

LogiSYM

The Magazine for Supply Chain Executives

OCTOBER 2015

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In this feature, our guest author Gwyneth Fries talks about minimising wastes and maximising opportunities in the Asia's food supply chain.

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from the editor

The aftermath of a very hot summer!

The global economic news is still dominated with echoes of pessimism and a very sluggish growth outlook from most of the trading blocks after a summer of many highlights.

During mid August we saw the devaluation of the Chinese Yuan, which triggered a downward trend on most of the major stock markets. But later the corrections showed some positive signs of recovery. The Chinese currency devaluation, could revive Chinese manufacturing output, but will resume pressure on Western manufacturing output with lower pricing impact.

Whilst Europe was enjoying the height of their summer vacation, most European markets were trading on thin volumes. As such the full impact of the Chinese currency devaluation had probably not yet had the full effect. But September seems to have stabilised the markets, with China still in the forefront of the market watch with a welcomed relief that we can expect less or no Government interventions.

This current economic situation is for sure impacting the supply chain segment in most sectors. Such indicators could signal that Q4 2015, could be a tough period for most industry sectors. But where there are challenging and changing situations, there are also new opportunities. – the key is stay positive and seek new horizons of innovation.

Lower oil prices is certainly good news for the supply chain industry, if only we could see this transform into lower rates with same speed in which oil prices come off – we shall see !

Whilst The Magazine for Supply Chain Executives is not intended to be an economic review journal, it is however relevant to recall the economic conditions that impact the supply chain industry. Looking at the situation from a positive angle, it is never too soon to start thinking and preparing for the upturn. Past trends have shown us that the upturn will arrive unannounced and where everyone is often caught by surprise.

It is often during these downward cycles, that we see new ideas and paradigm shifts in business models across most industries. But most especially in the consumer industry and in their supply chain models. Such changes can usually present new challenges and opportunities for the supply chain industry.

In this edition we are pleased to bring you several interesting articles in the Special Features Section and we hope that you will continue to find new as well as relevant information to guide you through similar challenges in your own working environment.

We thank all our readers for the great feedback and contributions we have received. And we welcome your ideas and inputs. If you feel that you have something to share, do not hesitate to put pen to paper and send us your contribution.

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a word from the president

The supply chain is a derived demand

Singapore just held its parliamentary elections last month and the Prime Minister of the country stayed in power. Ironically in that very same week, Australia which has not had an election recently, got a new Prime Minister when the sitting Prime Minister was unseated by his own party, following more than a year of poor ratings.

Also reported at the time, The Bank of Japan refrained from boosting stimulus even after the economy shrank in the last quarter, betting that a resumption in growth will be enough to rekindle inflation.

The move by Gov. Haruhiko Kuroda and his colleagues at the BOJ leaves the onus on Prime Minister Shinzo Abe's government to compile a stimulus package to boost what evidence indicates is a lacklustre recovery in the second half of the year so far.

The state of affairs in Malaysia, where there is some speculation around the actions of its Prime Minister is causing the currency to plummet. At the time this is going to print, there is no end in sight as to when the woes Malaysia is facing will abate sufficiently enough for this currency to stabilise and strengthen. Many political punters in fact are saying that things will get worse before they get better. Let's hope they are wrong.

This is not a political assessment of our region but just following the news and seeing what is happening in some countries reminded me of something that I used to highlight to students in my classes. Logistics and Supply Chains as a whole are derived (and not direct) demand. How

a government acts or is perceived to act will have a consequential impact on investment and trade. When trade slows, the demand for Logistics is reduced and in any up or down swing, the Supply Chain will need to be tweaked and optimised for maximum efficiency and effectiveness.

As Supply Chain professionals we not only need to be aware of the latest tools and trends in our industry in order to gain maximum performance but also need to possess a strong awareness of socio and geo-political issues that will in some way, shape or form have an impact on the component of the Supply Chain in which we are involved.

What to do and when exactly to do it is not easy to get right all the time but for the Logistician that does this better than most, the results can be very satisfying. This edition of the magazine looks at some of the issues and opportunities out there and hopefully you will be reading this at GLCS-Logisym in Malaysia where experts will be talking and presenting on the very topics that have an impact on what we do.

We hope you find this issue an interesting read and as always, we welcome input and feedback on how we can do better.

Raymon Krishnan

President, The Logistics & Supply Chain Management Society





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Sirius comes in a range of configurations due to its modular design. Each module is a standard size and uses approximately 45 watts. Sirius can be used in both high bay and low bay applications using a variety of lens types to tailor the light output to the lighting need. The Sirius range is setting a new benchmark for LED high bay lighting, delivering approximately 100 lumens per watt. We do this by using the very latest technology, including Philips Lumiled LEDs and by designing high quality electronics and purpose-designed optics.

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\$1.10
p.a. per \$1 spend



Up to
500%
Increase in lighting
levels

Saudia Cargo Appoints ACP Worldwide as South Africa GSA

ACP Worldwide, one of the world's leading international airline management companies, has been appointed cargo general sales agent (GSA) across South Africa for Saudia Cargo, effective August 1, 2015.

Saudia Cargo currently operates three times weekly B747 freighter flights from Johannesburg to Jeddah and Amsterdam, being shared frequencies with Nairobi.

In addition to this freighter capacity, ACP will also be able to sell belly space on the carrier's three times weekly B777-200 wide-body flights between Johannesburg and Jeddah offering total 50 tonnes of lower deck cargo capacity per week.

"Following a competitive tender process where we were able to demonstrate our depth of knowledge and professionalism, we were delighted to win the Saudia Cargo business," commented Dawn Bailey, ACP Worldwide country manager, South Africa.

She adds: "With a flourishing requirement for fresh produce in the Kingdom of Saudi Arabia, commodities which are likely to prove popular ex-South Africa include fruit, vegetables, meat, flowers."

Main business from South Africa is destined for the three principal hubs in Saudi Arabia – Jeddah, Riyadh and Dammam; with onward traffic to beyond network points such as Amsterdam, London, Brussels and Khartoum are also likely to feature.

In response to this appointment, ACP's Johannesburg based-team has deployed additional reservations and operations staff who will be dedicated to the Saudia Cargo portfolio.

Commenting on ACP Worldwide's appointment Ken Mbogo, regional director Africa of Saudia Cargo, said: "With their considerable experience of our market and long-established reputation, we believe ACP is the right partner to help drive our business forward and deliver on our ambitious growth targets in the South African airfreight market."



Jettainer Upcycles Old Cargo ULDs

Jettainer and a German company called Airbar have brought repurposing to the cargo world. On-board trolleys, which were used for catering and have traveled the world, are being upcycled into furniture by AirBar, a northern Germany manufacturer. The Jettainer limited edition uses panels from used ULDs.

In order to transform the on-board trolleys into furniture items, the company processes and installs the original walls and transport belts from the airfreight containers.

The program is environmentally-friendly and saves resources. Jettainer provides lightweight ULDs around the globe, but eventually they do wear out. Jettainer already provided a second life for its containers in the past. A variety of bags made of ULD materials were extremely popular.

The trolley furniture "Jettainer Edition One," made by Airbar, was presented to the public at the "Airport Days" aviation show in Hamburg.

Jettainer is the leading international service partner for outsourced ULD management.

This comprises the purchase & pooling of ULDs, their maintenance, and IT solution for all stations involved, and the entire daily operational management.



Qantas Posts Almost Billion-Dollar Profit

Qantas has swung back into the black after a heavy loss last year. The flying kangaroo has reversed its financial woes, turning last year's billion-dollar loss into a profit.

Qantas last month announced a full year net profit of \$557 million and an underlying profit of \$975 million.

Last year, the airline used an accounting measure to write-down \$2.6 billion of value, resulting in a total \$2.8 billion loss that shocked analysts and prompted speculation about CEO Alan Joyce's future.

The underlying profit was Qantas' best result since the global financial crisis and exceeded analysts' expectations.

Qantas has not declared a dividend but will return \$505 million to shareholders

through a 23 cent per share cash distribution.

It will also carry out a share consolidation, which it says will have a similar effect to a share buyback.

Meanwhile, the airline has announced it will purchase its first Boeing 787-9 Dreamliners to replace ageing 747s in its international fleet, after years of postponing a decision.

Qantas will purchase eight Dreamliners, which will begin to arrive from 2017, and holds options or purchase rights over another 45 of the aircraft.

Chief executive Alan Joyce said Qantas was only halfway through its dramatic turnaround.

"We are halfway through the biggest and fastest transformation in our history," he said.

"Without that transformation, we would not be reporting this strong profit, recommencing shareholder returns, or announcing our ultra-

efficient Dreamliner fleet for Qantas International."

All of the airline's businesses reported stronger earnings for the year, including its long-troubled international division, which made a \$764 million year-on-year turnaround.

The division reported underlying earnings of \$267 million for the year, up from a \$497 million loss a year ago.

Qantas's domestic business lifted its earnings to \$480 million, up from just \$30 million a year ago.

Jetstar recorded underlying earnings of \$230 million, up from a \$116 million loss a year ago.

Meanwhile, Qantas's loyalty business lifted its earnings to \$315 million, from \$286 million a year ago.

The airline's return to profit comes after it launched a three-year transformation program that has included pay freezes for staff and the axing of 5,000 jobs.



Hapag-Lloyd Benefits from CSAV Acquisition in H1 2015

Hapag-Lloyd has announced its financial results for the first half of 2015. It reported revenue of €4.67bn, an increase of 45.27% year-on-year. The company also recorded EBITDA €493.3m for H1, an increase of 634.08%. Accordingly Hapag-Lloyd's margin stood at 10.57%.

In the first half of 2015, Hapag-Lloyd increased transport volumes and revenue as well as earnings. This growth was driven by the merger with Compañía Sud Americana de Vapores

(CSAV).

Hapag-Lloyd stated that its transport volume increased to around 3.7m TEUs in the first six months of 2015, up by 29.4% compared to the same period in 2014 and mainly due to the merger with CSAV. The average freight rate in the first half of 2015 came in at \$1,296/TEU, which actually represented a 9% fall year-on-year.

The company attributed the increase in EBITDA to initial synergies from the CSAV merger and additional cost savings from its OCTAVE cost programme. OCTAVE includes improvement initiatives in several areas such as procurement and further fleet modernisation.

In the first six months of 2015 transport expenses rose significantly less than the transport volume as Hapag-Lloyd realized initial synergies and cost savings from its OCTAVE programme. The transfer of CSAV's services and ship

systems into the various trades of Hapag-Lloyd was completed in the second quarter of 2015, slightly ahead of the original plan. Now that the integration is almost completed, Hapag-Lloyd targets net annual synergies of around \$400m fully realized by 2017.

"After a solid start into 2015, we are satisfied with our results in the first half of 2015", said Rolf Habben Jansen, CEO of Hapag-Lloyd. "Our results prove that the merger with CSAV was the right decision and an important milestone in the development of Hapag-Lloyd, as we already benefit from the integration – and also see the first results of the OCTAVE programme. We are well on track to achieve clearly positive full year operating results in 2015. The market environment remains very challenging, but we are well positioned in the market and remain highly resilient due to Hapag-Lloyd's well-balanced portfolio of trades and services."



China's Port Authorities to Strengthen Dangerous Goods Shipment Supervision

China's port authorities will strengthen supervision of dangerous goods shipments following devastating explosions at Tianjin port in August, the Ministry of Transport has announced.

Port authorities from provinces including Zhejiang, Liaoning and Guangdong have asked shipping firms involved in relevant activities to conduct self-inspections to check safety standards, and pledged to crack down on any illegal activities, according to a report posted on the ministry's website.

Over a hundred people have been killed by the blasts at a warehouse which stored hazardous chemicals at Tianjin Port. The Chinese owner of the warehouse did not have a license to handle hazardous goods until two months before the disaster, according to its government-registered company records.

Suez and Panama Canal Will Battle for Market in 2016

Rivalry between the Suez and Panama canals is expected to reach unprecedented levels next year as the newly expanded Panama waterway targets larger ships on the Asia-US East Coast route.

The canals are the world's two key hubs for global shipping traffic, with the Suez Canal having been re-launched this month with a new channel providing two-way traffic for the first time in its history.

The Panama Canal, meanwhile, will be

re-launched in eight months time with a new set of locks and channels able to handle post-panamax container ships, which are currently routed to the US East Coast via the Suez Canal.

The canal will therefore get a shot at regaining a majority of the market shares lost to Suez since since 2008, according to analyst agency Alphaliner. Vessels sizes on the Asia-US East Coast, through Suez, have increased an average 73% since 2005, while ships on the same route via Panama have increase a mere 12% due to the limitations imposed by the locks.

The redeveloped Panama Canal will provide shipping lines with a much faster, more direct route between Asia and the US East Coast, negating the need to transit the Mediterranean and Atlantic and is therefore expected to have a significant impact on existing route networks.





Agility Reports Flat Q2 Results

Agility has announced its financial results for the second quarter of 2015. It reported revenue of KD328.4m, a fall of 4% year-on-year. The company also recorded EBITDA of KD25.5m, an increase of 1% compared to Q2 of 2014. Accordingly the company's margin stood at 7.76%.

"The global logistics market is a mixed bag in terms of growth, with continued sluggishness in China and Europe; and ongoing pressure on rates. In this environment, we are pleased to report that Agility continues to post steady growth in profitability. Agility's Global Integrated Logistics business continues to drive margin expansion through commercial transformation, financial discipline, and productivity improvements powered by technology," said Tarek Sultan, Agility's CEO. "Agility's Infrastructure group of companies, which capture investment opportunities in niche logistics related segments in emerging markets, each have their own strategy. Across the board there is an emphasis on improving efficiency and growing potential through regional and

customer expansion."

Revenue for Agility Global Integrated Logistics (GIL) for the second quarter of 2015 was KD259.0m, a 4% decline from Q2 of 2014. Agility stated that GIL's revenues were negatively impacted by currency volatility and that, when adjusted at constant currency rates, GIL revenues decreased by 1% compared to the same period of 2014. This slight revenue decline was attributed to the general logistics market performance and also the planned end of some large contracts.

Agility stated that the freight forwarding market showed mixed performance in the second quarter of the year relative to the beginning of the year, with a softer air freight market and consistent ocean freight market. The contract logistics market, especially in emerging economies, continues to grow however. This growth in contract logistics demand, coupled with improved yields in Agility's air freight business, and better commercial disciplines, resulted in margin expansion within GIL to 25% in Q2 2015.

Agility's Infrastructure companies contributed KD71.1m to second quarter 2015 revenues. Net revenues for this group of companies showed an 8%

increase over the same period last year. Agility Real Estate, the largest contributor in the group, grew its revenues by 10% in Q2 2015, compared to the same period in 2014. Other Infrastructure companies have also reported healthy growth in this quarter and are making progress in new customer acquisition and geographic expansion.

"The infrastructure group will remain an important and growing contributor to the group's profitability, with each entity pursuing its individual strategy to grow and expand. Most have a strong foundation in the Middle East, and are actively engaging with opportunities to grow in the region, Africa, and elsewhere," said Sultan.

"The external market environment will continue to be a challenge for the foreseeable future with economic growth slowing in some countries, but improving in others. While we cannot control these external factors, we will be strategic in our investment choices, focusing on countries, verticals, and products that have long-term potential. We will also continue to drive internal transformation efforts to operate more effectively and profitably, within individual businesses and as a company overall," said Tarek Sultan.

APL Logistics Expands in Vietnam

APL Logistics announced the opening of its high tech consolidation center in Ho Chi Minh City, Vietnam. It is the company's largest single-roof container freight station (CFS) in South East Asia.

The CFS is strategically located near major sea and airports and includes over 500,000 square feet of bonded CFS warehouse space, 80,000 square feet of secured parking space, and 170 loading and receiving bays, the statement said. The facility is also compliant with international standards for security and safety.

"Free trade agreements are increasingly being adopted in South East Asia to help drive global trade and make sourcing options even more attractive in this region," said Anthony Tay, Head for APL Logistics Vietnam.

APL Logistics now operates 6 facilities in Vietnam.



DHL Improves Asia-Pacific CO2 Efficiency

DHL Express has posted a 12% year-on-year improvement in its carbon efficiency for 2014 in the Asia-Pacific region.

Malaysia was the top performer with an improvement of 21%, while India improved by 15% and Taiwan by 14%.

"We are pleased to have achieved continued carbon efficiency improvements in Asia Pacific for six consecutive years through the development and introduction of innovative solutions," said Jerry Hsu, CEO of DHL Express in the Asia-Pacific region. "The 12% CO2 efficiency improvement in 2014 was a result of our GoGreen

initiatives such as deploying our 'green' fleets in the region, installing more energy-efficient lighting systems in our facility, and increasing the use of renewable energy where it is available, among others, to further improve the carbon efficiency of our ground operations."

Hsu added that the company was committed to achieving its target of a 30% CO2 efficiency improvement by 2020 compared to 2007, having already achieved a 23% improvement to date.

According to DHL Express, it has deployed a new fleet of electric commercial vehicles in Tokyo's Marunouchi district for pickup and delivery services. It has also expanded and upgraded trucks, vans and scooters in mainland China, Hong Kong, India, Malaysia and Thailand. More vehicles are now powered by liquefied petroleum gas, electric and hybrid engines.

In Taiwan, DHL tested a fleet of zero-emission electric scooters that are charged at a solar charging station rather than a conventional grid-power one.

DHL Express started assessing its carbon footprint in 2008, and the programme now covers more than 1,000 facilities across more than 30 markets in the Asia-Pacific region.





Unipart and Rolls-Royce Plan New Joint Venture

Rolls-Royce and Unipart, the manufacturing, logistics and consultancy group, have announced their intention to form a joint venture company that will help manufacturers bring their products to market faster.

The joint venture, called MetLase, will initially create some 30 high-end, technical engineering jobs at its new headquarters on the Advanced Manufacturing Park (AMP) in Rotherham. It will use technology initially developed by Rolls-Royce to support a wide range of new customers from different business sectors.

Manufacturers need expensive and often complex suites of tooling to help create finished products. But current methods of tooling development and manufacture can often take weeks or months, slowing down the time to get the finished product to market. The technology licensed to Metlase which uses lasers and patented joining techniques, will enable the rapid creation of innovative and cost-effective tooling products and solutions which will improve productivity for its customers.

The application of this technology saves time and will enable products to be brought to market more quickly and at lower total cost. The joint venture will focus initially on opportunities in the aerospace, automotive, motorsport and medical industries. Hamid Mughal, Director of Manufacturing, Rolls-Royce, said: "We view this joint venture as an excellent opportunity to partner with a well-established cross-sector partner with complementary capabilities.

This will help greatly to accelerate the development of the MetLase technology and to increase its use across a broader range of applications and products."

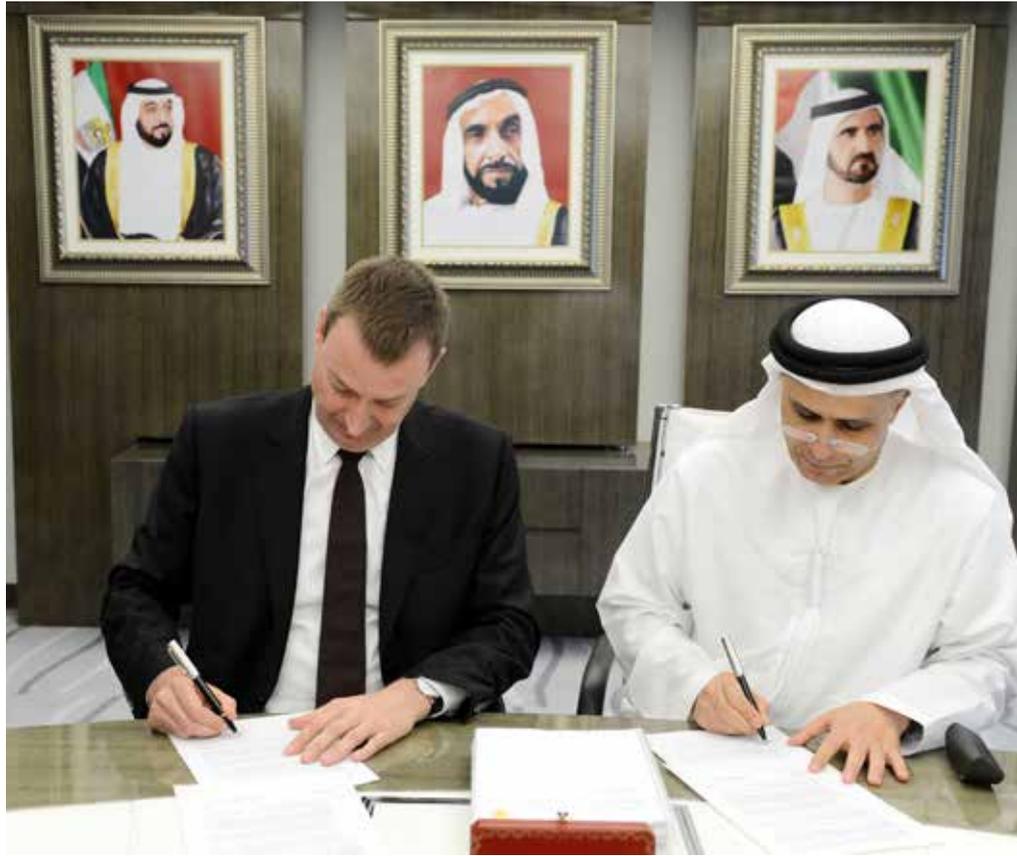
Unipart Chairman and Chief Executive, John Neill, said: "We're very pleased to be taking this important step with Rolls-Royce. Productivity is one of the biggest challenges facing the UK, today and the automotive industry and the aerospace industry are seen as leaders. "According to the Deputy Governor of the Bank of England the prize for the British economy if productivity in the UK economy as a whole had grown in the same way as the car industry could be £1/2 trillion.

This planned joint venture is a practical example of the way in which the aerospace industry and the automotive industry can combine their technical and operational excellence skills to enable their customers to improve their productivity."

DB International Expands in Saudi Arabia

Deutsche Bahn's international engineering company, DB International, opens a branch in the Eastern Province of Saudi Arabia. DB International will use the branch to support Saudi Arabia's planned railway construction project. Upon completion, the company plans to use the facility to support the railway's operations. DB Schenker will also run consultancy services from the branch.

Niko Warbanoff, Chairman of the board of managing directors said, "This initiative has strategic significance in light of the continuing process of globalization and the rising prominence of the market in the Kingdom".



LED Lamp Market to Surpass \$216Bn by 2024, Report Finds

Global revenue from light-emitting diode (LED) lamps and modules is expected to total \$216bn from 2015 to 2024, according to a report from Navigant Research.

LED prices have declined far enough that this type of lighting is now the economical choice for almost every setting and use, and heavy attention is being paid to the ongoing energy savings the technology offers. With payback periods now falling below two to four years, project decision makers from almost every application are being forced to consider LEDs for installations.

"For commercial buildings, the shift

to LEDs has been the most dramatic in retrofit projects where older bulbs are being replaced specifically to improve efficiency," says Jesse Foote, senior research analyst with Navigant Research. "This change is happening at such a fast rate that LEDs are expected to knock inefficient technologies like incandescent and halogen bulbs out of the market by 2024."

As more efficient lamp types have become available at lower price points, many countries have started to implement bans on outdated or inefficient technology, according to the report. While this has mostly taken place in North America and Europe to date, a number of Latin American and Asian countries have also started to introduce similar legislation that could drive more LED sales.

The report, LED Lighting: Global Outlook, analyzes the global market for LED lamps and modules across all major space lighting uses. The study provides an analysis of the market issues, including drivers and trends, barriers, cost issues, and technological developments, associated with LED

lighting. Global market forecasts for unit sales and revenue of LED lamps and modules, segmented by region, equipment type, and end use, extend through 2024. The report also examines key codes and standards and regional influences related to LED lighting, as well as the competitive landscape.



DHL and Cisco Internet of Things Trend Report Reveals Huge Potential

DHL, the world's leading logistics service provider, and Cisco, the worldwide leader in IT, have jointly released a new Trend Report focused on the Internet of Things (IoT) at the DHL Global Technology Conference in Dubai. DHL and Cisco Consulting Services are also collaborating on a joint IoT innovation project that will improve decision-making in warehouse operations with near real-time data analytics based on Wi-Fi connected devices.

Ken Allen, CEO DHL Express and Board Sponsor Technology, said: "At Deutsche Post DHL Group we have a deeply held belief in the positive powers of global trade. Yet, as our Global Connectedness Index(1) 2014 revealed, the overall level of global connectedness remains surprisingly limited. There is huge potential for countries to further increase their connectedness and prosper through trade, integration and technology. We believe the Internet of Things will be a primary enabler of this global transformation."

The Trend Report, which estimates that there will be 50 billion devices connected to the Internet by 2020 compared to 15 billion today, looks at the potential impact this technological revolution will have on business. The value at stake, combination of increased revenues and lower costs that is created or will migrate among companies and industries when new connections are made, reveals the huge potential when the Internet and networks expand their connections to warehousing, freight transportation and other elements of the supply chain. For any organisation with a supply chain or logistics operations, IoT will have game-changing consequences, from creating more 'last mile' delivery options for customers, to

more efficient warehousing operations and freight transportation.

According to Cisco's economic analysis, IoT will generate US\$8 trillion worldwide in Value at Stake in the next decade. This will come from five primary drivers: innovation and revenue; asset utilisation; supply chain and logistics; employee productivity improvements; and enhanced customer and citizen experience.

"Digital disruption is all around us and it's having massive implications for business. Digitisation and the expansion of the Internet of Things is a catalyst for growth, which is driving new economic models and enabling organisations to remain competitive and embrace the pace of change happening globally. This report clearly demonstrates that digitisation and the IoT will deliver long term efficiencies and growth opportunities across a wide range of industries," commented Chris Dedicat, president, EMEAR for Cisco.

According to the report, in the next decade the logistics industry could unlock higher levels of operational efficiency as the IoT connects in real time millions of shipments being moved, tracked and stowed each day. In warehousing, connected pallets and items will be a driver for smarter inventory management. In freight transportation, tracking and tracing of goods becomes faster, more accurate, predictive and secure while analytics of a connected fleet can help to predict asset failure and to schedule maintenance checks automatically. Finally, connecting delivery personnel with surrounding vehicles and people can become a way of monetising and optimising the return trip to improve efficiency and service in last mile delivery. For customers, this means DHL can provide an even faster, more reliable and cost-effective service.

"The Internet of Things is the connection of almost anything – from parcels to people – via sensor technology to the web and both Cisco and DHL believe this will revolutionise business processes across the entire value chain including supply chain and logistics.

To get the maximum global economic benefit, we'll need to understand how all components in the value chain converge and this will require a comprehensive collaboration, participation and the willingness to invest to create a thriving IoT eco system for sustainable business processes. The new Trend Report is another step towards making sure DHL delivers the benefits of IoT to our customers" said Markus Kückelhaus, Vice President Innovation & Trend Research, DHL Customer Solutions & Innovation. Cisco Consulting Services and DHL are now also collaborating on a joint IoT innovation project that will improve decision-making in the warehouse operations through near real-time data analytics based on Wi-Fi location data of selected devices. The solution is based on Cisco's Connected Mobile Experiences (CMX) which uses the high-density wireless network to collect aggregate location data on Wi-Fi connected devices.

The Trend Report "Internet of Things in Logistics" is available online: www.dhl.com/internetofthings





SATS and Singpost to Collaborate in the area of E-commerce

(SATS) and Singapore Post Limited (SingPost) have announced that they have signed a commercial agreement for SATS to provide airmail consignment handling services to SingPost.

The new automated facility, to be called SATS eCommerce AirHub, will improve efficiency and space utilisation, as well as enhance the consignment handling capabilities for both SATS and SingPost.

To be located at SATS Airfreight Terminal 1 within the Changi Airfreight Centre, this 6,000- square-metre facility is expected to be operational by December 2016. SingPost will be its anchor customer. SATS will become the first ground handler in the world to own such an airside facility.

Under the terms of the agreement, SingPost will outsource its airport consignment operations located at Changi Airmail Transit Centre 2 (ATC2) to SATS when its lease at ATC2 expires in end-2016.

This collaboration will result in the

integration of both SATS' and SingPost's airmail consignment operations under one roof. The integration will enable single scanning and sorting, and remove the need to tow consignments such as mail and parcel bags as well as pallets between facilities. This will enhance operational efficiency, including shorter cycle and connection times, and increase productivity. When fully operational, SATS eCommerce AirHub is expected to achieve a productivity gain of more than 30%.

Dr Wolfgang Baier, Group Chief Executive Officer of SingPost said, "This collaboration allows both SingPost and SATS to capitalise on our respective strengths while achieving greater efficiency and productivity in our operations. Working with other Singapore brands to jointly expand outside of Singapore, coupled with our continuous push to further improve our customer satisfaction and service, will all contribute towards SingPost's transformation to be the leading eCommerce logistics player in Asia Pacific."

"We are pleased to be partnering SingPost as it expands eCommerce volumes through its Singapore hub. SATS eCommerce AirHub is the latest in a series of initiatives that we have launched to improve productivity and introduce new and innovative services across our network in Asia," said Alex Hungate, President and Chief Executive Officer of SATS.



What Inspires us More: Play or Participation? How to Create a Productive Team Environment

There has been a lot of research, time, and money undertaken on finding new ways to motivate, retain, and attract staff. This is understandable in an age of market volatility where a business edge can also determine a company's survival and at the heart of every company's success lies its people.

The value of highly sought after reputations are becoming increasingly more valuable in an age of high market volatility where the stakes are also high. As a result, the so called "talent wars" still play out and so do the challenges of staff retention in ever competitive market environments. Globalisation means that there is no longer the safety net of a geographical barrier and big multinationals seeking the best talent are now headhunting in new ways, across different geographies and institutions like never before. So, if you have good staff, if you have actually achieved the impossible and managed to attract and hire a great team then how do you keep them and keep them engaged?

How do companies compete with the likes of Google, Microsoft, and other highly successful multinationals that are renown for their hype around edgy employer branding? The image of the young, "trendy" maverick who rewrites the corporate rulebook. These big multinationals are notorious for splashing out on all sorts of attractive ploys to win the best talent. For example, they have turned their office



work environments into the equivalent of over the top, adult play pens in which the corporate uniform corresponds to the sneakers and jeans worn in such places.

A quick google of Google's office environment will lead to pictures of giant mock rowing boats in a Google London office, a bowling alley with a statement describing their staff as "googlers" who's "offices and cafes are designed to encourage interactions ... and to spark conversation about work as well as play". Play being the central word!

According to the Business Insider, many corporates have followed this trend across industries. They compete in terms of company perks instead of salary. For example, Chesapeake Energy has an indoor rock climbing wall; J.M. Smucker Company holds bowling nights and softball games for its employees and so on. Free day care, overseas holidays, and a range of other offerings are all paraded as enticements to allure potential employees. This also builds the hype around a company brand and increases its desirability, like

all good marketing ploys.

Before we all rush out and invest in Lego sets and pinball machines, it is worth reflecting on whether this new trend actually has some basis. There is some evidence to suggest that the successful formula for a productive workforce may be based on a more basic requirement. According to Kim Winter, Group CEO for Specialist Talent Management and Corporate Advisory Firm, Logistics Executive Group, it is not just about the environment and the culture of an organization, but that of their leaders and their focus on personal inspiration. Leaders who empower their workforce and allow freedom of decision-making, open dialogue and support foster an environment of inspiration. This inspiration translates as personal motivation and sets a cultural road map for the organization".

The annual Logistics Executive Group survey results have consistently suggested that there are two main reasons why people leave their job. The most common reason employees will leave a company is because they feel they are not being challenged enough



or given enough opportunities. The other reason of equal weight is related to not getting along with their manager. Both of these explanations are reiterated in the interviews and conversations that our teams have with candidates on a daily basis.

Controversially, it may therefore be suggested that a fun office environment may not actually be a key motivator for many people to stay in a job. In fact, it could be suggested that if “happiness” is the key outcome that a company is trying to emulate it might suppress staff from actually voicing their opinions if they feel otherwise. Perhaps trying to define happiness is taking things one-step too far and it is better leaving this to the individual.

Perhaps it is better for employees to openly discuss opposing views. In fact, the ability to discuss different points of view or even conflicts in a non-threatening way is not only extremely healthy but also an invaluable way to bring a team closer together. Validating different points of view has the ultimate effect of creating a more creative and cohesive unit.

This openness also has the benefit of creating an environment whereby teams are united and focused on solving collective problems. For example, the case of an international chemical company that has a factory of 50 staff in Australia and several thousand people working for them in China.

According to their safety incident report, Australia had 300% more safety incidents at their plant than the entire Chinese operation. The differences upon further investigation were clearly related to how the information was being collated or rather not. It was clear that the difference came from the way that management was treating the issue. The management team in Australia were extremely safety focused.

They held regular toolbox meetings and underwent ongoing safety awareness training. However, their Chinese counterparts thought incidents denoted a failure and therefore found ways to avoid reporting them. For the company, which was publicly listed to meet its reporting requirements, the Chinese operation needed to be retrained to see the benefit of sharing



information. They needed to learn that a safety incident could be an opportunity to improve things and not a failure.

This example also highlights the interesting point that differences, such as different cultures can actually stimulate and challenge teams in a positive way. As mentioned, in our experience people leave their jobs because they are not being challenged. One of the key ways to offer them a new learning is by exposing them to a new way of thinking. This goes against the rule that most human resources teams employ which is to try to match “cultural fit” when recruiting new hires. A more astute way of thinking would be to hire not to who your team is today but to hire based on where they need to be in the future. New team members may offer differences that your team will find challenging but which they can learn from.

It comes down to offering your staff authentic experiences that will challenge and stimulate them and ultimately make them feel a worthwhile member of your team.

In conclusion, employee perks can be a great way to incentivize staff, as long as these inclusions are part of a deeper strategy. Leaders who have a solid understanding of staff needs at a basic human level shape a productive team. It is a fine balance that allows teams to self-actualize and companies to excel. It requires an environment which is nonthreatening but also challenging, inclusive but not homogenous.

Leaders who have undergone enough self-reflection, made enough mistakes themselves to know the nuances and levers to pull to get it right and a clear vision can only attain this delicate balance.

Darryl Judd

*Chief Operating Officer
Logistics Executive*



Darryl Judd
*Chief Operating Officer
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In 2015, Darryl was named as one 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.

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Evolve or Die: The Technologies Shaping the Future of Logistics

As technology advances and new opportunities emerge, the logistics industry is set to experience a tumultuous period of innovation. In recognition of this, Transport Intelligence (Ti) has been investigating in detail the significance of the latest advances and assessing their implications for the future.

Examples include the impact of crowd-sharing on last mile delivery operations, the opportunities for utilising robotics and automated systems, the application of wearable technologies and the development of supply chains in serving mega-cities. All of these topics and more will be discussed at Ti's Future of Logistics conference in Singapore during October. In addition, Ti is also

producing a new series of whitepapers on related subjects, in association with oTMS, of which, two have already been released.

The first of the topics to have been discussed, is mobile customer engagement, a notion explicitly tied to the age-old business concept of customer-centricity. By using the full extent of the mobile technology now available, companies are able to maximise their engagement with customers in order to better serve them. An example of this is the ability to track and trace parcels through a delivery network, with tools such as DPD's 'Follow My Parcel' now commonplace within the consumer express parcels (CEP) industry. As discussed further in the paper, such techniques are a lot more complex than they appear, particularly when goods move between different companies' networks, but nonetheless, customers continue to demand more.

The rise of mobile apps illustrates how such demand can be met. It has been demonstrated that users will spend a greater amount of time using apps to achieve a specific task than by utilising the same capabilities through a web browser. In addition to serving as a

shortcut, mobile apps benefit from close integration with a device's sensory inputs. An example of this is google maps, which uses a phone's GPS to map out the fastest route from A to B. Whilst this can be done on a PC, the ability to use it on the move significantly increases its usefulness.

In the case of logistics companies, using apps which can access a mobile phone's GPS, microphone and camera, among other things, can, for example, save the need of implementing such functions into their vehicle fleet. Thus, a parcel tracking service may not necessarily require significant investments in hardware.

As indicated, mobile customer engagement has been enabled by advances in mobile technology, as well as, more broadly, advances in IT. In particular, the development of the internet has created platforms for sharing information that were once unthinkable. Moreover, the advent of cloud computing, whereby remote servers hosted on the Internet are used to store, manage, and process data, has allowed companies to run such applications at a low cost, saving them the need to employ a local server.

This has also led to the emergence of the second technology analysed by Ti and oTMS; big data, which is discussed further here. Widely discussed at this moment in time, big data is a phenomenon that is beginning to transform the way we live and work, and as with mobile customer engagement, has been principally enabled by the evolution of the internet, and the proliferation of sensory devices. Combined, these have led to the creation of the so called Internet of Things (IoT), which will be covered later in the whitepaper series, but for now the most important development to understand is the exponential increase of data points that are accessible for analysis.

Big data is essentially a term used to describe a vast dataset, differentiated from a normal dataset by sheer scale or complexity. In order to analyse big data, special processing applications are required, beyond traditional tools that have been utilised for data analysis. However, the use of such big data analytics can unearth insights and develop capabilities that would have once not been possible, such as the

algorithms developed to drive Google's autonomous cars.

There are hurdles for companies to overcome in their ability to get the best out of big data, not least of which being the issues of accuracy and uniformity. Firstly, analysis is only as good as the information it is based upon, and ensuring that the data being gathered for use is accurate is of course paramount. Secondly, as elaborated further in the whitepaper, it is important that companies are able to base their analysis on "a single version of the truth". That is, big data analysis is able to come to clear and unambiguous conclusions, by gaining access to the same data points, storing the information in the same format and on the same or compatible systems; the implementation of which represents a major challenge in its own right.

Achieving this is difficult enough within an organisation, and given the advent of outsourcing in certain industries, a trend, it is important to bear in mind, which logistics companies have greatly benefitted from, this problem can be particularly difficult to solve.



Along with the development of these technologies, a shift in mind-set is also occurring, with transparency and visibility placed at the centre of dealings between buyers, suppliers and consumers. This is a particularly crucial imperative for the supply chain, where visibility issues have contributed to crises such as the European Horsemeat Scandal, and weakened responses to threats such as natural disasters; a prominent example being the Thailand Floods of 2011, which exposed the risks of concentrating manufacturing in the same, vulnerable location.

In implementing the necessary systems and processes to overcome the challenges that have been alluded to, an additional point of discussion forwarded in the whitepaper is the extent to which these mechanisms will differ from the hierarchical models prevalent in legacy systems. Driven by the demands of flexibility and ease of use, the tools used to manage big data will necessitate data structures more similar to those used in social networks such as Facebook, than those of older databases.

Ultimately, this will engender significant returns in the form of not only greater analytical potential, but also in co-operation throughout the supply chain, leading to greater efficiencies and more satisfied customers. The bottom line here is that emerging technologies like big data, and practices such as mobile customer engagement hold significant

potential for companies to improve their competitive position. Nonetheless, in order to gain the best out of each, companies will need to think carefully about investment.

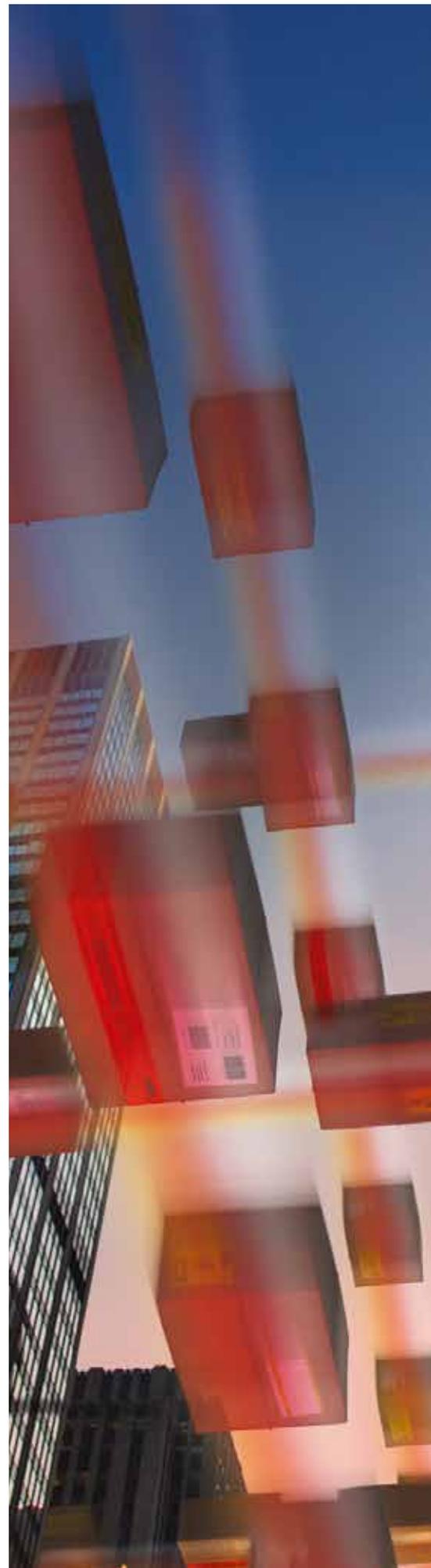
There are still many developments yet to come, and executives have to balance current demands against long-term strategies. Rushing or mismanaging the rollout of new systems can be highly costly, and it is important that migration efforts are thorough.

One thing is for sure though. Big data, IoT and cloud computing are already here. Companies must look to embrace them, or face being placed at a disadvantage to better-prepared adversaries.

Alex Le Roy

Analyst

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Alex Le Roy
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About the author

Alex Le Roy is an analyst within the Ti Research department, with responsibilities covering the GCSi information portal, reports and media contributions. He joined Ti in September 2013, and has a BA in International Relations from the University of Portsmouth.

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Managing & Sustaining High Performance in the Supply Chain - Part 6

Introduction

Managing and sustaining high performance in the supply chain, is the last part in this six-part series. If you missed the previous publications and would like to receive copies of any article, or discuss any of the concepts and ideas that we have raised, then please contact the email address at the end of this article.

For your reference the previous articles in this series were as follows:

- Part 1 - Why do some find it so challenging to manage their Supply Chains?
- Part 2 - Understanding the Value of a Supply Chain Structure
- Part 3 - Building and Sustaining an Enterprise Supply Chain Model
- Part 4 - People and Competencies in the Supply Chain execution model
- Part 5 - Understanding & Managing Risk in the Supply Chain

Company and business performance are always at the forefront of the CEO's objectives and the targets set are usually around financial and marketing goals. As a support function, the supply chain's targets are often "enveloped" within these overarching goals, resulting in few specific targets for this key area.

In part 3 we made reference to key performance indicators (KPIs) and quote:

"It is relevant to note at this juncture that we should not confuse business KPIs with supply chain KPIs, which may appear to be similar but are not always the same. Supply chain KPIs measure the capabilities and performance of operational processes and flows. Supply chain KPIs would, generally, revolve around KPIs that measure "time", "cost" and "quality" of supply chain activities and processes."

So how does this translate into high performance?

Managing capabilities to achieve high performance

It all seems quite easy then: manage the resources and capabilities in the supply chain and in return you can expect a high performance. In principle that is absolutely correct, but this would only be possible if the surrounding conditions remained constant and nothing changed. However we all know that this is not the case in supply chains.

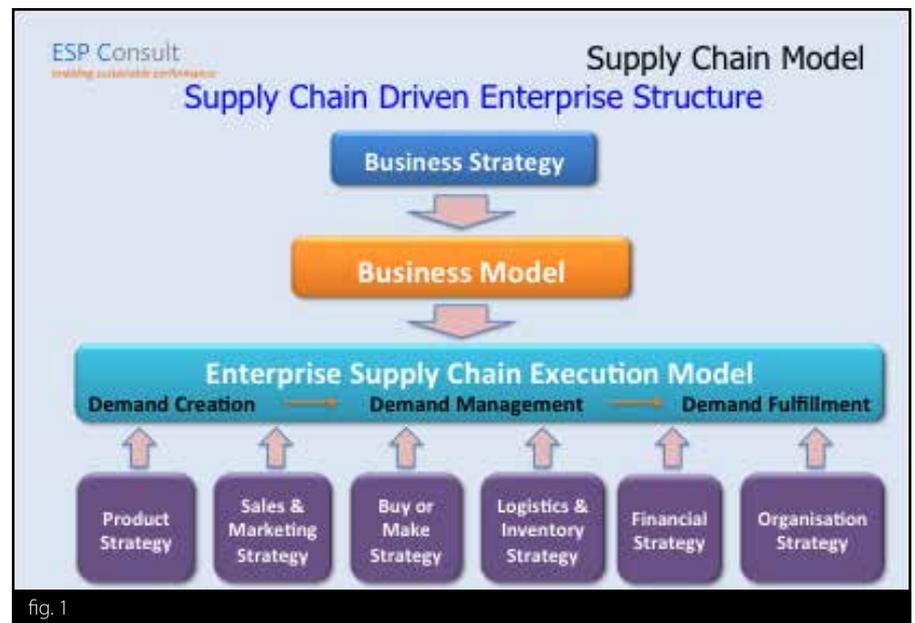


fig. 1

How do we define performance of the supply chain ?

As illustrated in our enterprise structure diagram used throughout the series (Fig 1), it is the supply chain execution model that delivers the goals defined by the business strategy. The business model can change and be adapted to the various market and industry conditions, but it is the supply chain that executes the strategies of this business model.

Having established this principle, we are able to formulate what are the expected performance factors of the supply chain. In part 3 we defined the KPIs of the supply chain as those revolving around "time", "cost" and "quality". If these are the basis of the supply chain deliverables, then we can define the supply chain performance as the optimisation of company resources through a structure of Supply Chain Capabilities.

The daily challenges are to deal with many variables in the business environment and the resulting resources flows.

To better understand these dynamics, we should delve deeper into the definitions of performance and of high performance. A simple definition of performance is executing what is expected, which implies aiming for a target or goal. The most common and most practiced performance goals associated with the supply chain are that of Time and Cost.

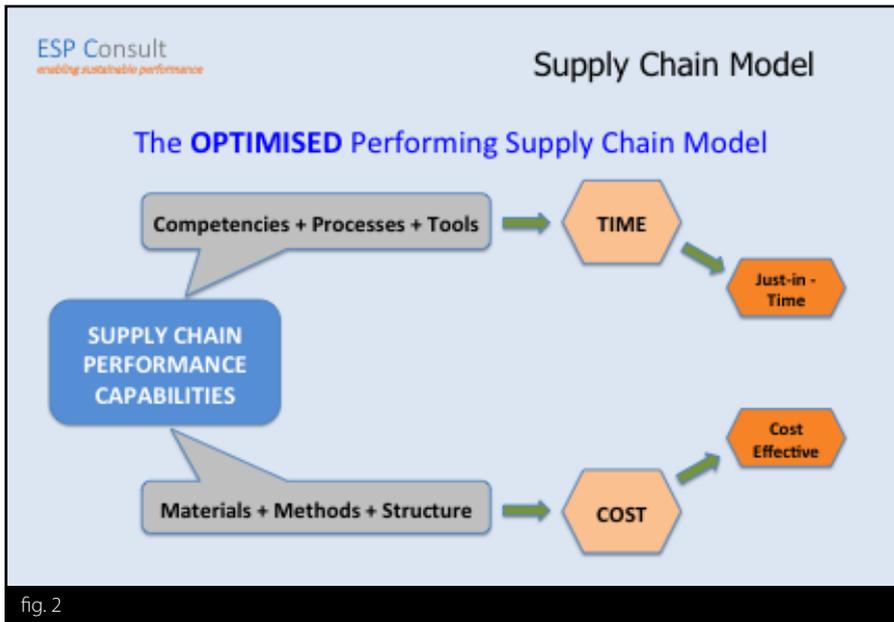


fig. 2

The illustration in Fig.2, we see how the performance measurements of Time and Cost of the supply chain are derived from the Supply Chain Model. Time is defined as and Cost, defined as a percentage of sales of cost of goods sold. We could consider this as the optimised performance measurement of the supply chain model, if the parameters were applied across the whole organisation and managed with an equal intensity.

However, this kind of optimised model and measurements of performance, are not sufficient to guarantee the deliverables expected to achieve the business strategy goals. But as we cannot be satisfied on performance targets alone in the supply chain, we must aim for a high performance. So what does high performance really mean?

The Adaptive High Performing Supply Chain

A dynamic CEO is continuously anticipating changes in the business environment, leading his team to work on innovative solutions and enhanced product offerings that will achieve and exceed the strategic goals of the business. The challenges of anticipation changes often requires a flexibility of priorities and an agility of execution. This approach could only be sustainable if the organisation's business culture is

able to adapt and pro-actively respond to changes within the shortest time horizon.

An optimised supply chain model, would not be able to respond effectively to the challenges of anticipation without re-defining the model. To meet the new dimensions of the business environment, the supply chain model will need to also be adapted to the new parameters and conditions.

Being adaptive also means being flexible. However any degree of flexibility can only be achieved by allowing and managing variables and buffers in the

supply chain. Introducing new elements in the optimised model will change the dynamics of the time and costs. In Fig. 3 we illustrate that by adding variables into the pipeline, will increase the supply chain time and by adding additional buffers in resources will increase costs.

By allowing new dimensions into the optimised supply chain model, we are by default allowing and accepting a change in performance deliverables. This could lead to a recognisable degradation of performance compared to levels previously achieved.

However, the supply chain model has to meet the CEO's challenges of anticipation and respond to business changes, whilst delivering the goals of the business strategy. To meet these challenges and deploy the necessary capabilities, the current supply chain will need to be re-configured to an adaptive model. This means that not only must the model manage the new variables and intrinsic resource buffers, but it must also achieve the same or better performance levels from the expected deliverables, appropriately expressed in Speed, Agility, Time, Costs and Quality. But how can this be achieved?

Managing the adaptive high performance supply chain

The performance characteristics dominant in the adaptive supply chain

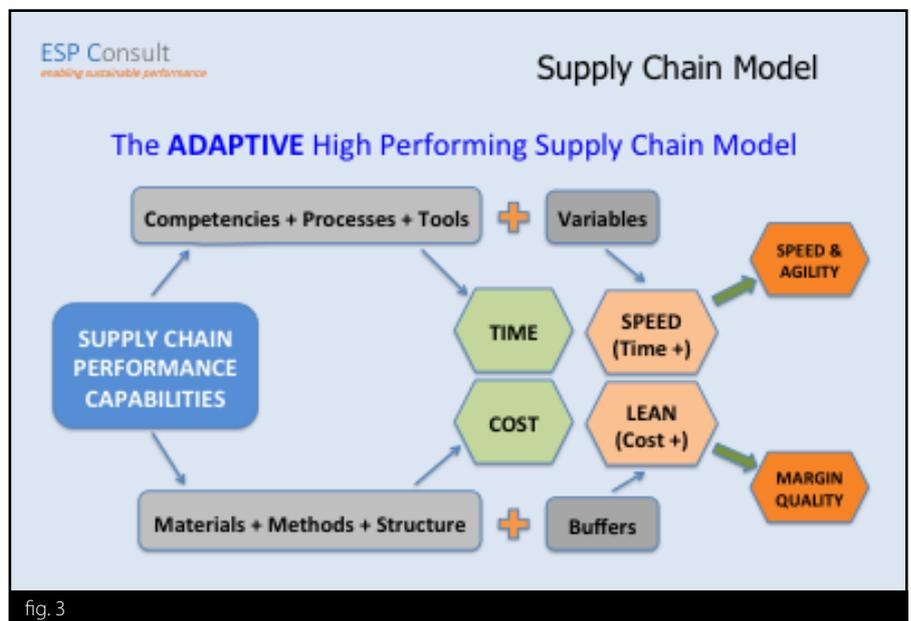


fig. 3

model, can seem to be contradictory to each other and it could be questionable as to how they could effectively work together. The key characteristics of this model (fast, lean, flexible, agile, cost effective) are the ones that need to be managed so as to deliver the high performance capabilities of the business.

As supply chain performance deliverables become more demanding, they also become more complex. Managing the variables and complexities of the supply chain will require disciplined approaches and methodologies. Once performance targets have been set, continuous monitoring will be necessary and any deviations or excursions from the target performance indicators must be addressed as a matter of priority and immediate corrective actions implemented.

It is such an attention to detail that will sustain performance and enable improvements and allow even more flexibility into the supply chain. The key is to learn to master and manage the flexibilities in the supply chain without any performance degradation. This can be achieved by following three simple, effective steps of defining and controlling performance.

Adapting flexibility into the supply chain without performance degradation
Define tolerance levels in relevant processes that will have small impact on KPIs

1. Define process controls to manage KPIs deviations and excursions.
2. Define process controls to manage KPIs deviations and excursions.
3. Monitor & measure benefit of flexibility model vs fixed structure.

Sustaining the High Performance deliverables

Having defined all the parameters, monitoring the KPIs and controlling the deviations from the targets as described in the previous sections, will not be enough to sustain high performing

supply chains. The successful supply chains are those that can achieve an integrated and collective overall performance.

The CEO and his senior executives, should typically define at least the Top 6 Supply Chain KPIs that will deliver the business goals. The KPI targets, actuals and deviations will be reported in the Performance Dashboard, available on a daily, weekly and monthly report for their review and management attention. In Fig. 4 are illustrated an example of the Top 6 Supply Chain key performance indicators.

In this model the goal set is a 6 sigma target. Each function in the supply chain will have to achieve 98% of their target performance. In the blue column of the chart, most functions have achieved 98% performance and this would seem adequate.

However the cumulative performance of each function will not be enough to achieve the business goal of 98% Overall Performance. In the Overall Performance, it is evident that any deviation lower than 98% will degrade the bottom line performance. In this case the overall delivery to the Customer will only achieve 85%.

This KPI chart calculation has been simplified to illustrate that a company supply chain performance is highly

dependent on all the contributors in the chain and that the high performance of one function does not mean another weaker performance can be easily compensated. For example, poor inventory availability cannot be immediately rectified by increasing warehouse service level or transportation performance. The impact of having no stock on some items can be devastating in a key customer account. Supply chain performance deliverables would be most effective if they are designed and developed in alignment with the strategic goals and embedded into the contribution functions as part of the planning.

Whatever the nature of your supply chain, understanding the interconnections and dependencies of each function in the supply chain will ensure a clarity of vision of the business structure and require alignment of the execution capabilities required to achieve a high performing supply chain model. The full engagement of all stakeholders in supply chain performance management is a fundamental pre-requisite to ensuring that supply chains are able to perform to the highest standard.

For more information on the articles or to contact the writers please email info@lscms.org

Key Supply Chain Process		KPI	Overall Performance
ORDER PROCESSING	Order Entry/BOM Accuracy (amendments made)	98%	98.0%
DEMAND MANAGEMENT	Order Scheduling & planning priorities	100%	98.0%
MANUFACTURING	Delivery Performance (on time to schedule)	98%	96.0%
STOCK CONTROL	Inventory Availability (Inventory vs Immediate Demand)	95%	91.2%
WAREHOUSING SERVICE LEVEL	1 st Pick Fulfillment (Delivery in full by line)	99%	89.4%
SHIPPING/TRANSPORTATION PERFORMANCE	DIFOT % (delivery in full x delivery on time)	95%	84.9%

fig. 4

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Joe Lombardo has more than 30 years experience in developing & managing supply chain logistics solutions & driving business operations, in multinational environments & operating in 12 Countries. Qualified as a Management Accountant, Joe developed & diversified his career in the fast moving world of semiconductor electronic components, where he managed various roles whilst with STMicroelectronics – in the Finance & Administration functions (including Treasury & Legal), Human Resources, Customer Service, Logistics & Warehousing, Site & Infrastructure Management, Trade & Customs Compliance and Free Trade Agreements deployment.

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The Role of Logistics in the Food Security Challenge

Global food demand is expected to increase by 50 to 80% in 2020, and mid-line estimates project an increase of 65% between 2010 and 2050. Right now, the emerging middle class in China and across South East Asia demand a more carnivorous diet, increasing the need for feedstock. As demand increases, so does the vulnerability of our food supply. The high-probability of extreme climate and weather events, degradation of the natural environment through monoculture and overfishing are contributing to an increasingly unstable food system, putting the region's food security at risk.

What is the role of logistics? A large proportion of the value of food is accounted for by the logistics infrastructure and services that get it to

your plate. Our increasing dependence on food produced by smallholder farmers in developed countries has not been matched with appropriate innovation and infrastructure development. The first segments of Asia's agriculture supply chains, and even sometimes the people that operate them, haven't changed much over the past 50 years, resulting in loss levels can reach up to 50% for perishable crops. The International Institute of Refrigeration estimates that 200 million tonnes of perishable food could be preserved if developing nations had the same level of cold chain as found in the developed world.

These inefficiencies are expensive. Clement Lam, Director and General Manager of Swire Pacific Cold Storage (SPCS) reported that cold chain logistics costs can be as high as 50% of a product's retail price, as opposed to 10 to 15% in more developed supply chains. These additional logistics costs are generally subtracted from the farm gate price of food, constituting a poverty penalty for smallholder farmers, who produce the majority of Asia's food.

At the same time, the F&B business booms in ASEAN, with modern grocery retail's growth outpacing traditional retail. The region's rising middle class is expected to double to 500 million by 2020, driving food retail growth and demanding higher quality food and shopping experiences. In the broader context of Asia, consumers are becoming more socially and environmentally conscious about their food. According to a Mastercard survey in 2015, over 74% of Chinese shoppers are likely to consider whether a product is fair trade, environmentally friendly or donates to charity when buying.

If we are to adequately feed a projected global population of 9.7 billion in 2050, while still satisfying the needs of Asia's increasingly affluent, demanding and conscientious consumers, the global food system of the future must be drastically different from what it is today. Agribusiness companies and cold chain logistics service providers can anticipate and drive these changes to stay competitive in tomorrow's food markets.



Here are three areas of innovation to keep on your radar:

Upstream: Rural Supply Chain Management

Food and logistics companies are increasingly looking at how technology can be applied at the farm-level to reduce losses and increase the amount of food produced that becomes food consumed. Improved farm-gate prices mean higher margins for farmers, which addresses several problems in the rural economy. Greater penetration of technology would create rural-tech jobs, perhaps enticing congestion-weary, tech-savvy millennials back to rural areas.

The first segments of the smallholder agriculture supply chain are dominated by independent actors: farmers, traders, transporters and distributors, and looks suspiciously like the C2C sharing economies that are developing in urban areas. While companies like Uber, Lalamove and Ninjavan are developing solutions to meet the demand for low-cost C2C delivery service in area, start-ups

like Logistimo in India connect farmers with traders and transporters, cutting links out of supply chains, reducing post-harvest losses and improving rural livelihoods. RML Information Services (formally Reuters Market Light) recently launched an ICT-based aggregation and transaction platform called Krishidoot that brings together farmers with agri-input providers, produce buyers, service providers and financial institutions. Another innovator in so-called "first-mile logistics", LEAF offers a range of services all along the horticultural produce industry, and has a focus on improving Post Harvest Management through technology and logistics.

For all of these platforms, technical capacity and training are the biggest barriers to entry, but these barriers are quickly breaking down. Establishing the business may be tricky, but being first to a new rural market means customers are comfortable with your platform, and will use it for other kinds of deliveries and services in the future, signalling huge growth potential, as well as an urgency to be the first go-to platform for a new market.

Distribution & Transport: The Cold Chain comes to the farm

Until recently, poor availability and quality of electricity in rural areas has made cold storage for perishable goods rare. But off-grid electrification companies are designing cooling systems that can work well and make a profit even in rural areas. Sunlabob, a renewable energy company based in Laos has developed solar fridges and freezers that run on DC voltage and uses only 150Wh of energy per day. After the success of its thermal battery milk chiller that can manage intermittent electricity supply, Promethean Power Systems has developed a cold storage system to chill, store and transport fresh fruits, vegetables and other perishables.

Further down the supply chain, reefer trucks guzzle diesel fuel, polluting the environment and raising energy costs for logistics firms. In developing countries, and even recently in the United States, drivers switch off refrigeration units to save on fuel, endangering the quality and safety of transported food. Dearman,

a UK-based technology company, has recently developed a zero-emission transport refrigeration system which is cost-competitive with existing diesel systems. The Cool-E truck's engine uses liquid air or liquid nitrogen, which has a low-boiling temperature and expands 710 times between liquid and gas phases, powering a high-pressure steam engine and eliminating the need for traditional fuel. While liquid air energy is still in the early stages of development, the Cool-E truck system is presently undergoing on-vehicle testing.

New, Later Links for Leftover Food

For the region's developed countries, the retail stage is one of the most wasteful. Globally, supermarkets engage in practices of deliberately spoiling food. Restaurants throw out uneaten food at the end of the day. Wet market stall owners tear off the leaves of greens to make them look fresher, and throw out ugly but edible foods.

France recently passed a law that bans French supermarkets from trashing unsold food, and requires them to donate edible food to charities. In Asia, South Korea has been the pioneer in food waste reduction at the household level. Fourteen years after the development of the Food Waste Reduction Masterplan, the government introduced a food waste fee system with three disposal modes; the most

high-tech of the three systems involves special food waste bins with magnetic card readers that then exact a monthly volume-based charge for residents. Singapore is behind the curve, but last year announced a requirement for hotels and food courts to collect and manage food waste data – a first step towards a more ambitious food waste agenda.

Concerns about food waste in the developed world are adding new links further downstream in food supply chains, presenting new opportunity areas for logistics companies. Who will move unsold food from restaurants to soup kitchens? Who will transport food waste to anaerobic digestors for conversion to fertilizer and fuel? Hungry New Yorkers can score leftover food at deep discounts using PareUp, a matching app. ItsCollected, a UK-based start-up up opens up the market for waste service providers, allowing household consumers and restaurants to hire waste collectors directly, according to the type of waste and receptacle.

Then there's just good inventory management. Featured recently in The Economist, Maury Rubin of Manhattan's City Bakery uses sales data to adjust his supply very carefully, accounting for hourly and weekly buying patterns, as well as holidays and the school season to avoid overbaking, and wasti

Growing concern about food security will not abate, presenting an enormous challenge for policymakers, but an equally great opportunity for agribusiness and logistics services, particularly when it comes to minimizing waste. Those companies that can anticipate their contribution to a new, more secure and efficient global food system stand to establish themselves as leaders in the growing ASEAN market.

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glcs-2015.logisym.com

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Jakarta, Indonesia
www.transport-supplychain-logistics.co.id

TI CONFERENCES: THE FUTURE OF LOGISTICS

October 13-14th, 2015
Singapore
ticonferences.com

CHINA INTERNATIONAL LOGISTICS AND TRANSPORTATION FAIR

October 14-16th, 2015
Shenzhen, China
www.scmfair.com/en

SUPPLY CHAIN LOGISTICS PROFESSIONAL NETWORKING

October 15th, 2015
Wan Chai, Hong Kong
scpl@markmillar.com

BREAK BULK MIDDLE EAST

October 25-28th, 2015
Abu Dhabi, U.A.E
www.breakbulk.com

GULFOOD MANUFACTURING EXHIBITION

October 27-29th, 2015
Dubai, U.A.E
www.gulfoodmanufacturing.com

November

BREAK BULK MIDDLE EAST

September 27-30th, 2015
San Diego, USA
www.cscmp.org/annual-conference

PROCURECON EUROPE

November 2-5th, 2015
Berlin, Germany
procureconeu.wbresearch.com

BIOPHARMA INDIA CONVENTION 2015

November 3-4th, 2015
Mumbai, India
terrapinn.com/conference/biopharma-india

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November 17th, 2015
Wan Chai, Hong Kong
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ASIAN LOGISTICS AND MARITIME CONFERENCE

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Wan Chai, Hong Kong
www.almc.hk/en

POWER LOGISTICS ASIA 2015

November 18-19th, 2015
Singapore
www.powerlogisticsasia.com

LOGISYM CEO INSIGHT BREAKFAST SERIES

November 19th, 2015
Mong Kok, Hong Kong
<http://www.logisticsexecutive.com/product/logisym-ceo-insight-breakfast-series/>

December

OIL & GAS UPSTREAM PROCUREMENT & SUPPLY CHAIN EXCELLENCE

December 2-3rd, 2015
London, United Kingdom
supplychainoilgas.wbresearch.com

March

LOGISYM ASIA 2016

March 9-10th, 2016
Singapore
logisym.org/2016

ASIA PACIFIC RAIL 2016

October 22-23th, 2016
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<http://www.terrapinn.com/exhibition/asia-pacific-rail/>

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April

RETAIL TECHNOLOGY SHOW ASIA 2016

April 20-21st, 2016
Singapore
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ECOMMERCE SHOW ASIA 2016

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