Supply Chain Transformation – Is it optional for Hong Kong SMES?

Introduction

Current Role

- President of Institute for Supply Management Hong Kong (ISM-HK)
- EY Greater China Supply Chain & Operations Consulting Partner
- EY Global Client Service Partner for a leading Power & Utility client
- Visiting Lecturer, The Hong Kong Polytechnic University
- Advisor, Global Supply Chain Master Program, The Hang Seng University of Hong Kong
- Founding Board Member, Lions Club of Clear Water Bay Hong Kong
- Previously EY Greater China Procurement Consulting Leader
- Previously EY Greater China Agile Business Finance Leader



Nelson Chow

President, Institute for Supply Management - Hong Kong (ISM-HK)



Education

- Doctoral Candidate, Business School Lausanne
- Executive MBA, The Chinese University of Hong Kong
- Executive program, Stanford University, US
- Executive program, University of Cambridge, UK
- Bachelor Degree, Business Management, The Hong Kong University of Science & Technology

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Disruptions Urging for Supply Chain Transformation

Opportunities and Challenges of Supply Chain Transformation for SMEs

Zoom in: HK SME E-Commerce

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Disruptions of Today

An increasing number of unexpected disruptions are hitting supply chains and impacting overall business performance



Three key disruptions that are greatly impacting supply chain



Disruption 1. Unstable Geopolitical Situation

Disruptions

Geopolitical Conflict

- Russia's decisions to interrupt the natural gas supply to the EU, including the suspension of fuel supply and damages to Nord Stream pipelines
- International sanctions on Russia in terms of trade, finance, etc.
- Some routes have been cut off, causing **chaos in the global transportation network**

Sino-US Trade Friction

 Since the trade war in 2018, measures such as raising tariffs, placing restrictions on imports, technology blockades have increased the export burdens of companies and caused inflations, posing severe challenges to some industries



Impact on Supply Chain



The **supply shortage** of certain **raw materials** (RM). The rising cost of raw materials has also led to increases in production costs.

- Palladium, Rhodium RM of Electronic Vehicle (EV)
- Neon gas RM of semiconductor
- Agricultural products such as wheat, corn



Global logistics systems are disrupted. Port congestion, poor container turnover, and strikes have led to a **surge in transportation costs** and **frequent delays** in orders

Major Affected Industries





Pharma-

ceutical





Machinery Finance

Disruption 2. Advanced Technology

Disruptions

- Emerging technologies are stimulating businesses kickstart the journey of digital transformation, facilitating the formulation of new business model and value chain
- Companies are faced with increasing pressure to embrace more advanced technologies to **stay competitive**
- Aging infrastructure and legacy systems prone to outages and posing integration challenges with newer systems and applications



Impact on Supply Chain



With the development of digital twins, users can get near-real time data in an integrated view which facilitates data-driven decision-making to enhance agility and responsiveness in supply chain



Advanced technologies (e.g. Al, smart factory) could help relieve **labour-intensive** activities, increase **process efficiencies**, and enhance **data accuracy**



Data throughout the end to end supply chain could be captured for analysis and forecasting, empowering strategic decision-making to exploit opportunities and mitigate risks

Major Affected Industries

- All Industries -

Disruption 3. Climate Change

Disruptions

Gearing Towards Carbon Neutrality

- COP27 stressed the focus on accountability when it comes to the commitments made by sectors, business, and institutions
- Energy transition shifting from fossil fuels to renewable energy sources



Sustainability Asks From Various Parties



☆☆☆ End consumers want Sustainable products and customers are setting ambitious goals.

investors want reassurance المعرفة on sustainability and brand **Investors** want reassurance protection



Brands want to rebuild trust. To do this they need data and transparency along the supply chain

Regulators are imposing a duty of care on companies to disclose their actions while **Governments** are setting local targets



Companies are investing in sustainability initiatives, creating a sought-after culture that **employees** are proud to work for

Impact on Supply Chain



Calls for the **reinvention of green supply chain** leveraging advanced solutions that integrates the entire value chain throughout order-to-cash, and procure-to-pay processes.



Besides utilising materials/energy that are recyclable/ renewable in manufacturing, the corresponsive operations shall also adhere to the principle of sustainability

Major Affected Industries



Overall Impacts On Supply Chain

These disruptions are exposing the fragility of supply chains and emphasizing the need to reinvent supply chain



Demand Disruption

Sudden unplanned changes in demand – uncertainty of when to pivot – with limited ability to respond causing increases in supply, manufacturing and logistics cost



Inventory Imbalances

Deployment of inventory misaligned to demand resulting in excess storage and handling cost to rebalance and expedite



Supply Disruption

Upstream supplier constraints resulting in long lead times and supply disruption - requiring costly measures to maintain service (e.g. expedited freight, higher cost alternatives, etc.)



Manufacturing Capacity

Pandemics, unplanned demands, labour strikes, and obsolete production facilities are posing challenges and uncertainties on companies' manufacturing capacity



Financial Uncertainty

Market volatility and disruptive events are impacting business performance due to material and services cost increases and labour shortages



War for Talent

Recruiting, training, and retaining the best people in an environment with increasing labour expectations and cost

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Key Drivers Of Supply Chain Transformation

Below drivers are inevitable and elevating the focus on supply chain transformation

Higher expectations for enhanced client experience

Client demand for

- Uninterrupted, 24/7 access to products and services
- Increased confidence in security and confidentiality of their data

Augmented impact due to disruptive events as business globally connected

- Cross-region impact on supply chain from supplier to distribution
- Speed to adjust or adapt in crisis scenarios difficult to manage on a global scale



Increased operational complexity

- Highly complex and inter-connected operations susceptible to increased operational outages and breaks
- Heavy reliance on third-party service providers located globally

Remain competitiveness in the challenging business world for SMEs

• To remain competitive, SMEs are faced with more pressure in terms of offering superior quality goods at the lowest prices possible. The need to minimize product costs and makes effective supply chain management is vital.

Greater tax and global trade complexity, international connectivity & penalties

- Fiscal, trade and regulatory landscape is every more complicated with enhanced exchange of information, international co-operation and alignment.
- Cost of failure is high (punitive fine, taxes, custodial sentences and PR impact)

Challenges for SME in Transformation Journey

Common challenges for SMEs to be considered when planning for your supply chain transformation journey



Limited financial supports and funding

Supply chain transformation is a complex project that needs sufficient investment in human resources, technology as well as ongoing maintenance efforts. Limited financial supports might hinder SME's transformation journey.



Relatively low data accessibility and quality

SMEs have relatively less accessible data and the accessible data quality might be low. Extra supports from leading technology platforms in implementation stage is needed.



Talent shortage

Supply chain transformation requires a full range of professional talents to support the implementation. However, shortage of talents has become the main bottleneck of transformation for SMEs.



Lack of technology and innovation mindset

As employees are heavily involved in daily operations, they might have insufficient knowledge regarding new technology and innovation, which might have impact on the transformation initiation stage and change management stage.



Limited management support

SME leaders might have stronger focus on growing the business with more "economic" approach and some might be hesitant to invest in transformation.

Trends in Supply Chain Transformation

The following themes are popular in supply chain transformation: Resilience, Sustainability, Cost Takeout, and Digital Transformation



Trend 1. Supply Chain Resilience

Leading companies are addressing the vulnerability with targeted action to improve visibility and control, improve knowledge of risk and step change flexibility, agility and responsiveness across the end to end ecosystem

What Does It Mean?

Resiliency = Visibility + Agility

ability to sense/ predict disruptions

generate dynamic resolutions using scenario planning

supply-demand

tracking and inventory

management

simulate the impacts on inbound raw materials as well as outbound shipments and the supplier network

What Other Companies are Doing?

Embed end to end visibility, simulation & risk monitoring

• Design omni-capable agile networks



Secure alternative sources of supply



Develop a resilient operating model & workforce



Create a trusted & secure supply chain

Trend 2. Supply Chain Sustainability

Enterprise led commitments and emerging technologies have enabled businesses of all sizes to reduce waste, increase efficiency, cater to global customers and gain value chain visibility

What Does It Mean?

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- It includes efforts to manage environmental, social and governance practices throughout the lifecycles of goods and services
- It not only considers how much each product costs financially, but also the toll on workers and the environment, in materials, energy and natural resources



What Other Companies are Doing?



Ensure sustainable and diverse sourcing



Enable traceability, visibility & disclosure



Decarbonize the value chain



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Introduce circularity into your business model



Focusing on supply chains is key to overall environmental, social and governance (ESG) efforts because more than 90% of an organization's greenhouse gas emissions, and 50% to 70% of operating costs, are attributable to supply chains¹.

Trend 3. Cost Takeout

With the purpose of maximising profit in today's competitive business world, companies are reinventing their supply chain in a cost-effective manner while positioning itself for growth

50-75% of corporate costs are directly influenced by supply chain decisions



Selling, General and Administrative Expenses (SG&A)

address cash and solvency issues through better IT / Real estate / Construction / Professional services and Marketing expenses management to improve cash positions

COGS

optimize through Raw Materials, Packaging, Conversion or Logistics costs to increase margin

Тах

optimize through different operating model and trade flow decisions to improve CAPEX



Trend 4. Advanced Technology as the Key

Digital transformation is put on agenda in many companies to build a digitally networked supply chain

Linear Supply Chain



End to End Visibility

- E2E Ecosystem visibility & synchronous collaboration
- Clear reporting and analytics •
- Balance cost optimization, risk mitigation, and growth



End to End Control Tower

- Integrated end-to-end visibility with cross-functional real-time dashboards
- Synchronized parameter setting and optimization
- Early warning system
- Respond to global shocks & shifting customer demands



Intelligence



ڻ ا Cloud Robotics



Internet Advanced of Things Analytics

0@1



Highly

based on Al



Machine of Things Learning



Networked Ecosystem

End to End

Digital Twin

Prescriptive recommendations

Scenario capabilities spanning

Integrated optimization tools

to optimize key supply chain

the entire supply chain

parameters in real-time

Digitally Enabled & Autonomous

- Self healing master data and planning parameters
- Digital twin orchestration of supply chain with continuous planning
- Cognitive Intelligence provides recommended decisions and ability to execute actions





Learning

Neural Networks

Integrated Systems

Key Takeaways for SMEs

It is time for SMEs to leverage your own advantages to start mobilise your supply chain transformation



Plan your transformation journey in a collaborative manner

- Engage supply chain key stakeholders for a comprehensive review of the supply chain processes to identify pain points and opportunities
- **Prioritise** the initiatives and develop a **roadmap** for a planned transformation journey
- Align visions and missions and mobilise the decision makers of related teams
- Start with quick and approachable wins, and perform retrospective after each implementation and validate the business case



Revisit supply and demand portfolio to enhance resilience

- Compared to large-scale companies, SMEs often react to changes quicker and has more authority and choices when it comes to suppliers and business partners
- In the post-pandemic era, consider establish multiple sources of supply – both in-house production and from third parties – so as to dynamically reconfigure networks to respond to actual supply constraints



Start building a technology-driven, seethrough supply chain

- According to the resource capability, select the appropriate digital solution to enable end-to-end visibility across the supply chain
- Leverage digital tools (e.g. cloud computing, integrated solution) to transform the disparate data into insights with a digital dashboard integrating metrics for users to **understand**, **prioritise**, **and address critical issues in near-real time**.
- Smart use of technology (e.g. advanced analytics, robotics, route optimization software) to drive **maximum working efficiencies**



Take plans into actions to enhance sustainability

- Screen suppliers and logistics providers about sustainable products and services in order to verify and strengthen green supply chains
- **Convince internal stakeholders** to push sustainability further up the agenda. Buy-in from employees helps demonstrate to stakeholders that change will be driven from the inside out, and is aligned with employee satisfaction and company loyalty.

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SME E-commerce in HK

Hong Kong's e-commerce sales will grow at a compound annual growth rate of 8.3 percent, from HK\$178 billion in 2021, to **HK\$226 billion** by 2024.^[1]

40% of Hong Kong SMEs polled said investing in technology had led to bigger profits in 2021.^[2]

53% of Hong Kong SMEs said more than **10%** of their revenue came from online sales — the highest percentage recorded for Hong Kong since 2017.^[2]

Cross-border e-commerce is becoming increasingly accessible and convenient due to mobile banking, international e-commerce platforms, and app-based e-commerce sites. Therefore, Hong Kong SMEs have to step up their investments in digitalization to compete with international merchants with large e-commerce platforms.

Solutions Supporting SME E-commerce

CALAMOVE has formed alliances with platforms such as Shopify and Boutir to create **one-stop e-commerce services**, offering small businesses peer-to-peer selling capabilities online and on mobile.

Lalamove aims to invest in HK SMEs to provide them with customized logistics solutions and expand the ecosystem with more business partners. About 85% of Lalamove's business orders come from HK SMEs.^[3]

pickupp plans to invest in R&D of the machine learning algorithm logistics technology and **decentralized network** with different optimization levels to provide **cost-effective and customized solutions** to HK SMEs.

Compared with big companies, SMEs do not have adequate information and economies of scale that enable them to obtain the best value deal in logistics service procurement. Logistics partners should offer decentralization technology that allows them to bolster transport capacity to cope with peak seasonal orders and obtain smart logistics services, such as batching and clustering. ^[3]

Sources: [1] GlobalData [2] Survey by CPA Australia [3] ChinaDaily HK

Zoom in: Digital Transformation In a Local F&B

Background

The company vasion for a solution to digitise its supply chain activities and standardise the supply chain processes. With the help of a consulting firm, it adopted a stepped approach to select the appropriate ERP solution and completed an end-to-end supply chain transformation with Microsoft D365 in 2.5 years.



THANK YOU !

