

Thinking Beyond the First Step: Unintended Consequences in Supply Chain Decision Making

Exploring how to spot second-order impacts before they derail your strategy and why second-order consequences deserve a front row seat.

LUNCH AND LEARN

Thursday, June 5, 2025 | 12pm ET

Thank you for attending!



Featuring
Chris Gaffney

Related Upcoming Course
scl.gatech.edu/scrr

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Supply Chain and
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The Big Idea

Blind Spots Exist

Big decisions focus on immediate problems, missing domino effects

Ripple Effects

Second-order consequences emerge after presentations end

Think Ahead

Good decisions need two-step-ahead thinking

A Personal Lens



Speed Prioritized

Decision-making values pace over reflection



Alignment Focus

"Get the deal done" trumps "explore what might go wrong"



Curiosity Sacrificed

Tight deadlines kill exploration of consequences

The Core Challenge

Complexity

Strategic decisions optimized for closure,
not exploration



Reversibility

Assuming changes can be undone when
they can't



Unasked Questions

Teams rarely examine future problems
they're designing in



Downstream Effects

Solving one issue may create two new
ones





Real-World Examples



Acquisition Stress

Regional acquisition stressed planning systems, reduced forecast accuracy 12%



Green Backfire

Eco-friendly packaging caused recycling disruptions, drew penalties



Reshoring Challenges

Resilience policy led to material shortages from regional dependencies

Common Objections

Time Constraints

"We don't have time for hypotheticals."

Simplicity Bias

"Let's not overcomplicate things."

Scope Limitations

"That's outside our scope."

In global supply chains, second-order effects aren't edge cases—they're part of the terrain.

High-Stakes Areas in Supply Chain



Network Redesign

Facility consolidation impacts multiple systems



Supplier Changes

Switching and dual sourcing create ripple effects



System Overhauls

TMS/WMS/ERP changes affect entire operations



Tools That Punch Above Their Weight



Simple Tools

Accessible methods inject foresight into decisions



No Restructuring

Work within existing processes, just add intention



Game Changers

Four tools that transform decision quality

Tool 1 – Pre-Mortem Workshop



Imagine Failure

Envision catastrophic outcome of decision



Work Backward

Identify potential causes of failure



Create Safety

Psychological safety to voice concerns

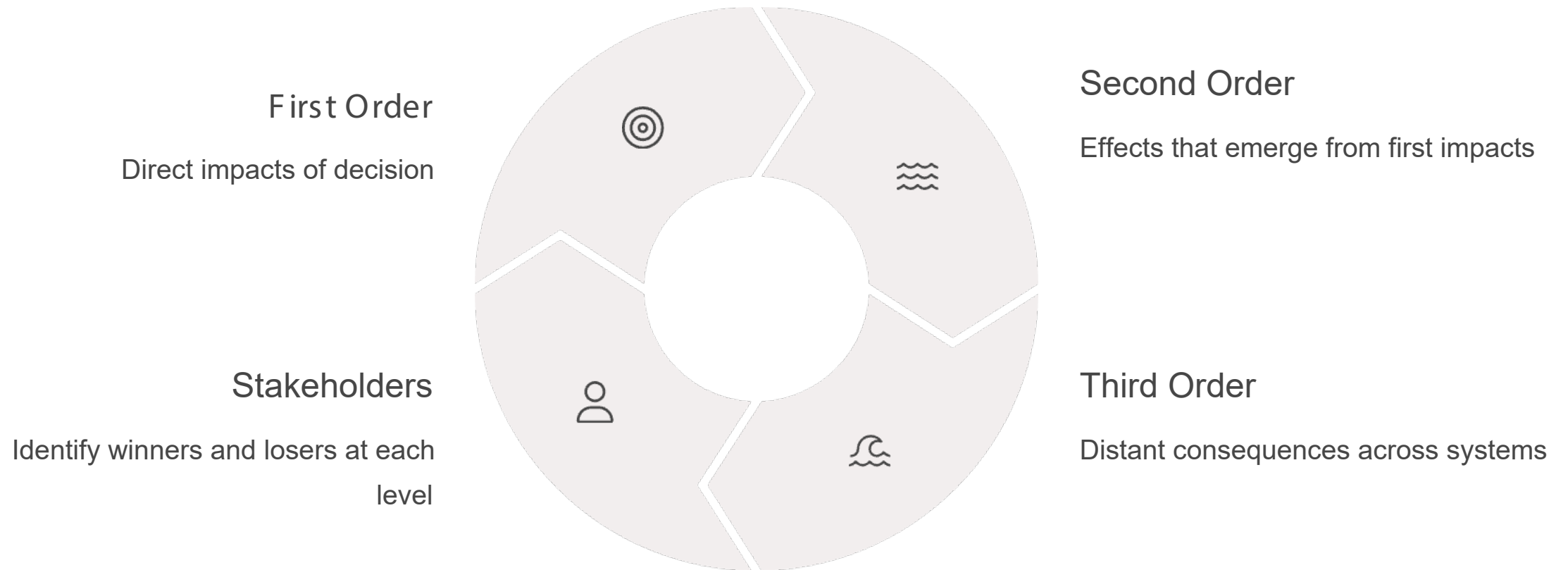


Spot Blindspots

Surface issues before they become real



Tool 2 – Ripple Mapping



Tool 3 - FMEA: Preventing Failures Before They Happen



Identify

Potential failure modes and effects



Analyze

Severity, occurrence, and detection levels



Calculate

Risk Priority Numbers (RPN)



Mitigate

Implement preventive actions



Tool 4 – 20 Questions



Reflective Questions Framework

Who

1. Who benefits from this decision or solution?
2. Who might have a different perspective we should consider?

What

1. What are the unintended consequences?
2. What might be missing?
3. What other perspectives or alternatives have we not explored?
4. What if we do nothing?

Where

1. Where can we find additional information or data to guide our decision?
2. Where might we encounter the biggest roadblocks or challenges?
3. Where do similar solutions already exist for us to learn from?

When

1. When will we know if we've succeeded?
2. When should we revisit or iterate on this plan if needed?
3. When is the best time to involve other stakeholders or ask for help?

Why

1. Why is this problem worth solving now?
2. Why should we (and others) care about this over other priorities?
3. Why did this issue arise, and what does it reveal?

How

1. How do we ensure we're addressing the right problem?
2. How might our own biases be influencing our decisions?
3. How can we test or validate this solution before fully committing?
4. How do we communicate our plan and reasoning to everyone involved?
5. How does this benefit our broader team and stakeholders?



How to Use It:



Solo

As a personal checklist to improve leadership decision hygiene.



Team Exercise

As a 15–30 minute guided discussion during decision reviews.



Alongside Other Tools

- Before: Run a pre-mortem to generate failure scenarios.
- During: Use this question set to pressure-test proposals.
- After: Combine with post-mortems to build institutional learning.



Tips for Facilitation:

Appoint a "Devil's Advocate" or "Second-Order Scout"

to raise hard questions.

Encourage psychological safety

so team members feel empowered to voice overlooked risks.

Don't aim to answer every question

— aim to reveal the ones that matter now.



Strategic Decision Risk Toolkit: Plant Closure Example

Ripple Mapping – Unintended Consequences

Georgia-based manufacturing plant to be closed and operations consolidated in Tennessee within 12 months.



First-Order Effects (Immediate)

- 300 direct job losses
- Supply chain rerouting to Nashville
- Equipment and tooling relocation
- Temporary fulfillment disruption

Second-Order Effects (Ripple)

- Economic impact to Columbus community
- Strained supplier relationships
- Employee morale dips across network
- Regional media and political scrutiny
- Pipeline loss from local tech schools

Third-Order Effects (Long-Term)

- Talent retention challenges
- ESG goal misalignment
- Reputation damage with regional partners
- Innovation decline due to workforce turnover

Facilitation Prompt: "What are we not seeing that could ripple out months or years after this decision?"

FMEA – Risk Analysis with Countermeasures

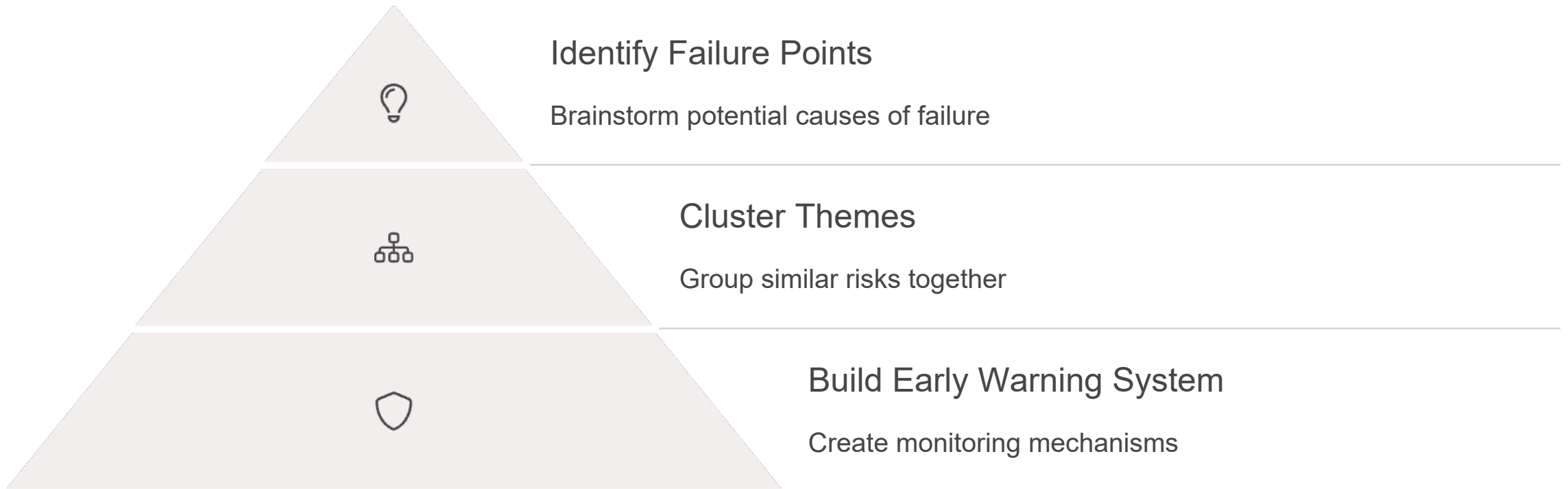
Failure Modes and Effects Analysis (FMEA): Use to identify where the plan could break down —and how to prevent it.

Failure Mode	Effect	S	O	D	RPN	Countermeasure
Skill loss due to workforce exit	Quality, productivity drop	9	6	6	324	Incentives for retention/relocation, cross-training
Supplier disruption	Cost or service gaps	6	7	6	252	Dual sourcing, supplier communication early
Employee morale decline	Attrition, poor performance	8	6	5	240	Frequent town halls, clarity on future roles
Underestimated relocation cost	Budget overrun	7	5	7	245	Independent financial estimate, phased investment
Reputation backlash	Loss of trust, political risk	7	5	6	210	Community redevelopment support, media strategy

Facilitation Prompt: "What would cause this plan to fail six months after launch?" Then: "What can we put in place now to reduce that risk?"

Pre-Mortem Workshop – Proactive Discovery

Workshop Objective: Mentally simulate a future where the strategy failed—and work backward to uncover hidden risks.



Scenario Prompt: "It's 18 months from now. The plant closure is complete—but the strategy failed. Customers were lost, operations are fragile, the Nashville facility is behind plan, and costs have ballooned. What went wrong?"

Early Warning System Development

Operations

Risk Example: Transition delays due to line setup issues

Early Warning Signal: Missed milestone in equipment transfer

Proactive Action: Weekly cross-site readiness checkpoints

Talent

Risk Example: Nashville team overwhelmed

Early Warning Signal: Burnout signs, high attrition

Proactive Action: Add interim staffing, phased ramp-up

Reputation

Risk Example: Local backlash turns into political action

Early Warning Signal: Social media or press backlash

Proactive Action: Appoint local liaison, proactive media outreach

Facilitation Prompt: "How would we explain this failure to our board or investors?" Then: "What can we do today to avoid that?"





Workshop Implementation Guide

Prepare Materials

Customize the toolkit with your specific strategic decision context. Gather relevant data about potential impacts and stakeholders.

Facilitate Sessions

Guide participants through each exercise: Ripple Mapping, FMEA Risk Analysis, and Pre-Mortem Workshop. Encourage candid discussion about potential failure points.

Document & Implement

Capture all insights and create an action plan with clear ownership and timelines for risk mitigation strategies.

Monitor & Adjust

Establish regular checkpoints to evaluate early warning signals and adjust countermeasures as the strategic implementation progresses.

20 Reflective Questions

Applied: Columbus Plant Closure Decision

Use this adapted version of the 20-question framework to reflect on the potential second-order effects of the Columbus, GA plant closure decision. These prompts are designed to help you and your team surface blind spots, validate assumptions, and refine the plan through multiple lenses.



Stakeholder Perspectives and Strategic Considerations

WHO – Stakeholders and Perspectives

- Who benefits most from consolidating operations in Nashville?
- Who in Columbus is most at risk of harm or disruption?
- Who are the secondary stakeholders (e.g., suppliers, schools, community leaders) whose perspectives should be considered?

WHAT – Risks, Omissions, and Scenarios

- What are the likely unintended consequences for workforce morale across all sites?
- What might be missing from our transition plan (e.g., upskilling, supplier realignment)?
- What alternative scenarios (e.g., phased closure, shared production) have we not fully explored?
- What if we do nothing for 12 months—how might the situation change?

WHY – Strategic Fit and Prioritization

- Why is this plant closure the best strategic move right now?
- Why might some stakeholders perceive this decision negatively even if it's financially justified?
- Why did this situation arise—was it part of a broader trend (e.g., automation, consolidation)?

Implementation Considerations and Validation

WHERE – Data, Lessons, and Obstacles

- Where can we find benchmarks or lessons from similar plant consolidations?
- Where are the biggest roadblocks—regulatory, operational, or cultural?
- Where do we risk overpromising outcomes (e.g., cost savings, timeline)?

WHEN – Timing and Feedback Loops

- When will we know if the transition is successful?
- When should we pause, pivot, or re-evaluate if problems emerge?
- When is the best time to engage external partners like local officials or suppliers?

HOW – Validation, Bias, and Communication

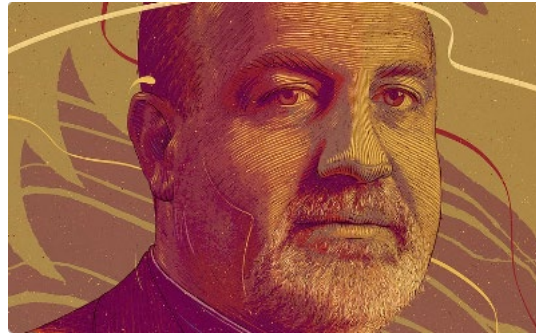
- How do we ensure we're solving the right root problem and not a symptom?
- How might our own cognitive biases be influencing the perceived benefits of consolidation?
- How will we validate that Nashville can absorb the load and talent gaps effectively?
- How are we communicating this transition plan to employees, customers, and partners?
- How does this move align with our long-term goals for workforce, ESG, and innovation?

The Thought Leaders Who Back This Up



Peter Senge

Systems thinking and
feedback loops



Nassim Taleb

Antifragility and stress-
response adaptation



Cass Sunstein

Decision hygiene to reduce
bias



Atul Gawande

Value of curiosity and the "last
question"



Your Role as a Leader

1

Make Space

Create room for curiosity in fast decisions

2

Ask Questions

What might we be missing?

3

Consider Impact

Who else is affected by this decision?

4

Define Success

What does success look like over time?

800

600



From Transaction to Trajectory

Add Checkpoints

Second-order reviews in strategic processes

Require Mapping

Consequence mapping in major proposals

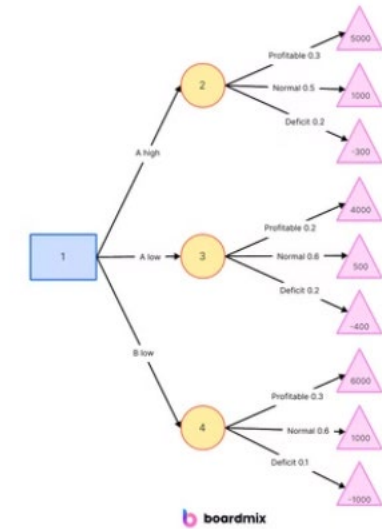
Incentivize Voices

Reward teams that identify potential risks

Learn Continuously

Use post-mortems to feed future strategy

Final Thoughts + Q&A



What second- or third-order consequences might your teams be underestimating right now?

Upcoming Courses

[Machine Learning Applications for Supply Chain Planning](#)

Sept 15, 2025 – Sept 18, 2025 | Virtual (Instructor-led)

[Procurement and Supply Management Leadership Certificate](#)

Sept 22, 2025 – Sept 26, 2025 | Virtual (Instructor-led) and in-person in Savannah, GA

- [Category Management and Sourcing Leadership](#)
- [Contracting and Legal Oversight](#)
- [Essentials of Negotiations and Stakeholder Influence](#)

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"Are You Prepared for the Next Crisis?"

w/ Dima Nazzal and Chris Gaffney

Thursday, July 3rd | 12-1pm ET | Zoom Registration Link



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