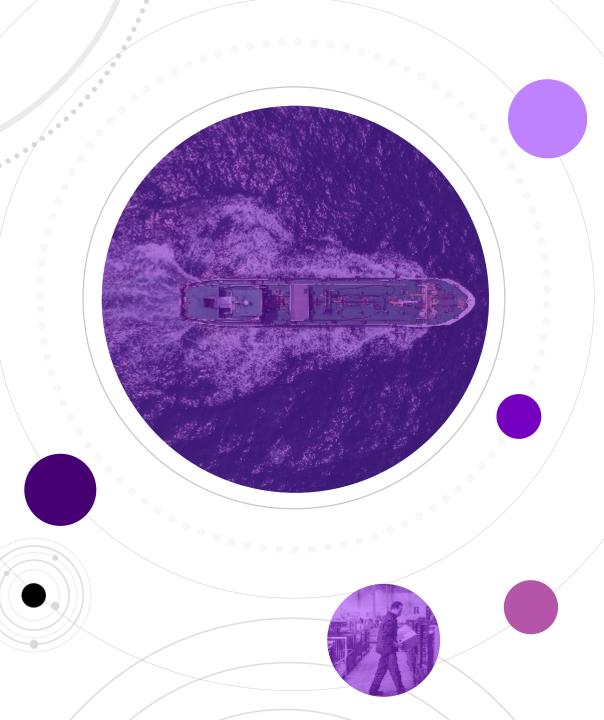


# Supply Chain Resilience

**SUSAN KRYSTEK** 



# Accenture is a global professional services company with leading capabilities in digital, cloud and security.

Combining unmatched experience and specialized skills across more than 40 industries, we offer Strategy and Consulting, Interactive, Technology and Operations services—all powered by the world's largest network of Advanced Technology and Intelligent Operations centers.

Our 674,000 people deliver on the promise of technology and human ingenuity every day, serving clients in more than 120 countries.

We embrace the power of change to create value and shared success for our clients, people, shareholders, partners and communities.

Our purpose

# To deliver on the promise of technology and human ingenuity



# We provide a broad range of services at scale – from strategy to operations.

# Strategy & Consulting

- Strategies to Accelerate Digital Transformation
- Enhancing Growth / Profitability to Deliver Sustainable Value
- Deep Industry / Functional Expertise
- Applied Intelligence
- Innovation Hubs
- Connected Products / Platforms

#### **Interactive**

- Meaningful Experiences to Drive Growth and Value
- Growth, Product & Culture Design
- Technology & Experience Platforms
- Creative, Media & Marketing Strategy
- Campaign, Content & Channel Orchestration

#### **Technology**

- Cloud
- Systems Integration / Application Management
- Security
- Intelligent Platform Services
- Infrastructure
- Software Engineering
- Labs / Ventures
- Ecosystem Alliances

#### **Operations**

- Business Process Services
- Function-Specific
- Finance & Accounting / Procurement / Supply Chain / Marketing
- Industry-Specific
- Banking / Insurance / Health Care



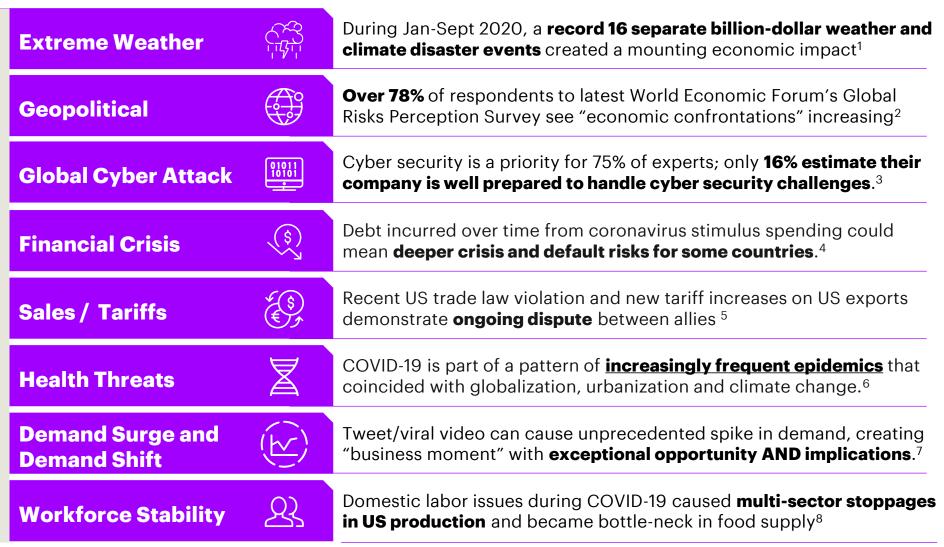
**INDUSTRY-SPECIFIC SOLUTIONS** 



## Unforeseen disruptions are inevitable

Crises are tending to increase in both frequency and scale.

Managing supply chain risk will likely be more challenging in the future.



#### Sources



<sup>1)</sup> Evidence for sharp increase in the economic damages of extreme natural disasters

<sup>2)</sup> Global Risks 2020: An Unsettled World

<sup>3.)</sup> Cyber security risks in globalized supply chains: conceptual framework

<sup>4.)</sup> A double recession? Economies risk debt crises after stimulus spending

<sup>5.)</sup> The Latest on Tariffs and Their Impact on Business Strategies

<sup>6.)</sup> Coronavirus isn't an outlier, it's part of our interconnected viral age

<sup>7.)</sup> The Impact of a Celebrity Tweet on Your Supply Chain

<sup>8.)</sup> Transportation bottlenecks snarl inputs to food supply chains

## The impact of disruption is experienced across the value chain

With increasingly complex, global supply networks, disruptions have the potential to significantly impact areas throughout the value chain. The biggest effects may be yet to come for some, or as a rebound for others...

#### **Examples of challenges across the value chain:**









#### **Suppliers**

Significant challenges in distributing supplies, e.g. quarantine and trade restrictions.

Consumers concerned with traceability and source country of products.

#### **Manufacturing**

Factories in quarantine, production plants totally shutdown.

Production challenges due to lack of raw materials availability.

#### Logistics

Travel restrictions including airports, roads, trains and ports.

Market closures.

Carriers suffering shortage of drivers / driver man-hour restrictions.

#### **Sales**

Consumers shifting demand away from stores to online and prioritizing 'need' vs. 'want' purchases.

Stores are closed or have shortened hours, with mass inventory depletion due to panic purchases.

#### Labor

Quarantine measures cause labor shortages and temporary unemployment.

Employees preferring to stay/work from home and those in service industries unable to do so.

Reduced productivity from infection/fear.

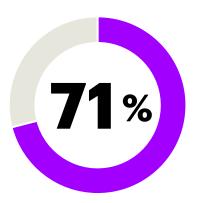


## Most supply chains are underprepared

Supply chains have developed capabilities to withstand short-term disruptions with operational risk mitigation plans. However, large-scale unpredictable disruptions have been met with inadequate preparedness and understanding.

For example, the scale of the COVID-19 pandemic eclipsed the preparations of most companies. Large scale disruptions like the pandemic ranked low as a focus for risk mitigation efforts, per a survey of supply chain leaders.<sup>1</sup>

For low-probability, high-impact "black swan" events<sup>2</sup>, standard risk models fall short. As a result, most companies do not have contingency plans in place, leaving supply chain executives scrambling to respond.



of companies surveyed did not have a business operations contingency plan in case the outbreak lasted longer than a few weeks<sup>3</sup>

#### Sources:

3) (Webinar) The Economist: Coronavirus outbreak – economic and business implications 03-February 2020

**WHAT** is needed to rapidly and effectively mobilize my organization?

**HOW** do we recognize the most critical impacts to our customers, people and business?

**WHAT** data and analytics are required to measure and inform the insights to our action plan?

**HOW** does our action plan account for the characteristics of our supply chain?

**WHAT** needs to change in my operations to ensure ongoing agility and resilience?

<sup>1)</sup> Supply Chain Insights, 2018

<sup>2)</sup> HBR: How Coronavirus could impact the global supply chain

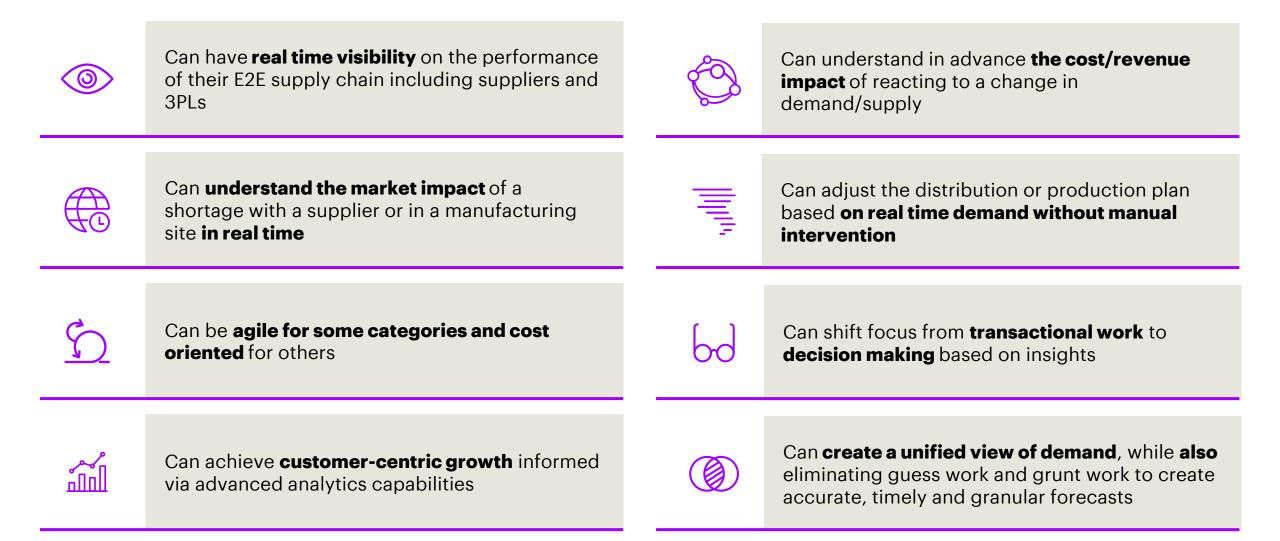
## **What is Supply Chain Resilience?**

"Supply Chain Resilience is the ability of a company's end-to-end supply chain and operations to absorb, adapt to, and recover from a disruptive event within your supply chain"

# Supply chain resilience lays the foundation for enabling risk management operationally, tactically, and strategically

	<b>Business Challenge</b>	Approach
Operational Risk	How can I quickly respond to a sudden change in my supply / demand picture ?	<ul> <li>"Real-Time" Extended Supply Risk Identification &amp; Mitigation</li> <li>Short-term Supply / Demand mismatch visibility (e.g. Control Tower)</li> </ul>
Tactical Risk	How can my supply chain adapt to evolving view(s) of demand / supply plans?	<ul> <li>Scenario Planning &amp; Modeling as part of S&amp;OP cycle</li> <li>Risk vs opportunity analysis as part of S&amp;OP</li> </ul>
Strategic Risk	How can I create flexibility and redundancy across my supply chain to mitigate business risk?	<ul><li>Footprint / Network Modeling and Simulation</li><li>Strategic buffer sizing</li><li>Multi-Sourcing options</li></ul>
Supply Chain Resilience	How is my supply chain able to <b>absorb</b> and <b>recover</b> from shock? What are the potential "points of failure"?	Resilience Stress Test

## A resilient supply chain...



### **Navigating disruption through supply chain resilience**

mobilize the command center and (initial) response plan. Establish operating rules for responses related to all supply chain interventions and contingency management

**Mobilize** Operate
Execute the plan
and monitor
results

Analyze

Analyze

Analyze

Analyze

Analyze

Analyze

Analyze 

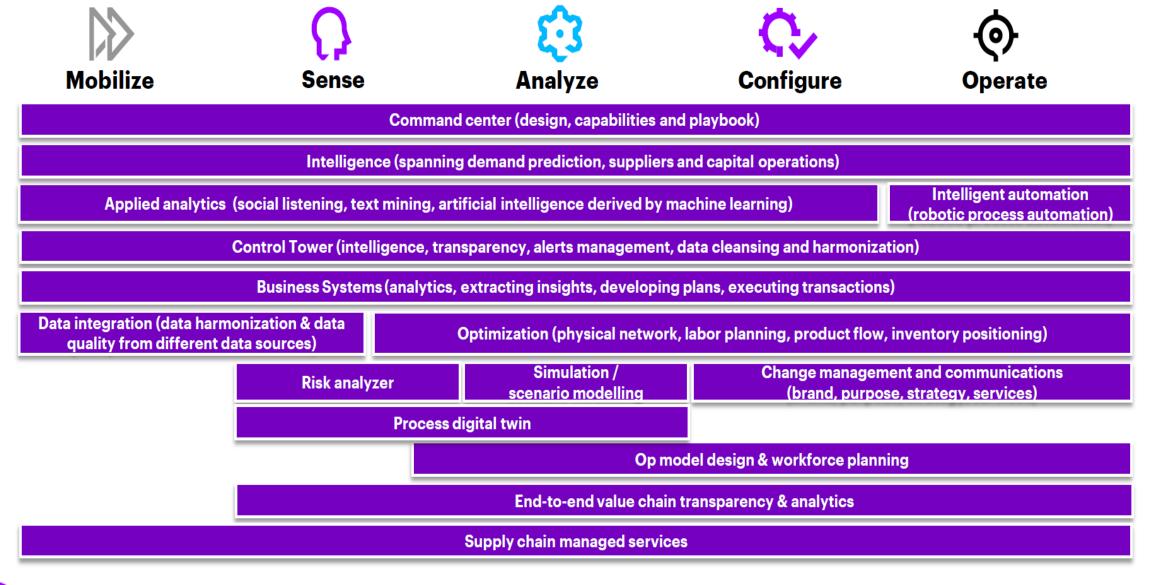
risks and implications to your supply chain components, products / services and ecosystem

configure and tailor the network and products flows to execute the protocols.

Develop balanced scorecard to track and measure the effort

analyze what-if scenarios and protocols for source, plan, make, distribute and service implications

## Effective supply chain resilience requires key capabilities



## Supply chain resilience leverages digital for speed

A digital and analytics backbone are crucial to understanding supply chain complexity, anticipating disruption, and quickly developing a response.

#### **ENABLERS**







## Understand the Disruption

(demand, supply, network)

- Internal >> feed segmentation and risk analysis / prioritization
- External >> inform macroeconomic effects (trade / transport restrictions, employment, geo-political)
- Create visualization from data extracts
- Capture IoT, POS, and sensor data
- Segment the supply chain by risk / disruption type
- Assess risk types across the value chain
- Sense changes in demand / customer sentiment

# Manage the Disruption

- Internal >> feed what-if scenario, capacity, production schedule analysis, inventory positioning
- External >> supplier capacity & lead-times, employment & market changes
- Modify alert / exception thresholds (increase sensitivity)
- Modify inventory policies / replenishment models
- Share data / enable collaboration across partner ecosystem
- Run complex what-if scenario-models
- Anticipate disruption impacts across the supply chain(s)
- Recommend changes to network, product flow, policies / thresholds, etc.



#### Operate in New Normal

- Internal >> inform production capacity and capabilities for new in-demand products
- External >> management of ecosystem partnerships
- Facilitate integrated business planning
- Share data across ecosystem
- Enable rebalancing of the multi-echelon network
- Automate response protocol execution
- Embed predictive analytics into decision making
- Optimize physical network, labor planning, inventory, etc.



## **Supply Chain Resilience is not a single solution**

Leaders develop fit-for-purpose capabilities across their network to build resilience.





#### Integrated **Planning**



- Intelligent execution
- Potential impact quantification
- Optimal solutions protocols identification
- Ability to execute & right to execute





- Intelligent execution
- Intelligent automation of response
- Late-stage fulfillment

- Multi-sourcing
- Diversification of supply base
- Supply buffering

Supplier

Management

Centralized risk modeling



- Active multi-tier supplier performance management
- Collaborative supplier relationships
- Raw material / inbound supply visibility
- Shared wins contracting







#### **Internal Supply Chain Functions**

- End to end data driven supply chain
- Seamless information connectivity across Ecosystem
- Cross-functional collaboration
- Systems resilience for critical capabilities
- Workforce adaptability



### **Manufacturing**

- Product design
- Multiple qualified manufacturing sites
- Off the shelf product preference
- Cross-functional collaboration for capacity analysis and capital allocation



#### **Transport and Last Mile Delivery**

- Intelligent execution
- Potential impact quantification
- Optimal solutions protocols identification
- Ability to execute & right to execute



