

#### EXCELLENCE IN MANUFACTURING CONSORTIUM



### **Top 5 Challenges Facing BC's Manufacturing Industry October 11, 2022**

# **EMPOWERING MANUFACTURERS**

**YOUR** CANADIAN MANUFACTURING NETWORK



Top 5 Challenges Facing BC's Manufacturing Industry

### AGENDA – October 11, 2022

- About EMC
- Issues Affecting Manufacturing
  - Manufacturing GPS Survey Findings
  - Supply Chain Trends
  - Emerging Technologies Trends

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# About EMC

### Vision:

• For Canadian manufacturers to grow and be more competitive – at home and around the world.

### **Our Mission Statement:**

 Canadian Manufacturers sharing to optimize learning, expertise and resources, to achieve world-class.

### Now Going on 25 years...

- Industry driven programming
- Provide advanced manufacturing expertise, facilitate knowledge networks, resources, services, training and other support.
- Foster continuous improvement, benchmarking and sharing of ideas and best practices...

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# **About EMC**

A unique grassroots **not-for-profit** organization of manufacturers:

- ✓ All Sizes
- ✓ All Sectors
- ✓ All Levels of Sophistication





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## **Issues Affecting Manufacturing**

# **Issues Affecting Manufacturing**

### **Top Challenges for 2022**

- Skills and Labour Shortages
- Increasing Cost of Manufacturing
  - HR / Labour and Workforce capabilities Costs
  - Energy Costs
  - Cost of Regulation, such as Low-Carbon Economy Costs
- Acceleration of Advanced Manufacturing Technologies
- Trade Exposure Exports
- Increased Competition (Canada, USA and Global Markets)
- Finding New Customers and Access to Markets

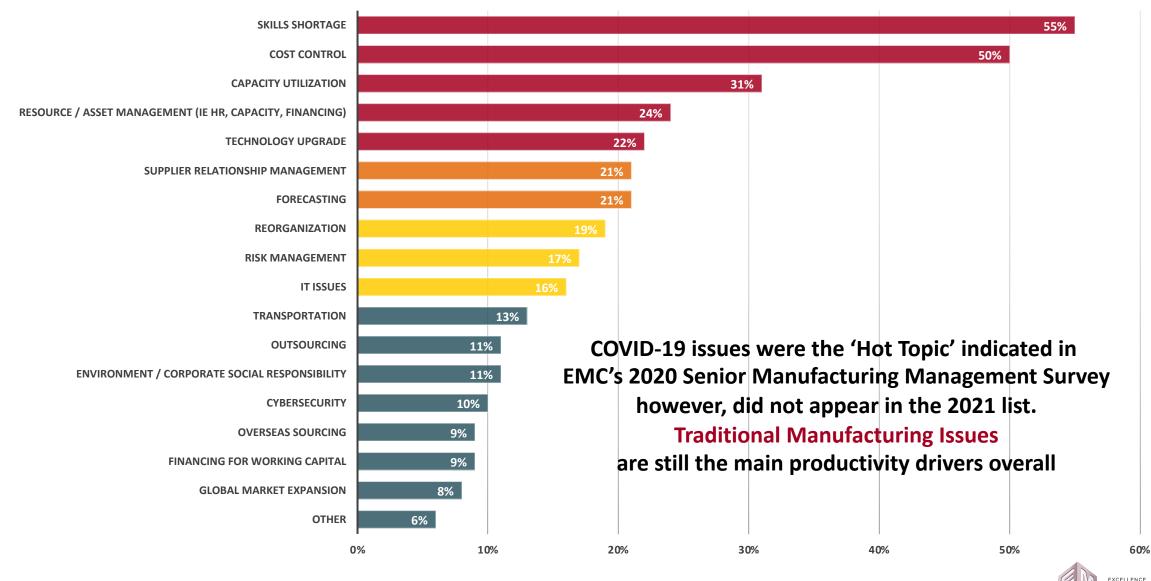
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Manufacturing

### **Issues Affecting Manufacturing:**

#### Most Significant Plant Management Issues for 2022





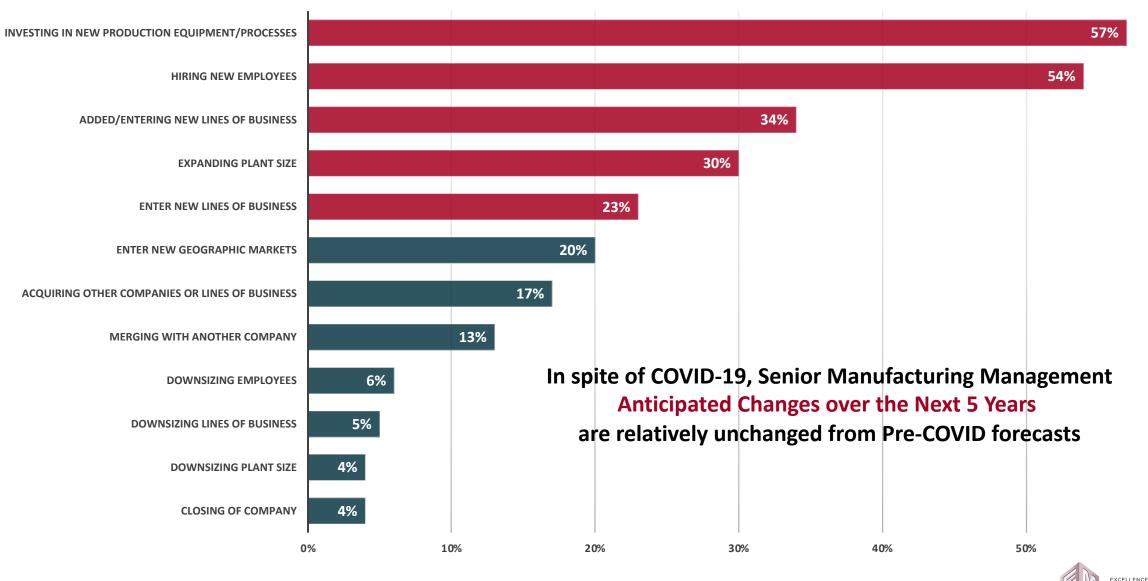
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### **Issues Affecting Manufacturing:**

Changes Anticipated by Plant Management Over Next 5 Years (2022 - 2026)





**UCUUR CANADIAN MANUFACTURING NETWORK** 

**60%** 

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# **Supply Chain**

### National Supply Chain Task Force Report:

- 21 short / longer-term actions to reduce congestion, improve reliability and build resilience within Canada's transportation supply chain
  - Easing port congestion.
  - Addressing labor shortages and employee retention.
  - Establishing a federal Supply Chain Office to unify relevant federal government activities.
  - Protecting corridors, border crossings and gateways from disruption.
  - Developing a national transportation Supply Chain Strategy.
  - Engaging the U.S. and the provinces and territories to achieve mutual recognition of regulations, polices and processes.



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# **Supply Chain Trends**

### What manufacturers are seeing...

- Lack of predictability across all aspects of Supply Chains is making planning and execution very tough/challenging.
- Impacted by material cost increases, long lead times and shortages and the transportation / shipping delays

### What manufacturers are doing...

- Looking for & implementing innovative ways to address these issues
- Offset material price increases through cost reduction efforts
  - ie VA ideas for products and packaging, alternate lower cost materials, increased automation.
- Addressing lead times/shortages by:
  - increasing ordering horizons, increasing inventories, supply diversification, on-shoring, etc.
- More frequent communication with supply chain partners

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# **Emerging Technologies Trends**

#### Strategic investment in various technologies

- Enterprise Resource Planning (ERP) Systems
  - Helps manage product supply chains by tracking business resources
- Artificial Intelligence (AI)
  - Integrating computer systems into the production process
  - Majority of employers are short staff; AI allows businesses to augment labour & maximize talent
- Robotic Process Automation (RPA)
  - Adapted to emulate the actions of a human workforce and automate specific business processes to work in concert with people.
- Blockchain
  - Use to store legal contracts, track product inventory, and monitor movement along the supply chain

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# **Thank You!**



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