Schulich Webinar Series: Shaping the Post-Pandemic World
How Will COVID-19 Change Supply Chains?

Webinar Summary – April 21st, 2020
Dr. David A. Johnston
Schulich School of Business
Overview

On April 21st, 2020, the Schulich School of Business presented a webinar hosted by David A. Johnston, Director of the Master of Supply Chain Management (MSCM) program, as part of the Schulich Webinar Series: Shaping the Post-Pandemic World. His guests were Dr. Johnny Rungtusanatham, Canada Research Chair in Supply Chain Management, Dr. Markus Biehl, Schulich COVID-19 Taskforce, Dr. Adam Diamant, Operations Management and Information Systems. All are faculty at Schulich and teach in the MSCM.

During the session, over 100 questions were submitted and a brief survey was conducted online. Dr. Johnston presented a number of insights on the webinar topic to which guests and participants responded. What follows is a summary of some of the valuable insights from the survey and questions asked by the audience. To view a video of the complete webinar, please go here.

Perceptions on Supply Chains and COVID-19

During the webinar, we asked participants how COVID-19 has changed their thinking about supply chains. 212 business professionals told us what they believe about the consequences of COVID-19 for their organizations and the prevention of future disruptions to supply chains. 150 professionals were from within Canada and 62 from outside Canada. Below is a visual summary of what they said:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes (%)</th>
<th>Do Not Know (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will change our organization's long term relationships with customers</td>
<td>79%</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>Will change our organization's long term relationships with suppliers</td>
<td>79%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Will change our organization's internal operations in the long term</td>
<td>92%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>We had an Emergency Management Plan (EMP)</td>
<td>41%</td>
<td>17%</td>
<td>42%</td>
</tr>
<tr>
<td>That EMP was effective for COVID-19</td>
<td>60%</td>
<td>14%</td>
<td>26%</td>
</tr>
<tr>
<td>More resources towards assuring dependable supply versus only lowering costs</td>
<td>59%</td>
<td>31%</td>
<td>9%</td>
</tr>
<tr>
<td>Would trust governments to help prevent major disruptions</td>
<td>41%</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Would trust NGOs to help prevent major disruptions</td>
<td>42%</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>Would trust businesses to help prevent major disruptions</td>
<td>55%</td>
<td>17%</td>
<td>28%</td>
</tr>
</tbody>
</table>
Results

• The majority of business professionals believed that COVID-19 will change the nature of relationships for the long term with customer's suppliers and employees by changing internal operations.

• A majority either did not have or didn’t know whether their organization had an Emergency Management Plan (EMP) in place in their organization prior to the pandemic. Only 60% believed that these plans were effective in mitigating COVID-19 related issues.

• When asked about future intentions in light of COVID-19, the majority said that they would put more effort and money into assuring dependable supply versus chasing only low cost supply. Interestingly, almost a third did not know whether the pandemic would change the relationship between these two priorities.

• When asked who they would trust to help prevent future disruptions in supply chains such as COVID-19, we had to separate international from Canadian respondents. International respondents tended to trust businesses and non-governmental organizations (NGOs) over government. In Canada, professionals had mixed feelings as to their trust in governments to prevent future COVID-19 type supply disruptions. Trust in NGOs, such as industry associations, exhibited a similar division of opinion.

• The majority of business professionals surveyed tended to trust other businesses more than government to help prevent future disruptions.

Insights

Our interpretation of the responses suggests that business professionals are mentally reconciled to the need for changes in the critical supply chain relationships an organization has with its customers, suppliers and employees. They are less certain as to whether these changes are going to pivot their organization’s strategy from a priority on efficiency and low cost to secure availability of supply. The low levels of emergency preparedness and mixed feelings about effectiveness suggests that some organizations need to take risk management and contingency planning more seriously. Pandemics require a coordinated response across all sectors of the economy. There is a lot of work to be done to build more trust between business, government and other non-governmental institutions in each other’s capabilities and commitment in the wake of this pandemic.
What Attendees Asked About the Future of Supply Chains

Asking good questions as supply chain professionals is critical to preparing for the future of supply chain management post COVID-19. I organized the webinar attendee’s questions with the help of graduating students from the Master of Supply Chain Management (MSCM) COVID-19 Response Consulting Service. We found that six themes revolved around the webinar’s central question: how will COVID-19 change supply chains? For each theme I have provided the common questions. They are by no means the final word. This hopefully will encourage further lively debate and research on the future design of supply chains. At Schulich we are working on some of these answers. Here are the themes:

<table>
<thead>
<tr>
<th>Sourcing and Supplier Relationships</th>
<th>Government's Role in Supply Chain Management</th>
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<tbody>
<tr>
<td>Human Resource Management</td>
<td>Responding to Future Supply Disruptions</td>
</tr>
<tr>
<td>The Adoption of New Technology</td>
<td>Sustainability</td>
</tr>
</tbody>
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**Sourcing and Supplier Relationships**
1. Will more transparency about the risks and capabilities of buyers and sellers be required to source effectively?
2. What are the best practices for managing procurement activities during both mitigation and recovery from a pandemic?
3. When should organizations have single source vs multiple sources of supply?
4. Is a shift from global to local supply chains economically sustainable?
5. Will the outsourcing of manufacturing to lower-cost nations and regions continue?
6. Will procurement more frequently be bought as a professional service versus provided by an organization’s employees?
7. How can suppliers commit to customers to offer stable prices with uncertain production, inventory and fulfilment costs?
8. How do purchasers manage the trade-off between declining margins due to increased cost of purchasing versus increased certainty of product availability?
9. Will COVID-19 inflate purchase prices for all or just some commodities across economies?
10. How does the current crisis affect future delivery and payment terms between buyers and suppliers and the level of support provided for trade and business financing?
11. Will purchasing firms in the future take greater responsibility for the health and safety of their suppliers and their supplier’s supplier?
Human Resource Management
1. Will COVID-19 affect the overall and sectoral demand for supply chain labour and management talent in Canada?
2. What measures can industry take to improve the health and safety of supply chain workers?
3. Does hiring, compensation and promotion based on increased resiliency run counter to how management is currently hired, compensated and promoted?

The Adoption of New Technology
1. Can organizations use more advanced analytics such as artificial intelligence versus human judgement to predict demand during supply shocks such as pandemics?
2. Will block chain technologies emerge as a mainstream solution for securing supply chains?
3. How will the pandemic experience accelerate the digital transformation of supply chain management?
4. How will the adoption of automation in supply chain operations change in response to COVID-19?
5. Will the pandemic expedite the adoption of self-driving vehicles in the transport of goods and services?
6. How will COVID-19 impact the portion of sales and delivery of goods and services done online?
7. As data-driven decision making in supply chains becomes more important, how will organizations protect themselves from hackers, trolls and other cyber criminals?

Government's Role in Supply Chain Management
1. What new regulations and incentives will be introduced by different levels of government as a direct result of COVID-19?
2. Will national security policies by government increasingly define the structure of future supply chains as a response to COVID-19?
3. How can the supply chains where government is the end customer become more resilient?
4. Will government pursue an industrial policy directing the development of strategic supply chains for some goods and services?
5. Will COVID-19 encourage changes in bilateral and multilateral trade agreements?

Responding to Future Supply Disruptions
1. How can organizations detect future potential "black swans" events like COVID-19?
2. Will more manufacturers and service providers be tasked with having the capability to convert production over to essential products and services such as those required by healthcare during COVID-19?
3. How will we manage innovative responses to supply disruptions like COVID-19 by small entrepreneurs and non-governmental organizations along with those of governments and large established firms?
4. How do small and medium sized organizations with less resources and power than large organizations protect themselves from future disruptions?
Sustainability
1. How do we manage supply better to avoid both waste and shortages?
2. Will environmentally sustainable initiatives such as mitigating the impact of climate change increase in supply chains as the result of COVID-19?
3. Are slumping commodity prices as a result of COVID-19, such as in oil, a threat to sustainability in that they encourage more consumption?
4. What is the potential impact of COVID-19-type supply disruptions on reverse logistics?
5. How do we design and manage supply chains to be less vulnerable to disruption?

Acknowledgements

I would like to thank the organizers of the Schulich School of Business Webinar Series: Shaping the Post-Pandemic World, Ashwin Joshi, Series Organizer, Preet Aulakh, Moderator and Host, and Vito Giovannetti, Webinar Support.

I would also like to thank the efforts of the Master of Supply Chain Management (MSCM) COVID-19 Consulting Service Team for their hard work in the initial analysis of the data. They are: Saravanan Jagannathan; Raunak Kumar Mishra; Fiona Woticky; Deswaine Nanton; Xiaoyu (David) Wang; and Wen-Yen (Lucie) Wang.

Thank you for attending the webinar. Feel free to reach out in these extraordinary times.

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