

LogiSYM

The Magazine for Supply Chain Executives

OCTOBER / NOVEMBER 2020

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**INFORMATION SHARING
COMMUNITIES FOR
DIGITALLY ENABLED
SUPPLY CHAIN
VISIBILITY**

Pg 27 by Wolfgang Lehmacher

**SUPPLY CHAIN
DISRUPTIONS ARE
NEW OPPORTUNITIES**

Pg 31 by Karmjit Singh

**CURRENT STATE OF
INTERNATIONAL
TRANSPORTATION
INDUSTRY**

Pg 35 by Trames



The Official Journal of The Logistics & Supply Chain Management Society



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Contents Page



Feature Articles

- 27 Information Sharing Communities for Digitally Enabled Supply Chain Visibility
- 31 Supply Chain Disruptions Are New Opportunities
- 35 Current State of International Transportation Industry
- 38 Logistics experts from SSI Schaefer implement automated deep-freeze warehouse in Manila, Philippines
- 44 Leveraging digital technologies to reinvent and accelerate supply chain automation

Contents

From the Editor	04
A Word From the President	06
Contributors	08
Opinion Editorials	10
Webinars Synopsis	17
Courier News	18
Freight News	20
Logistics News	21
Supply Chain News	24





from the editor

..... *Re-Thinking & Re-Building Supply Chains, with new focus on Opportunities & Sustainability*

Dear Readers,

As we rapidly approach the end of 2020, I am sure that we all wish for a “reset” going into 2021. But what does a “reset” look like and what does it take to achieve this? The normalisation of the economic stage, coupled with political stabilisation, seem to be the key 2 ingredients of the utmost importance for a “reset”. However, calling for a “reset” alone, will not happen without a strong global engagement.

The COVID disruption has made us all think long and hard about where we went wrong and how should we have been better prepared. Whilst we can do nothing to fix the past, we can use the experience to better prepare ourselves going forward. A reset can only be realised if we are ready to change our thinking and adapt to the new realities.

The opportunities open to us, are many. And re-thinking a path forward with a different optic, will suddenly create a new dimension – this change is not easy for many, but worth considering. With a fresh new thinking mindset, we will also discover a stability in the way we approach disruptions. This kind of adaptation will inherently build-in a more resilience culture in the leadership and people of an organisation.

However, recent events and history have shown us, how Trade can separate us but also how powerful it can also be to bring us together. If we aspire to achieve a meaningful “reset”, then we must choose Trade to help us restore the balance, stability and prosperity, we all wish for. This will not happen by magic and supply chain professionals should stand up and take note of such opportunities.

The theme for our October/November issue is “Re-Thinking & Re-Building Supply Chains, with new focus on Opportunities &

Sustainability”. It again reminds us that regional and global collaborative mindsets are fundamental to economic stability, business sustainability and eco-concerns. The initiatives to drive meaningful trading collaborations are plentiful and with good intentions. They will in-turn create stability and sustainability through mutual engagement.

At a time when disruptions are creating chaos, embracing trade agreements, is one productive avenue where such opportunities are readily available. We should actively embrace such thoughts and take interest to utilise all the tools, means and regional collaborative structures available to us, to their full potential.

At LogiSYM we are proud to bring our latest Conference event, albeit in Digital form. On 1st & 2nd December 2020, we will add LogiSYM Vietnam to our program of annual conferences. The Agenda will cover many topics of great interest and relevant to our time. To preview the agenda, simply logon to <https://logisym.org/vietnam2020/agenda/>

In this edition of the magazine, we have several great feature articles and opinion-editorials. We hope that you will find them informative and interesting. I would also like to thank all those who have put pen-to-paper to share with us their insights and experience.

As usual I look forward to receiving your feedback at info@lscms.com and even publishing an article of yours.

Meanwhile take care & stay safe!

Joe Lombardo
International Editor
info@lscms.org



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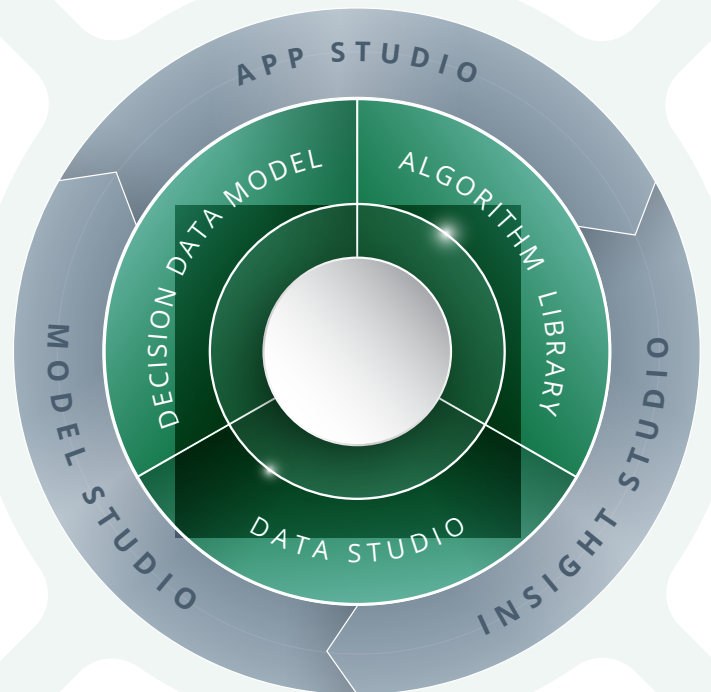
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a word from the president

The Time to Act is NOW!

The impact of the COVID-19 pandemic is of global significance, and 2020 is not a year that will soon be forgotten. The development of COVID-19 vaccines are imminent and seen as a solution that the world is looking for to see a return to some semblance of normal. When vaccines are available, getting the vaccine from production to the global population will be the next challenge.

Vaccine development is the first step in an extensive distribution process. Governments need to plan and build the strategies, infrastructure, and organization to manage the post-production supply chain for vaccine delivery. There will be significant differences between the global north and the global south in how governments can address these challenges.

A vaccine delivery ecosystem is required to coordinate this supply chain challenge. This VDE is a public-private partnership (PPP) that orchestrates the private and public networks to ensure that populations are effectively inoculated. LSCMS released a Blueprint that was distributed globally and which can be downloaded using the QR code at the bottom of this message.

This blueprint developed by the Logistics & Supply Chain Management Society (LSCMS) in collaboration with IDC, serves as an awareness tool to drive open engagement between stakeholders to discuss safe and effective options for ensuring vaccination distribution with minimal waste and maximum integrity to the world's population and we are proud to be part of this solution that serves the global good.

2021 is fast approaching and like most organisations, we are finalising our plans and outlook for next year. If you have any feedback or input on what LogiSYM or its sister platform CargoNOW can do to develop our industry, please drop me a note. I look forward to hearing from you.

In the meantime, as we approach the end of this very unique year, I wish you and your families all the very best.

Be safe!

Raymon Krishnan, FALA, FCILT, CLP

President

The Logistics & Supply Chain Management Society

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Conquering COVID-19
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Seamless Distribution Systems (SDS) is a Swedish multinational with 30+ years of experience in providing digitization solutions for sales and distribution processes. A global leader in technology, SDS delivers end-to-end platforms for digital value distribution and supply chain management to 500+ million users indirectly. They facilitate some of the world's largest sales networks, enabling customers to drive revenue growth and optimize operations. Sales Force Optimization (SFO) is part of the product offering of SDS, which is a complete multi-product supply chain management solution. It is a comprehensive solution to track the flow of stock, optimize the order fulfillment process through the products' lifecycle, and manage all entities for a business.



TRAMES is an end-to-end supply chain orchestration technology company, headquartered out of Singapore. Our key mission is to create a streamlined and unified platform for shippers and their logistics partners. With all stakeholders plugged into a digital platform, the ability to collaborate naturally increases; and in doing so, this will help to accelerate processes that are traditionally long and prone to error.



Zebra (NASDAQ: ZBRA) empowers the front line in retail/e-commerce, manufacturing, transportation and logistics, healthcare, public sector and other industries to achieve a performance edge. With more than 10,000 partners across 100 countries, Zebra delivers industry-tailored, end-to-end solutions to enable every asset and worker to be visible, connected and fully optimized. The company's market-leading solutions elevate the shopping experience, track and manage inventory as well as improve supply chain efficiency and patient care. In 2020, Zebra made Forbes Global 2000 list for the second consecutive year and was listed among Fast Company's Best Companies for Innovators. For more information, visit www.zebra.com or sign up for news alerts. Participate in Zebra's Your Edge blog, follow the company on LinkedIn, Twitter and Facebook, and check out our Story Hub: Zebra Perspectives.



The company offers innovative solutions that maximize the value of AI with deep expertise in machine learning, optimization, simulation and advanced analytics capabilities to improve decision making. LLamasoft technology helps business leaders design operational strategies to achieve profitability and growth goals, creating a true end-to-end view of global supply chains to enable decisions across strategic, tactical and operational time horizons.

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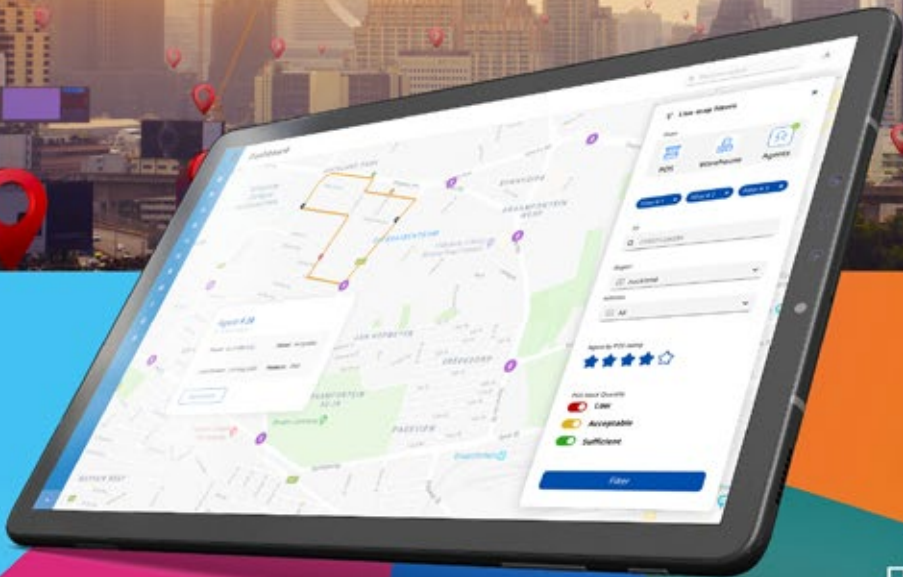
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OPINION EDITORIALS

The Challenges and Relevance of Procurement

by Joe Lombardo – Business Consultant in Transformational Management



Overview

We are all very busy trying to reset our supply chains and facing many challenges in the process.

The most obvious is to keep the lights-on, by restoring the cargo flows and meeting deadlines. Technology emerges as the white knight that will fix many of our supply chain issues. People and talent management is also a favourite for many. And the list rightly goes on with several areas of focus being addressed across the industry.

The core supply chain functions are many and their interrelationship are crucial to the effectiveness of the supply chain structure. These core functions are principally, demand planning, sourcing/procurement, logistics, flow planning, production pipeline support, inventory control, warehousing/proximity hubs, transportation, import/export processes, compliance and track & trace systems. There are of

course various sub-sets of these core functions and all are equally important.

Has the focus shifted?

But whilst all core functions are crucial and critical to effective and efficient supply chains, there are times when some must take a higher focus than others. The COVID disruption has raised many questions and every supply chain practitioner is reviewing, assessing and searching for new solutions. At this point in time, it is sourcing and procurement that emerges as a higher focus area. The main talking points in the industry, right now are around Technology, Transportation and Sourcing {materials/products/services}. These are elements that will be driving successful transformations, whether they be business transformation or digital transformation. It is in these core supply chain functions where we will find the solutions for the future in embedding robustness

and resilience of our supply chains.

Sourcing/Procurement Focus

The stability, robustness and resilience we all want in our supply chains, is primarily derived from the systems, processes and stakeholders we manage. These are the foundations pillars that will determine the characteristics of our supply chain.

Selecting the right business partners, suppliers, outsourced services, technologies providers and ensuring the right solutions serve our supply chains objectives, is about an informed and diligent approach to sourcing and procurement.

New Supply Chain Technologies

For the purpose of this synopsis, I will address one solution area, that is Technology. There is on the market an emergence of some very good and innovative

solutions, providers and smart applications. On the face of it they all seem to be great and would seem to fix our problems. But be aware that what glitters is not always gold and the same goes for technology.

Whilst one needs to delve deep into understanding the solutions available, what is clear is that the new concepts, structure and deployment is more agile and "light". Gone are the days when you had to load systems onto you in-house computer, engage an administrator, a system analyst and an IT structure to run your IT systems.

Today most applications are web based, mobile & interfacing to core systems does not require heavy customisation and subsequent maintenance. The new supply chain technology solutions are truly agile, mobile and are enablers that can really improve performance at lower costs. Lower cost is for sure one key driver but being able to manage operational risk by gaining true visibility at any point and time along multiple processes is truly game changing. Becoming a front runner and take advantage of such technology requires a radical mindset shift to truly become successful. Using 'The Old' (data / process / behaviour) will not help to adapt and become successful in using this technology.

There are providers that do not even charge for the set-up, but charges on a usage criteria. IT technology solution have now become consumable commodities. They can be upgraded without the user even

being aware of it. Think about your mobile phone updates and upgrades – same concept!

Understanding the New Technologies

This new reality changes the paradigms of how we have managed IT solutions and is a very exciting time for all those responsible for managing supply chains. But just like when selecting a mobile phone, tablet or the like, the sourcing and procurement of new technology solutions, needs to be an informed one.

This is where many businesses and supply chain practitioners need to sharpen their skill sets in this areas. If they are serious about finding the solutions for the future, that delivers for them robustness and resilience in their supply chains, then sourcing and procuring the right technology vendor will be crucial.

ABOUT THE AUTHOR

Joe Lombardo

Transformational Management Advisory

Founder of ESP Consult, Joe Lombardo, advises on transformational management through a supply chain focus.

The need-for-change is a very likely and necessary step for business transformation and sustainability. Starting a journey of transformation can be hugely daunting. ESP advises on structuring the model to facilitate and successfully implement transformational programs. A transformational journey, is a truly enlightening and lasting motivating experience.



Delivering end to end Healthcare Logistics Solutions

by Ni Sheng Jie, Head of Healthcare Asia Pacific, CEVA Logistics



With the complexity of today's healthcare supply chains, it has never been more important to offer and manage integrated, end-to-end logistics solutions. Being able to adapt to rapid market changes and requirements are key factors. The capability to offer air, ocean and ground service are critical if tailored solutions across all geographies are to be provided to meet customers' needs.

During the COVID-19 pandemic, the ability to deliver emergency medical supplies, particularly, for temperature sensitive cargo, is a key challenge. At the peak, CEVA Logistics supported one of the largest healthcare services groups in Asia, to move critical medical supplies from China and India to Singapore. The shipments of up to 100 metric tons had to be strictly kept at 15-25 degrees in order to preserve their efficacy.

We were able to demonstrate our understanding of the customer's needs and show our capability in addressing their needs to build an end-to-end solution for them in less than 10 days.

CEVA Logistics' team executed a highly complex, temperature-controlled door-to-door operation using reefer trucks for both pickup and delivery involving multiple charter flights, with special brokerage arrangements to counteract delays in Shanghai. This emergency response and resourcefulness demonstrated the value of a professional logistics partner in the global fight against COVID-19.

Our ability to structure operations around customers' KPIs has enabled the CEVA Logistics team to stay focused on specific logistics needs to deliver value-

added services which optimize cost and performance throughout our customers' supply chains.

CEVA Logistics can also provide great service to its customers beside emergency healthcare solutions. In Australia, CEVA Logistics has built a direct-to-pharmacy distribution network for a major consumer care company. The customer is a leading consumer care distributor in Australia, selling a wide range of pharmaceuticals and over the counter (OTC) products across Australia and New Zealand. It operates through seven regional distribution centres and supplies close to 580 retail pharmacies countrywide.

Our customer needed a partner which could provide overnight delivery coverage to all 580 retail pharmacies including shopping

malls, site within CBDs and residential sites. This meant scheduling deliveries to suit different opening hours of retail outlets while maintaining a door-to-shelf service level with a 95% on-time target rate. We also utilized geo-fencing so that once a driver is close to the shop, a text message is triggered to inform the shop of the upcoming delivery.

CEVA Logistics has transformed a previously localized delivery capability into a single nationwide retail delivery network with a dedicated pharmacy/retail delivery fleet. Highly customized delivery scheduling was implemented to ensure pre-opening and after hours delivery in 3-4 daily delivery waves.

The delivery routing and automated arrival pre-alerts were all set up through the geo-fencing enabled system and a digitally-enabled scanner ensured accurate carton count and in-store PUD signing along with a GDP-compliant hand-over process for drugs with in-store pharmacist sign-off. Data transparency was achieved by using CEVA Logistics' Matrix IT system which was able to support the growth of the customer from an initial 400 sites to nearly 580 in 3 years.

Meanwhile in Malaysia, CEVA Logistics has built a direct distribution network for a major consumer care company which is a diversified American-owned conglomerate with business in pharmaceutical, medical devices and consumer care sectors.

The company required a consolidated distribution model

for its consumer and vision care divisions in the country. It needed to transform the vision care division from a traditional distributor model into modern 3PL operated direct distribution set up with improved locally managed delivery being merged into a centrally controlled nationwide delivery network with progressive cost and service improvements.

CEVA Logistics introduced a robust continuous improvement program (CIP) that improved the efficiency and cost on an ongoing basis including a national distribution center of 12 000 sq m as well as a nationwide transport network with a pharmacy/optical shop delivery fleet. Value added services including repacking, return and transportation management were provided alongside a Control Tower to manage the local last miles deliveries.

As a result CEVA Logistics has been able to consistently deliver with up to 99.5% inventory accuracy, created major cost-saving for the customer and improved the productivity through the use of voice picking while still delivering close to 100% on-time delivery performance.

CEVA has been able to utilize its global skills and knowhow to implement a logistics bridge between Asia and Europe and all over the world during the pandemic. Working with the French Government and other players the CEVA team created an airlift which moved not just millions, but billions of facemasks in a very fast time-frame.

Looking into the future, COVID-19 has been a major catalyst to accelerate some long-term trends in healthcare logistics and players in the supply chain will have to evolve. The industry, as CEVA Logistics has done, must embrace smart technologies and solutions to provide more transparency and allow for more regulatory compliance in each process of the supply chain. A much more integrated data and information processing will facilitate decision-making process as it allows for total visibility and insights in the distribution channel.

Organizations must shift their strategies to cushion the impact of this virus and any in the future, in order to recover quickly from the resulting disruptions. These various factors will eventually pave the way for a much more streamlined supply chain.

ABOUT THE AUTHOR

Ni Shen Jie



Sheng Jie has over 20 years of experience in the Healthcare and Supply Chain industry. He is recognized for

his expertise in the healthcare supply chain, particularly the clinical trial logistics and pharma cold chain distribution. He has held various executive positions including Regional Industry Director for TNT Healthcare, and Managing Director for FedEx. He joined CEVA Logistics in March 2020 as the Head of Healthcare in APAC.

A second chance? How businesses can better prepare for a potential 2nd wave of COVID-19 disruptions



It's hard to believe that, for many countries in Asia, it has been almost six months since lockdown protocols were introduced to tackle the spread of COVID-19. More than that, it has been over half a year since the pandemic started.

From a humanitarian and business standpoint, the impact that this novel virus has had and continues to have, cannot be underestimated. For businesses, it has led to significant drops in revenue and productivity. The combination of the two is now leading to thousands of job losses and an impending global recession. It has also changed the way they approach their supply chains, transitioning away from the notion of static networks towards more dynamic value chains.

Partly due to a relaxation of

lockdown protocols and partly as a result of businesses beginning to reassess their supply chains, there have certainly been recent signs of recovery. However, in conglomeration with this signal of hope there remains a residue of uncertainty and concern, which is quickly rising to the surface. This comes in the form of a second or even third wave of infections across the globe. Businesses need to take the lessons they have learned from the last six months and prepare for this eventuality.

Unprecedented? Not anymore

When COVID-19 first emerged as a global pandemic the word 'unprecedented' was, and in many cases, is still used with a frequency which has somewhat negated the meaning of the word. It is of course certainly true that nobody saw this pandemic coming and

that there have been precious few viruses in human history to compare it to. The World Health Organisation has even labelled it the 'most severe' global health emergency ever.

However, there has to be a point at which businesses stop using the word 'unprecedented' and use the new precedents set by the pandemic to become both more resilient and more agile. Across the globe, we have now lived with this virus for long enough to know what measures can be used to tackle it, the speed with which they can be implemented and the disruptions that they cause.

Whether it concerns the impact of stockpiling, which led to shortages of essential items such as toilet paper, or the issue of excess stock as demand for products fluctuated, there now exists six months' worth of data about the impact of COVID-19 on businesses. Therefore, should there be a second or a third wave of the virus, businesses now have the information and the opportunity to leverage technologies, such as AI and machine learning to prepare and react accordingly.

Lessons learned

The phrase, 'hindsight is a wonderful thing,' is often framed sarcastically or regrettably.

However in this instance, there is a great deal which businesses can gain from hindsight; from looking back at the last six months and assessing what went wrong, why and how they can avoid history repeating itself.

For businesses, one of the major pain points during the pandemic stemmed from lockdown protocols, which saw shops, offices and even entire countries locked down. This caused havoc within the supply chain. Firstly, it meant that key nodes within the supply chain, whether for transportation, sourcing or storage, were either eliminated as an option or reduced to very limited capacity. Secondly, a shift in consumer priorities saw huge fluctuations in demand, leading to both excesses and shortages in supply.

These disruptions, and the suddenness of them, highlighted one very important lesson for businesses: failure to prepare is preparing to fail. For many businesses, the issue was simple: they did not have the technology in place to adapt to these disruptions. As a result, if they were able to recover at all, it was either too late or not a long-term solution. In many cases, it might have been both. This needs to change moving forwards.

Bending not breaking

When considering how businesses can make their supply chain both flexible and resilient, a good analogy to draw is how buildings are made to withstand earthquakes. In Japan, a country more at risk with earthquakes than

most, buildings are fitted with base isolators. These act as shock absorbers between the building and the ground. Essentially, when an earthquake hits, the building can slide back and forth while remaining upright: flexible, yet resilient.

Similarly, the supply chain has to be flexible in order to withstand shocks and continue performing its primary function. However, instead of using base isolators, flexible supply chains should rely on technology such as digital twins, AI and machine learning to navigate through disruptions.

Using COVID-19 as an example of a disruption, businesses which have a living, breathing digital twin of their supply chain can rapidly model all kinds of scenarios and evaluate the cost and service trade-offs associated with changes in the supply chain – whether planned or unplanned. Advanced algorithms can then be used to simulate and optimize the outcomes, providing insights which businesses can both rely on and act upon.

With these systems in place, businesses can not only prepare for the expected, but for the unexpected too. Using digital twin technology, in combination with advanced algorithms and artificial intelligence, businesses can virtually test out contingency plans within the supply chain before putting them into practice. That means, should there be a second or third wave of COVID-19 infections and the subsequent disruptions, the supply chain can be quickly adapted to tackle these.

Businesses that want to be truly agile and resilient within their supply chain need to accept today's reality: there is no 'new normal', just the 'never normal'. Disruptions will always exist, whether we know they are coming or not, so businesses need to expect the unexpected and have the technology in place to deal with them. When it comes to implementation of this technology, the old adage rings true here: there's no time like the present.



Kobe Ding

Kobe Ding, Solution Design Director
Greater China & Southeast Asia, LLamasoft

Kobe graduated from Shanghai Jiao Tong University majoring in International Shipping, with more than 10 years of working experience in Li & Fung, Kewill, Amber Road as senior supervisor, PM, solutions consultant.

Participated in multiple SCM/Optimization projects for companies like DHL Supply Chain, H3C, Lenovo, Metro, MARS etc. Now Kobe is the Greater China and SEA Solution Design Director in LLamasoft responsible for the solution design for customers from different industries.

Halal Business Management— A Guide to Achieving Halal Excellence

by Prof. Dr. Marco Tieman – CEO LBB International. Publisher: Routledge London and New York

The halal industry is fast-growing due to demographics and industry expansion. Halal certification of products, outlets, and services is essential for doing business in Muslim majority countries. This book shares the building blocks of professional halal business management, covering halal certification, halal supply chain management, branding and marketing, and halal risk and reputation management.



Drawing on years of academic research and advisory experience, the book provides practical advice and guidance on how best to organise and upscale your halal business operations. Successful companies in the halal industry are those that embrace halal excellence by design. Halal excellence is a process—a pursuit of excellence.

Halal business management is beyond halal certification, and needs to address supply chain management, branding and marketing, and risk and reputation management. Halal excellence needs measurement through adopting the right key performance indicators, to protect your halal reputation and licence to operate in Muslim markets.

Halal is not static, but is going through an evolution from a product approach towards a supply chain and halal value approach. The halal integrity of a product is a function of the supply chain. The halal integrity is as strong as its weakest link, not its strongest link.

Halal business management has major implications for the purchasing function and organising supply chains. The purchasing department needs to adjust its procurement strategy and purchasing processes to ensure sustainable halal purchasing and operations for the company. Most companies outsource their logistics and supply chain activities and processes to logistics service providers. When you outsource these activities or processes, the brand owner is still responsible for the halal integrity of its supply chain network.

Evidence supports that engaging a logistics service provider that is halal-certified strengthens your halal risk management. The retailer completes an end-to-end halal supply chain, where the halal product is handed over to the consumer upon payment. The development of halal clusters allows for better organisation and upscaling of halal production, which is highly necessary to alleviate bottlenecks in supply and to support the fast growth of the halal industry. Halal parks and halal zones can create a superior

halal eco-system for companies to operate in, simplifies halal, and harvest synergy advantages.

This book gives proven, practical strategies to guide you in the halal industry. The book is for all organisations involved in serving Muslim markets, and also serves as a coursebook for graduate and postgraduate education in halal business management.

ABOUT THE AUTHOR

Prof. Dr. Marco Tieman

Marco Tieman, the is the founder and Chief Executive Officer of LBB International, a supply chain strategy consultancy & research firm with offices in The Netherlands, Malaysia and Indonesia. He has been the trusted advisor to governments and private sector on supply chain analysis, supply chain design, and market research.

Watch the interview



WEBINAR SYNOPSIS

Technology Partnerships that help you maintain a high performing Supply Chain



Guest speaker: Richard Ryan – Senior Industry Advisor Blue Yonder, **Vineet Kumar** – CEO & Founder Smartlinks, **Amlan Bose** – COO & Senior VP Smartlinks talking to Joe Lombardo – ESP Consult and **Dr Raymon Krishnan** – President LSCMS

SUMMARY

This webinar focussed on the power of Partnerships in particular during the COVID restrictions. The key highlights of good partnerships, can create very productive synergies with high efficiencies. Our Guest speakers shared some very pertinent insightful experiences, offered some very pragmatic advice & in closing some excellent take-aways, as we look ahead to the future.

Summarised below are highlights of the speakers' comments and you can also view a complete recording of the webinar – see link provided.

1. Richard Ryan - key highlights are summarised as follows:-

Key message – *“reaching customers when you cannot travel is challenging, but extending the reach through partnerships close to customers is the way to achieve continuity.”*

Discussion points: – over communication is better than under communications.

- project objectives must be clear.
- alignment to customer need is a key priority.
- discretion in relationship management is fundamental.
- working with local partners, increases the business

effectiveness.

- courage to tell partner how it is.

Closing message – *“we have learnt a lot & still learning – especially on how to work in remote.”*

2. Vineet Kumar - key highlights are summarised as follows:-

Key message – *“we are learning from COVID – Customer face-to-face engagement is better but we have to find the right work-arounds & adjust accordingly – but I do miss meeting customers.”*

Discussion points: – productivity has dropped due to change in working methods.

- re-balancing is a fine act, but compensated by time savings i.e. less travel.
- speed & agile to go-live, builds confidence in partnerships deliverables.
- supply chains are forcing Companies to adapt.

Closing message – *“relearn how to position yourself, do it at scale & use digital technology to do the heavy lifting.”*

3. Amlan Bose - key highlights are summarised as follows:-

Key message – *“way of working may have radically changed, but Client partnerships is about understanding the issues & customers' needs whether you are close or distant.”*

Discussion points: – most effective when you can penetrate customers' eco-system.

- decisions need to be made on fact based criteria, not on political compromise.
- ROI is not the only key issue, but must be solution driven.
- ability to “leap-frog” the market, will bring the best customer results.

Closing message – *“in 2021 we need to continue to be agile, with speed & adopt hybrid ways of working with digital tools.”*

Taobao's Official Logistics Provider Cainiao Launches Million Dollar Reward to Enhance Customer Experience in Hong Kong

The first prize for the best courier team will receive HKD 111,100 as a reward Initiative aims to enhance last mile logistics experience and uplift the industry

Hong Kong, China, 30 October 2020 — Cainiao Smart Logistics Network, ("Cainiao Network"), the logistics arm of Alibaba Group Holding Limited, organized an island-wide voting campaign for Taobao consumers.

in Hong Kong to vote for the best courier service and collection point. Spanning one month from 27th September to 27th October, this initiative was launched to enhance last mile logistics experience and recognize outstanding courier partners whose dedication helped to make logistics a core foundation of the growing eCommerce sector in Hong Kong. Results are announced today, with the winning team receiving HKD 111,100 cash reward. Participating consumers also win up to HKD 1,111 in logistics red packet between 8 p.m. 30th October and 12 p.m. 31st October to enjoy even greater benefits during the 11.11 shopping festival. Total reward for the campaign amounted to HKD 1 million.

The award comprises two main categories aimed at recognizing the courier teams and collection point teams respectively. Each team was issued with an unique code which the Taobao consumers



Courtesy of Cainiao

used for voting purposes. At the end of the month-long voting campaign, Cainiao totaled the votes to declare the winning teams today.

"Last mile logistics such as couriers and collection points have direct touch points with our customers and play a critical role in delivering superior service. We launched this voting campaign with the intention of recognizing and celebrating these behind-the-scene heroes who have been working hard to ensure a seamless logistics experience. With the rise in cross-border eCommerce activities, we will continue to work hand in hand with our partners to enhance our logistics services to better serve our customers." says Ray Cheuk, Head of Operations (Hong Kong), Cainiao Network.

About Cainiao Smart Logistics Network

Founded in 2013, Cainiao Smart Logistics Network ("Cainiao") is a technology company and the logistics affiliate of Alibaba Group. It adopts a collaborative approach to logistics with an innovative and open data platform that improves efficiency and customer experience for all players along the supply chain. It carries forward Alibaba's mission of making it easy to do business anywhere by aiming to deliver anywhere in China within 24 hours, and across the globe within 72 hours.

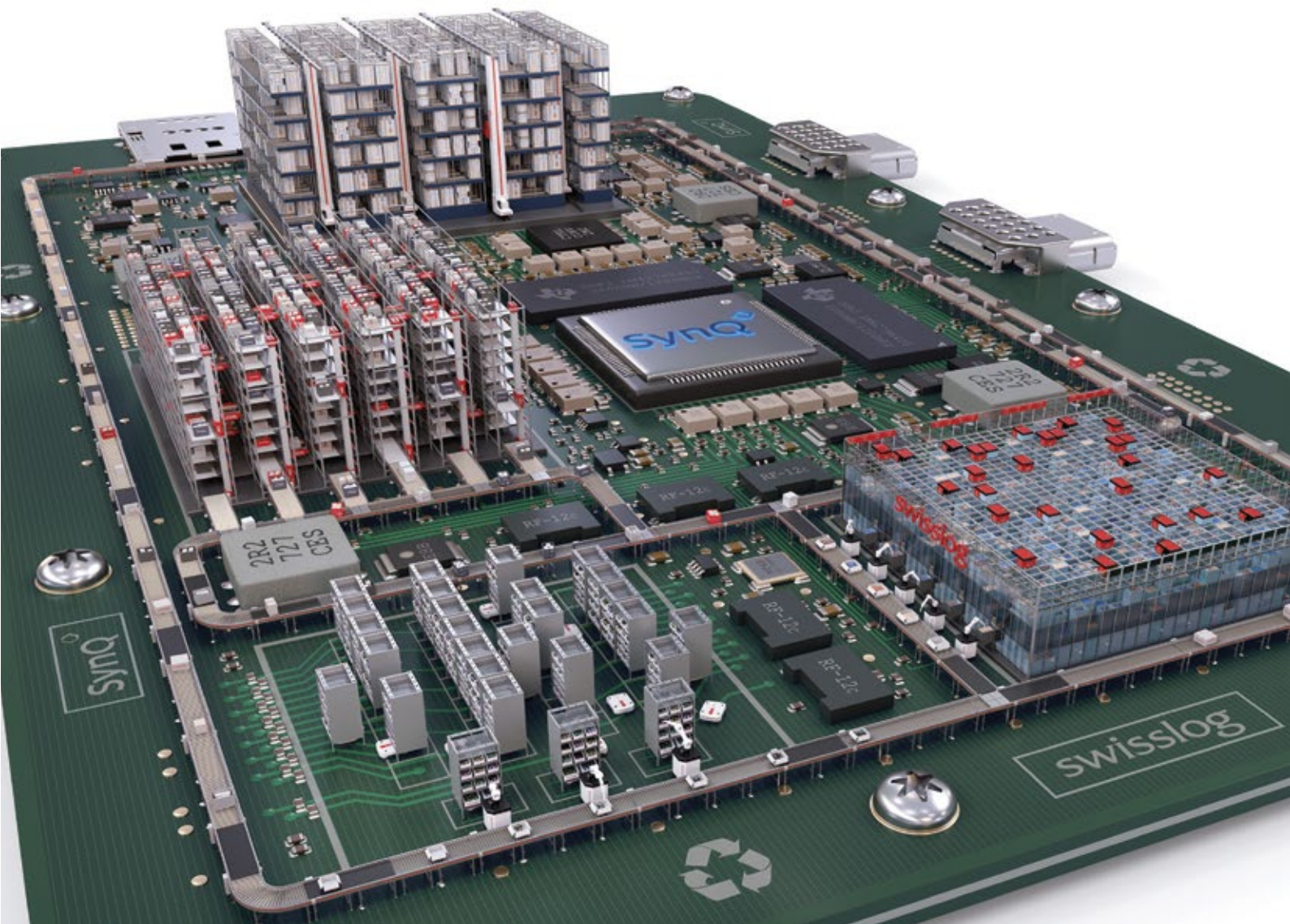
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Top 100 most influential women in supply chain launches brand new bid-and-ship freight platform, Shipz Inc



supply chain marketer and tech CEO, Sarah Barnes and Industry expert, Co-Founder John Joe, Shipz brings all their experience, knowledge, and passion into one essential platform for the supply chain industry.

Sarah was recently named Top 100 most influential women leaders in Supply Chain (global) and Top 100 most influential Women in Canadian Supply Chain. She is also the Founder and host of the popular Let's Talk Supply Chain Podcast (LTSC), through which she brings awareness to brands and hot topics in the industry, including her infamous Women in Supply Chain series and Blended the new show about Diversity and Inclusion.

For more information, visit: www.shipz.com or email us at info@shipz.com

Shipz Inc today announces the launch of its new platform to bring neutral bid-and-ship freight solutions to importers and exporters. Working to simplify the complexity often found in logistics, the Shipz platform closes the gap between shippers and forwarders, creating an accessible and hassle-free logistics solution for all.

In the current market, many mid-sized companies want to work with forwarders, but are limited by the current process; meanwhile, forwarders are equally strained by the amount of "free" work they do. Combined with the industry's continuous evolution and complexity, matching the two sets of needs has historically been a challenge. The Shipz platform aims to break down those barriers, using insight-driven change and a passion for better business.

Shipz Co-Founder and CEO Sarah Barnes explained: "Whilst

the industry's rapid growth and technological advancement is a great thing, it started to become clear to me that it was leaving some businesses behind. Nobody wants to see the industry become monopolized by big business, whilst small and medium sized enterprises are unable to stay in the game. I founded Shipz to even out the playing field, champion small business and facilitate those much-needed networks and connections. Efficient, effective logistics chains reduce carbon footprints, support small businesses, and democratize trade – if we can all innovate and collaborate together, the industry will be a real force to be reckoned with."

From quick and accurate quotes, selecting the right partners that fit your business to secure goods storage, shippers and forwarders will see a variety of benefits by connecting with the Shipz platform. The brainchild of logistician turned



Sarah Barnes

Shipz Co-Founder & CEO

Sarah was recently named Top 100 most influential women leaders in Supply Chain (global) and Top 100 most influential Women in Canadian Supply Chain. She is also the Founder and host of the popular Let's Talk Supply Chain Podcast (LTSC).

SSI Schaefer Welcomes New Leadership in APAC & MEA As Former MD Brian Miles Receives LogiSYM Excellence Award



SSI Schaefer, the world-leading provider of products and systems for intra-company material handling and waste technology, has further cemented its position as an industry frontrunner under a new leadership team with Xavier Perello Pairada at the helm. With his proven track record and unwavering commitment to service, Perello will take the reins from Regional Managing Director Brian Miles — ensuring a smooth transition whilst guiding the company to its next phase of growth.

As Miles enters the next phase of his life, SSI Schaefer would like

to congratulate him on receiving the LogiSYM Excellence Award at this year's LogiSYM Awards 2020. Selected and judged by a panel of leading experts from global businesses, the LogiSYM Awards recognize individuals and companies who have actively demonstrated or contributed significantly to the supply chain and logistics industry. Miles is the first to receive the special award for his lifetime achievements.

With over 35 years of service with SSI Schaefer, there is no doubt that Miles has truly made his mark through the development of the region's cold chain storage

network. Miles first joined Schaefer in 1980, where he led Gulf operations for the company in Dubai. Over four years, he established his reputation and commitment to excellence before relocating to Singapore in 1984 where he established Singapore as Schaefer hub for SE Asia. In the following three and a half decades, Miles built up SSI Schaefer to be the market leader in the region, growing the team from just seven staff to 550 employees working in 13 offices across the Asia Pacific and Middle East, as well as two wholly-owned factories in Malaysia and China.

Ushering in the next phase of growth for SSI Schaefer in the Asia Pacific

Xavier Perello Pairada will build upon Miles' incredible leadership legacy and ensure SSI Schaefer continues to strive for excellence in the industry. An industry veteran, Perello holds two master degrees (Master of Industrial & Structural Engineering UPC — Barcelona and a Master of Business Administration, MBA from the Macquarie Graduate School of Management — Sydney) and has over 25 years of material handling, logistics and supply chain experience. The role will see him focus on supporting SSI Schaefer's continued expansion throughout the Asia Pacific, Middle East and Africa.

Perello's move to Senior Vice President, Regional Head APAC & MEA comes following his two-decade career with SSI Schaefer in the Asia Pacific. After joining Miles' team as Export Manager in 2000, he played an integral role in developing the market within the region. He was promoted

to General Manager for India, Malaysia and Thailand, where he oversaw operations of SSI Schaefer's first wholly owned factory in the region, before moving up to become the Senior Vice President, Regional Head APAC & MEA for Asia. Most recently, Perello was the Managing Director for South and South-East Asia — a role which saw him grow cold-chain capacity for the F&B industry by 145 million kg in just two years.

"I am thrilled to serve SSI Schaefer as the new Senior Vice President, Regional Head APAC & MEA for the Asia Pacific and Middle East region. Brian Miles has done an outstanding job during his time in the position, and I would like to thank him and wish him well in the future. I am honored to be able to build upon his life's work as the company enters the next phase of growth and expansion," said Perello.

"Over the coming months, myself and my team will work hard to make the transition as smooth and seamless as possible for SSI Schaefer employees across the

region. At the same time, we as a company will ensure business continuity for our partners during this challenging and uncertain global climate. SSI Schaefer remains steadfastly committed to delivering excellence in intralogistics solutions for companies across the APAC & MEA region, and we will continue to support the development of export-oriented local businesses."

Shaping the future of intralogistics in the Asia-Pacific

In recent years, the productivity demands of the food and beverage industry have risen significantly across the APAC region. Growing product diversity, an online shopping boom and constantly changing packaging makes handling using conventional block warehouses inefficient — thus increases the need for more efficient storage and picking solutions. Innovation and automation are critical to help providers address this surge in demand; however, country-specific challenges require providers to adapt their products and services to the unique requirements and trends of each market.

Adhering to its philosophy of thinking long-term and beyond the obvious, SSI Schaefer's Asia Pacific arm has continuously evolved its product solutions to address the diverse needs of the region — shaping the future of intralogistics and securing its position as an innovative industry leader.

In Indonesia, massive business growth fueled by the nation's



SSI Schaefer remains steadfastly committed to delivering excellence in intralogistics solutions for companies across the APAC & MEA region, and we will continue to support the development of export-oriented local businesses

ever-growing food and beverage market spurred a need for a sustainable warehouse solution. The country's shortage of highly skilled laborers, growing population density and lack of warehousing solutions fit to handle heavy pallet weights of 1.5 tons, coupled with strict fire-safety regulations, mean many turn to SSI Schaefer as their long-term intralogistics partner. With a proven track record in automation and a high degree of trust in the brand and products, SSI Schaefer offers expertise and innovative solutions to meet the unique

requirements of companies operating in Indonesia.

SSI Schaefer's bespoke high bay warehouses are individually designed for a partner's needs and guarantee optimum space utilization, faster and more direct access and secure storage up to 40m high. Working in close collaboration with key personnel from the beginning of a project, SSI Schaefer's automated warehouse solutions utilize groundbreaking technologies such as the SSI EXYZ storage and retrieval machine for fully automated pallet storage; SSI Flexi scalable single-level shuttle for space optimized storage of cartons, trays, and cubic and conical bins; and innovative transport solutions for large load carriers such as the pallet conveying system.

In Korea, where online grocery shopping is witnessing an unprecedented boom, flexible and scalable system solutions are a necessity as eCommerce companies seek to address increased demand for online groceries — all while navigating the ever-changing consumer purchase behaviors. At the same time, in a hyper-competitive market, improved order fulfilment quality can offer an advantage over the competition, which is why many are turning to automation to ensure error-free orders, manage short picks and streamline customer returns.

On this front, SSI Schaefer is the logistics brand of choice thanks to its excellent customer relationship, global expertise on eCommerce logistics solutions, and a single-source philosophy that is ideally suited to these

turnkey projects. SSI Schaefer engaged with customers at the early stages to provide a flexible, scalable and modular solution that guarantees maximum efficiency for both in-person and online food trade.

eCommerce logistics solutions such as the SSI Flexi allows tailored and highly flexible system concepts with excellent use of space and high levels of technical performance in chilled and deep-freeze environments; while the SSI Miniload is the ideal storage-retrieval machine (SRM) for fully automated miniload logistics and enables the storage and picking of containers, cartons, and trays together with a higher throughput in the miniload system. Furthermore, SSI Schaefer's carton and container conveying systems and innovative Pick by Light picking system assist teams to optimize their picking and conveying processes while virtually eliminating errors.

Down Under, Australia is witnessing a boom in cold chain storage solutions for F&B. SSI Schaefer ensures maximum freshness and fast retrieval of goods with best-in-class services across the value chain. SSI Schaefer's innovative solution automates the cold storage and retrieval system by moving pallets of food using cranes and high racking structures, in order to prevent food contamination, enhance safety, maximize storage space and improve operational efficiency.

Zebra Study: Only Two in 10 Consumers Have Complete Confidence Their Food is Safe to Eat

On average less than 40% of food and beverage industry decision-makers place complete trust in the industry to ensure food and beverage safety



SINGAPORE – November 2, 2020 – Zebra Technologies Corporation (NASDAQ: ZBRA), an innovator at the front line of business with solutions and partners that deliver a performance edge, today announced the results of its Food Safety Supply Chain Vision Study. The study highlights the views of consumers as well as food and beverage industry decision-makers worldwide from distribution and warehouses to grocery stores and restaurants around safety, traceability and transparency. Surveyed consumers reported

their top food safety concerns include restaurant kitchen and wait staff hygiene, foodborne outbreaks, illness from contaminated food, and food and beverage recalls. Consumers can be quite unforgiving if they experience a food incident as approximately six in 10 reportedly would never eat at a restaurant again if they contracted a foodborne illness or food poisoning. Slightly more than 80% of surveyed consumers said companies have an important role to play in implementing food safety solutions and an

ethical responsibility to ensure the safe handling of their food. Most consumers (70%) said it is important to know how their food and ingredients are manufactured, prepared, and handled, while 69% agreed knowing how their food is sourced is also important.

Given the increased focus on health and wellness, it's unsurprising both consumers and industry decision-makers are showing a great level of interest in the source, quality and safety of their food. However, a disconnect exists between what consumers

believe and what industry decision-makers think. Almost seven in 10 (69%) decision-makers say the industry is prepared to manage food traceability and transparency, but only 35% of consumers agree. Furthermore, only 13% of consumers felt the industry was extremely prepared today to manage food traceability and be transparent about how food travels through the supply chain, whereas 27% of decision-makers reported feeling this way. Unfortunately, this is not just a short-term challenge as approximately half (51%) of surveyed food and beverage decision-makers said meeting consumer expectations will remain a challenge in five years.

“The F&B industry in Southeast Asia is already taking measures to ensure more transparency in the supply chain. However, our study found that a lot more work still needs to be done in order to increase consumer confidence and improve food traceability in this region,” said Fang-How, Lim, Regional Director for Southeast Asia, Zebra Technologies. “Due

to the digital world we live in today, businesses have more information available to them. Businesses should leverage this and provide consumers access to the same information, which in turn can increase consumers’ faith in their food sources.”

One bright spot identified in the research is the role that technology can play in closing both these gaps in both the short- and long-term. An overwhelming majority (90%) of decision-makers acknowledged that investments in traceability-focused solutions will provide them with a competitive advantage by enabling them to meet the expectations of consumers. When asked about the top benefits that technology-based track and trace solutions would provide, nearly six in 10 decision-makers cited risk reductions with proper handling, transportation and storage and tracking product perishability. 41% of industry decision-makers reported RFID tags improve food traceability within the supply chain more than any other technology, yet only 31% currently use them

Zebra offers a portfolio of solutions that transform the food supply chain from farm to fork

within their own organizations.

Mobile computers and tablets, mobile barcode label printers, scanners and specialty labels and tags will also be key enablers in winning consumer trust and delivering more transparent information to consumers.

Approximately 90% of surveyed industry decision-makers expect to use rugged handheld mobile computers with scanners, barcode scanners and mobile barcode label printers within the next five years to digitally manage and track food products and related information.

“Zebra offers a portfolio of solutions that transform the food supply chain from farm to fork,” said Aik Jin, Tan, Vertical Solutions Lead, Zebra Technologies Asia Pacific. “Businesses can choose from basic track and trace solutions by pairing up of the likes of the ZQ511 and ZQ521 mobile printers with the CS60 Series companion scanner for barcode printing and scanning. Otherwise, they can opt for RFID solutions by pairing up the likes of the ZQ511 and ZQ521 RFID mobile printers



that produce RFID-enabled labels with handheld RFID readers and RFID-enabled scanners. By doing so, businesses will be empowered with real-time visibility that takes their track and trace efforts to a whole new level.”

KEY REGIONAL SURVEY FINDINGS Asia-Pacific

- 93% of surveyed food and beverage decision-makers believe their companies have an ethical responsibility to ensure the safe handling and management of food.
- Nearly three-quarters (73%) of consumers listed illness and deaths caused by contamination as their biggest concern for risks posed by the food supply chain.
- 89% of industry decision-makers believe investments in traceability-focused solutions would provide their companies with a competitive advantage.

Europe

- Only 15% of surveyed consumers completely trust food and beverage distributors to ensure the food and beverages are safe for public consumption.
- More than six in 10 (62%) consumers listed a foodborne outbreak as their top concern for food-related issues.
- Approximately half (53%) of surveyed industry decision-makers completely agree their companies have an ethical responsibility to

ensure the safe handling and management of food - the lowest of any region.

Latin America

- Almost nine in 10 (87%) consumers cite restaurant kitchen staff hygiene as their top concern for food-related issues.
- The vast majority (97%) of surveyed industry decision-makers believe investing in food safety and traceability technology will provide their companies with a competitive edge.
- Seventy-nine percent of consumers responded that having access to accurate information on where their food came from was important to them.

North America

- The average trust level in companies and brands to ensure food and beverages are safe for public consumption is two and a half times higher in industry decision-makers (45%) than consumers (18%).
- 91% of surveyed food and beverage decision-makers believe their companies have an important role in implementing food safety solutions.
- More than six in 10 (64%) consumers cite fear of foodborne illness/disease as their primary reason for wanting more information about their food source.

SURVEY BACKGROUND AND METHODOLOGY

Zebra's Food Safety Supply Chain Vision Study included approximately 4,957 consumers and 462 food and beverage industry decision-makers in the manufacturing, transportation & logistics, retail and wholesale distribution markets in North America, Latin America, Asia-Pacific and Europe who were interviewed in January 2020 by Azure Knowledge Corporation.

About

Zebra Technology

Zebra (NASDAQ: ZBRA) empowers the front line in retail/ecommerce, manufacturing, transportation and logistics, healthcare, public sector and other industries to achieve a performance edge. With more than 10,000 partners across 100 countries, Zebra delivers industry-tailored, end-to-end solutions to enable every asset and worker to be visible, connected and fully optimized. The company's market-leading solutions elevate the shopping experience, track and manage inventory as well as improve supply chain efficiency and patient care. In 2020, Zebra made Forbes Global 2000 list for the second consecutive year and was listed among Fast Company's Best Companies for Innovators.

For more information, visit www.zebra.com or sign up for news alerts. Participate in Zebra's Your Edge blog, follow the company on LinkedIn, Twitter and Facebook, and check out our Story Hub: Zebra Perspectives.

Information Sharing Communities for Digitally Enabled Supply Chain Visibility

Written by: Mikael Lind, Margi van Gogh, Hanane Becha, Norbert Kouwenhoven, Wolfgang Lehmacher, Erik Lund, Henk Mulder, Niall Murphy and Andre Simha.

Article No. 64 (UNCTAD Transport and Trade Facilitation Newsletter N°88 - Fourth Quarter 2020)



Supply chain operations can be complex. Especially where multi-modal transport is necessary, and where dynamic decision making is required for the routing of goods in-transit. These supply chain operations are pursued in an environment that can be characterised as a self-organising ecosystem. Connections between various

(local) data sharing environments in networks of networks enable stakeholders in the supply chain to enhance their information base. The latest internet of things (IoT) technologies can provide complementary insights as to the whereabouts and status of goods and assets. Combining all available data improves situational awareness. Data sharing enables

green and humanitarian decision making and facilitates a truly smooth and seamless movement of goods.

Everybody wants to know more

Information and data are the foundation of insight. Substantial investments today are being

made in digital technologies allowing for more digital data streams in supply chains. Logistic Service Providers (LSP), carriers, intermodal operators (air, sea, ground etc.), port authorities and terminal operators, regulatory bodies, and Beneficial Cargo Owners (BCO) are all working on this topic. The European Commission forecasts exponential growth of data streams.

Efficient routing and high utilisation of logistics assets and infrastructure lead to cost efficiency benefits. This includes the efficient use of vessels, planes, trucks, barges and trains, as well as loading/unloading equipment. Episodically visiting actors are being served just-in-time with short turn-around times at transshipment hubs, reducing waiting times to a minimum. All of these require the sharing of information about goods and transport as the basis for visibility and transparency.

Visibility and transparency are critical for condition and time sensitive goods, like vaccines and flowers, and for bringing agility, resilience, and predictability into the supply chain. Such visibility and transparency require data; about the location of shipments, about the temperature and shock conditions goods are exposed to, also the situation merchandise faces along the supply chain, like transit delays or bad weather.

Supply chain visibility is needed to realise improved outcomes for society and the environment. As a result of Covid-19 restrictions across the globe the number of people facing starvation due to

food insecurity at the beginning of 2020 has doubled from a projected 135 million to more than 270 million by the end of the year. According to a July 2020 Oxfam Report, this could result in 6,000-12,000 deaths per day.

Transparency is a must to improve emergency and humanitarian support, such as with the COVID-19 pandemic. Flagging a container 'COVID prio' in a truly transparent supply chain would make it visible for all relevant supply chain participants thereby allowing priority treatment to speed up movement and delivery, and pre-emptively circumvent disruptions in the system. With the right infrastructure in place, a carrier could put such a container on deck, the terminal could off-load it first, customs could fast-track clearance or clear the container while still at sea, the port could even make sure all the traffic lights in the port are set to green for the haulier's truck, etc.

Similarly, the distribution of a COVID-19 vaccine is at present a logistics challenge that has never been faced before. The optimization of insufficient and constrained air cargo capacity (due to COVID-19) as well as the limited cold chain infrastructure, combined with the short expiration dates of vaccines means that increased visibility and transparency of vaccine logistics data literally equates to more lives saved.

More visibility and transparency aid 'green decision making' on transport choices and routings. Optimised routes and flows produce less carbon emissions.

Supply chain visibility is an important ingredient for true planetary and human benefits to be realised. Visibility also allows for post transport analyses and the verification of fair charges. Price-gouging or excesses in supply chains could more easily be exposed.

Greater visibility creates new opportunities and innovation for trade financiers, risk managers and insurance companies. Ports and hinterland carriers want to know what cargo (and how fast it) is approaching them, and where it is heading. All share the need for data, and all want to know more.

The way forward — Connecting actors in a network of networks setting

Situational awareness can be derived from combining the small pieces of information that each involved LSP is willing to share. There are many sources for those pieces of information, such as IoT devices, and systems of records for engaging LSP's that provide data on agreements and achievements within a system of production.[i] There are various means to share, varying from central databases such as UNCTAD ASYCUDA's "Digitizing Global Maritime Trade" (DGMT) project, or ASYCUDA Single Windows or shared blockchain ledgers, and there are various methods to control the sharing - who can see what.

Cargo being transported can take different routes through logistics networks, within regions and globally. Therefore, the need for

the many actors to be digitally connected. All parties along the transport chain need to be well joined up. An important task for all involved is collaborative alignment. As most transport involves multiple modalities, and as goods being transported along the supply chain have different characteristics, it is important to understand the many aspects that can influence a shipment, from environmental conditions, to security and safety.

Initiatives such as IATA's ONE Record, building upon the Internet of Logistics, or the TradeLens data sharing environment, originating from the collaboration between Maersk and IBM, are two initiatives intending to create a network of (local) networks. Within the European initiative of the Digital Transport Logistic Forum (DTLFF), concepts for a federated environment of networks of networks are now emerging and being validated within the FEDeRATED and FENIX projects.

Multiple entities within the consumer and supply chain and transport arena are exploring the concept of data aggregation for the common good. Essentially, bringing the least granular level of anonymised data from multiple open and closed network sources (and existing aggregator platforms) together in a non-commercial, open-source global supply system dashboard (GSSD), providing system wide visibility on the movement of essential goods to vulnerable communities served by the humanitarian sector. Further, we now see the introduction of such things as smart containers (IoT), as a

source of data that cuts across the different modes of transport.

Benefits within reach

When parties decide to collaborate and agree to mutually share data about a shipment, the benefits are huge: Increased visibility and transparency, integrated performance (i.e. that actions pursued by all actors are continually coordinated and synchronized) throughout the supply chain, latter parts of the transport chain being administratively prepared before the actual physical operations happen, reduced waiting time, secured fulfilment levels, minimised administrative burden, collaboration regardless of location, data point accuracy, cost effectiveness, increased resilience, improved and new services, innovation potential, capabilities for predictive actions, enabled post transport analytics, real time decision making, and increased automation.

All these contribute to cost effective, integrated fluid supply chains, and provide the means for appropriate commercial, societal, and environmental prioritisation throughout the global supply chain.

Imagine a situation where the many actors engaged in the supply chain, across and among the different modes of transport, provided minimum levels of data to enable decisions on the prioritisation of transport to be made collaboratively leading to reduced delays and waste, increasing the number of lives protected. Imagine analyses on

areas of extreme poverty and famine; food, medicines and medical equipment arriving faster to save lives.

The value of these benefits for BCO's, carriers, LSP's and other stakeholders, including the customs authorities offsets the effort required and data governance frameworks can help to overcome intuitive reluctance to sharing data.

Challenges to overcome

The transport ecosystem is reliant on many autonomous actors. Sometimes they are simply competitors chasing the same customers, yet at other times the same players seek to collaborate to reap the benefits of co-opetition. This collaboration is usually sub-optimal. To overcome this, local information sharing communities have emerged to obtain higher performance. Port Community Systems, Government Single Windows, Trader Community platforms are all examples of this sort of development.

An issue here is to allow for the co-existence of multiple platforms, both as local information sharing communities and as horizontal information sharing communities enabling the end-to-end supply chain. Inter-operability through standardised messaging and interfacing between information sharing communities is key for success.

The Data for Common Purpose Initiative (DCPI) at the World Economic Forum focuses on creating a new flexible data governance model that allows for the combining of data from

personal, commercial, and government sources. The DCPI is built on a belief that orienting data policy and data models around common purposes, such as specific use cases, will unlock opportunities for public good and commercial spheres. The view is that data can and should be treated differently depending on its actual and anticipated use, and that Fourth Industrial Revolution technologies can enable differentiated 'permissioning' of the same data, dependent upon context.

At the local level there are several specific requirements and challenges to address, including:

- Overcoming resistance to new business models
- A need to lower the thresholds for any actor to become digitally included
- Establishing agreed way(s) for identifying the cargo being transported, with different levels of granularity
- Addressing the automatic fear of data sharing, even when it will be protected by robust data sharing rules and governance models
- Overcoming the misconception that withholding non-sensitive data will create a sustainable competitive advantage
- Substantiating data sharing trust and security models between role players

Summary and call for action

Quantifiable economic, environmental and societal benefits originate from sharing data. However, the foundations are yet to be fully established and there are challenges to overcome.

As a result of increasing digital data sharing activity, the maritime sector is now establishing a new discipline of maritime informatics that unites practitioners and academics to jointly contribute to making shipping more efficient, sustainable and resilient, empowered by digital data sharing.

There is a need for an attitudinal shift: Everyone needs to take responsibility for promoting data sharing, and all need to help establish simple and fair data sharing models. For every player there needs to be a benefit – a commercial or a social reward, or both. Only then can the true potential of data and information sharing be unleashed.

It is not a question of which platform should or should not be used. It is not a question of withholding data waiting for monetisation or a competitive edge. Our call for action is for a collaborative effort to share data, under mutually agreed and fair sharing conditions. This is urgent for the future of our society, vulnerable communities, industry and not the least, our planet!

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*Website article from email
<https://unctad.org/news/information-sharing-communities-digitally-enabled-supply-chain-visibility>*

Supply Chain Disruptions Are New Opportunities

Written by: Karmjit Singh Chairman — Chartered Institute of Logistics & Transportation (CILT)



Supply chains were ravaged given the almost total failure in the conventional 4 flows in linear supply chains: Information, Physical Goods & Services, Financial and People flows.

Unlike SARS in 2003, the Covid-19 pandemic has spawned an unprecedented Global health pandemic. No country has been spared - with over 35 million infected people and deaths exceeding 1.0 million. The enforcements of draconian lockdowns, various economies have experienced severe shocks, adversely affecting global trade, global tourism & travel, International Aviation and Airports as well as International Shipping and Ports.

As a result, Global Supply Chains have experienced severe "Supply side Shocks" with massive disruptions impinging on all sectors. SMEs have been hit hard with mounting job losses and financial haemorrhaging.

The ensuing Financial Liquidity

and Credit earthquakes were timely mitigated by swift financial rescue operations mounted by Central Banks, with massive Government Fiscal bailouts. In the initial few months Global demand inevitably crashed affecting virtually every industry save for Essential Services.

Supermarkets, food suppliers, pharmaceutical and medical industries were the main beneficiaries. It even took authorities some time to recognise the vital importance of warehouse logistics, supply chain continuity, truck drivers and other transport operators.

SUPPLY CHAIN DISRUPTION—Respond, Recover and Regrow

With governments in crisis management mode, policy priorities pivoted on Saving Lives and Livelihoods. Concurrently Government bailouts prudently extended to all Businesses, to keep enterprises afloat. Many countries even experienced trade restrictions initially as governments were more inclined for temporary protectionism and domestic self-preservation, particularly marshalling food, medicines and medical devices.

Supply chains were ravaged given the almost total failure in the conventional 4 flows in linear supply chains: Information, Physical Goods & Services, Financial and People flows. The demand and supply shocks were humongous, forcing enterprises to institute crash

Business Continuity Plans (BCPs) and Crisis Management plans (CMPs).

IMPACT HIGHLIGHTED BY THE CRISIS

Crisis Response - At the outset of the crisis, it's easier to visualise a horizontal and linear supply chain with the 4 flows disrupted and adversely affecting the Core Supply Chain Functions, of Planning, Sourcing, Production, Distribution, last mile Deliveries and returns management or reverse logistics.

Even vertically integrated Businesses are not spared and such disruptions also magnified inherent challenges associated with the usual highly "silod" supply chains and operations. Saddled with legacy IT systems and minimal digitalisation of SME businesses including LSPs, inordinate supply chain security and operation problems have been experienced during the COVID-19 disruptions.

Crisis Recovery

As governments and businesses emerge from the lockdown, and transition from the Crisis Response into the Recovery and Stabilisation Phase, deep thought has to be given to think about the strategic impact on the Regrowth phase. Vulnerabilities and weaknesses highlighted in the Core Supply Chain Functions must be quickly fixed. Lessons learned must be implemented. Without delay.

This risk of a major second

pandemic wave is still a possible reality. Businesses need to be far better prepared in their BCP and Crisis Management planning and execution. Supplier and Customer relationships, must be reviewed and improved to ensure integrity, security, reliability and resilience of the supply chain.

SUPPLY CHAIN OPPORTUNITIES AND CHALLENGES

The opportunities are out there for the taking. The smart operators need to embrace the crucial IT tools, methodologies and Collaboration systems like FTAs.

Diversification

Arising from the pandemic is risk diversification i.e. reducing sourcing risks from China. In a highly globalised and integrated world economy, China plays a pre-eminent role as a manufacturing heavyweight – the factory of the world representing 17%-20% of world GDP. But the recent pandemic exposed the massive over dependence on China in all sectors of the supply chain.

Several European, American, Japanese, Korean, Taiwanese & Indian business, in many industry sectors, like automotive, aerospace, electronics, pharma and medical, have experienced supply chain earthquakes. Many are now actively pursuing opportunities to diversify sourcing and reduce the China risk factor. In ASEAN, Vietnam, Thailand, Indonesia, Myanmar and Singapore are reportedly experiencing strong inbound FDI

Conventional 4 flows in linear supply chains: **Information, Physical Goods & Services, Financial and People flows.**

a. Information

Information - Information Flows, as in all disruptions and crisis, are always a critical constraint for any organisation whether government or private enterprises. COVID-19 Health Advisory and Policy communication between WHO and Governments on correct health, life saving protocols took several months to stabilise and trickle down to individuals as well as businesses. Businesses had to quickly adapt to fast evolving social distancing practices recommended by governments for workers whether in warehouses, production factories, distribution centres, supermarkets wet markets or F & B outlets for home deliveries. Rapidly changing demand behaviours, including panic buying of toilet paper and toiletries, created havoc as supermarkets in several countries were confronted with empty shelves, inventory stock-outs and uncertain replenishment cycles to meet unpredictable demand. Reliable and accurate demand forecasting was almost impossible. The classical "Bull Whip" effect impinging on intermediate inventory stocking meant havoc all the way upstream to production and supply sourcing until the new buying behaviours stabilised.

b. Physical Goods & Services

Physical Flows of goods and services in the value chain suffered with adverse deliveries and sub-standard services experienced by most customers. This is the consequence of ambiguous, limited, inaccurate and capricious information.

c. Financial

Financial Flows likewise suffered with a sharp fall in Demand, in most industry. Invariably with sales revenues plunging, various business partners and suppliers were not paid on time. This triggered serious cash flow difficulties, bad debts and even business insolvencies. Businesses had to resort to desperate cost cutting and staff retrenchments.

d. People Flows

With severe lockdowns and stay home orders, in the initial Crisis Response phase, forced companies to restructure work shifts, adjusting work process to meet changing demand. Internal team work, resource planning, collaboration, co-ordination and communication, required quick adaptation of BCP and Crisis management responses to minimise supply chain disruptions and meeting customers' needs.

and capital investments in new production and logistics facilities.

FTAs and Trade Flows

The Trans-Pacific Partnership (TPP) Agreement remains in the limbo. Apart from proactively forging bilateral trade agreements, ASEAN has continued broadening and deepening its Regional Comprehensive Economic Partnership (RCEP) Agreements. Other FTA partners include Australia, New Zealand, Japan, Korea (ROK) and China. Ensuing diversified and dynamic trade shifts will invariably mean shifting regional supply chain opportunities benefiting intra-Asia and intra-Asean economies and businesses. Businesses need to digest and leverage on the various favourable trading terms in these FTAs including the envisaged strong e-commerce growth opportunities.

Supply Chain Technology

Businesses with legacy IT systems and organisational silos, will have experienced major operational, commercial and supply chain disruptions, with unhappy Supplier/ Customer relationships. There is a great opportunity for a strategic re-think in the fundamentals of business models in the light of rapid digitalisation.

Post-COVID planning offers many fresh opportunities for managing IT. Specifically to review and reconfigure the entire end-to-end supply chain from Demand to Delivery processes. Businesses that harness the new and advanced Supply Chain Digital technologies and deploy them

in national, regional and global geographies, will perform far better in orchestrating complex supply chain operations.

This can be achieved despite having multiple-tier Suppliers, Partners and Customers responding to unpredictable, real-time, and dynamic demand shifts. Several proven "Control Tower", Supply Chain Technologies (leveraging on Robotic Process Automation (RPA), Cloud solutions, Internet-of-Things (IOT), Artificial Intelligence, Machine Learning) have since emerged in the market.

These advanced supply chain technologies have enabled great strides to be made in strengthening the Core Supply Chain functions, adding cost optimisation, efficiencies, agility and most importantly resilience to the list.

There are clearly still major technology gaps in many SMEs and LSPs. Outdated work processes and legacy IT systems need to be jettisoned. Major opportunities exist to transform business models as well as transform supply chains Human Capital Challenges - While the opportunities for growth and transforming businesses and supply chains are there for the taking, there lies a Herculean challenge. Change management leadership and up-skilling/ re-skilling efforts cannot be underestimated.

Organisational learning and motivating staff to retrain and improve supply chain competency

levels take an inordinate amount of energy, time and patience. These challenges can be overcome through diligent planning, stakeholder engagement, transparent communications and visionary leadership. Any short cuts to such a change management program are doomed for failure.

CONCLUSION

The COVID health pandemic triggered unprecedented Global Economic, Trade and Financial crisis with massive global supply chain disruptions. This has aggravated geopolitical and trade tensions between leading economic powers, which are likely to get worse before they get better.

The risk of de-globalisation and re-shoring of supply chains, could adversely affect free trade, will have a significant impact. A proactive and analytical approach to solve these issues, like SWOT, VUCA and supply chain model simulations, are crucial to the Post-COVID world.

Adapting to the new realities is not an option. Governments and Businesses need to have clear strategies to overcome uncertainties and prevail in the new realities as these unfold in the future.

Current State of International Transportation Industry

What TRAMES Aims to Tackle

Our vision at TRAMES, is to reduce global trade barriers through digitalizing international freight and transportation. By convening players, who would normally work in isolation, to participate on a collaborative platform, information and documentation can now be relayed dynamically, in real time. Doing so significantly reduces physical paperwork, as well as the number of manual touchpoints in any supply chain resulting. This results in efficient gains in time and cost. The process is achieved through carefully crafted services and tools on TRAMES, to enable seamless connectivity and secure exchange of information across a streamlined and unified workflow.

The current trade and logistics landscape is plagued with manual processes and siloed actors. Just from the sheer number of actors involved, coupled with potentially differing channels of transmission (i.e. emails, text, physical documents) has resulted in delays and potentially inaccurate or misconstrued information. This problem statement is exacerbated when supply chains are long and complex, with further fragmentation through disconnected legacy systems.

Why We Do It Better Than Others

TRAMES is all about International Freight Orchestration (IFO). Key

features include the tracking of concise milestones to bring supply chain transparency, a completely digital document repository to facilitate real time sharing and confirmation of shipping documents, exception management, and many other collaboration tool-kits.

There are four key factors that set us apart from the competition:

1. Eco-system Approach:

Shippers—especially multi-national corporations—work with a plethora of logistics partners all over the world. Transparency of the supply chain becomes even more important as the number of logistics partners within the Shippers' network increases. TRAMES' solution bridges the shipper and all their logistics partners onto a single platform, facilitating collaboration and streamlining communication.

a) Across the various actors in any single transport chain

According to IBM, "1 shipment goes through 20 people, via 200 interactions". These interactions flow across Brokers, Truckers, Carriers, Third Party Logistics Service Providers both at Origin and Destination.

b) Within each service pillar

An average company would appoint anywhere between 3 to 50 Third Party Logistics Service Providers. Monopolistic supply is extremely rare, especially

in the freight industry where service providers have varying strengths in the different markets.

c) Digital Freight Forwarders

Digital Freight Forwarders boast a broad stack of digitized capabilities but are constrained to flows that they manage. Shippers need visibility across their entire supply chain, across all freight forwarders that they work with.

2. Technologically Inclusive:

Logistics partners across the world have varying levels of technological capability and maturity. Across the spectrum, the TRAMES solution can integrate with ERP systems for the more progressive companies but also supports web portal connectivity for those who prefer quick and easy access.

a) Digitized Partners

Global freight forwarders have moved fast on the digitization journey, and now have a much stronger ability to share key data seamlessly with their clients. TRAMES provides a straightforward delivery of data through an API gateway in any corporate network, regardless of technology stack.

b) Traditional Partners

Not all freight forwarders have digitized to the same extent, especially smaller regional players where return on investments have been hard to justify. Where integration of back-end data sys-

tems is not technologically possible for less technical suppliers, basic file/csv upload functionalities for key event milestones are in place.

3. End-to-End Capability:

Digital solutions reap maximum benefit if all stakeholders from Shipper, to Consignee as well as all logistics stakeholders in between are plugged into the platform. With this as a key fundamental principle, the TRAMES solution is carefully designed to include all partners, no matter big or small, to realize complete visibility across end-to-end supply chains.

4. Optimal Customs & Free Trade Leverage:

Customs Compliance is absolutely key in International Trade, but is made challenging due to varying practices across countries, inconsistent classifications and heavy administration. Our digital solutions ease our clients' administrative burden, preventing delays and penalties, and optimizing customs costs as a result.

a) Harmonized System (HS) Code Optimization

The quantum of applicable Import Customs Duty is defined by the HS Code corresponding to product description. TRAMES' Customs AI Module analyses and proposes HS Code classifications to help customers ensure "accuracy" and "optimization". Significant productivity opportunities can be uncovered in this space!

b) Leverage Free Trade Agreements

Many countries have struck bi-

lateral Free Trade Agreements, offering businesses significant opportunity to optimize customs duties in International Trade. Two main factors impede this opportunity: (1) identification, and (2) execution. TRAMES' Customs Module does both digitally, easing the extensive paperwork and administration needed to leverage FTAs.

How We Actually Do This

Putting everyone on the same page is essential – as a digital platform, the TRAMES solution serves as the glue that will bring together and align stakeholders; and through the continued addition of relevant and unique features and functionalities, this is how we will address specific pain points and add value.

1. Dedicated Freight Eco-Systems: Shipper-centric Freight Eco-Systems allow companies (ie. Beneficial Cargo Owners) to conduct International Freight in their very-own environment, powered by TRAMES' technology. This is an ecosystem across existing partners, convened on a digital platform. Digital connectivity across all parties will reduce time and friction from traditionally manual processes, and significantly enhance collaboration.

Trames' EcoSystem presents a number of opportunities for process improvement and productivity gains. Existing customers have validated a 30% reduction in the time spent on freight booking management, shipping document review and shipment coordination – with the following features:

a) Freight Booking & Shipping

Administration

b) Document Repository & Sharing

c) Collaborative Chat

d) Workflow Customization

2. Data Objectivity & Transparency:

The collaborative nature of the Freight Eco-System requires operational shipping events to be managed within the platform. This facilitates the corroboration of data between partners, ensuring a high level of data integrity. The solution uses Satellite AIS (Automatic Identification System) data, to provide real-time visibility of vessel movements across the globe.

a) Real-time Shipping Milestones

With shipping status at your fingertips, expect Customer Satisfaction to improve significantly with the ability to provide reliable delivery date commitments. Pre-emptive operations from automated Pre-Alerts between actors give sufficient lead time for crucial follow-ups before problems arise.

b) Objectively Validate Ancillary Charges

Hidden ancillary charges in the freight industry is common – these range from re-routing fees to container detention and demurrage—and traditionally Shippers have not been able to refute when these are imposed. Transparent event milestones provide Shippers the means to objectively challenge the validity of non-standard activities.

c) Data-Driven Partner

Performance Management

Suppliers render transportation services, and typically commit service levels in the process. However performance measures are reported by each service provider, and there is no objective means for the Shipper to evaluate nor critique. With your Dedicated Freight Eco-System, you can change the way shipping performance is managed today!

3. Analytics:

The ability to harness cargo and freight data can yield significant benefits to any Shipper. Through manipulation and analysis of freight orchestration data sets within the Freight Eco-System, together with Optical Character Recognition (OCR) capabilities, the TRAMES' Analytics Module effectively turns fragmented, unstructured data into actionable insights. Beyond the basic dashboards, some interesting examples would include:

- Air-Sea Ratio Optimizer
- Container (FCL) Fill Rates Simulator
- Groupage (LCL) Optimizer

4. Block Chain Enablement:

Over the past few years, there have been an increasing number of blockchain use cases in the shipping and international trade industry. By ensuring stored data records are tamper-free and come from a verifiable and immutable source, participants will be able to trust that data on the network is the single source of truth. We are of the opinion that Blockchain technology has the potential to render paperwork in freight movement obsolete.

Key use cases for blockchain, in

the context of TRAMES, include:

- Instantaneous and secure access of end-to-end lifecycle of delivery orders
- A single source of truth, with fair, trusted and a tamper-proof information flow
- Permissioned access control and fully transparent history of all transactions

In collaboration with IMDA (InfoComm Media Development Authority) of Singapore, TRAMES will be weaving in TradeTrust¹ where the adoption of such standards will offer a number of anticipated benefits to participants on the Trames platform:

a) Digital equivalence

The adherence to MLETR standards will ensure all electronic documents transmitted through the Trames platform are compliant. Electronic documents (including title transferability) can be taken and used on the platform, just as in their physical form.

b) Authenticity

Assurance that transmission of all information across the

Trames network is secure and unique, reducing the risk of fraud. Any form of tampering will immediately be visible to participants of the network.

c) Provenance and Auditability

Incorporation of blockchain will ensure immutability of events and secure information exchange across unique stakeholders and curated enterprise workflows, providing full transparency of actions across all stakeholders.

Our TradeTrust journey represents our commitment to supporting the eventual transformation of the International Transport industry. We at Trames, believe BlockChain will be a crucial part and contributor towards the inevitable digital transformation the freight industry

¹ TradeTrust is a blockchain initiative by the Singapore Government. It is a 'digital utility that comprises a set of globally-accepted standards and frameworks that connects governments and businesses to a public blockchain to enable trusted interoperability and exchanges of electronic trade documents across digital platforms' — <https://tradetrust.io/#about>

To begin this exciting Digitization journey, please do not hesitate to contact:



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Company Profile

TRAMES is an end-to-end supply chain orchestration technology company, headquartered out of Singapore. Our key mission is to create a streamlined and unified platform for shippers and their logistics partners. With all stakeholders plugged into a digital platform, the ability to collaborate naturally increases; and in doing so, this will help to accelerate processes that are traditionally long and prone to error. Key features on TRAMES include a blockchain enabled document repository to facilitate collaborative drafting and confirmation of shipping documentation, the ability to track granular shipping milestones enriched by carrier and independent data sources as well as advanced analytics coupled with elements of artificial intelligence and machine learning to optimize decision making.



**Logistics Experts
from SSI Schaefer**

**Implement
Automated
Deep-Freeze
Warehouse
in Manila,
Philippines**

SUSTAINABLE DEEP-FREEZE LOGISTICS SECURE FOOD SUPPLY

The topic of sustainability and sustainable action is becoming increasingly important worldwide, as resources are finite and need to be used sensibly. To this end, measures must be taken, and solutions developed, in order to achieve global climate goals. The initiative "50 Sustainability and Climate Leaders" aims to leverage innovation and sustainable business models, and gives a platform for making the contribution to achieving the United Nations 17 Sustainable Development Goals (UNSDG) global visibility. 50 world-leading companies from various industries are gathering to showcase how they are developing activities and evolve business models towards a more sustainable future.

One of the "50 Sustainability and Climate Leaders" is SSI Schaefer. "As one of the leading global providers of material handling solutions, we are an ideal partner for companies that pursue economically viable and future oriented sustainable goals," says Steffen Bersch, CEO SSI Schaefer Group. This logistics expert brings extensive experience from many industries and a broad portfolio of innovative products and solutions.

ENERGY-EFFICIENT SOLUTIONS GUARANTEE FRESH FOOD

SSI Schaefer has delivered an outstanding project in terms of sustainability in partnership with ORCA Cold Chain Solutions in



Food products loaded onto the pallets for shrink-wrapping and tagging.

the Philippines. This archipelago with 7,641 islands, in the western Pacific Ocean is already struggling with the consequences of global warming. Worldwide rise in temperature, along with rising sea levels and water temperatures in the region, leads to greater weather extremes, including dangerous tropical storms, which in turn could trigger storm surges. In addition, the South East Asian nation lies on the Pacific ring of fire, the geologically most active zone on earth. Around 90% of all earthquakes worldwide occur along this line.

Of the over 100 million inhabitants of the Philippines, 1.8 million live in the capital Manila and a further 11 million in the urban area of Metro Manila. Supplying this urban population with fresh food is difficult due to the tropical temperatures and the overloaded transport infrastructure with frequent traffic gridlocks. In addition, ORCA faces the other challenges of the food industry. Up to 37% of the food produced worldwide spoils due to poor packaging, storage and handling. ORCA Cold Chain Solutions (ORCA) was founded in 2017 as a subsidiary



Tagging of pallets using QR codes for real-time monitoring.



ORCA uses the proprietary logistics software, WAMAS® to combine all intralogistics components into one smart system.

efficiency and process safety, the facility is strategically located in the heart of Manila and is close to ports and industrial areas so that it could quickly supply the country's various regions. The scope of services provided by SSI Schaefer includes the fully automated high-bay warehouse in silo design with four SSI Exyz storage-retrieval machines and a storage capacity for 20,000 pallets, a conveying system, Advanced Pick Stations (ergonomic goods-to-person picking stations) and the logistics software WAMAS®.

The imposing 45-meter-high deep-freeze automatic warehouse is technically and architecturally designed to meet the special seismic and climatic challenges of the region. To this end, the rack-clad structure is designed to withstand the strong horizontal movements and vertical forces that could be caused by earthquakes or typhoons. The optimised design of the building without additional columns and structures makes very efficient use of the limited

of ISOC Holdings. With the challenges above, ORCA set itself the task of establishing services and infrastructure for temperature-controlled food logistics. The company's sustainable business objective encompasses the difficult task of maintaining the quality and safety of food in this tropical climate zone, thus helping to prevent food spoilage. Within a very short time, the company has become the leading provider of temperature-controlled logistics, warehousing and complementary services for the food and agricultural industry. Customers include large fast food chains in the Philippines, exporters and importers, as well as small food retailers.

At the heart of this successful corporate development is the establishment and expansion of an efficient and sustainable deep-freeze infrastructure. ORCA currently has three storage locations in the Manila metro region: Alabang, Taguig and Caloocan, which is currently under construction. ORCA chose

SSI Schaefer as a partner because of their extensive experience in technology, engineering and customer service. In Taguig, ORCA together with SSI Schaefer built the first fully automated deep-freeze warehouse with temperatures from -18°C to -25°C on a floor space of one hectare and opened the facility in February 2020.

Designed with a focus on energy



Monitors the inbound and outbound goods using logistics software WAMAS®.



The four SSI Exyz storage-retrieval machines operate simultaneously and are unaffected by the sub-zero temperatures.



Pallets are transferred from a -18°C environment to the automated high-bay warehouse via conveyors.

space in Manila. "SSI Schaefer made sure that our carbon footprint is smaller than a typical conventional facility would take. A 20,000-pallet facility would normally take three to four hectares of land. But with the technology and innovation that SSI Schaefer provided we were able to do this type of facility on one hectare of land," explains Yerik Cosiquien, President & CEO

of ORCA Cold Chain Solutions.

The ORCA Taguig plant was awarded "Pioneer Status" by the Philippine Board of Investments, a department of the Philippine Department of Trade and Industry, as the first fully automated freezer plant in the Philippines. Thanks to the automated solution, ORCA can move up to 4,800 pallets per day in two-shift operation. A team of technicians from SSI Schaefer

ensures maximum availability of the system.

SUSTAINABLE, ECONOMICAL AND FUTURE-PROOF: GOALS ACHIEVED WITH INNOVATIVE TECHNOLOGIES

In the goods receiving area, the food is unloaded from the trucks using forklifts, palletized, shrink wrapped and labelled with QR codes and barcodes for traceability and real-time monitoring. Via a 282-meter-long conveying system, the pallets are automatically transported to the respective assigned zone in the high-bay warehouse, where a constant temperature of -25°C is maintained. In order to guarantee the freshness, products are handled with the FEFO principle (First Expired, First Out). With the logistics software WAMAS®, ORCA has a close eye on stock and ensures that all goods within the warehouse are booked and tracked in real time.



Operating in a seismic zone, the ORCA 45-meter-high facility was built with a rack-clad designed structure.



The 282-meter long conveying system connecting to key individual areas of the warehouse.

This also reduces the risk of theft, which is an issue in the region.

Thanks to SSI Schaefer's energy-efficient technology and innovative solutions, ORCA could offer its customers end-to-end cold chain solutions with first-class customer service, higher efficiency standards and transparent inventory tracking. Electricity costs have been reduced by almost 35% and human involvement has been kept to a minimum. This ensures the integrity of all goods.

ORCA's vision from the beginning



Yerik Cosiquien, President & CEO of ORCA Cold Chain Solutions.

was to be a pioneer. "From the very beginning, the vision for ORCA was to be a world-class gamechanger. That is why we chose to work with SSI Schaefer in order to bring to the Philippines for the first time, this type of innovation and automation.", explains Yerik Cosiquien and emphasizes: "With SSI Schaefer, we are assured that our 14-storey high facility can withstand earthquakes and typhoons. Electricity in the Philippines is also very expensive and with the unique technology of SSI Schaefer, we are able to save electricity and maintain our sustainability values."

Thanks to SSI Schaefer's energy-efficient technology and innovative solutions, ORCA could offer its customers end-to-end cold chain solutions with first-class customer service, higher efficiency standards and transparent inventory tracking

SSI SCHAEFER

The SSI Schaefer Group is the world's leading provider of modular warehousing and logistics solutions. Employing 10,500 people across six continents, SSI Schaefer develops and implements innovative industry-specific answers to its customers' unique challenges, by designing, developing and manufacturing systems for warehouses, industrial plants, workshops and offices. SSI Schaefer is also a leading provider of modular, regularly updated software for in-house material flows. Designed by a strong team of 1,100 engineers, SSI Schaefer's broad IT offering, including its own WAMAS® and SAP products, delivers seamless support for all warehouse and material flow processes.

For more information, please visit <https://www.ssi-schaefer.com/en-sg>

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An aerial photograph of a port terminal. The image shows a large stack of multi-colored shipping containers (red, blue, white, green, yellow) arranged in neat rows. Two large blue gantry cranes are positioned on either side of the container stacks, ready for loading or unloading. The ground is paved and marked with yellow lines. The overall scene is industrial and organized.

Leveraging Digital Technologies To Reinvent And Accelerate Supply Chain Automation

by Sandipan Mukherjee

BEYOND THE TRADITIONAL BUSINESS MODELS

With the proliferation of technology, digital transformation has taken many industries by storm and the logistics sector is not immune to these changes. The world of logistics and distribution is volatile, uncertain, and more competitive than ever before. With the digitization trend in the industry, a major shift is imminent. Automation and digitization of core business processes have become the norm in the industry, not only for the sake of business development but also for the long-term sustainability of business operations. Due to the dynamic conditions of this sector, enterprises are under increasing pressure to provide flexibility and quality in their product offerings. Thus, to optimize operating costs and provide a smooth customer experience, companies are forced to reexamine and reshape their traditional business models.

In order to improve the overall experience for end consumers and thrive in this innovation-driven environment, businesses must have a more proactive approach and should aim to embed digital strategy in their core business plans. There is more to digital transformation than creating an online packaging around the existing product offerings. It begins at the most fundamental level and requires companies to rethink their strategies, from product innovation and marketing to customer acquisition and retention.

PREVAILING CHALLENGES IN THE INDUSTRY

The fundamental challenge that companies face today is that the

Organizations must have a more proactive approach and should aim to embed digital strategy in core business plans



majority of their resources are focused on aggressive marketing and sales efforts. They aim to provide a market push to their products, and little attention is paid to the “how, when, where, and who” of the entire logistics and supply chain. Many enterprises fail to realize that simply creating a product or a service and handing it over to sales with revenue KPIs is not enough, the hyper-competitive and digitized market necessitates end-to-end solutions. Moreover, in this digital age, companies have multiple products floating around in the market, at different life cycles; and it is imperative for them to keep a track of all products at all times. However, the traditional linear approach makes it challenging for the companies to monitor their on-ground sales and the activities of agents in the distribution network.

A distinct lack of visibility on the product movement in the market can essentially skew the perception of demand and supply which can lead to higher costs and loss of revenue. The need for more visibility and control radiates out to the logistics sector, as organizations need to closely monitor the activities related to their inventory, sales, and transactions. Therefore, the focus of many

companies has shifted from execution and ‘closing the loop’ to the more effective management of the end-to-end supply chain, which requires collaboration and orchestration.

To gain a competitive advantage in the real-time economy, speed and timing are the two most important success factors for companies. Although supply chain automation solutions have persisted in the market for decades, the dynamic and volatile demand has certainly left a void. Hence, businesses are now striving to be more customer-centric and adaptive to the hyper-connected environment. The aim is to offer the same level of optimization for the distribution network with improved speed and responsiveness. Thus, the supply chain automation solutions in the fast-paced market today need to have an agile approach which can significantly reduce time to market. The underlying principles for this solution have to be based on data-driven models that would ultimately allow companies to extract actionable insights.

MOVING TOWARDS DIGITIZATION AND DATA-DRIVEN STRATEGIES

Digitization and innovative tech-

Leverage digital tools to drive growth and optimize revenue



nology have become indispensable tools for improving the efficacy, quality, and capacity of supply chain management. So, it is pertinent that companies harness the power of smart technology to create a comprehensive solution or a

platform which allows them to boost revenue and achieve targeted growth. Innovation in technology and digital transformation are avenues that can effectively 'lead the horse to the water', but primarily it is up to companies to leverage these digital tools to drive growth and optimize revenue.

Supply chain automation can help mitigate risks and optimize costs for businesses, however, it requires cross-functional collaboration and data-driven digital strategies. Management of the digital value distribution decreases technical capabilities entailing business intelligence, strong alignment between business and supply chain strategy, and application of advanced analytics

INNOVATION SOLUTION FOR LOGISTICS AND DISTRIBUTION SECTOR

In light of the increasing demands of the end customers and the transaction volume, it is of

utmost importance for companies operating in the logistics and distribution sector to have fast, reliable, and flexible business operations. They have to be able to create new and innovative delivery solutions to ensure the sales readiness of their retail network. However, the process of digital transformation in logistics and supply chain is more than just installing a new system or software, it is a collaborative endeavor that requires strategic repositioning on part of the company. Conventionally, the implementation of digital technology in logistics sectors unfolds in three main areas; warehouse management, manufacturing processes, and distribution chain management.

The end-to-end process of product delivery and distribution has multiple levels and steps involved. This makes it essential for firms to rely on a digital solution that can simplify delivery flows and make it easy for them to manage complex hierarchies. Ideally, it should facilitate the companies in untangling the cluster of logistics with a high level of flexibility so that it can be deployed at any stage of development. Given that capturing data for the distribution network and processing it with speed and accuracy is crucial, it is also necessary for the digital solution

Implementation of digital technology in logistics sectors



to incorporate advanced reporting capabilities and data analytics.

A ONE-STOP SOLUTION FOR LOGISTICAL PLAYERS

The ideal platform for supply chain automation should serve as a one one-stop solution for the logistics industry. This solution must be capable of handling the complete process of inventory planning, ordering, and real-time performance management through a user-friendly interface. The functionality to provide complete visibility of business demand and supply should enable the users to control and optimize their sales and distribution.

It is important to note that depending on the requirements, companies should have the flexibility to plug in unique modules from the solution into the supply chain ecosystem, instead of the whole platform. The implementation process of digital strategy does not have to be an 'all or nothing' approach. Companies should be able to pace the deployment of this solution to reap the full benefits and optimize revenues as well. The modularity of intelligent logistics tools must facilitate this gradual digital transformation process. Additionally, the solution should have the capability to replace a part of the system to

provide an optimized view of the inventory or to be plugged into an existing delivery network and work in synergy with other systems. It should also support different kinds of delivery models, ranging from 'push' models with top-down distribution to 'pull' models where the endpoint, such as the store, proactively decides delivery stock.

The supply chain automation platform must be a dynamic, enterprise-level solution that has cross-industry applicability, delivering a range of products, from physical to digital and intangible. The platform's capabilities should allow companies to achieve better competitive positioning, irrespective of the industry. The supply chain automation solution is predominant in the retail, logistics, and telecom industry, however, it should easily be able to translate into other industries as well. End-to-end sales and distribution of any product across various industries like pharmaceutical, manufacturing, FMCG, etc. is also an essential requirement. From the tracking of inventory and sales of products to the complete visibility of transfers, this solution should provide full control to companies with distributed supply chain networks.

Since companies are working with a network of partners and logisti-

cal players, full visibility, control, and a holistic understanding of the market are required. Thereby, the solution should not only offer omnichannel support and intelligent reporting but must also be armed with geo-tracking and geo-mapping capabilities. It needs to provide complete visibility of the distribution flow, market demand and supply insights, and post-sales insights. Moreover, this comprehensive solution should enable automated management of delivery trips for agents. The real-time stock visibility along with low stock alerts enables end-to-end inventory lifecycle management. Taking into account that this provides a glass-effect view of the entire supply chain, it puts the companies in a position to have full circle visibility of every serial of a given product from procurement to sales and distribution.

The immersion of artificial intelligence and data analytics through this solution helps companies advance their digital agendas and meet growth objectives. A supply chain automation platform should capacitate the companies to shift from a traditional transactional-based system that captures a lot of unstructured data to a data-driven, intelligent system. It must help them automate the processes, transform large amounts of captured data into a business strategy by putting context around it, and make recommendations accordingly. This, in turn, allows companies to learn from their data, and understand the consumption patterns of the end consumers. Additionally, demand forecasting should be a key element in the digitized supply chain platform to facilitate the companies in the optimization of inventory management. With this platform, companies



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Books
High lighters
- **FMCG**
Lotions
Toothpastes
Detergents

PROVIDE ANY SERVICE

- **HEALTHCARE**
Hospital facilities
and labs
- **TELECOM**
Mobile money, Etopup,
airtime recharge
- **MOBILITY**
Logistics, maritime,
and shipments
- **SOCIO CULTURAL CONTRIBUTIONS**
Schools, research,
and donations

THROUGH ANY CHANNEL

- **DIRECT**
Smart phones Web

- **INDIRECT**
USSD Kiosk/Tablet


would have access to user-friendly dashboards that provide real-time and updated analysis and optimization of the entire distribution network. Artificial intelligence and machine learning are the key elements, through which the platform not only optimizes trip management but also offers inventory predictions with the help of low stock alerts and demand forecasting. Business intelligence and powerful analytics allow companies to transform their

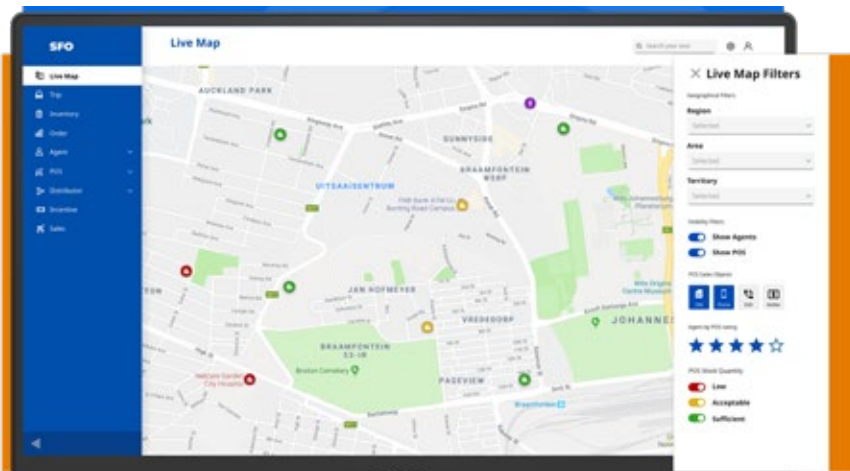
transaction data into valuable information. Companies can slice and dice the data, learn from the behaviors of their end customers, and make better decisions much faster than before.

Business intelligence makes this solution capable of automatically tracking the performance of ongoing activities so that managers can predict possible declines and take corrective measures in time. With this useful information at their disposal, companies would not only be able to make informed decisions but also enhance their sales by incentivizing resellers or agents in their distribution chain. The supply chain automation platform should be armed with a flexible incentive model for agents and resellers, which is adaptable to the market needs. Based on the consumer behavior patterns, market demands, and insights obtained from sales trends and

logistical processes, this solution must provide quantitative sales targets to agents. This leads to a more granular approach towards incentives as sales agents are motivated to achieve realistic minimum targets along with the challenging stretch targets.

In line with this, advanced supply chain solutions should also be equipped with the gamification element which would make it a user-friendly and easy to follow platform for incentivization and promotion. The embodiment of the typical gaming elements like point-scoring and leaderboards, in the supply chain automation platform significantly improves the learning curve and performance of complex tasks for the agents. Essentially, it is an interactive way of enhancing the performance of sales agents as they can gain points by the completion of certain tasks, and then redeem





the same data-driven approach towards cash collection would mean that organizations can minimize and optimize agent trips to ensure cash collection is done based on certain thresholds.

With this tool at their disposal, companies would have a vantage point considering that such a solution can provide a one-stop operational window, from product delivery to cash payment and reconciliation. It would not only enable efficient management of capital, and transparency but would also provide ease and flexibility to the POS and agents.

STRATEGIC REPOSITIONING AND DIGITIZATION OF DISTRIBUTION NETWORK

A complete supply chain automation and optimization solution is indispensable for companies today as it allows them to manage the workflow of each product. With a successfully digitized sales and distribution network, companies across the logistics industry would have the ability to optimize demand and supply, manage and track inventory till the last mile, and monitor all entities which are involved in field distribution and order fulfillment. Through the automation of the re-order cycle, adequate inventory availability and optimization for the warehouse is ensured as inventory is acquired and stocked based on demand. This also ensures that the cash is not tied up in excess inventory. The next-gen solution in supply chain management is much faster and easier to use, with increasingly reduced turnaround times with reliance on a data-driven and actionable insights model to cater to volatile market demand.

those points for rewards. A next generational approach to loyalty programs, commissions, and incentivization, gamification is an engaging and interactive way that allows companies to foster long-term relationships with retailers and agents in their distribution network.

While supply chain management solutions manage the end-to-end product flow from inventory to last-mile delivery, they also need

to be capable of realization of the actual “sale” amount associated with the movements. This means that organizations are more agile, with faster account reconciliations as the product moves from one stage within the supply chain to the next. As a next step, this solution can also include a data-driven approach to cash collections, especially for those economies where transactions are either mostly cash-based or their monetary value is low. Using



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Sandipan Mukherjee has 20+ years of progressive leadership experience in implementing, managing and leading diverse software and systems engineering teams all over the world. His strong forte is providing key leadership and strength for the delivery of business-critical functions within the organization and externally towards partners and customers.

Seamless Distribution Systems (SDS) is a Swedish multinational with 30+ years of experience in providing digitization solutions for sales and distribution processes. A global leader in technology, SDS delivers end-to-end platforms for digital value distribution and supply chain management to 500+ million users indirectly. They facilitate some of the world's largest sales networks, enabling customers to drive revenue growth and optimize operations. Sales Force Optimization (SFO) is part of the product offering of SDS, which is a complete multi-product supply chain management solution. It is a comprehensive solution to track the flow of stock, optimize the order fulfillment process through the products’ lifecycle, and manage all entities for a business.



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