

Journey to becoming a Resilient by Design Organization

SPEAKERS

Derek Rappaport

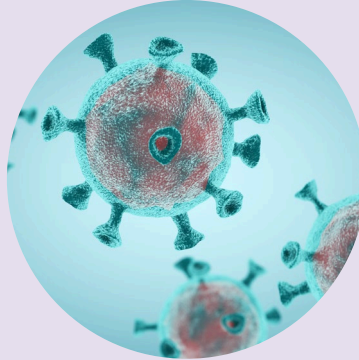
Senior Director, Risk & Resiliency | Vertex Pharmaceuticals

Alfredo Vidal

Director, Supply Chain Risk Management | Vertex Pharmaceuticals



Patients are at the heart of everything we do



We strike at the core of serious diseases to change people's lives



We're not afraid to take on the impossible

For the lives we have changed and for those who are still waiting, we will never stop fighting until we discover transformative therapies.

Quick Facts



Founded:
1989



Headquarters:
Boston



~6,200
Employees worldwide
(~5,000 in the U.S.)

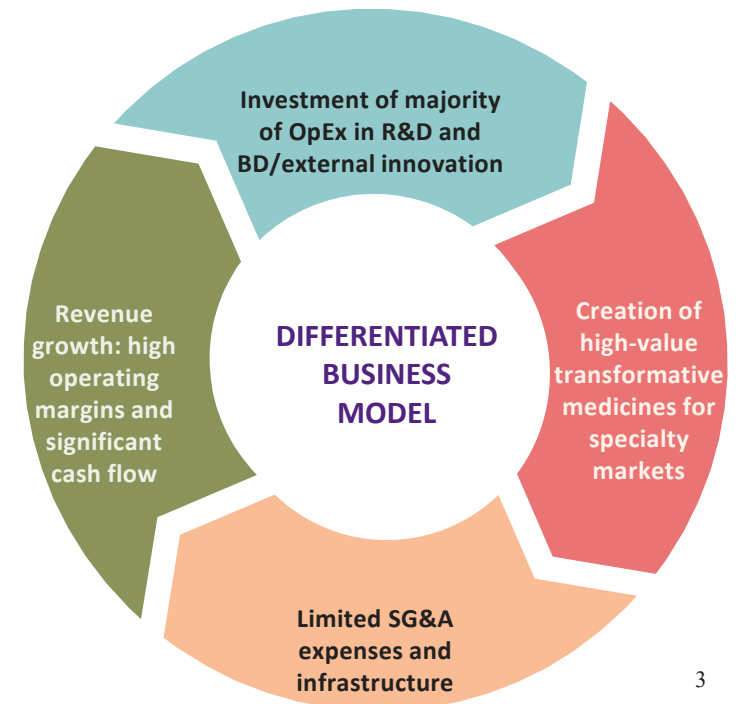
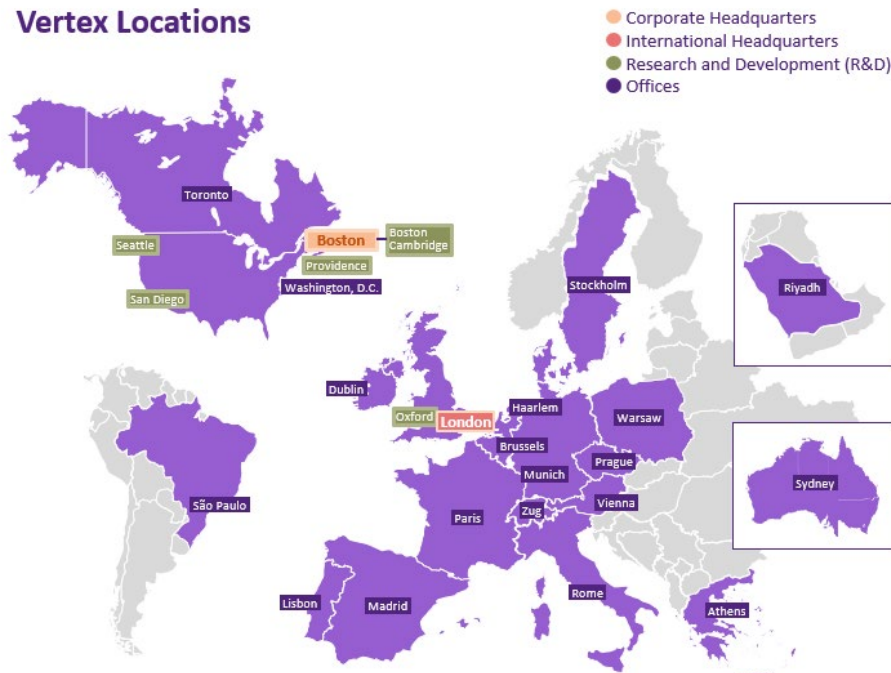


\$>100B
Market cap
(as of April 2025)



\$11B
2024 revenue

Vertex Locations



ENTERPRISE RISK MANAGEMENT (ERM) IS A HOLISTIC APPROACH TO IDENTIFYING AND MITIGATING MAJOR ORGANIZATIONAL RISKS

An ERM program helps companies:



Identify potential eventualities
that may significantly and adversely
affect the business over the next 3
years



**Address the associated
risks** and opportunities that
result from these events

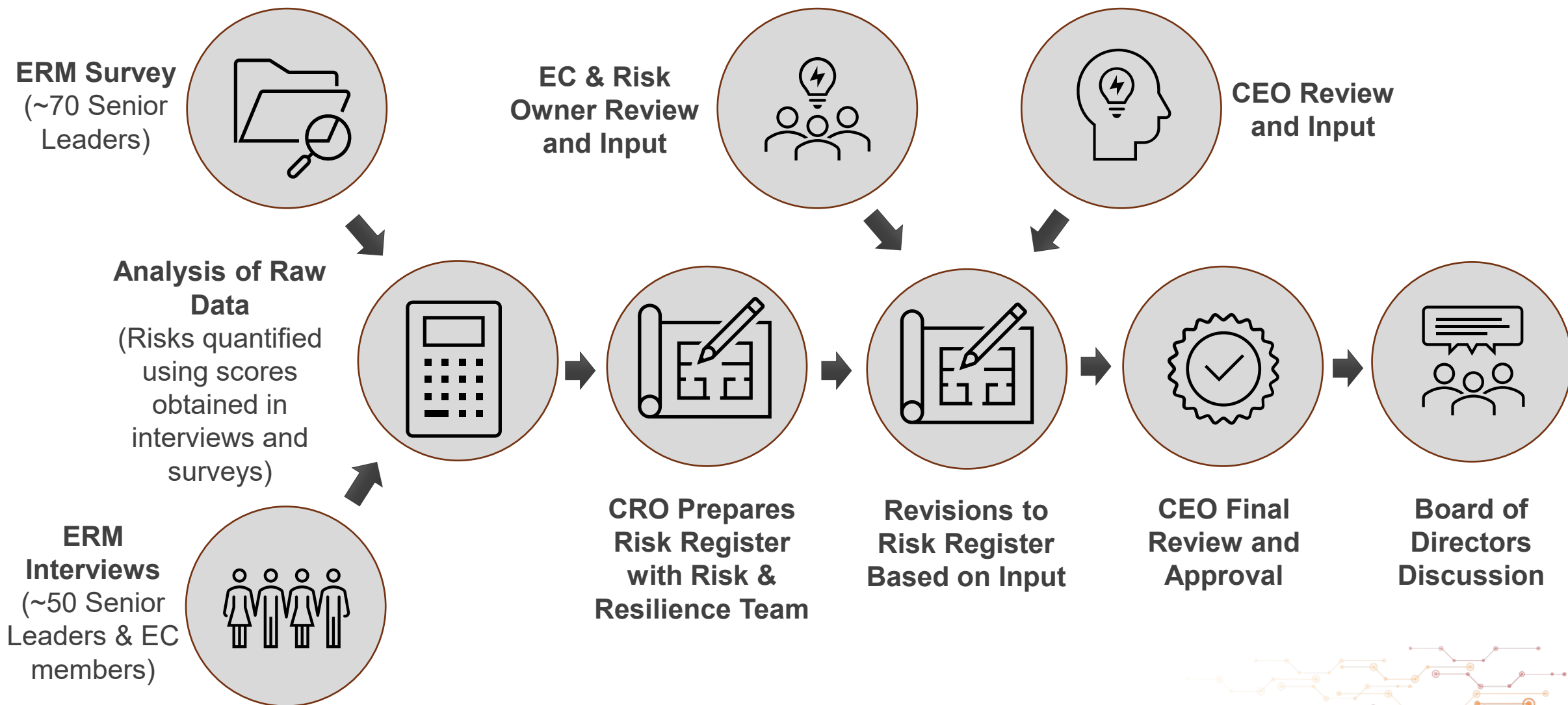


**Deliver reasonable
assurances** that
the company's objectives will
be achieved

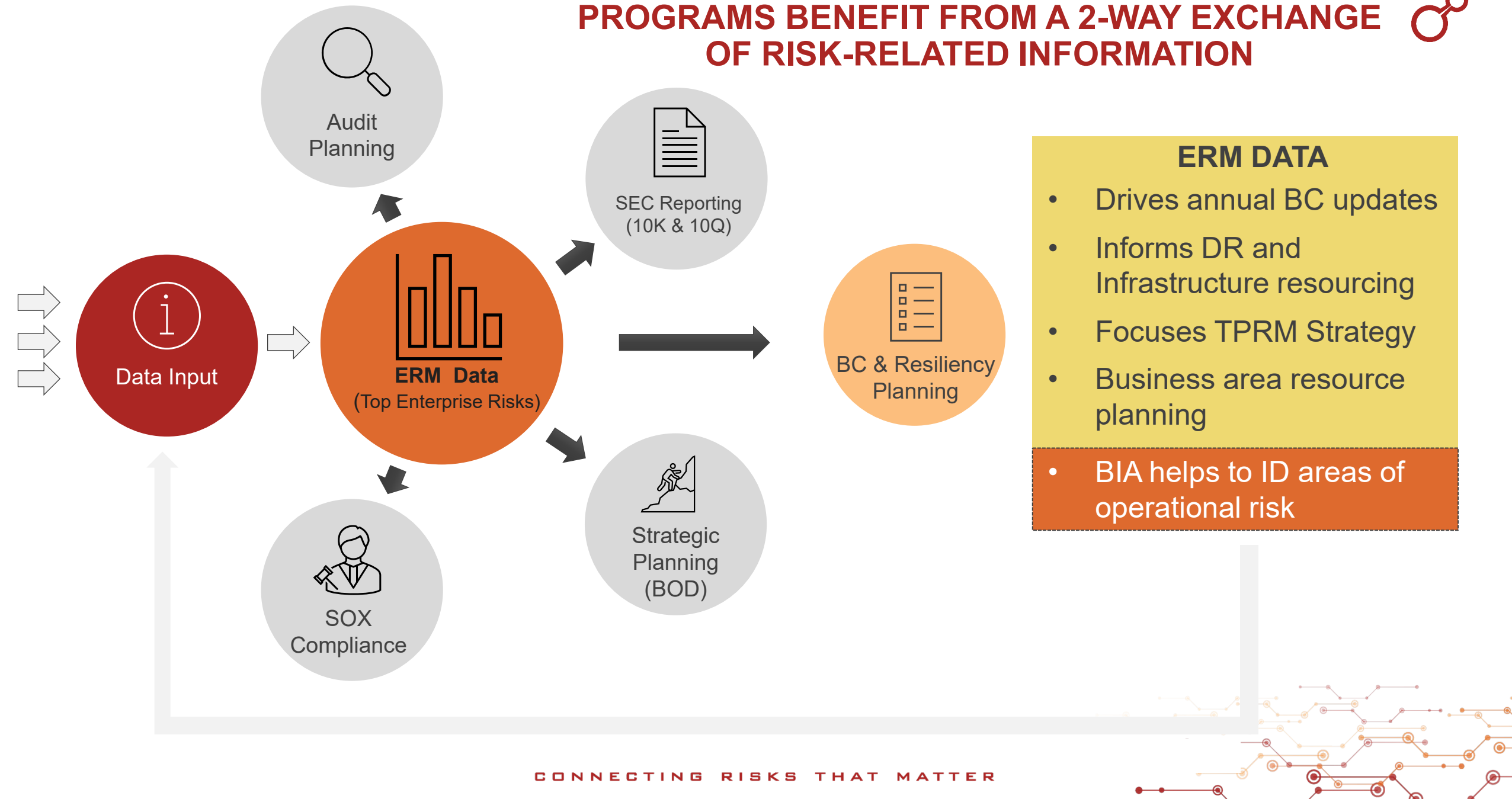
Effectively deploying an ERM program will help enable an organization to successfully achieve its strategic objectives



BY DESIGN, WE IDENTIFY AND PRIORITIZE KEY ENTERPRISE RISKS THROUGH A COMPREHENSIVE BOTTOM-UP AND TOP-DOWN PROCESS



INTEGRATED ERM AND BUSINESS CONTINUITY PROGRAMS BENEFIT FROM A 2-WAY EXCHANGE OF RISK-RELATED INFORMATION



Our Journey to becoming a *Resilient by Design* Organization

"By failing to prepare, you are preparing to fail."

Benjamin Franklin



Our Journey to *Resilience by Design*

To reach “*Resilience by Design*” we needed to understand our starting point, and our vision for the program in an ideal yet **Fit-for-Purpose** future state

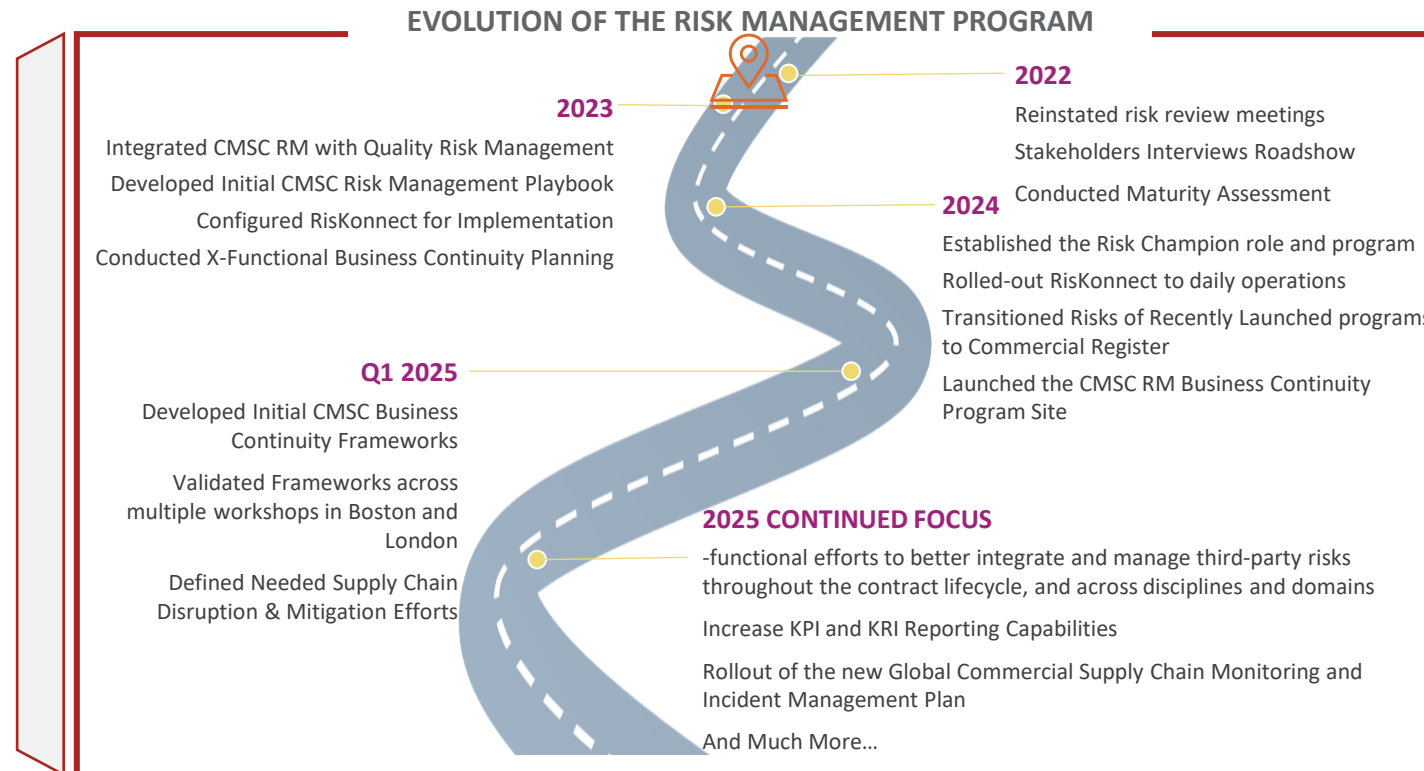
MATURITY ASSESSMENT KEY FINDINGS*

Diverse Governance Structure
Varying approaches (top-down versus bottom-up) to meetings and escalation pathways

Cross-Functional Collaboration
Cross-program forums contributing to targeted risk discussions and alignment

Reactive Mitigation Actions
Reactive approach to managing emerging / urgent risks across the supply chain

Minimal Data Integration
Various risk registers requiring integration to support a holistic risk view and list



Top-down Bottom-up approach to Risk Management



The top-down approach ensures the strategic “bigger picture” is cascaded throughout risk efforts while the bottom-up approach ensures that the people who work closest to the risks can identify, manage, and escalate those risks up





Playbook Scope

Risk exists across the organization in various forms, and our Playbook focuses on CMSC Risk Management and its interfaces with other parts of the organization. The Playbook offers a consistent yet not rigid approach to managing risks end-to-end.



The Playbook Will Address the Following Questions:

- 1 How is risk consistently managed **within CMSC** across functions, modalities, and regions?
- 2 How does CMSC Risk Management **interface** with Quality Risk Management and Third-Party Risk Management to **prevent redundancy** and ensure **consistency**?
- 3 How does CMSC Risk Management **align** with and **feed the overall Enterprise Risk Management** process?
- 4 How does CMSC Risk management **align** with and **feed the overall Business Continuity and Incident Management** process?

CMSC Risk Management Playbook Content Overview



CHAPTER 1: RISK MANAGEMENT OVERVIEW



- Risk Management Framework
- Top Down / Bottom-Up Approach
- Risk Appetite
- Risk Profile
- Risk Categorization Strategy
- Key Risk Indicators
- Success Factors

CHAPTER 2: CMSC RISK MANAGEMENT GOVERNANCE



- Leading Practices
- Role of Risk Committee
- Meeting Governance
- Meeting Details
- Role of the Risk Champion

CHAPTER 3: CMSC RISK CLASSIFICATIONS



- Scope of CMSC Risk Register
- CMSC Risk Categories
- CMSC Heat Maps
- Acceptance & Closed Criteria
- Risk Levels & Requirements

CHAPTER 4: CMSC RISK MANAGEMENT PROCESS MAPS



- Process Maps Depicting Ownership & Riskconnect Use for the Following Processes:
 - Identify
 - Assess
 - Control
 - Monitor
 - Review

CHAPTER 5: CMSC BUSINESS CONTINUITY



- Detailed Sections on Business Continuity Planning, Supply Chain Disruption & Mitigation, and Incident Management
 - Definitions
 - Governance
 - Thresholds for Plans
 - RACI / Process Flows
 - Everbridge Capabilities

CHAPTER 6: RISKCONNECT PLATFORM



- Riskconnect Overview
- Riskconnect User Manual Contents
- Riskconnect Workflow / Instructions
- Integration with Other Systems



Business and Supply Chain Continuity & Resilience

Our Approach to Resilience in a *Polycrisis Era*

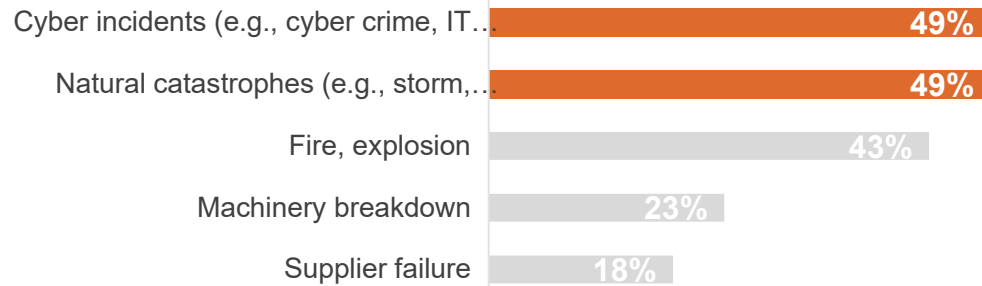
CONNECTING RISKS THAT MATTER

Connecting the Dots – Instilling a Compelling Sense of Urgency

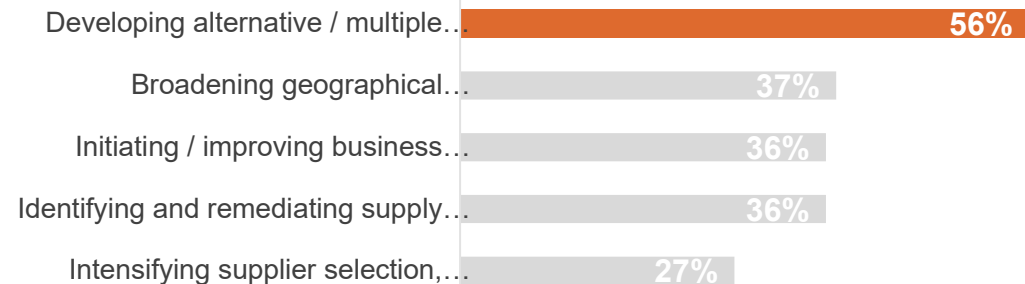
In a “*polycrisis*” Era, it is imperative to ensure robust, holistic and cohesive Business and Supply Chain Continuity and Resilience strategies, particularly as Vertex continues to scale and expand their pipeline

External Drivers and Industry Statistics¹⁻⁵

Which causes of business interruption do companies fear most?



Which actions are your company taking to de-risk supply chains and make them more resilient?



9/10

companies experience at least 4 network or system outages per year

~50%

of manufacturers suffered supply chain disruptions in the past year

36%

of surveyed individuals identified supply chain disruptions as one of the top 5 external risks

Internal Drivers

Agile Approaches: corporate programs set expectations while giving flexibility to functions to tailor their approaches to fit specific needs

Growth & Preparedness: need for proactive preparation and documentation to address potential crisis or events associated with scale-up and growth

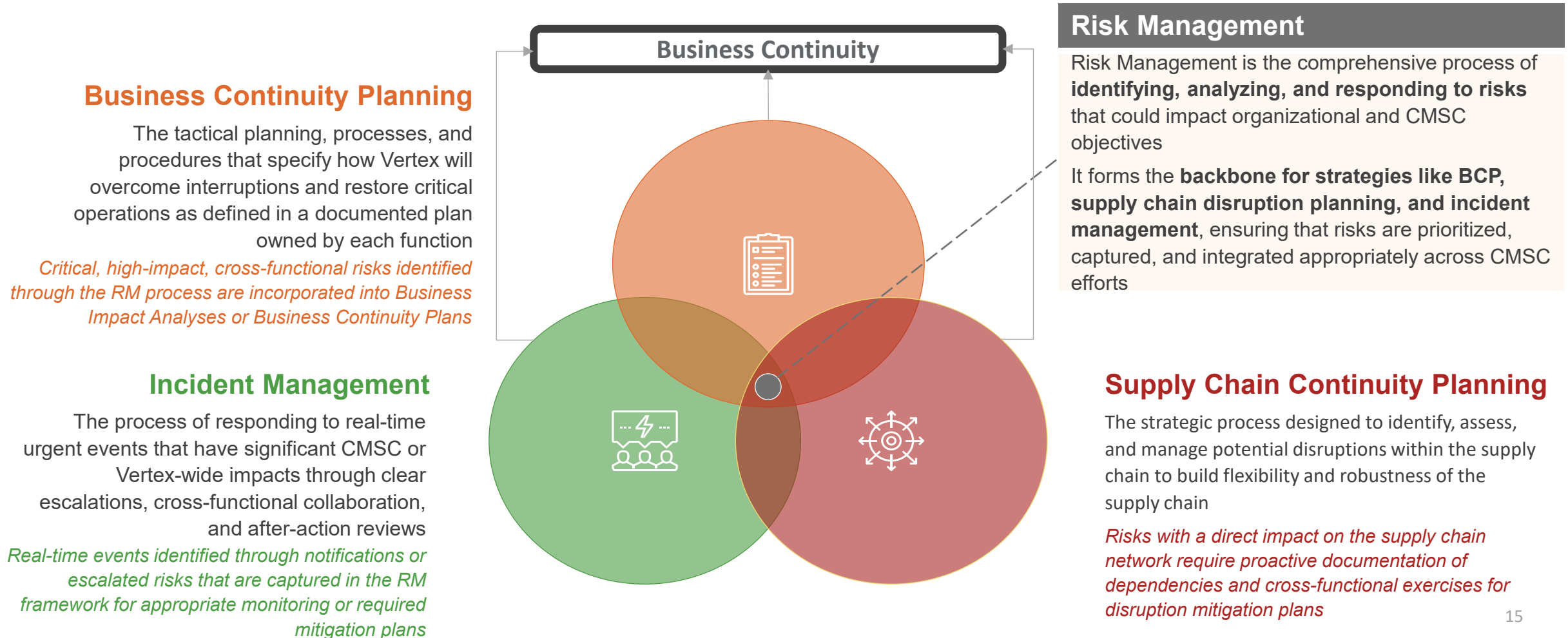
Evolving Risk Appetite: changes to appetite should be reflected in mitigation efforts, defined thresholds, and resiliency strategies

Cross-Functional Representation: plans require cross-functional representation to ensure the end-to-end supply chain is represented in preparedness strategies

Balancing Efforts: essential to strike a balance between responding to immediate disruptions and investing time in proactive mitigation and day-to-day responsibilities

Risk Management's Influence and Intersection with Business Continuity

The proactive classification and continuous monitoring of risks within the Risk Management framework supports the development and refinement of CMSC Business Continuity and mitigation plans



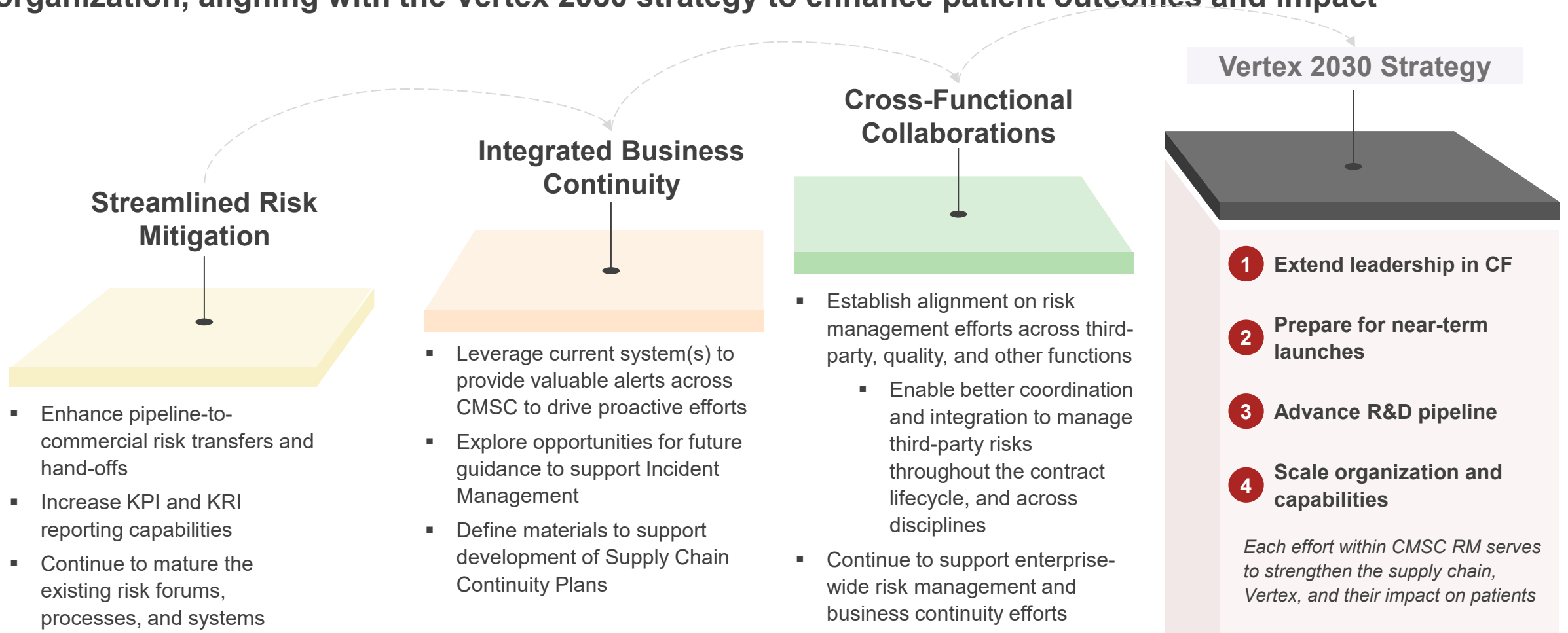
2025 Key efforts within the frameworks

CMSC Business Continuity efforts are organized into three key pillars, each with distinct roles and responsibilities, yet have overlapping outcomes that can influence one another

Business Continuity Planning	Supply Chain Continuity Planning	Incident Management
<i>Relationship</i>		
<i>Department level Business Continuity Plans sit with CMSC Leadership and are referenced if a crisis occurs</i>		
<i>SCCPs and risk details inform critical work to capture in BIA template to inform Continuity Plans</i>		
<i>Business Continuity and SCD&M Plans guide the real-time crisis management efforts</i>		
<div>1</div> Business Impact Analysis (BIA) Function specific risks, critical work, processes, vendors, and workarounds	<div>1</div> Risk Identification Identify disruption risks and document related critical suppliers, impact, and dependencies	<div>1</div> Event Identification Detect real-time or potential crises and assess the scale and impact to determine escalation
<div>2</div> Plan Development Develop plan using BIA outputs and details in SCD&M plans	<div>2</div> Plan Development Evaluate whether a risk necessitates a SC Disruption Mitigation Plan or a BC Plan	<div>2</div> Incident Response Define response actions, obtain leadership approval, and notify impacted parties of plan
<div>3</div> Plan Refresh Refresh and review of plans through various exercises on an annual basis or as needed	<div>3</div> Mitigation Execution Execute mitigation actions and milestones to regularly report out on progress and findings	<div>3</div> Action Coordination Identify resources and execute activities according to the defined plan
	<div>4</div> Plan Refresh Review and update plans based on drills, updated assessments, or mitigation impacts	<div>4</div> After-Action Report / Recovery Determine when the crisis is stabilized and evaluate response for improvements

2025 & BEYOND FOCUS AREAS

The CMSC Risk Management Program continues to focus on opportunities to grow and support the organization, aligning with the Vertex 2030 strategy to enhance patient outcomes and impact



2025 **Kōnnect**

Questions?

CONNECTING RISKS THAT MATTER

THE MATRIX

Thank You!

CONNECTING RISKS THAT MATTER

2025  **Konnnect**

Connect with me.

Derek Rappaport

derek_Rappaport@vrtx.com

[Vertex Pharmaceuticals | Home](#)

 www.linkedin.com/in/derek-rappaport-0b600819

Alfredo Vidal

alfredo_vidal@vrtx.com

[Vertex Pharmaceuticals | Home](#)

 <https://www.linkedin.com/in/alfredovidal/>

2025 **KOnnect**