

COVID-19 AND SUPPLY CHAIN IMPLICATIONS: WHAT IS GOING ON AND WHAT SHOULD COMPANIES BE DOING?

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Your Panelists



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Agenda

- **SCM at Marquette University**
- **Global environment and how have we been designing supply chains so far**
- **Covid-19 – Short-term SC impact and what companies should be doing?**
- **Covid-19 – Longer-term SC impact and what companies should be doing?**
- **Q&A**

SCM at Marquette University

- **Located in Milwaukee**
- **SCM Program**
 - Undergraduate
 - Graduate – Online MS in Digital Supply Chain Management
- **Rankings:**
 - 15th (Internationally) – SCM World (2017)
 - 16th (Nationally) – Gartner (2018)
 - 17th (Nationally) – US News & World Report (2020)

SCM at Marquette University

- **Rankings – contd.:**
 - 3rd (Nationally) – Quality of curriculum – Gartner (2018)
- **Demand driven curriculum with an emphasis on applied learning**
- **Placement: 99.2%** (excluding international students)
- **Internships: Compulsory for graduating**
 - 40% seniors with two or more internships



**GLOBAL ENVIRONMENT AND HOW WE
HAVE BEEN DESIGNING SUPPLY CHAINS
SO FAR ...**



Global Environment and SC pressures

- Global Supply Chains were **already changing**, due to a multitude of factors!

Pressure on Costs-to-Serve:

- Energy Costs
- Environment
- Tariffs
- Regional Conflicts
- Cyber Attacks
- Natural Disasters
- Regional Epidemics

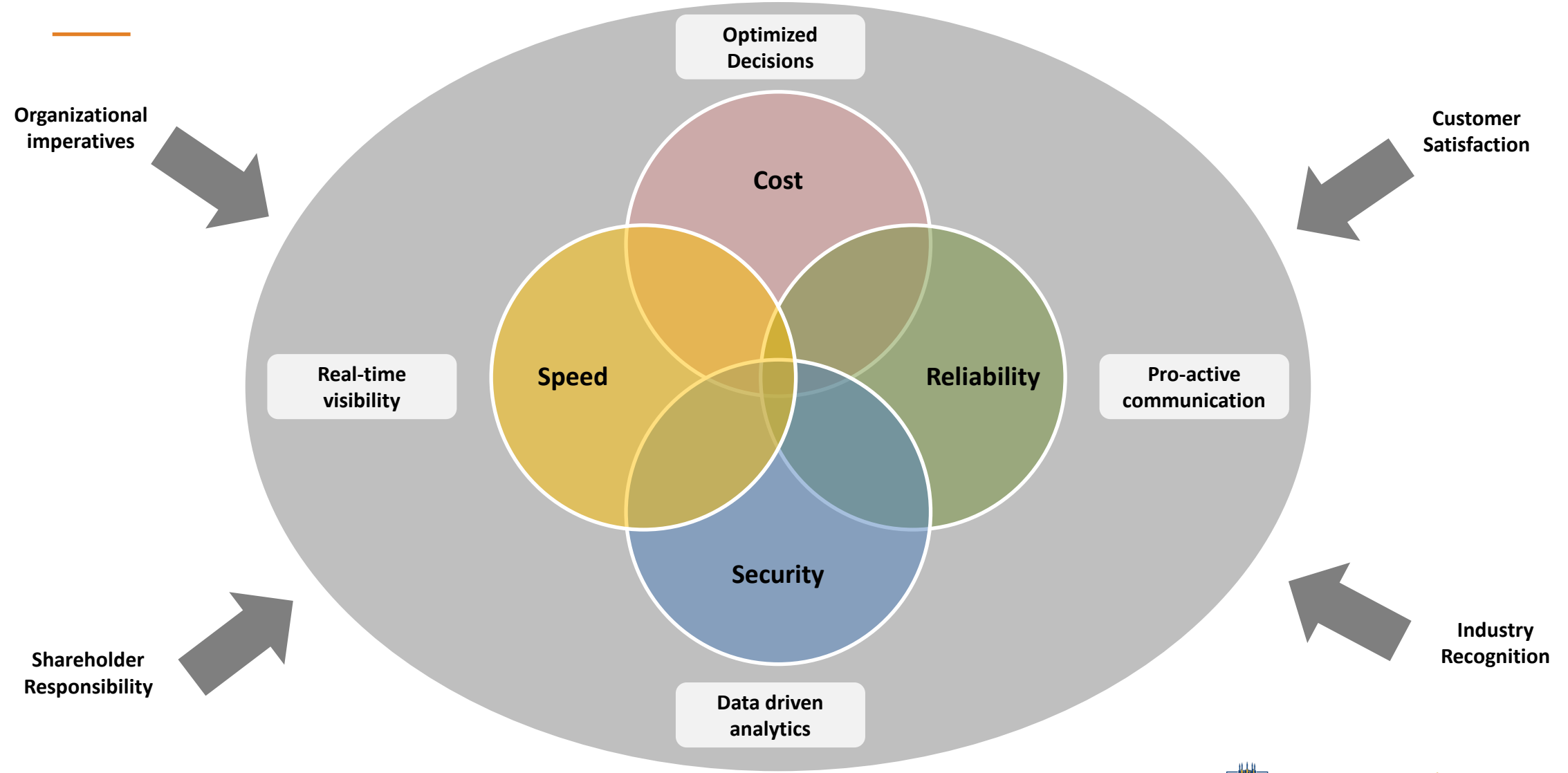
Pressure on Capacity:

- Rapid growth of E-commerce →
- Reduced Air Cargo and Warehouse Supply

Pressure on ROIC:

- Asset Light companies increasingly using 3rd Parties to run their operations
- Low interest Rates → SC Investment stimulus

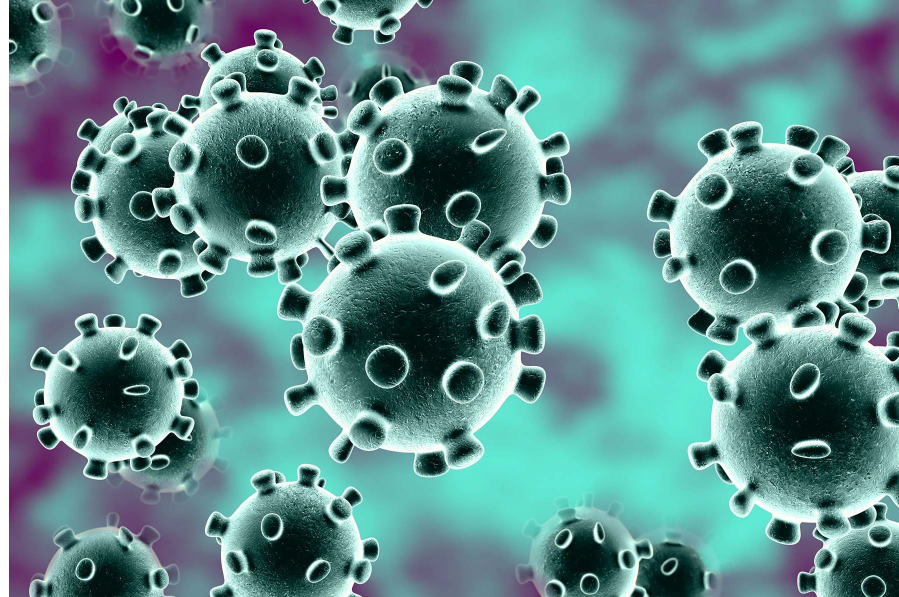
S/C optimization – BEFORE Covid-19 ...



... and the result

- Vigorous pursuit of **Supply Chain Excellence** in order to drive **Increased Profitability!**

- And then came...



COVID-19 – SHORT-TERM SUPPLY CHAIN IMPACT AND WHAT SHOULD COMPANIES BE DOING?



A Few Recent Headlines

**Europe Borders May Be Closed
Until September Due to the
Covid-19 Threat**

**Food Supply Chains Slow Around
the World in Trucking Bottlenecks
And Worker Health issues**

**Historic oil price collapse sees
First major energy company cut
its quarterly dividend**

*Shippers shocked by scale and speed of
blanked sailing announcements*

Some Airlines Will Remove Seats
To Carry Cargo And Medical
Supplies On Passenger Aircraft
Converted Into Freighters

**Boeing Loses Plane Orders as
Coronavirus Hits Global Air Traffic**

**US airlines are losing money for the
first time in years as coronavirus ends
travel boom**

**Millions of Americans join unemployment
line as coronavirus savages economy**

Short-Term Challenges

1. **When the crisis finally abates, we will likely experience near term shortage of air, ocean & trucking capacity...**
 - **Airlines** have grounded 90% of their flights → **reducing wide body capacity** that carries much of IAF tonnage
 - **Container Ship sailings reduced dramatically** with multiple canceled (blanked) sailings each week
 - **Trucking firms laying-off drivers and reducing capacity** in USA as States shelter-in-place ... more to follow

Short-Term Challenges, continued ...

2. Multiple EU “Schengen”
Borders closed in March
→ **Significant obstacle**
to cross-region trucking.

3. Worker **health** and
Worker **availability**



Source: www.washingtonpost.com, April 2020

Short-Term Challenges, continued ...

Compounded, these factors will amplify the disruption of global logistics and supply chain networks.



Source: www.businessinsider.com, April 2020

Short-Term Challenges, continued ...

- Fast-Forward 45-90 days
– let's assume that the “all clear” siren is finally being sounded!
- **What is going to happen?**

ALL CLEAR!
ALL CLEAR!
ALL CLEAR!

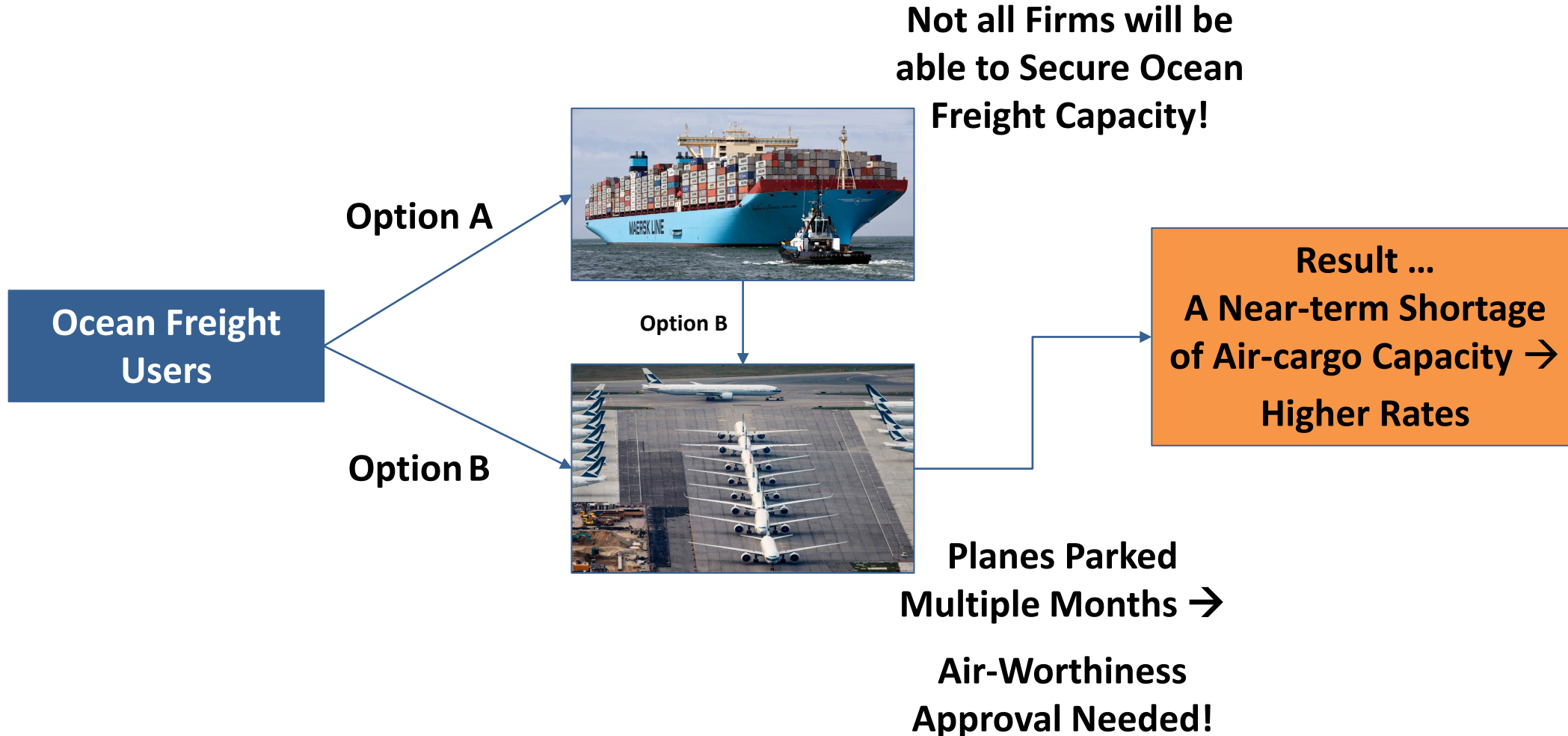


Short-Term Challenges, continued ...

- **A race toward the recovery and return to “normal”:**
 - Companies rush to re-stock their own supply chains +
 - Big push for year-end 2020 to salvage the business...

- **... only to find:**
 - Globally **disrupted** logistics and supply-chain networks
 - **Severely impacted** supply base (**1st tier and lower**)
 - **Impacted** Build-Move-Store Capacity

Short-Term Challenges, continued ...



Short-Term Challenges, continued ...

Surface Freight Users



Driver Displacement plus Failures in NA & EU Trucking Industry

+



A Challenged Schengen Process

+



A 'forgotten' Brexit

+

Result ... A Near-term Shortage of Surface Freight and Storage Capacity ...

Plan Now!



Health of Current / Future Drivers and W/H Workers

+



E-commerce W/H Dominance

Short-Term Challenges, continued ...

- **A few more factors to be considered if lockdown ends in 45-90 days:**
 - Larger retailers will likely go **“all out”** to salvage CY’ 20 – pushing hard for Holiday season!
 - **Push will be aggressive** - even if demand lags!
 - This **“demand surge”** will challenge S/C reliability, logistics capacity, impact cost **and** imperil the survival of some businesses!

Short-Term Initiatives

- **Start planning now - Internally!**
 - **X-functional team approach** – Marketing/Sales + Finance + Purchasing/Materials + Logistics + Production Planning
 - **Understand the plans** for “Re-filling” your factories and your customer base
 - Assume “**Day-X**” as a Re-start Date – Add a Re-start **Delta** of 15 days for **4-6 cycles**
 - **Update plans every 15 days!**

Short-Term Initiatives, continued ...

- **Start planning now - Externally!**
 - **Start Prioritizing Fulfilment Plans** – with your supply chain partners **now!**
 - Material suppliers – multi-tier / multi-level approach ... Will some of them need “*help*” from you?
 - Logistics and Brokerage Providers
 - Warehouse Operators + JIT Hubs / Kitting Operators + Others

Short-Term Initiatives, continued ...

- **In parallel - Start forming your “Long Term” Team!**
 - **Who** will be your suppliers?
 - **What** will be your priorities?
 - **When** = 1-2 years, 3-5 years, 5+ years **Time Horizons!**
 - **Where** will you be located (Factories, Warehouses, etc.)?
 - **Why** ... because you cannot wait for the crisis to end ... because your competition won't be waiting!

 - **The Time To Act Is Now!**

COVID-19 – THE LONGER-TERM S/C IMPACT AND WHAT SHOULD COMPANIES BE DOING?



Long-Term Impact

- The Covid-19 outbreak **will accelerate** long-term changes in Supply-Chain strategy started with **tariffs** and **geo-political** issues.
- Need to systematically address supply chain vulnerabilities

Long-Term Impact

- **Why are our supply chains so vulnerable?**
 1. Focus on efficiency over the effectiveness
 2. Globalization of supply chains
 3. Focused factories and centralized distribution
 4. (Over)outsourcing
 5. Supply base reductions
 6. Poor supply chain visibility



Long-Term Impact - initiatives

1. Rethink single origin bias:

- Single geography
- Single/sole supplier sourcing practices

2. Strategic Industries – **Pharmaceuticals and Hi-Tech** – will face increased Government Pressure to “*Re-regionalize*”

Long-Term Impact – initiatives continued ...

3. Start taking Supply Chain Risk Management seriously:

- Contrary to the popular belief, **most risk in supply chains arises from internal company's decisions** and NOT external events
- Increased Emphasis on **“Health-Hardening”** as well as **“Contingency Planning”**
- **Understand your supply chains**

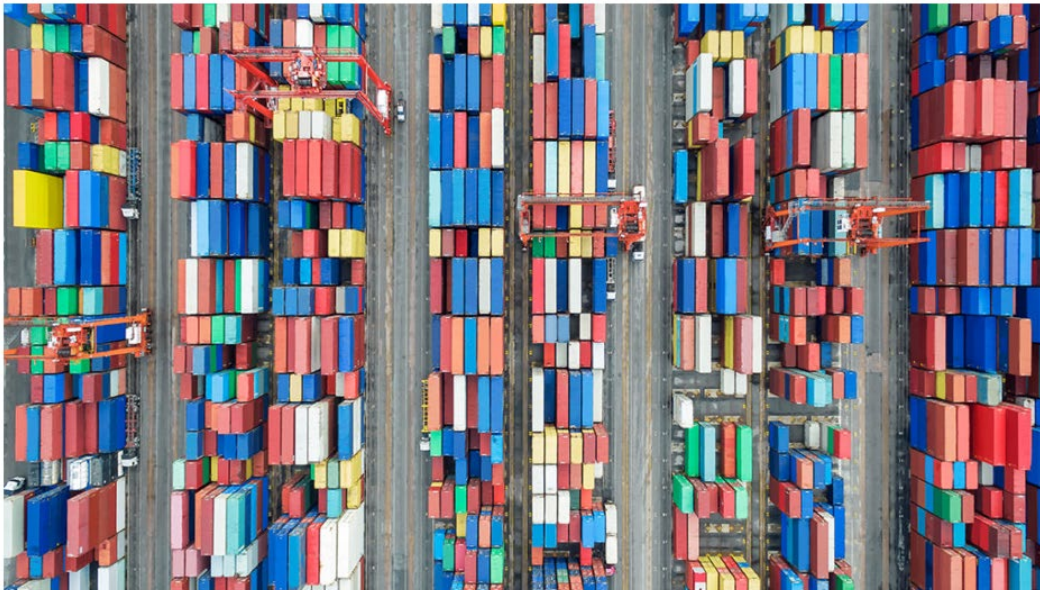
Long-Term Impact – initiatives continued ...

Coronavirus Is a Wake-Up Call for Supply Chain Management

by Thomas Y. Choi, Dale Rogers and Bindiya Vakil

March 27, 2020

Summary Save Share Comment Print \$8.95 Buy Copies



Source: [Harvard Business Review](#), April 2020

- **What are your critical paths?**
 - Long lead-times / Sole sourcing
 - Multiple T1 suppliers sharing same T2 supplier
 - Infrastructure dependence and Material Flow Bottlenecks
- **Inventory positioning**
- **Is procurement function still measured by costs savings versus revenue-assurance?**

A Reminder from Recent History ...

March 2011 – Japan Earthquake



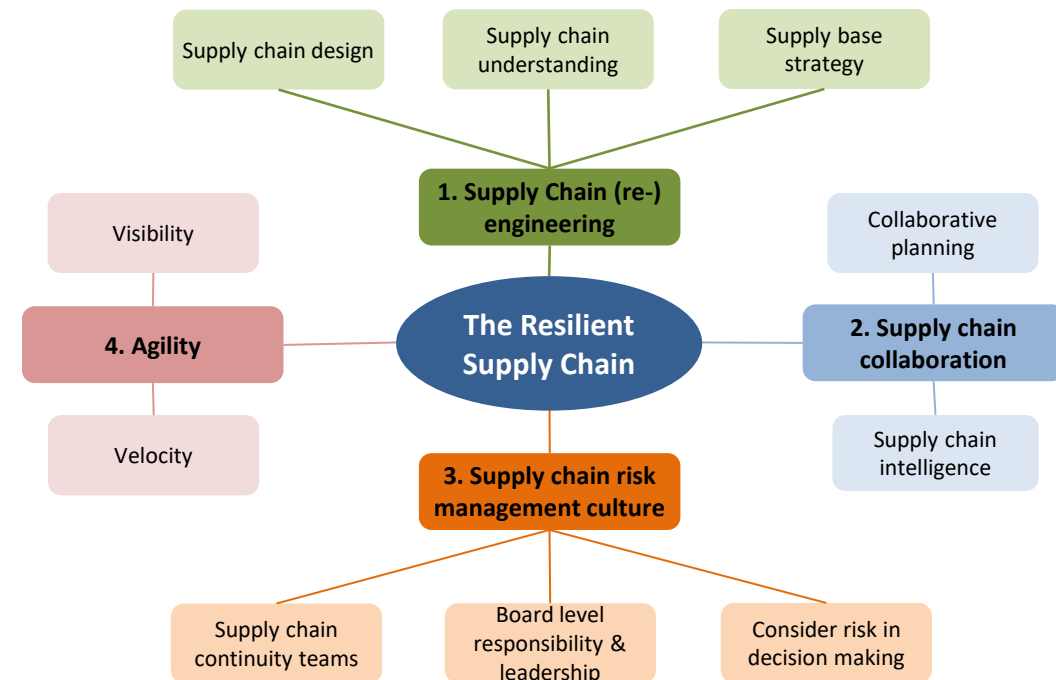
Source: The Atlantic, March 2011

- **Some of the practices implemented were:**
 - Parts standardization
 - Increase in safety stock (deep in a supply network)
 - Multi-region and multi-supplier sourcing

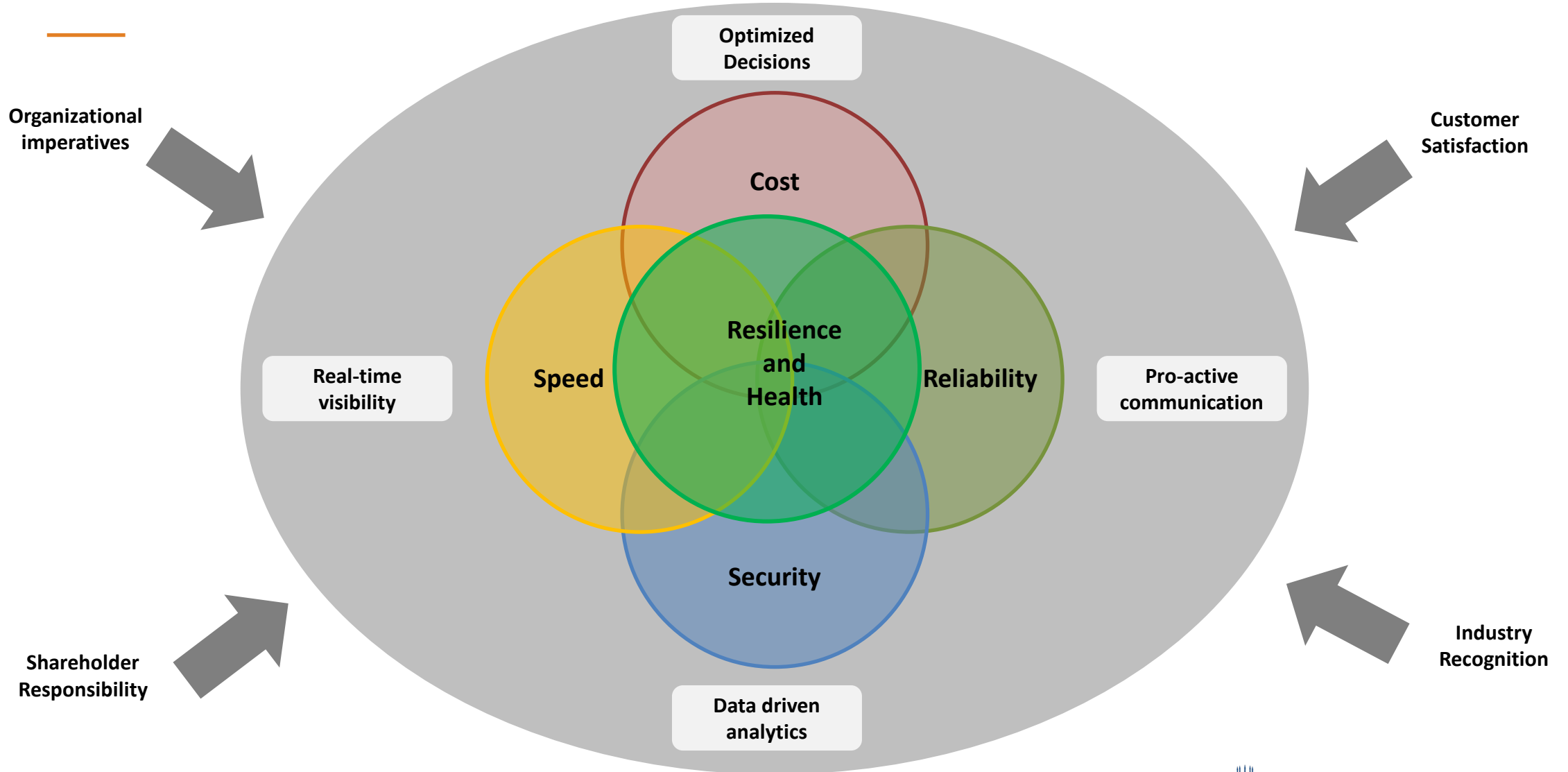
... but then we “forgot”

Long-Term Impact – initiatives continued ...

4. **Supply Chain Reliability and Resilience** should become a **Top-priority** – because “***low cost***” does not help if you **cannot move your product!**



Leading to S/C Optimization AFTER Covid-19



Some Closing Thoughts

- **Winners – Companies who rebound quickly by managing short-term issues in parallel with long-term S/C redesign**
- **Don't think if you've *scraped through* through this crisis that you're okay – the next time you probably won't be**

Because ...

- **Your long-term competition – the “winners” – will be acting now ... and so should you!**

Q&A

And Now Over To Our Audience

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THANK YOU!