

JDI ROUNDTABLE ON MANUFACTURING COMPETITIVENESS IN NEW BRUNSWICK



Manufacturing in a COVID-19 World

Martin Davis & Dr. Herb Emery

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Atlantic Institute
for Policy Research

Today's presenters



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C-level executive with 30+ years in IT and Manufacturing



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The JDI Roundtable for Manufacturing Competitiveness in New Brunswick:

Economic data through two recessions shows that manufacturing is one of New Brunswick's most geographically diverse, resilient, and productive sectors. The sector supports higher-than-average paying jobs for New Brunswickers in almost every corner of the province. And manufacturing, with its capital intensity and deep supply chains, has the potential to drive more economic growth than any other sector of the economy.

Program Objectives:

- Identify and enable research that focuses on competitiveness of New Brunswick manufacturers
- Seek stakeholder input to help define research projects
- Share research to advance public understanding of factors that impact competitiveness in New Brunswick
- Develop the next generation of New Brunswick economists
- Identify and explore headwinds and opportunities in New Brunswick's manufacturing sector
- Share evidence-based policy options to improve the performance and health of New Brunswick's manufacturing sector

Questions are welcome

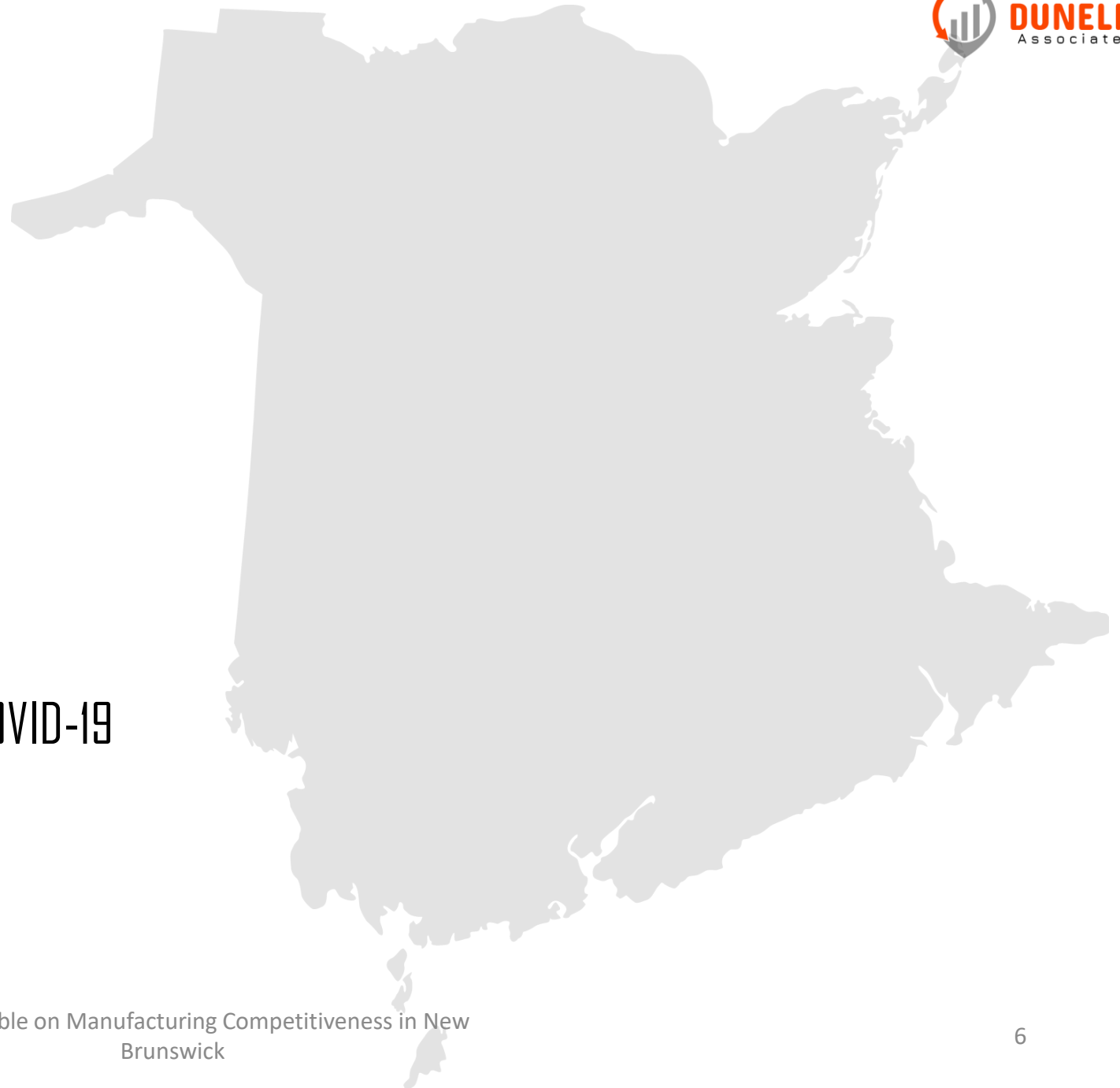
Submit questions via the Q&A function. Questions will be answered after the slide presentation.

To submit questions anonymously during the presentation, text Mara Mallory at (506) 292-0720

For additional inquiries, email mara.mallory@unb.ca

Areas of focus

1. Business Disruption
2. Workers
3. Supply Chain Issues
4. Adapting Operations
5. Financial Risks
6. Economic Recession
7. Cyber Risk
8. Thriving in a World of COVID-19
9. Post COVID-19 Actions
10. Key Themes to Succeed



Business Disruption:



- Restrictions
 - Forced to shutdown or reduce hours
 - Border issues impacting exports
 - Raw material availability
- Reduced (or increased) demand
 - Projects being postponed, pipeline impact
 - Inability to forecast supply & demand
- Risk of further outbreaks

Workers:



- Illness and loss of key workers
- Workers are fearful and staying home etc.
- Workers being paid to stay home
- Need for more or less workers
- Taking precautions, e.g. screens, separation etc.
- Keeping shifts physically separated to avoid cross contamination
- Remote workers

Supply chain issues:



- Border restrictions impacting imports
- COVID-19 shutdowns impacting raw material production
- Free tool to map a company's COVID-19 Supply Chain impact

<https://techcrunch.com/2020/04/09/free-tool-helps-manufacturers-map-where-covid-19-impacts-supply-chain/>

Adapting operations:

- Stabilising Operations
- Adapting to new working practices (e.g. social distancing)
- Modifying the workspace and other areas
- Impact on production volumes
- Handling increased demand (how long will it last?)
- Re-purposing to produce essential supplies

JDI Covid-19 Plan



18 page guide used internally by JDI, but available to all.

[\(Direct link\)](#)

Financial risks:



- Customers asking for credit extensions
- Increase in bad debts
- Higher operating costs
- Reduced operating efficiencies
- Cash flow issues
- Raw material price increases

Economic recession:

- Inevitable and already happening
- Potential of >20% lost output, >15% lost workforce
- Consumer Goods will be hardest hit
- Manufacturing likely to be a major casualty
- Impact of high US\$ (cons on raw materials, pros on sale costs)

Cyber risk:



- 4,000 x increase in cyber and phishing attacks
- More remote workers = more vulnerabilities
- Particularly true for Manufacturers
 - Increasing reliance on automation and advanced control systems, with Engineers working remotely, leads to more risk of cyber attack

Thriving in a world of COVID-19:

- Can you offer your products / services online?
- How can you pivot to in-demand products?
- Can you acquire infrastructure to assist you?
- Adapt operations by increasing your Industry 4.0 maturity
 - Use data to make better decisions / eliminate waste / increase efficiency
 - Utilise increased automation and advanced industrial control systems
 - Utilising data to keep employees healthy, taking temperatures of workers etc

Post-COVID actions:

- When to return to your core business?
- Do you return to that business or pivot?
- Hiring back workers?
- Laying off workers no longer needed?
- What can you learn from COVID-19 actions?
- What will you do differently?
- Useful article from HBR
- https://hbr.org/2020/04/leaders-do-you-have-a-clear-vision-for-the-post-crisis-future?utm_source=dlvr.it&utm_medium=twitter

Key themes to succeed:

- Need to change and adapt operations
- What can you do differently?
- How can information help you succeed?

Innovation

- Think outside the box
- Adapt lessons from other industries
- Re-purpose capabilities and technology

Transformation

- Pivot to in-demand products
- Adapt current capacity to meet new needs

Renewal

- Rejuvenate your business post COVID-19
- Take a fresh eyes approach and plan for the future

Martin Davis contact:

If you would like more information, please contact:



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Check out their [Industry 4.0 Blog](https://industry40iiot.wordpress.com/) (<https://industry40iiot.wordpress.com/>)