The Impact of COVID-19 on NZ Supply Chains and Actions to Take

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Agenda

• **Part 1**
  • Impacts and Disruptions..to date
  • How to get ready?
  • Supply Chain Response Framework

• **Part 2**
  • Foundational Capability for COVID-19 Response
  • My recent experiences with mitigations
COVID-19: NZ Supply Chain Impacts to date..

- Changing customer demand → Inventory and Working Capital
- Supply Shortages → Low Inventory
- Reduction in freight capacity → Increase in transport cost and lead times
- Labour shortages → Capacity Constraints
Nestlé CEO Mark Schneider warns that the business must ‘get ready for the storm’ as supply chain challenges are expected to intensify amid the global coronavirus pandemic.

...."get ready for the storm"
How to “get ready for the storm”? 
Ask 3 key questions and seek answers..

**Depth of Disruption**
How deep are demand reductions and supply constraints?

**Length of Disruption**
How long could the disruption last?

**Shape of Recovery**
What would be the nature of bounce back?

**GENERIC LEAD INDICATORS**

- Social Behaviour, Spending, Travel
- Credit Defaults; Stock Markets; Unemployment
- Industrial and Trade Activity
COVID-19 Post Lockdown: Supply Chain Response Framework

Immediate to Near Term
Short to Medium Term
COVID-19 Post Lockdown: Supply Chain Response Framework

Immediate to Near Term
- Restore
  - Response Capacity and Speed

Short to Medium Term
- Revitalise
  - Uncover scenarios and strategy
- Plan Ahead
Likely NZ Scenario Post Lockdown: MY VIEW

**Virus Response**
- Contained by end Q2 (June 2020)
- No Widespread resurgence

**Economic Policy**
- Partially offsets damage
- Steady bounce back in demand

**Global Outlook**
- China slowdown sharp but short; Flat 2020
- EU, UK, US – Muted recovery by Q4’20

Proven and Industrialised Vaccine not available for at least 12 months
Supply Chain Response Framework

COVID-19 Post Lockdown:

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Present Focus

Plan Ahead
NZ Economy and Supply Chain

Snapshot
Total Exports: $86 Billion

Exports by country 2019

- China: $26.2 Billion (46%)
- Australia: $3 Billion
- United States of America: $2.5 Billion
- Japan: $1.8 Billion
- Korea: $1.6 Billion

Exports by product (2019)

- Dairy: $26.2 Billion (46%)
- Meat: $3 Billion
- Wood: $2.5 Billion
- Transport: $1.8 Billion
- Travel: $1.6 Billion

Exports account for ~30% of GDP

Food & Bev. is ~30% of total exports

NZ Economy and Sectors

- Manufacturing – 12%
- Transport – 10%
- Primary – 8%
- Construction – 7%
- Wholesale Trade – 6%
- Retail Trade - 6%

Supply Chain drives 50% of NZ economy
COVID-19 Post Lockdown:

Supply Chain Response Framework

RESTORE

- Virus stamped-out
- Remediate
- Recover
- Rebound
- Policy enabled mitigation

12 to 18 months

Immediate
8 to 12 weeks

Near Term
Q3 2020/Q1 2021

Short Term
Q2 2021/Q4 2021

Back to pre-COVID fundamentals

COVID Vaccine available

Policy enabled mitigation
Top 4 Supply Chain Actions..

**Remediate**
- Demand impact
- Inventory Visibility
- Logistics capacity
- Production agility

**Recover**
- Illuminate supply network
- Alternate supply sources
- Redefine planning
- Alternate channels and route to market
A Foundational Capability
..in times of Social Distancing and Remote/WFH..way of working..

Visibility

Asset  Inventory  Cargo

Location  Condition
Events  Custody

COVID-19 Post Lockdown:
Supply Chain Response Framework
RESTORE
Supply Chain Visibility...

My experience with deploying digital technologies that can mitigate COVID-19 triggered supply chain disruptions.
Real time visibility of inventory and assets

- Pallets Handed to Carrier
- On Tarmac
- Aircraft Arrived
- Unloaded at Factory/WH
- Arrived at Airport
- Aircraft Departed
- Received by Carrier
Construction site with over ~3000 asset units being tracked across multiple zones using BLE tags
**Real time visibility** of machine performance

- Sensor without equipment modification
- Loss-reason collection via cheap consumer tablets
- Easy access to reports
- Fast, personalized alarms
Risk indicator development over time – Mar 12th

- Risk exposure and dependencies visualised
- Risk Detection automated
- Focus on critical suppliers and partners

**Real time visibility** of supply network risks
Warehouse Wearable: Barcode scanning glove

Real-time visibility: Construction sites

Concrete strength sensor
COVID-19 Post Lockdown: Supply Chain Response Framework

Present Focus

Restore
Response Capacity and Speed

Plan Ahead

Revitalise
Uncover scenarios and strategy

For next webinar

Immediate to Near Term

Short to Medium Term
A Wishlist for post COVID-19 world..

• governments will finally start spending more on healthcare than on warfare.

• public health concerns will outweigh personal privacy issues.

• online learning platforms go mainstream in education at all levels

• specialist health professionals get recognized like pop or sports superstars
Thank You

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Our Digital Platform Partners

- Logistics (IoT)
- Industrial (IoT)
- Risk Management
- Process Intelligence
- Procurement
- Construction (IoT)
- Manufacturing (IoT)

Logos:
- roambee
- Foghub
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- converge
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