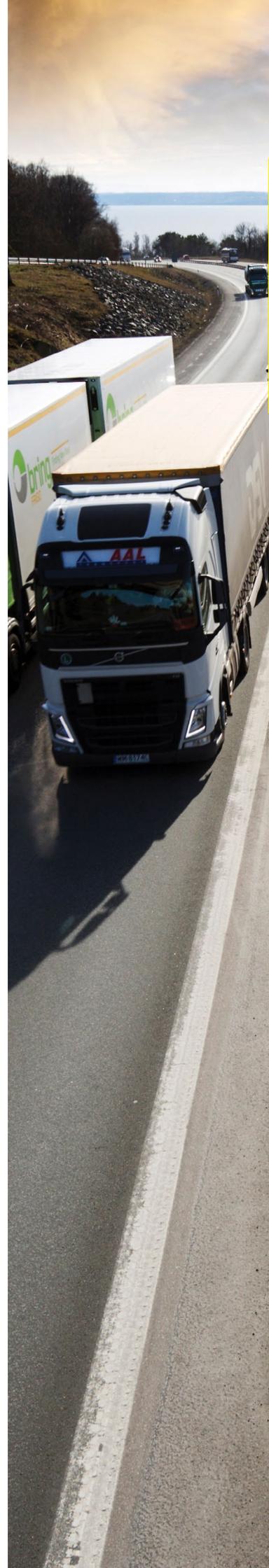
Finally, I am pleased to report that Dubai Trade is now Global Partner of LogiSYM and this is a significant endorsement for LogiSYM and opens a number of new opportunities for sponsors and participants.

As always, keep that feedback coming and thank you for all of your continued support!

### **Raymon Krishnan**

*President*

*The Logistics & Supply Chain  
Management Society*



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# Emirates Continues Diversification Push with SkyFresh

Emirates SkyCargo has launched a new suite of solutions for food logistics companies in the Middle East called SkyFresh. The freight division of Emirates Airline is aiming to provide better services in maintaining the freshness of perishables and fresh consumables during transportation.

This latest announcement comes just months after the airline launched its new Emirates SkyPharma facility at Dubai International Airport. Unlike SkyPharma, however, SkyFresh does not include any new infrastructure or equipment.

According to a release from the airline, it instead brings together Emirates SkyCargo's state of the art infrastructure, a modern fleet of wide-bodied aircraft, a range of innovative cool chain solutions including the

brand new Ventilated Cool Dolly and experienced staff.

The Emirates SkyFresh Ventilated Cool Dolly is Emirates SkyCargo's latest innovative cool chain protection product which helps preserve the freshness of perishables that require constant circulation of fresh cool air.

Emirates SkyFresh will feature three levels to ensure that perishables such as fruits, vegetables, fresh fish and seafood, meat and flowers maintain their freshness during the entire air transportation process.

The first is Emirates SkyFresh, the second is Emirates SkyFresh Breathe and the third is Emirates SkyFresh Active - offering varied levels of cool chain protection for different kinds of perishables. Emirates SkyFresh, is

geared towards temperature tolerant fruits and vegetables and will offer quick ramp transportation and thermal protection through Emirates SkyCargo's White Cover blanket.

Emirates SkyFresh Breathe provides protection for temperature sensitive perishables such as fresh cut flowers, ready to sell cut fruits and vegetables and fresh fish.

In 2016, Emirates SkyCargo transported close to 400,000 tonnes of perishables across its global network of over 150 destinations. This included products as diverse as salmon from Norway, strawberries from California, flowers from Ecuador, meat from Australia, mangoes from the Indian subcontinent, wine and cheese from France.

## February Sees Double-digit Air Freight Growth, but is it a Blip?

IATA has stated that global international air freight tonne kilometres (FTKs) expanded by 12.6% year-on-year in

February when adjusting for the effect of the leap year in 2016. On the same basis, FTKs overall were up by around 12%, almost four times the five-year average rate.

Asia Pacific and European airlines accounted for most of the overall change in FTKs (around 75%). Latin American carriers detracted from FTK growth for the 25th time in 27 months. In terms of international FTKs, Asia Pacific saw leap year adjusted growth of over 15%.

IATA stated: "The timing of Chinese New Year can complicate year-on-year comparisons at this time of year, but annual FTK growth clearly made a

strong start to 2017. Global FTKs were 7.2% higher in year-on-year terms in January and February combined, which we estimate is consistent with 9.0% adjusting for the leap year."

However, IATA also expressed caution. It was noted that the present strength in FTK growth is partly flattered by the combination of the weak start and the strong finish to 2016. In addition, despite data disruption at this time of year (mainly thanks to Chinese New Year) making accurate assessments particularly difficult, falling seasonally adjusted month-on-month FTK levels in recent months are a warning that the market may not be as buoyant as the year-on-year numbers suggest.

# Qatar Cargo Launches Direct Freighter Service to Cambodia

Qatar Airways Cargo began freighter service to Phnom Penh today, focusing mostly on Cambodia's garments business, which accounts for about 80 percent of the country's exports.

The weekly service, operating on the Doha-Phnom Penh-Doha route, will offer more than 60 tonnes of cargo capacity each way aboard one of the carriers A330 freighters.

The airline currently carries more than 70 tonnes of belly-hold cargo on daily passenger flights to Phnom Penh via Ho Chi Minh City, Vietnam, every week, so the capacity will nearly

“  
Intra-Asia air cargo has grown over the years, and we have observed substantial migration on manufacturing trade from China to Southeast Asian countries, such as Cambodia and Vietnam

**Ulrich Ogiermann**  
Chief Officer of Cargo  
Qatar Airways

double with the new freighter traffic. Ulrich Ogiermann, Qatar Airways chief officer of cargo, said that this was the

carrier's fifth freighter destination launched this year. "Intra-Asia air cargo has grown over the years, and we have observed substantial migration of manufacturing trade from China to Southeast Asian countries, such as Cambodia and Vietnam," he said.

Qatar Airways Cargo also noted that the Phnom Penh route increased the cargo carrier's freighter network to seven destinations on the continent. New passenger flights to Canberra in Australia and Medan in Indonesia were also recently announced by the airline.



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# SOHAR's US\$1 Billion Power Plant to Drive Future Growth

Work is progressing fast on the construction of SOHAR III, a green-field, integrated combined-cycle gas turbine power plant located in SOHAR Port.

The project is valued at over US\$1 billion and is on track to commence commercial operations by January 2019, according to a release from SOHAR.

With more than enough capacity to power new developments in the recently announced SOHAR Port South and SOHAR Freezone Phase II expansions, the new plant will have a power output of over 1,700 Megawatts, making it Oman's second largest power station.

Developed by Shinas Generating Company SAOC, the project is in partnership with Mitsui, ACWA Power and Dhofar International Development and Investment Holding.

The sole off-taker will be Oman Power

“

We have seen sustained double-digit growth in SOHAR for over twelve years now, and we are 100% on track for continued expansion.

**Mark Geilenkirchen**  
CEO  
SOHAR

and Water Procurement Company, who will supply the power produced to Oman's national grid.

Mark Geilenkirchen, SOHAR CEO, explained the importance of the new plant to SOHAR: “We have seen sustained double-digit growth in SOHAR for over twelve years now, and we are 100% on track for continued expansion. Our role is to ensure that

world-class infrastructure is in place before our incoming tenants require it, so they do not experience delays when commencing production. In times of budgetary constraints right across the GCC, SOHAR has once again shown it is possible to develop, finance, build, own and operate a large-scale high performance power plant like this one with a significant share of private investment. Since we started operations here in 2004, public-private partnerships have been at the core of our success story - made in SOHAR.”

SOHAR Freezone CEO, Jamal T. Aziz, added: “The first phase of SOHAR Freezone is practically leased out and our technical teams are now busy planning phase-two. The current levels of international interest from investors, especially in the food and logistics sectors is phenomenal and sufficient network power at reasonable rates is a prerequisite to the continued smooth growth of SOHAR Freezone.”

Webinar | 3:00PM – 4:00PM; May 3, 2017

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## DHL Says Ocean Freight Rates Have Reached Turning Point

Demand for ocean and air freight has been better than expected this year, with increasing volumes and rates finally improving after years in the doldrums, executives from freight

forwarding company DHL, part of Deutsche Post DHL Group, said.

"We're seeing relatively high demand for both ocean and air freight. We're seeing rising volumes on several routes," Tobias Meyer, chief operating officer and executive vice president for business support, DHL Global Forwarding, told Reuters.

"Given the debate around the new U.S. administration and Brexit, our customers had been expecting more of a negative impact on world trade," he said in an interview.

The bankruptcy of South Korea's Hanjin Shipping also helped to ease overcapacity on the container shipping market, he said. On routes between Asia and Europe, customers

are therefore having to wait up to four to five weeks, rather than one to two weeks, before their goods can be placed on ships and that is leading to an increase in freight rates.

"We're seeing a turning point in rates. They're no longer falling, as they had done over the last five to 10 years," Meyer said.

The Harpex Shipping Index, which tracks weekly shipping container rates, has climbed 40 percent this year to 439 points, its highest level since October 2015.

Air freight, aside from Latin America, has also made a positive start to the year, Ingo-Alexander Rahn, global head of air freight at DHL Global Forwarding, said.

## China Merchants, Sinotrans & CSC Wrap Up Merger

The long-awaited merger agreement between China Merchants Group and Sinotrans & CSC Holdings was finalized on April 10, according to a statement released by Sinotrans Shipping Limited.

With the strategic reorganisation, China's Sinotrans & CSC became a wholly-owned subsidiary of Hong Kong-based China Merchants. The merged corporation is expected to

further improve the competitiveness of China's state enterprises and promote industry consolidation.

Under the merger conditions, the two companies would work on reorganizing their tanker shipping business, as well as other businesses including energy and dry bulk shipping, property development, ports, marine and offshore engineering and logistics. The merger received the official approval from the state-owned Assets Supervision and Administration Commission of the State Council (SASAC) in December 2015.

In March 2016, the parties were urged to pick up the pace of their merger agreement as Li Jianhong, chairman of China Merchants and the person appointed to lead the merger entity, said that the companies should hasten the process.



# HNA Group to Buy CWT for More Than US\$1 Billion

Chinese conglomerate HNA Group has tabled a pre-conditional general offer for logistics provider CWT after almost a year of exclusive talks with CWT's three controlling families.

HNA is offering US\$2.33 in cash for each CWT share, in a deal that values one of Singapore's largest logistics groups at about SG\$1.4 billion.

CWT chairman Loi Kai Meng and his son, group chief executive Loi Pok Yen, together with the Liao and Lim families, own 65.1 per cent of CWT. The families have given their undertaking to accept the offer. HNA Group is making the offer through a special vehicle of Hong Kong-listed HNA Holding Group Co.

One pre-condition of the offer is that shareholders of HNA Holding Group must vote to approve the CWT takeover, although this is not expected to be a problem since two entities that

collectively own 66.84 per cent of the Hong Kong-listed company have undertaken to vote in favour of the deal as well as provided assurance that they have sufficient financial resources and will fund the takeover.

Other pre-conditions include the receipt of certain anti-trust approvals from China.

HNA Holding Group has agreed to pay a US\$15 million deposit to CWT, which CWT will retain in the event that all pre-conditions are met and HNA does not proceed with the takeover. If the deal does not proceed because of material adverse effects created by CWT over the next five months however, the US\$15 million will be returned to HNA.

Trading of CWT shares had been halted since last Thursday. At US\$2.33 a share, the offer represents a 12.6 per cent premium to the last traded price of US\$2.07. The offeror intends to make

CWT its wholly owned subsidiary and does not intend to preserve its listing status. To ensure continuity in the management, business and operations of CWT, the offeror plans to retain the senior management team of CWT's key business units.

One of China's richest companies, HNA was founded by billionaire Chen Feng as the parent company of Hainan Airlines.

CWT operates in more than 90 countries and was once the warehousing and container trucking services arm of government-linked port operator PSA until C&P bought over the company in 2004.

CWT is also the sponsor of Cache Logistics Trust, and manages the Reit together with ARA Asset Management, with CWT holding a 40 per cent stake in the Reit manager.

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## UPS Worldwide Express Freight

UPS has developed a new express airfreight service, UPS Worldwide Express Freight, for urgent, time-sensitive, and high-value international heavyweight shipments. This new service is an extension of the UPS Worldwide Express package portfolio.

According to UPS, the Worldwide Express Freight makes it easier for customers to ship pallets over 150

pounds within UPS' global air network of 37 origins and 41 destination countries and territories. According to UPS, the service provides guaranteed, day-definite, door-to-door delivery with some of the fastest times in transit in the industry. It includes overnight shipping from the Asia Pacific region, Europe, and the Americas to the United States. Two-day shipping is available to Europe from Asia Pacific,

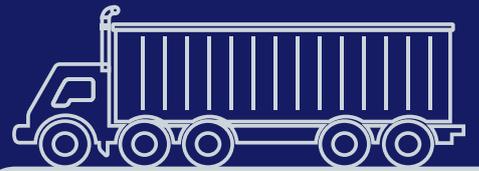
the United States, and the Americas.

UPS Worldwide Express Freight service offers many of the same features as UPS' Worldwide Express package service, including automated shipment preparation, online tracking, and proactive notification technology. In addition, both express freight and package shipments are consolidated into one bill.

3D printing



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# Deutsche Post DHL Group Doubles-Down on Green Delivery Vehicles

Deutsche Post DHL Group is embracing the green revolution, doubling the production capacity of its own electric vehicles from 10,000 to as many as 20,000 by the end of the year. The news follows an announcement earlier that



Photo: Courtesy of DHL Innovation

DP-DHL will reduce all logistics-related growth emissions to zero in net terms by 2050.

DP-DHL's electric vehicles are already joining the fleets of third-party delivery services, which the group expects to account for half of this year's StreetScooter annual total sales. DP-DHL anticipates more orders to roll in from municipal authorities, strategic partners and large fleet customers in Germany and the rest of Europe.

The company currently has about 2,500 vehicles in its StreetScooter fleet, and plans to double that number by the end of 2017.

The scooters are effective for urban letter and parcel deliveries partly due to their size and maneuverability, and because they don't add to emissions in congested urban centers. As more cities ban or tax vehicle traffic in urban cores, the DP-DHL model will make increasing sense.

# Railways to Allow Private Companies to Run Own Freight Trains

Indian Railways will soon allow private companies to run freight trains from their own private terminals, a move which could potentially break the monopoly of the national transporter on the country's rail roads.

Companies from sectors such as cement, steel, auto, logistics, grains, chemicals and fertilisers have evinced interest in having their own fleet under the special freight train operations scheme of the railways, a senior rail official said. "Through these private terminals, we'll be able to add almost 20-25 million tonnes of additional loading capacity. The demand for

all commodities other than coal have seen an uptick. So, we expect companies from various sectors to come forward and invest in their own terminals at their plants or any other convenient location," the official said, adding, "They will also be able to run their own trains."

If successful, it could pave the way for running private passenger trains eventually. Many of the private companies, including Tata Steel, Adani Agro, Kribhco and several others, have their own private terminals. For the current year, railways has decided to allow 55 private freight terminals in

the country. Under the freight train operations scheme, companies can lease wagons from Indian Railways or have their own rakes manufactured as per their specifications and run them entirely as per their convenience on the existing rail network from their own private freight terminals. However, the train operations will still be managed by railways and companies will have to pay track and other usage charges to the national transporter.

Indian Railways is slowly moving to bring in more private investment in the areas which are of high traction for private companies.

## Adidas to Mass Produce Factory-Ready 3D Printed Shoe

German sportswear giant Adidas has partnered with Silicon Valley start-up Carbon to produce a shoe with a 3D printed mid-sole that can be manufactured at scale – and has committed to creating more than 100,000 pairs by end of 2018.

The new Futurecraft 4D features a mid-sole produced using an additive manufacturing (AM) technology called Digital Light Synthesis, and eliminates traditional prototyping or moulding.

Digital Light Synthesis uses digital light projection, oxygen-permeable optics and programmable liquid resins to generate high-performance, durable polymeric products. The technology will be an "integral" part of the Adidas Speed factory concept, says the company, providing

consumers with bespoke performance products tailored to their individual physiological data.

Traditionally, 3D printing has mostly been used to prototype products in development before heading into production with conventional manufacturing techniques.

According to Carbon, its factory-ready 3D printing method technology overcomes the shortcomings of these traditional manufacturing methods, including low production speed and scale, poor surface quality, and colour and material restrictions, allowing brands to boost speed to market.

With the new technology, Adidas says it now operates on a "completely different manufacturing scale,"

officially departing from traditional 3D printing.

Designed to take the running shoe standard to the next level, the 'Futurecraft series' initiative is aimed at driving innovation across all elements of production. For the Futurecraft 4D, Adidas analysed its library of running data to shape a midsole design which was then crafted through Digital Light Synthesis, allowing the company to precisely address the needs of each athlete in regards to movement, cushioning, stability and comfort with one single component.

Futurecraft 4D will be available later this year, with 5,000 pairs due for release in autumn/winter.

## Tata Motors Aims to be No. 3 Carmaker by 2019

Tata Motors plans to expand its sales and service network from the current 700 centres to 1,500 by 2019, as part of an effort to achieve third position in the market by then, said Mayank Pareek, president of its passenger vehicles business unit.

Last year, it was fifth out of 18 manufacturers in the car market. The plan is to expand the product portfolio and geographical reach.

"We are present in only 59 per cent of the market and are not there in many, such as compact SUVs, bigger SUVs

and similar segments. Our product plan reflects this and in 2020, you will see that we have covered at least 95 per cent of the market. There will also be new market segments emerging and we are also looking at some of those," he said.

It will be focusing on the domestic market till it achieves the goal of becoming the third largest car manufacturers in India by 2019-20, it says -- there are some exports to South Asian countries and to South Africa.



## Amazon to Launch Dubai Hub Following Souq Deal

Amazon is understood to have started a search for its first office in Dubai, as well as logistics space to run its expanding Middle East operations.

The retail giant, which acquired UAE e-commerce website Souq.com for an undisclosed sum in March, does not currently have a permanent base in the country.

Its Middle East e-commerce operations are limited to Saudi Arabia – although its cloud computing arm, Amazon Web Services, has offices in Dubai and Bahrain.

Arabian Business has reported that since January, Amazon has had a team of around five people on the ground in Dubai tasked with finding office and logistics space from which to run the company's regional operations.

Amazon is understood to have met with the relevant authorities and advisors and to have ramped up its search since the acquisition of Souq.com.

It is understood the company has also begun recruitment activity outside the UAE, to bring new staff to a UAE office. Some are already preparing to move to the country in the coming months, sources said.

It is not known how big the office and the logistics warehouse will be, nor where the buildings will be located.

However, sources said the company is unlikely to be restricted to free zone areas as the government would consider granting it special onshore

privileges like it did for technology giant Apple, with its standalone stores in Mall of Emirates and other prime locations.

It is understood that Amazon could deploy a 'build-to-suit' model if it fails to find available space to suit its requirements – that is, to construct its own building from scratch.

If Amazon seeks a retail presence like Apple in future, sources said this is likely to take the form of 'shopfront' stores like those of UK retailer Argos, which has a relatively small front-of-house space where customers choose what they want to buy from Argos catalogues, and the stock is kept in a warehouse at the back.

Amazon has not provided details of its Middle East e-commerce strategy following its acquisition of Souq.com for a price thought to be around \$650 million.

## JD.com to Build 150 Drone Launch Facilities in China by 2020

Chinese e-commerce company JD.com plans to build 150 drone launch facilities in southwestern Sichuan province for unmanned aerial vehicle (UAV) parcel delivery. Having secured government approval in select provinces, autonomous aerial deliveries in China are at the forefront of commercial drone innovation.

JD.com CEO Richard Liu told local media that the goal of 150 launch facilities was three years out. Liu also said that drone deliveries would reduce the costs of shipping freight by 70 percent, compared to conventional truck delivery.

The drone service can deliver

products to some shoppers within 24 hours and will improve delivery efficiency in remote areas, Liu added.

JD is not attempting to make drone deliveries to individual residences, or to customers residing within megacities, like Shanghai or Beijing. Rather, the company sees drones as especially suitable for rural areas where urban density poses no obstacle to unchallenged drone operations, and where poor transportation infrastructure inhibits efficient courier delivery.

JD.com's drones can carry 50-kilogram payloads, but the retailer says that 500-kilogram-capable drones are in the pipeline.



## Corporate Advisory

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## About us

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# MARKET MOVES

## Global Mergers and Acquisitions News

In conjunction with Logistics Executive Group Corporate Advisory  
[www.LogisticsExecutive.com](http://www.LogisticsExecutive.com)

### *April 2017 Market Commentary*

The global transportation and logistics sector which at the end of 2016 had displayed a relatively stable level of M&A activity with the exception of the Middle East market, appears to have kicked back to full stream with a number

of major deals being seen this month. Led by HNA's proposed purchase of Singapore's CWT and merger between Knight Transportation and Swift Transportation, 2017 looks to be a year set for further industry consolidation.

Valuations remain steady and in line with 2016 multiples. The Middle East markets are showing increased activity, particularly for asset backed organisations being in demand.

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### **HNA to Buy CWT for US\$1 Billion**

China's HNA Holding Group Co. said it would make an offer to acquire Singapore-listed logistics firm CWT Ltd for \$1 billion. Reuters had reported in May 2016 citing sources that HNA Group was in talks to acquire CWT for \$1 billion. CWT, incorporated in 1970 as a private arm of the Port of Singapore Authority, has interests which include logistics services, commodity marketing, financial services and engineering services. HNA said in the filing that it intended to keep CWT's management team. It said the acquisition would help it to leverage an established international platform, become a leading logistics player and diversify its property investment portfolio.

### **Imperial Logistics Joint Ventures with Sincero in China**

Imperial Logistics and the Chinese conglomerate Sincero have set up a joint venture to be known as Imperial Sincero (Shanghai) Automotive Logistics. The partners will offer integrated logistics solutions to OEMs operating in China. Sincero makes available extensive infrastructure in China, such as warehouses, distribution centres and vehicles. Imperial, on the other hand, contributes many years of collaboration with German automobile manufacturers to the joint enterprise.

### **Knight Transportation and Swift Transportation to Merge**

Knight Transportation and Swift Transportation have announced a merger of the companies in an all-stock transaction that will create the largest full truckload company in North America. The combined company will be named Knight-Swift Transportation Holdings Inc. The transaction will create a truckload transportation company with \$5bn in annual revenue and a "Top 5" truckload presence in the dry van, refrigerated, dedicated and cross-border segments, and a significant presence in brokerage and intermodal. The holding company structure will enable the Knight and Swift businesses to operate under common ownership and share best practices while maintaining distinct brands and operations. The company will remain headquartered in Phoenix, Arizona operating with approximately 23,000 tractors, 77,000 trailers, and 28,000 employees.

### **APL Logistics Forms Joint Venture in Oman**

In partnership with Arab Global Logistics, APL Logistics has opened an office in Muscat, Oman. The new entity will be called APL Logistics Oman. The two companies are looking to win business on the back of Oman's position as a regional logistics hub serving the Middle East and East Africa markets.

## GLS acquires US courier Postal Express

Royal Mail has announced that its subsidiary, General Logistics Systems (GLS), has acquired US overnight parcel delivery company Postal Express for approximately \$13.3m. Postal express works across Washington, Oregon and Idaho, mainly offering B2B services. It delivered around 8.7m parcels in 2016, generating revenues of approximately \$42m. Postal Express will be consolidated within GLS for reporting purposes but will be managed as a separate entity.

## Yusen İnci Lojistik Launches with Merger of Yusen Logistics Turkey and İnci Lojistik

Yusen Logistics Turkey and İnci Lojistik have merged to form a new company, Yusen İnci Lojistik ve Ticaret A.Ş. This strategic merger represents a crucial step for both parties and changes the landscape of the domestic logistics market in Turkey, as well as impacting the international sector.

### M&A INSIDER

## Merger & Acquisition Deals & Transactions

### BUSINESS FOR SALE

#### Regional contract transport company with locked in customer contracts

Transportation / Trucking | UAE  
USD\$40,000,000 - \$48,000,000

Regional transportation business with more than 30 years' profitable track record in the UAE. Excellent growth prospects with new customer contracts locked in and implementation for 2017-2018. Large mixed fleet including more than 60 prime movers and 100+trailers. Good average age of assets and excellent safety management programs.

#### Niche 3PL / General Sales Agency

Airfreight / Cargo | Singapore  
USD\$300,000

SME sized specialised Airfreight General Sales Agency. Young business with solid visibility, well established customer and supplier relationships. Steady sales with untapped regional potential.

#### Niche 3PL SCM Services Provider seeking investment partner from growth or sale

Logistics / Freight Forwarding | Netherlands  
USD\$10,000,000 - \$12,000,000

Specialised 3PL Contract Logistics business focused on value added services with circa revenues of EUR10mio. Strong in Far East Imports for distribution to EUR markets with good business mix air, ocean and rail. Single footprint operation.

#### 3PL Contract Logistics and Cold Chain Provider

3PL Contract Logistics | Middle East  
USD\$135,000,000 - \$150,000,000

Large scale warehousing business with specialist contract logistics operations in cold chain. Owned property in strategic location and solid customer contracts.

#### International Freight Forwarding & Logistics Services Company

Logistics / Freight Forwarding | Middle East  
Undisclosed

SME Freight Forwarder with 250+ trading customers and annual revenues in 2015 excess of USD\$5mio. Operations in both onshore and offshore trade environments, the business provides all traditional freight forwarding activities (ocean, air, import, export, customs clearance, warehousing, distribution) and operating a small company owned UAE trucking fleet. The business is fully established freight forwarding company with capable staffing, systems, agency network, linehaul procurement (ocean/air capacity) and locations. It holds both all necessary business licenses.

## SEEKING TO BUY

### Project Engineering and Commercial Architectural Firms

Construction & Design  
Target Geography: United Arab Emirates

SME to Medium size commercial architectural firms in the project construction sector.

### 3PL Logistics Warehousing Business

Logistics / Freight Forwarding  
Target Geography: United Arab Emirates

Prominent UAE organisation seeking to expand its logistics operation through strategic acquisitions in areas of 3PL warehousing, transportation (trucking) and cold chain. Strong investor in growth.

### European 3PL sought by Asian 3PL expanding internationally

Logistics / Freight Forwarding  
Target Geography: Benelux region / Germany

Seeking solid stand-alone 3PL business in the Benelux region as part of an international expansion being undertaken by a major Asian based 3PL.

### Globally known MNC seeking 3PL, Trucking and Warehousing Assets to support strategic growth and diversification

Logistics / Freight Forwarding / Warehousing  
Target Geography: United Arab Emirates / United Kingdom / Saudi Arabia / Australia / Russia / Germany / India / Vietnam / Indonesia / China / South America

Publically listed MNC seeking a range of supply chain related assets across its global footprint and to meet strategic initiatives. Annual revenues greater than USD\$10mio.

### Small to Medium size freight forwarding and warehouse business in Nairobi

Logistics / Freight Forwarding  
Target Geography: Nairobi

Seeking small to medium size forwarding business complete with business licences to be part of a new market entry for a Regional Logistics Services provider.

### Medium size freight forwarding business in the UAE

Freight Forwarding or like  
Target Geography: United Arab Emirates

Regional logistics firm seeking medium size acquisitions in the areas of logistics, warehousing and freight forwarding. Ideally seeking businesses with solid financial history and annual revenues greater than USD\$5mio.

### Global Freight Forwarder

Freight Forwarding Air and Sea  
Target Geography: United Kingdom

Seeking to increase its European strength through a UK acquisition which would integrate with their global network. Looking for a company with operations throughout the UK which has a sound financial performance and a strong service ethos.

*Contact one of Logistics Executive Group's experienced principals for more information or to discuss one of these opportunities or your requirements.*

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# Astral Aerial Wins the 2017 IATA Innovation Award

**Bringing to life cargo drone operations in Africa, Astral Aerial recently won the IATA Innovation Award paving the way for commercial drone operations across the African continent.**

When asked about winning this award, Astral Aerial's CEO, Mr Sanjeev Gadhia had this to say, "We are excited here at Astral Aerial Solutions to have won the IATA Air Cargo Innovation Award for developing an airspace management system for drones in Africa"

The project, titled UAV Traffic Management (UTM) Concept for Africa, is specifically designed for low altitude airspace operations where unmanned aircraft will operate. The concept introduces virtual highways and routes for drones and demarcates the airspace into different flight levels depending on the size and nature of the mission. The UTM also provides vital information to drone operators such as weather updates, restricted airspace and altitude restrictions. This data is also shared with regulators to ensure compliance with air traffic requirements.

"We are very confident that the UTM concept will provide a safer environment for drone operations and prevent drones from colliding with other aircrafts in the airspace" Mr. Gadhia went on to say. "It's designed with Africa in mind, but can be used anywhere in the world."

Astral Aerial Solutions is on track to revolutionize cargo transportation using high payload drones of up to 2,000 kilograms of cargo, 1200km range and 26 hours of flight. The drone, called the Flyox, also has the capability to land on water and unpaved airstrips in remote areas in Africa.

***Why Africa is difficult to serve from a logistics perspective and why drones make perfect sense for filling a gap in the market there.***

Africa is vast and has 1.2 billion inhabitants. According to a World Bank



survey in 2015, 62% of the population lived in rural areas. These areas are characterized by poor transport and communication infrastructure, difficult terrain and lack of a physical address system.

“Having been born and raised in a remote village on the slopes of Mt. Kenya, I can accurately relate to these challenges. We have seen the case of Malawi where transporting blood samples to laboratories using the conventional methods can take up to 11 days!” said Project Manager, Mr Geoffrey Nyaga.

“We are on the brink of the next revolution in Africa, after mobile technology. This revolution started in South Africa and has spread to Rwanda, Nigeria, Ghana and most recently to Kenya. The Drone revolution driven by technology will be vital in the transportation of medical supplies, relief aid and cargo deliveries to inaccessible areas”.

Astral Aerial targets to extend air cargo transport to destinations where conventional aircrafts are incapable of landing due to insufficient infrastructure like airports. One of the ongoing strategies is to construct a dedicated drone airport, also known as a droneport, in the northern part of Kenya.

The droneport will be an enclosed area with adequate facilities such as warehouses, cargo handling facilities, drone charging and refueling stations, maintenance stations and security control measures. This will serve as a central logistics hub and enable other operations in agriculture, relief, oil and gas and ecommerce to flourish.

Based on studies, cargo transport using drones in Africa is only viable using high payload, long range drones. It also makes sense if cargo transport is faster, more reliable, cost effective and has the ability to bring connectivity between several remote towns with inadequate infrastructure. High payload drones will successfully serve such requirements at a fraction of the cost of conventional air transport.

“We have seen various uses of cargo drones in the industry so far. Amazon is leading the line with ecommerce parcel deliveries. Zipline, a Silicon Valley startup, is revolutionizing blood delivery in Rwanda with transport of up to 2kg payload over 150km range. Matternet drones were deployed in HIV/AIDS care transport in Malawi. The drones transported 1kg of payload for up to 10km. Vayu, an American company has also completed successful delivery of laboratory samples in Madagascar using their fixed wing vertical take-off and landing (VTOL) drone” said Mr Nyaga.

“Africa will also benefit from drone use in aerial surveys, monitoring infrastructure projects in the power, oil and gas sector and the drone technology will provide other benefits such as assistance in anti-poaching efforts”

Astral aims to be the largest drone operator in Kenya once the regulations have been ratified. For now, pilot training and operations planning

are presently awaiting Kenya’s drone regulations which are current being clarified by the Kenya Civil Aviation Authority (KCAA) and Kenya’s Ministry of Defense. At present, the KCAA limits civilians to flying drones at just over 130 meters and requires pilots to obtain security clearance from the Ministry of Defense. It is expected that the new regulation will see significant changes to this requirement, thus opening the path to commercial operators.

### ***The use of drones in supply chain operations for remote communities***

Astral believes that the initial utilization of drones being primarily in delivery of cargo, urgent supplies such as medicine and relief aid and agricultural supplies to remote communities, with later growth being driven by ecommerce last mile delivery to the growing middle class in Africa.

There are also the projected benefits to the local communities in terms of jobs through the construction of infrastructure and various drone operations. This is essential keeping in mind that 60% of African population is comprised of the youth.

“

Africa will also benefit from drone use in aerial surveys, monitoring infrastructure projects in the power, oil and gas sector and the drone technology will provide other benefits such as assistance in anti-poaching efforts

**Geoffrey Nyaga**  
Project Manager  
Astral Aerial



Photo: Winners at the 2017 IATA Innovation Award

***Some of the challenges of operating drones in Africa and what Astral Aerial is developing with the UTM will help overcome these.***

“We have observed the negativity surrounding drone use especially in regions with perennial conflicts. Additionally, there is the bad publicity when drones invade restricted airspaces such as airports, embassies, government buildings, military bases and densely populated areas. However, the underlying challenge is the poor infrastructure and communication network and unlike other parts of the world where cellular coverage is ubiquitous, there are still many areas in Africa that have no basic communication network. We developed the UTM concept to address all these challenges. Solutions

like advanced scheduling of drone flights and using offline activation codes will be applicable when operating in areas with little or no cellular coverage” outlined Mr Gadhia during his presentation to more than 1000 delegates at the IATA annual conference.

***So what does the future look like and where to from here for this exciting project?***

Well, I see a future where drones operate safely in the airspace. That is the first objective and using UTM will allow not just operators like Astral take to the skies, but make it safe and commercially viable for all operators. It is my strong belief that the full potential of drones will be

realized in Africa, while solving the critical challenges faced by the local population and doing so cheaply, reliably and safely” says Mr Nyaga.

“We expect to see a lot of developments and testing of cargo drones in the course of 2017 and that stakeholders in the drone industry will have to come together for a successful development and implementation of the UTM concept. This will in turn be used as a platform to set common standards in the drone industry”.



**Darryl Judd**

Chief Operating Officer  
Logistics Executive Group

In 2015, Darryl was named as one of the “Top 50 influential individuals in Asia’ Supply Chain, Manufacturing & Logistics industry” in the prestigious SCM Thought Leader publication by SCM World, recognising him as expert in the linkage of business strategy and supply chain best practices to human capital management. Darryl brings 28 years of executive leadership and consulting experience and is regular contributor on thought leadership across numerous industry publications and is a frequent speaker at international conferences and events on business leadership, strategy & people alignment and talent management. He was instrumental in the creation of Logistics Academy and presently holds an advisory board appointment with industry group LSCMS. In 2014, he was appointed as one of five global experts to IATA’s Global Innovation Award selection board and has held senior executive positions within the airline, air cargo and aircraft leasing industry.

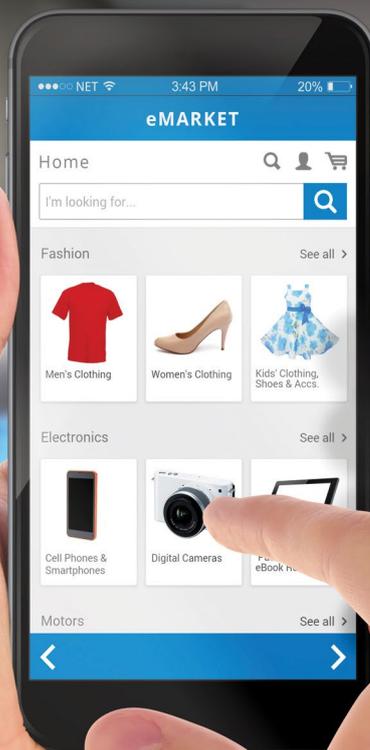
**the full potential of drones will be realized in Africa, while solving the critical challenges faced by the local population and doing so cheaply, reliably and safely**

# How Supply Chains Will Play a Future Role in Helping to Change the Face of Luxury Brand Retailing

*A case study from one of our Clients, an international luxury brand.*

The need to go Omnichannel has dominated discussion in the luxury industry during the last two years. Yet, with so many brands still lagging behind the curve, 2017 is a critical period as effective Omnichannel engagement becomes a necessity. Luxury customers are increasingly

demanding the personalization of services and adaptable modes of engagement they are seeing in other industries. Factor in the rise of millennial purchasers and brands are left scrambling for a solution. The consumer base has become far more varied and unpredictable. Without strong Omnichannel engagement, brands will be powerless to respond effectively.



Luxury retailers are well known for maintaining flagship stores where consumers discover products and experience best-in-class customer service. However, they have struggled to leverage digital to move consumers from clicks to bricks. For luxury brands to complement the exclusivity they embody offline, they will need to properly execute Omnichannel strategies online. More than any other industry, luxury brands rely on a strong sense of brand heritage and tradition, yet they also face a constant challenge to keeping the brands fresh and modern. With luxury shoppers looking for a unique and tailored experience as well as top quality products, brands need to have a much greater understanding of exactly who they are speaking to and how to adapt to individual preferences. Therefore it is imperative for brands to improve Omnichannel engagement to allow for more rounded personalization strategies. In the past, developing meaningful relationships with these customers meant luxury retailers giving the best possible customer service in-store.

It is valuable to analyze a real case study in order to get deep insights into which aspects luxury brands need to put most of their focus to take

advantage of the immense potential of the Omnichannel strategy.

Our case study is related to a major international European fashion house, which, as of the beginning of 2016, has unveiled a three-year plan to revive performance with Omnichannel excellence at its heart. At the backbone of such a decision, is a research run by the company which highlighted as today's luxury customers are looking for experiences, newness, authenticity and storytelling, which they want to see delivered through service-driven and tailored contact. This became possible thanks to the huge progress technology has been going through during the last five years. Such a strategic change of direction was anything but easy as the luxury player had to shift its historical corporate structure to reflect this new, purer Omnichannel point of view.

Among the actions put into place by the company, were equipping stores with audiovisual technology and Sales associates with iPads to allow them gaining a real-time full inventory visibility cross-channel and cross-countries anytime and anywhere.

This move has been providing customers with a more consistent and

intuitive experience across existing product assortments, while reducing internal complexity across product and processes. Also, the increasing adoption of Omnichannel, has put the fashion house on a journey to embed LEAN disciplines across the internal Supply Chain to shorten lead times, and increase the value delivery for customers. The organization drove Lean implementation across some of its North European in-house manufacturing sites, delivering 15% productivity improvements and 75% lead-time reduction.

The above actions are part of a wider organizational strategy to provide greater product consistency across all fully-owned retail stores based on optimizing product assortments and core product replenishment whilst also allowing a degree of flexibility to reflect local customer needs. Last but not least, the Omnichannel strategy translated into an evolution of its inventory management processes to achieve an optimized retail execution which has proved to drive a 10% increase in efficiencies.

#### **HOW TECHNOLOGY IS A KEY ENABLER FOR LOGISTIC COMPANIES TO BECOME DYNAMIC AND FLEXIBLE: THE OMNICHANNEL REVOLUTION**

Retail and Logistic executives often state that they need more from their CIOs. As they explore the latest technologies, executives are getting a better picture of what they need in order to deliver a true Omnichannel experience - that is, a seamless, integrated shopping experience, whether the customers are in the store or on their mobiles. To deliver against that promise, executives are looking for CIOs who can build IT organizations that are more nimble, collaborative, agile and responsive.

## **it is imperative for brands to improve Omnichannel engagement to allow for more rounded personalization strategies**



appropriate path to follow.

Companies must couple the assessment of technological capabilities with the creation of a business culture within the organization. For transformation to succeed, choosing the right technology is as important as rethinking the organization and the operation processes. This change must be embraced and managed starting from a managerial level with a top-down approach, with an efficient coordination and communication across the entire company. The potential of such strategy must be spread at all levels and overcome the structures typical of the brick-and-mortar product-centric retail. Indeed, this change needs to be led by the company board members and then spread with a “cascade” system within the organization.

For Omnichannel retailing to truly become reality, the primary concern is to be capable of fulfill shoppers’ need and want, all while directly engaging them over any customer-preferred channel. To do so, customer experience must be at the heart of any planning process and be the core of the organization’s culture.

The first step for the CEOs is to think of the business as a whole and not as single compartments where employees compete for revenues. In working together, it may become apparent that other units share the same goal and that joined business cases may be possible.

The next step is to partner the IT with the line-of-the-business heads. As the term Omnichannel implies, such a technology encompasses several different logistical functions: hence creating Omnichannel directors along with board-level roles will achieve

Without Information Technology, no Omnichannel would be possible. New technologies create new opportunities. But having too many choices makes prioritizing them difficult. This is particularly true when companies need to make decisions across functions - which is frequently the case in Omnichannel initiatives like flexible fulfillment (a unique warehouse for both channels, buying online and picking up in the store or having it shipped from a local store), which involves Merchandise Planning, Supply Chain, Logistics, Store Operations and IT.

Few companies excel at cross-functional collaboration, particularly when it involves creating something new. But IT leaders can and should play a more strategic role in prioritization, helping the business understand the potential of new technologies and leading the way through innovation and adoption. Many IT organizations don’t have the resources to meet the demands of this broader role. As organizations move toward an Omnichannel model, the demand for IT development and implementation services is very likely to grow exponentially, stressing the technology capabilities.

More specifically, when it comes to

Logistics, Omnichannel winners need to invest in technology. Indeed, the best way to get an Omnichannel approach off the ground is to offer one replicable and standardized WMS/delivery system. It has become mission critical to get this right. Usually, this translates into a Cloud-based solution which can be seamlessly integrated across multiple Supply Chain channels and partners. It means providing real-time information about the available inventory across the whole organization, regardless of which channels are accessed and used, and requires a solid fully-integrated system.

#### CHALLENGES

Providing a seamless customer experience integrating both offline and online channels has become a truly must-have of a successful luxury retailer, to stay competitive and to avoid significant business losses. However, being a bare necessity, putting into practice the omnichannel theory presents notable challenges.

To reach an optimal integration between channels thus deliver the best customer experience organizations need to realize whether there is an internal process that can be implemented, based on an actual need, and which is the most

the integration of the processes and the efficiencies across the business. Managing this level of technology is a challenge of nearly all industries, which requires to be competitive to improve the overall quality of the service provided. Soon no company will be able to get by without harnessing sensor technology, the internet of things and cloud based software tools.

IT strategy must consequently move up to a technology infrastructure that eliminates the need for a costly and complicated integration with ecosystem players. More specifically, with stores' retail POs, marketplaces, brand.com stores and cross-border networks.

This becomes a must-have for the luxury industry, that has the unique chance to combine its traditional image with an advanced technology

and framework. Therefore, the need to outsource to a Logistic company that can manage a common inventory across all channels and list all the products across marketplaces, becomes pivotal for the retailer's success.

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**Paolo Traisci**

General Manager SE Asia  
**BGroup Logistics**

With over 20 years in the Logistics and Supply Chain industry, covering 3 continents and emerging markets, Paolo possesses an extensive experience in the international logistics business, Apparel & Fashion industry, Freight Forwarding, and E-commerce (since 2007 with projects related to Asos, Littlewoods in London and Yoox).

He is passionate about the omni-channel retail revolution and look closely to the digital transformation in the supply chain. Wanting to take part to this transformation, adding up values to the traditional logistics and supply chain industry, he now offers his expertise to BGroup and its wonderful challenge.



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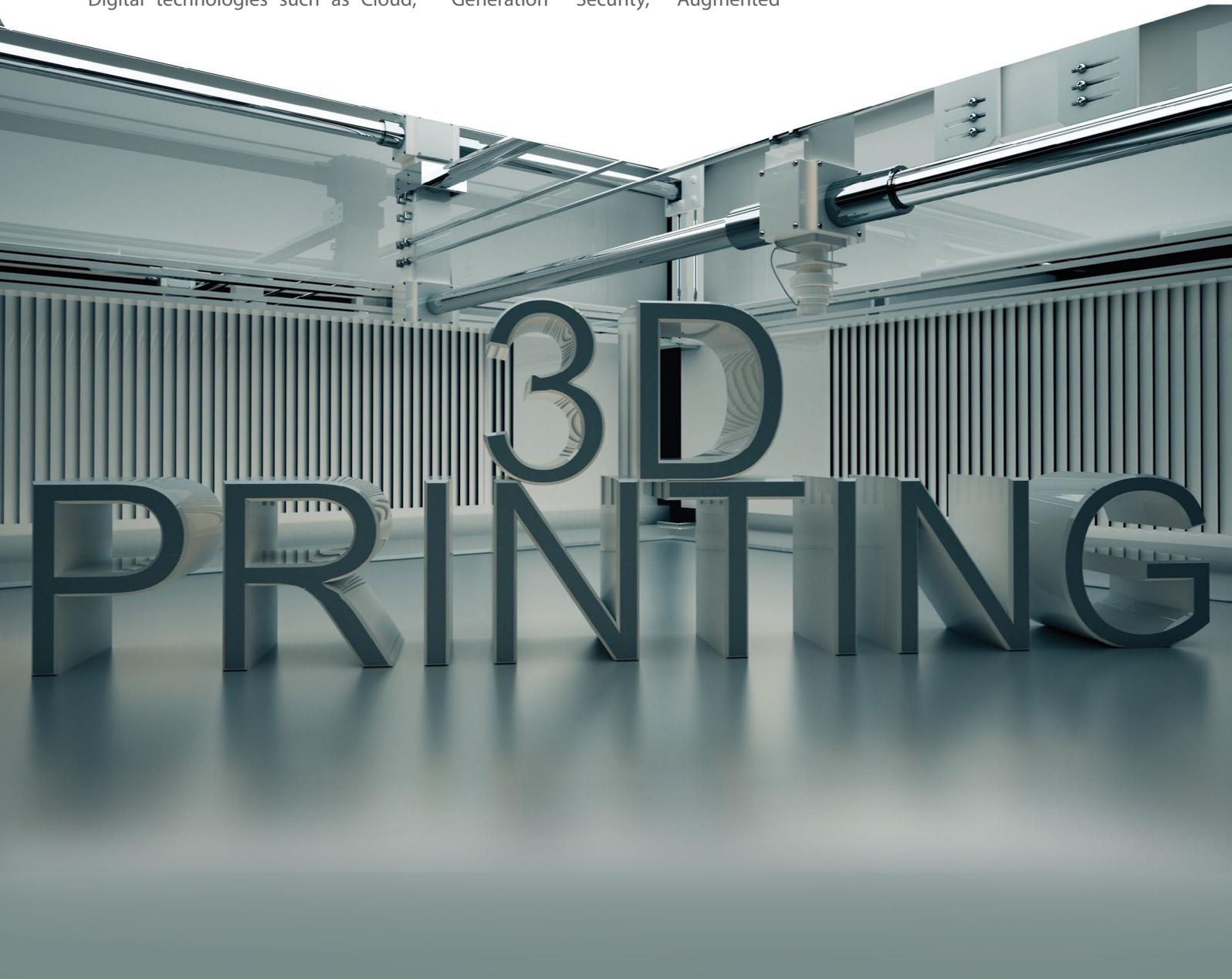
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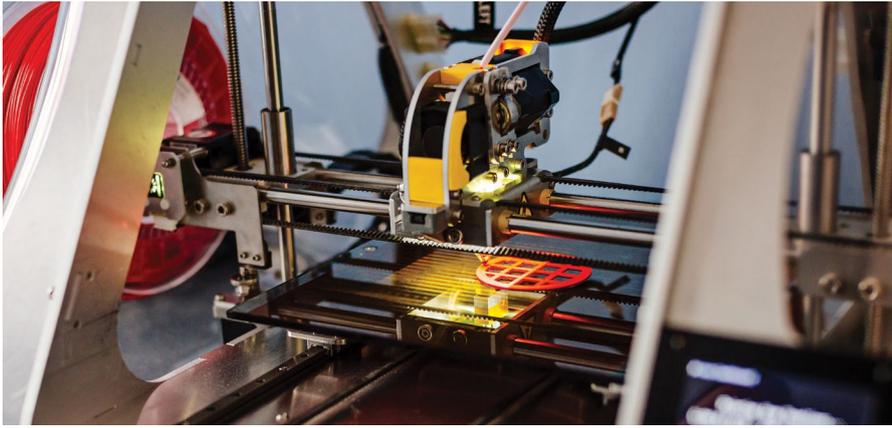
# The Rise of 3D Printing in Manufacturing

Across the globe, smart manufacturing has gained a significant momentum in transforming operational models and processes. Manufacturers are now looking to digital technologies first when searching for avenues to change the way work is performed. The key driver is to save on operating costs and to generate new revenue streams. Digital technologies such as Cloud,

Mobility, Big Data Analytics and Social Business, which IDC refers to as third platform technologies, are at the core of such transformations. But these transformations are even now happening at a much faster rate with the advent of six other technologies - Robotics, the Internet of Things (IoT), Cognitive Computing, Next-Generation Security, Augmented

and Virtual Reality and 3D printing. Classified as innovation accelerators by IDC, these technologies have the potential to change a manufacturers' business processes, operating models, design, production and service products. Otherwise known as the digital business transformation drivers.





Out of the six accelerators, the adoption of 3D printing seems to have been the slowest to unfold. A key impediment has been the high capital investment required to acquire 3D printer hardware and print materials. Concerns raised previously on 3D printing adoption include the speed of production, reliability and precision. But today, we can see an increase in the number of cases for 3D printing across the value chain. This ranges from product prototypes and samples, to replacement parts, packaging components, and service tools or molds, which is the most common use case across the industry segments.

***The growing option of 3D printing technology is that more applications can be attributed to 3 key benefits:***

(1) faster product development process, (2) reduced tooling & packaging costs, and (3) the ability to adjust to demand fluctuations.

Using 3D production of functional end-user parts is already one of the fastest growing areas in the manufacturing sector. This results in a reduction in the number of manufacturing parts.

Notable industrial applications are, local auto-manufacturers can produce a car that is 75% 3D printed. Fewer parts will translate into fewer suppliers and less complexity in the supply chain. This in turn means lower production costs and less transportation from one part of the value-chain to the next.

Another industrial application is that GE Aviation is 3D printing fuel nozzles that could not be produced through other manufacturing methods. This delivers engine parts that are 25% lighter than predecessors, by combining 18 parts into 1.

With 3D printing maturing technological capabilities and cost, IDC expects the continued rise of 3D printing adoption in several applications. There are 5 innovative scenarios we believe will showcase the future disruptions in manufacturing driven by 3D printing technologies:

**1. 3D PRINTING PLATFORM**

3D printers will serve as an online cloud-based platform. Through a crowd-sourced approach, the user community, like manufacturers, buyers, designers and end-users can publish, search, evaluate, negotiate and transact additive manufacturing services. The platform will be able to connect the virtual to the real, allowing users to bring their ideas to life, while optimising the manufacturing and design resources.

For example, software company Dassault System has recently launched 3DVIA Make, a personalised product platform. Without creating large physical inventories, gives the ability to provide customer-specific products. The platform allows retailers to sell digital designs that are 3D printed by a specific service or a local 3D printing

bureau. This opens a wide variety of materials and colors with which to offer customers.

**2. 3D PRINTING FOR SERVICES PARTS**

The unpredictability of demand for many service parts forces companies to hold excess stock of low-turnover inventory. This approach is used to buffer the risk of long delays in service repairs while waiting for parts to arrive. But if space used to store inventory could be converted to produce parts on demand using 3D printers? Companies could remove the tail of inventory — e.g. items that are kept on hand in case they are needed with no real data on when or even if they will be needed. This is a particularly challenging issue for expensive assets with long life cycles such as ships, aircraft, industrial machinery, farm, construction, carts and trucks. The financial and physical cost to carrying such parts in inventory is substantial. The Chinese Army is introducing the technology at the practical side of its implementation. When a military tanker truck was damaged during an exercise, the replacement parts were not readily available, the team resorted to 3D printing. The damaged parts were the trucks couplings, a component of the oil pumping system. These are considered non-consumable parts and not kept as inventory in the emergency depot. To enable repair of the unit, the support team simply designed the necessary part and 3D printed it.

**3. 3D PRINTER-ENABLED MANUFACTURING CENTERS**

Distributed manufacturing will be the trend with the micro-factories, supporting production in new, remote, or hazardous locations and short-term runs. More logistics providers such as FedEx, UPS or UL will develop stationary manufacturing centers with 3D printer and lease machines for small production runs when there is an advantage to keep

production close to the customers or end-customers and respond to their unique requirements with faster speed. This model will be particularly attractive to all manufacturers that are design centric and need outsourcing services or to complement their existing supply chains for smaller volumes and short deadlines from their customers. Manufacturers will look to 3D printed-enabled facilities to strengthen the relationship between supply and demand, perhaps by decreasing the physical distance between production and customer or through postponement strategies.

#### 4. 3D PRINTED "SMART PARTS"

The 3D printing solutions that offer multimaterials capability today do so with the intent of speeding production, creating more accurate and varied prototypes. Several manufacturers are developing 3D printing systems designed to use conductive materials to create printed electronics and electronic components and RFID antennae. There is a great opportunity to leverage multimaterials printing capabilities to create "smart parts" or components with embedded sensors and printed electronics.

In turn, these smart parts offer key capabilities such as product authentication, anti-counterfeiting, supply chain reporting. This can also reduce break/fix service calls by alerting users and service providers when maintenance is required. The increasing use of 3D metal printing in production environments will further accelerate the need for "smart part" production capabilities.

#### 5. 3D CAPABLE SMART ROBOTS

The early stage examples of 3D print capable robots, resemble spiders with multiple legs for movement. These demos show how spider robots will come together in swarms for new applications. Regardless of how they look, the expectation for robots is well beyond just automation — they

will include technology from other innovation accelerators as well such as IoT and cognitive. The vision for the robots of the future is going to become a reality more quickly in environments that include less than ideal working conditions where worker safety is a major issue.

The decision to own or outsource 3D printing capabilities, has several aspects for consideration.

A major driver is the criticality of maintaining the assets and managing the machine uptime. Any unwarranted down time would cancel the benefits of the speed and agility that 3D printing offers.

Installing complex 3D printing capabilities would require a support. This needs a feasibility study of asset utilisation vs the cost and benefits of the output. These are clearly the new challenges that we will face with these new technologies.

Yves Wang, Senior Research Manager for IDC Manufacturing Insights Asia Pacific, says: "3D Printing speeds have been improving at approximately the same rate as prices have been decreasing. The availability of printing materials is also growing. IDC's Worldwide 3D Printer 2012–2017 Forecast reports that 3D printing unit shipments are expected to grow at an annual growth rate of 59% through 2017. Global spending on 3D printing will experience a five-year compound annual growth rate (CAGR) of 22.3% with revenues reaching \$28.9 billion in 2020."

"The affordability cost and growing maturity of 3D printing technology is increasing the adoption of 3D printers in manufacturing environments. 3D printing will appear across the whole product life cycle from product birth to its end of life. We strongly believe that 3D printing would change the future of the manufacturing industry,"

ends Wang.

To keep exploring its long-term potential, an extended ecosystem must be built up for manufacturing. This can be achieved by involving all stakeholders – from manufacturers, service providers, brokers, designers and end users/consumers. The integration with other digital technologies like Cloud, IoT, Big data and AI is also a critical step to make 3D printer smarter and more versatile. Meanwhile, with the rise of Computer Augmented Design supporting 3D printing, it is time for manufacturing users to rethink and redefine how the products are designed and manufactured by changing the mindset from subtractive manufacturing to additive manufacturing. Moreover, the manufacturing users should develop the new KPIs and metrics for utilisation of 3D printing by having a holistic view in term of production speed, costs, quality and time to market and develop new usage scenarios which might transform the way of design, manufacturing and services.



**Yves Wang**  
Senior Research Manager  
IDC Asia/Pacific

Yves Wang is a senior research manager with IDC Asia/Pacific Manufacturing Insights based in Beijing. He is responsible for research and analyses of key trends, best practices, and applications on the emerging digital manufacturing technologies, including cloud, Big Data/analytics, IoT, robotics, and Mobility. He is also responsible for delivering custom research that assists clients in making key technology investment decisions for the next wave of manufacturing.

# The RCEP: Tidying up the Asian Noodle Bowl

With the prevailing uncertainty about the future of the Trans Pacific Partnership (TPP), it may be about time to focus more attention on the “other” mega Free Trade Agreement (FTA) that has, until recently, been in the shadow of the TPP. This other FTA is known as the Regional Comprehensive Economic Partnership Agreement (RCEP). Like the TPP, it also spans major economic powerhouses (primarily in Asia) and more importantly, now seems to have a higher chance of ratification.



**A BIG ASEAN-LED INITIATIVE**

The RCEP membership stretches from South Asia (India), North Asia (China, Japan, South Korea), Southeast Asia (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Singapore, Vietnam) and all the way to Oceania (Australia, New Zealand). Interestingly, it excludes the US. Nonetheless, the RCEP comprises over 30 percent of global gross domestic product (GDP) and, with a market of 3.4 billion people, covers nearly half of the world’s population in a diverse group of countries which feature a mélange of mature markets, burgeoning middle classes, and/or a young productive workforce.

The RCEP has just gone through its 17th round of negotiations and hopes are high that it will be concluded by the end of this year to coincide with the 50th anniversary of the founding of the Association of Southeast Asian Nations (ASEAN). ASEAN makes up 10 out of the 16 country membership of the RCEP.

The sheer size of the FTA, the notable membership of China, and the equally noticeable absence of the US, has led some to tout the RCEP as China’s response to the US-led TPP. This is a misconception, but it is nonetheless an understandable one since China is expected to seize the opportunity to pick up from the TPP’s loss of momentum.

However, the reality (at least for now) is that the RCEP is more of an ASEAN-led initiative.

**ASEAN AS COMMON GROUND**

Apart from being arguably the geographical center of the RCEP, ASEAN also holds the unique position of being the common

FTA denominator among all RCEP members. As a bloc, it already has separate and independent FTAs with each of the other RCEP members, known as ASEAN+1 Agreements.

This means that for products that are made in ASEAN, the chances of it being granted FTA treatment in any of the six non-ASEAN RCEP member countries is almost certain, provided that it meets the rules of origin (ROO) for the applicable ASEAN+1 agreement.

The same will be true for products made in one of the non-ASEAN RCEP countries that are eventually imported into ASEAN. It is important to consider here though that the ROOs for each of these ASEAN+1 agreements are different and, as such, are covered by different types of certificates of origin. These agreements and the corresponding type of certificate of origin used are summarized in the table (Table 1) below.

Therefore, a company only needs to consult the relevant ROO to that specific ASEAN+1 agreement and, if found to be eligible, apply for the corresponding certificate of origin to enjoy FTA benefits if it plans to ship a qualifying product directly:

- from an ASEAN member to another ASEAN member;
- from an ASEAN member to an ASEAN+1; or
- from an ASEAN+1 member to an ASEAN member

**OUTSIDE ASEAN**

Under current rules, the case will be different if the intention is to ship from one ASEAN+1 member to another ASEAN+1 member. It must be noted that outside of ASEAN, this commonality does not currently exist among ASEAN+1 countries.

Fortunately, there are separate

CURRENT ASEAN AND ASEAN+1 AGREEMENTS		CERTIFICATE OF ORIGIN (COO)
ASEAN	ASEAN	Form D
	China	Form E
	India	Form AI
	Japan	Form AJ
	Korea	Form AK
	Australia	Form AANZ
	New Zealand	

Table 1

The prevalence of these different rules and documentary requirements for every FTA, gave rise to the noodle bowl analogy to help characterize this crisscrossing complexity.

Note that for purposes of this article, we shall refer to each of these six non-ASEAN RCEP member countries singularly as an “ASEAN+1” country.

bilateral FTAs and a very limited preferential trade agreement known as the Asia Pacific Trade Agreement (APTA) between and among some ASEAN+1 members.

ASEAN+1 members can consult APTA to confirm whether any possible savings or duty benefits are applicable.

FTAS AMONG ASEAN+ 1 MEMBERS		FTA DOCUMENT OR COO
China	Australia	China-Australia FTA COO or declaration of origin
	New Zealand	China-New Zealand FTA COO or declaration of origin
	South Korea	China - Korea FTA COO
	South Korea (very limited products)	APTA COO (Combined declaration and certificate)
	India (very limited products)	APTA COO (Combined declaration and certificate)
Japan	Australia	JAPEA Certificate of Origin
	India	IJCEPA Certificate of Origin
Korea	Australia	Korea-Australia FTA COO
	India	India - Korea CEPA COO
	New Zealand	New Zealand - Korea FTA Origin Declaration
Australia	New Zealand	Not Required
	Japan	JAPEA Certificate of Origin
	China	China-Australia FTA COO or declaration of origin
	Korea	Korea-Australia FTA COO
India	Korea	India - Korea CEPA COO
	China (very limited products)	APTA COO (Combined declaration and certificate)
New Zealand	Australia	Not Required
	China	China-New Zealand FTA COO or declaration of origin
	Korea	New Zealand - Korea FTA Origin Declaration

Table 2

These FTAs are summarized in the table (Table 2) above and it is noticeable that FTA relationships between ASEAN+1 countries are comparably much more limited.

### MANAGING THE ADDED COMPLEXITY OF LOGISTICS HUBS

Now, what if the products are first shipped to a logistics hub say, in Singapore, before being delivered to their final destination? The conventional requirement among most FTAs is for products to be directly consigned from the factory

to the importer and would only allow third country transits subject to strict conditions.

The ASEAN agreements have made compliance with this much easier. One of the unique features of the ASEAN agreements is a legal facility to generate what are known as “back to back” certificates of origin in an intermediate country that is also a party to that particular FTA. For example, if a Thai manufacturer first sends its products to a Singapore hub before being shipped to China, it can first apply for a Form E (under the

ASEAN-China FTA) on the Thailand to Singapore leg of the shipment. When the final order is placed for a second leg shipment to China, a back-to-back Form E (also known as a “movement certificate”) may be issued by Singapore authorities (subject to certain conditions) which will be accepted for FTA treatment by China Customs.

These back-to-back arrangements only apply to shipments within ASEAN and those between ASEAN and ASEAN+1 countries. It will not be applicable to shipments from one ASEAN+1 country

# The RCEP is precisely this common FTA that could unlock significant supply chain benefits alongside duty savings opportunities.

to another ASEAN+1 country as these bilateral agreements would not have similar provisions. Instead, the relevant transshipment provisions of these different bilateral FTAs will have to be checked separately if any possibility of FTA savings retention exists.

Although “back to back” certifications have been a very helpful innovation, the current framework still has considerable limitations. Going back to the example of the Thai company that shipped products to Singapore with a Form E, what if instead of being re-exported from Singapore to China, the supply chain team decided to route the products to Japan instead? Since the original certificate of origin was a Form E (which is only accepted in ASEAN and China), Singapore Customs cannot generate a back-to-back Form AJ which is what will be needed to claim FTA benefits in Japan. In this situation, the company will unfortunately have to forego the FTA benefit.

## HOW THE RCEP TIES IT ALL TOGETHER

Unless a common FTA binding all these countries together comes into effect, then this will remain to be the case. The RCEP is precisely this common FTA

that could unlock significant supply chain benefits alongside duty savings opportunities.

If the concept of back-to-back certifications are likewise extended to the RCEP, then this will allow companies the flexibility to generate back-to-back RCEP origin documents and ship their products from a logistics hub to any of the ASEAN+1 members which should recognize this common RCEP certificate. In effect, this will close the ASEAN+1 FTA loop and allow for a single set of FTA rules between/among ASEAN and ASEAN+1 countries that will mitigate the challenges of the noodle bowl of ROOs currently crisscrossing the region. From a purely logistics perspective, this will be the primary and arguably the most important contribution that the RCEP will have, apart from the broader economic and trade enhancing benefits it accords business located in the region.

We share the hopes of a successful completion of the RCEP negotiations within the year and its long awaited implementation next year. It would also be very helpful if the final version of the agreement can be first made public upon conclusion of negotiations, as was done with

the TPP, to give companies a chance to digest the information and make necessary preparations to maximize its potential benefits. Therefore, prior to embarking on any FTA project, we would highly recommend that you first reach out to your logistics providers and supply chain experts to help you navigate the requirements, identify possible options, and quantify its potential impact.

This excitement and anticipation of what could be a major trade boon should be balanced by the rigor of detailed internal studies regarding the potential costs, benefits and - to a certain extent - risks that a company's decision to participate in the RCEP may entail.



**Raphael Madarang**

Director, Global Trade Compliance and Management  
APL Logistics

Raphael leads the Global Trade Compliance and Management function of APL Logistics. He specializes in providing technical assistance and conducting research on a wide range of global business issues concerning international trade and customs. In the course of 14 years, he has managed several customs compliance and tax/duty saving engagements relating to the inbound and outbound operations of multinational companies. His main areas of expertise are supply chain optimization, free trade agreements (FTAs), special economic zones, as well as customs valuation and tariff classification planning. He has conducted numerous on-site trade compliance reviews and advised on various internationally accepted best practices for large companies.

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### May

#### LOGISYM SINGAPORE 2017

May 17<sup>th</sup> - 18<sup>th</sup>, 2017

NUSS Kent Ridge Guild House,  
Singapore

[logisym.org/2017](http://logisym.org/2017)

#### GPCA SUPPLY CHAIN CONFERENCE

May 2<sup>nd</sup> - 4<sup>th</sup>, 2017

Abu Dhabi, UAE

[www.gpcasupplychain.com](http://www.gpcasupplychain.com)

#### THE 4TH MENA COLD CHAIN FORUM

May 16<sup>th</sup> - 17<sup>th</sup>, 2017

Dubai, UAE

[www.menacoldchain.com](http://www.menacoldchain.com)

#### SUPPLY CHAIN INNOVATION SUMMIT 2017 CHINA FOCUS

May 25<sup>th</sup> - 26<sup>th</sup>, 2017

Shanghai, China

[www.scinno-cn.com](http://www.scinno-cn.com)

#### AUTOMATED WAREHOUSE, SMART TECHNOLOGIES & SUPPLY CHAIN

#### INTEGRATION FORUM

May 22<sup>nd</sup> - 23<sup>rd</sup>, 2017

Melbourne Marriot Hotel

Melbourne, Australia

### June

#### CAREER PLANNING & DEVELOPMENT

June 10<sup>th</sup>, 2017

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### September

#### MATERIALS HANDLING MIDDLE EAST

September 11<sup>th</sup> - 13<sup>th</sup>, 2017

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### October

#### LOGISYM MALAYSIA 2017

October 10<sup>th</sup> - 11<sup>th</sup>, 2017

Empire Hotel Subang

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#### GULFOOD MANUFACTURING 2017

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### November

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