SUPPLY CHAIN RISK MANAGEMENT
handling disruptions today and tomorrow

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Competitive Insights, LLC

October 22, 2020
speakers

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Executive Advisor & Consultant

Richard Sharpe
President & CEO
Competitive Insights
speaker

Richard Sharpe
President & CEO

• Designated by DC Velocity as a Rainmaker in the industry

• Over 30 years of experience in Supply Chain Management and Applied Business Solutions

• Founding member of the American Logistics Aid Network (ALAN)

• Graduate Degree in Industrial Engineering from Georgia Institute of Technology; Undergraduate Degree in Industrial Engineering from the University of Florida
multiple sources of data into actionable insights

Analytics revenue • costs • efficiency • profitability
Net Landed Cost to Serve & Net Landed Profit

Accurate  Trusted  Agile  Repeatable  Efficient
recognized

Competitive Insights Listed as a Representative Vendor in
Supply Chain Cost-to-Serve Analytics Technology

Competitive Insights Named “Cool Vendor” by Gartner
“Cool Vendors in Supply Chain Management, 2014” Report

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Creating effective Supply Chain Risk Management (SCRM) Strategies

![Balance Scale with Generation and Protection on the left, TARIFFS and COVID-19 on the right, and Profitable Performance at the bottom.](image)
Significant Disruption Considerations

- The widespread impact on multiple Countries, Industries and Companies
- The length of time
- The significant economic impact
introduction

Supply Chain Risk Management Tools

Real/Near-Time Operational Status
- Control Towers,
- Risk Tracking Systems,
- Transportation Management Systems

Optimization, Simulation Scenarios
- Prescriptive Tools,
- Transportation Planning Tools

Profit Protection
- Profit Contribution
- Analytical Tools
• Supply Chain Risk Management (SCRM)

• SCRM - Reactive Analytics

• SCRM - Proactive Analytics

• conclusion
Supply Chain Risk Management (SCRM)

“One size does not fit all”
Supply Chain Risk Management

POLL:
Who first coined the phrase “One size does not fit all?”

• Benjamin Franklin
• Henry Ford
• Frank Zappa
• Thomas Edison
Supply Chain Risk Management (SCRM)

“One size does not fit all”

Frank Zappa

Thriving by Using Supply Chain Financial Insights
Supply Chain Risk Management

**PROACTIVE** – before disruption

Mitigation • Preparedness

minimize impact of any kind of disruption

**SUPPLY CHAIN DISRUPTION**

**REACTIVE** – after supply chain disruption

Response • Recovery

crisis management to defuse impact

**LEARNING**
Supply Chain Risk Management

Key Operating Assumptions

Lean operating principles drive efficiencies and cost reductions

- Automotive
- Medical/healthcare
- Communications
- Industrial
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Supply Chain Risk Management

Key Operating Assumption

That Each Key Component Of Your Supply Chain Is Going To Work As Expected Under Defined Operating Agreements
• Kenya is the sixth-largest flower exporter to the U.S.  
  ~U.S. Customs and Border Protection

• Kenya supplies the European Union with 38% of its cut-flower imports

Supply Chain Risk Management
Supply Chain Risk Management

Distribution Channel of Flower Industry

- From field to store in around 72 hours with daily overnight air shipping
- 2-3 days shelf life in stores
Supply Chain Risk Management

Distribution Channel of Flower Industry

- Eyjafjallajökull volcano erupts in Iceland
- 100,000 flights cancelled for 2 weeks
Supply Chain Risk Management

Distribution Channel of Flower Industry

where will it hurt the most?

- Market share
- Revenue
- Profit
Measuring Supply Chain Financial Performance

Supply Chain Risk Management

- Off Shore Manufacturing
- Domestic Supplier
- Port
- Domestic Manufacturing
- 3PL Distribution Center/Warehouse
- Customers
- International Suppliers

Net Landed Revenue

Sourcing Costs + Inbound Transportation Costs + Import/Export Processing Costs + Manufacturing Costs + Inter-facility Costs + Warehousing & Handling Costs + Outbound Transportation Costs + Reverse Logistics

Inventory / Inventory Working Capital

Standard cost
Gross margin
Cost-to-serve
Net Landed Profit

- Automotive
- Medical/healthcare
- Communications
- Industrial
Supply Chain Risk Management

How many of those customer locations provide 80% of your profits?
Supply Chain Risk Management

POLL:
How many customer delivery locations provided 80% of the company’s profits?

• 50% or more
• 20-50%
• 20% (80/20 rule)
• Less than 10%
Supply Chain Risk Management

In Chicago IL

110,000 delivery locations

How many of those customer locations provide 80% of your profits?

Net Landed Profit (NLP) Groupings per Customer Locations

- Unprofitable
- 5th 20%
- 4th 20%
- 3rd 20%
- 2nd 20%
- Top 20%

# of Customers

Profit Contribution of the Group to Total NLP

11th top Sales Customer lost $260K

2,843 or 2.5%

Share price increase of $0.67 ($0.17 if 25% realized)
• Supply Chain Risk Management (SCRM)
• SCRM - Reactive Analytics
• SCRM - Proactive Analytics
• conclusion
SCRM – Reactive Analytics

Reactive – after supply chain disruption
Response • Recovery
crisis management to defuse impact

- A disruptive event has occurred
- Immediate action needs to take place to minimize impact
- All efforts are to stabilize the situation
POLL:
How did your company adjust to COVID? (mark as many as apply)

- Nothing – just wait it out
- Freeze/postpone projects/initiatives
- Frequent adjustments to the operation (i.e., lockdowns, labor shortages and safety issues)
- Re-strategize to demand changes or capacity issues
Creating **reactive** Tariff Strategies

### How the U.S.-China Trade War Escalated

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trump signs tariffs on imported solar panels/steel and aluminum for all nations, including China</td>
<td></td>
</tr>
<tr>
<td>China puts additional 15/25 percent tariffs on $3 billion worth of U.S. goods</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>U.S. Tariff Action</th>
<th>Chinese Tariff Action</th>
<th>Tariff Rate</th>
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<tbody>
<tr>
<td>January 22/March 8, 2018</td>
<td>$34b 25%</td>
<td>$34b 25%</td>
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<tr>
<td>April 2, 2018</td>
<td>$50b 25%</td>
<td>$50b 25%</td>
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<tr>
<td>July 6, 2018</td>
<td>$50b 25%</td>
<td>$50b 25%</td>
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<tr>
<td>August 23, 2018</td>
<td>$50b 25%</td>
<td>$50b 25%</td>
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<tr>
<td>September 24, 2018</td>
<td>$60b 10%</td>
<td>$60b 10%</td>
<td>$200b 10%</td>
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<tr>
<td>September 17, October 1, 2019</td>
<td>$110b 20-25%</td>
<td>$110b 20-25%</td>
<td>$250b 20%</td>
</tr>
</tbody>
</table>

*Source: Media reports*

**MORE THAN ONE-THIRD OF THE FIRMS ARE TAKING NO ACTION**
SCRM – Reactive Analytics

Focus on customers that matter most
Customers that give you the majority of your operating profits

Net Landed Profit (NLP) Groupings per Customer Locations

- Unprofitable
- 5th 20%
- 4th 20%
- 3rd 20%
- 2nd 20%
- Top 20%

# of Customers

Profit Contribution of the Group to Total NLP

SCRM – Reactive Analytics

- Reactive Analytics
- Focus on customers that matter most
- Customers that give you the majority of your operating profits

Short-Term Tariff Reactive Strategies

- Retain – no price and discount changes
- Re-energize – no price changes
- Reconsider – targeted price and discount changes
Net Landed Profit (NLP) Groupings per Customer Locations

Terminate Unprofitable Customers
(lower operating costs while raising profits)

Short-Term Tariff Reactive Strategies
- Reconsider – targeted price and discount changes
- Reduce – sales efforts – terminate the customer
SCRM – Reactive Analytics

Actionable insights to make informed decisions

Net Landed Profit (NLP) Groupings per SKU

Net Landed Profit (NLP) Groupings per Customer

Customer Profit Groups

Unprofitable

5th 20%

4th 20%

3rd 20%

2nd 20%

Top 20%

35 Customers

$7,316,027 Cost

$1,773,277 Profit leakage

201 Customers

403 products

68% of total Net Landed Profit
Home Depot has mitigated half of its potential tariff cost with a data-driven approach that analyzes tariff impact at the SKU-level.

"We know down to the SKU level the point of origin, the classification of the tariff, the potential impact. And from there we start working with our supplier partners to mitigate that tariff impact,“

- Ted Decker - EVP, Merchandising
• Supply Chain Risk Management (SCRM)
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SCRM - Proactive Analytics

PROACTIVE – before disruption

Mitigation • Preparedness

minimize impact of any kind of disruption

- Focuses pro-actively identifying *vulnerabilities that would hurt the most*
- Devises plans to mitigate potential operational risk
- Periodic monitoring to identify changes in potential key vulnerabilities
POLL:
Does your company have mitigation plans for future supply chain disruptions?

• No, I’m not now aware of any plans
• Yes, we already have a Supply Chain Risk program
• Yes, we are in developing plans now or have just completed because of COVID
“Not One Size Fits All” Strategies:

- increase prices
- reduce overhead costs
- renegotiate supplier and consolidate contracts
- open an upholstery factory in Tupelo, Mississippi
- bring in “as much inventory as possible” ahead of the tariffs

Results:

- by 2020 will have halved its China sourcing
- increased its operating margin in the first two quarters of 2019 and held the figure steady in Q3
SCRM - Proactive Analytics

73 Suppliers to Analyze

$17.68M Total Net Landed Profit
Identification of Risks

- Infrastructure
- Competence
- Economics
- Politics
  ranges between 0 and 5
SCRM - Proactive Analytics

73 Suppliers to Analyze

$17.68M Total Net Landed Profit

17 Suppliers

23% of total suppliers

$7.81M Net Landed Profit to protect

44% of total Net Landed Profit to protect

using an EPIC Index of less than 2.25
Prioritization of Risks

Prioritization Matrix Based on User Defined Risk Index Threshold and NLP Threshold

Risk Group A
Risk Index < 2.25
NLP > $0.14M

Highest priority

User defined

Supplier Details by Risk Group

<table>
<thead>
<tr>
<th>Risk Group</th>
<th>Supplier</th>
<th>Risk Index</th>
<th>Country</th>
<th>City</th>
<th>Volume</th>
<th>NLP</th>
<th>NLP Index</th>
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<tbody>
<tr>
<td>A</td>
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<td>1.69</td>
<td>Algeria</td>
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<td></td>
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<tr>
<td></td>
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<td>Nigeria</td>
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<td>559,680</td>
<td>($529,031.72)</td>
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<td>D</td>
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<td>1,305,446</td>
<td>$253,071.43</td>
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<td>6,573,188</td>
<td>$17,682,303.91</td>
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</table>

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Supplier Scorecard for Vendor ABC

586 total SKUs

Priority 2
535 Total SKUs

Priority 1
51 $2.49M Total SKUs Total NLP
Supply Chain Risk Management (SCRM)

SCRM - Reactive Analytics

SCRM - Proactive Analytics

Conclusion
The Coronavirus Will Create A New Operating Norm For Making Supply Chain Risk Management A Critical, Ongoing Business Practice

Gross Domestic Product, Percent Change

Note: Data for 2020 and 2021 are estimates.
Conclusion

Call To Action

- Prior COVID-19 generalized operating strategies no longer work

- It is critical to understand the exact profit and revenue contribution of every product sold to every customer

- Customers can then be differentiated and segmentation strategies created that define appropriate service levels, product offerings, pricing and discount policies

- Key suppliers can be identified and prioritized for risk mitigation strategies

- Operating networks can be reconfigured to lower unnecessary costs and tied up working capital
结论

**PROACTIVE**

Mitigation • Preparedness

minimize impact of any kind of disruption

**REACTIVE**

Response • Recovery

crisis management to defuse impact

学习

Net Landed Profit (NLP) Groupings per Customer Locations

<table>
<thead>
<tr>
<th>Grouping</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unprofitable</td>
<td>3,812</td>
</tr>
<tr>
<td>5th 20%</td>
<td>106,362</td>
</tr>
<tr>
<td>4th 20%</td>
<td>1,795</td>
</tr>
<tr>
<td>3rd 20%</td>
<td>718</td>
</tr>
<tr>
<td>2nd 20%</td>
<td>287</td>
</tr>
<tr>
<td>Top 20%</td>
<td>43</td>
</tr>
</tbody>
</table>

NOT one-size-fits-all

2,843

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Thank you

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Sources: