



Workshop 2: Developing Strategic Responses to Manage Top Risks

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Wednesday, June 18, 2025 | 1:00 pm - 3:30 pm EDT

2-Part Workshop | Outline

WORKSHOP 1
June 11

**Using a Strategic Lens to Identify Risks to Your Organization's
"Crown Jewels" and Key Strategic Initiatives**

WORKSHOP 2
June 18

Developing Strategic Responses to Manage Top Risks

Learning Objectives

1. Understand different strategic **response** actions to **manage** top risks.
2. Learn how to use a **Bow-Tie Risk Response Tool** to develop both preventative and reactive responses to manage top risks, including responses that might involve **taking more** of the right kinds of **risks**.
3. Understand the importance of having **Key Risk Indicators (KRIs)** to **monitor** changes in risk conditions.
4. Highlight the value of a one-page **Risk Profile** for leadership communication.

Continuing Education Credits (CPEs)

- Total CPEs available for completion of both sessions is **5.4**
- Participant may earn up to the maximum CPEs below for full participation in each session:
 - **Workshop 1:** 2.7 CPEs maximum
 - **Workshop 2:** 2.7 CPEs maximum

CPE Credit Requirements

- Poll submissions and Zoom attendance record are used to verify participation throughout the session.
- **Participants seeking CPE credits must:**
 - Participate fully in the learning activities and submit ALL polls throughout the course.
 - **If you miss a poll**, send a Chat message as soon as possible. The time stamp on your Chat can be used to verify your participation.
 - Log in to each session with first name, last name and email by the scheduled start time.
 - Request a certificate via the final evaluation poll or email.
- **If you plan to petition your state board of accountancy for CPE credits, please submit ALL polls, including the final evaluation.**
- For more information on CPE credits, **contact Lindsay Wells at consult.lwells@gmail.com.**
**** Certificates will be issued after completion of the full course.** For an interim certificate showing CPEs earned to date, please contact Lindsay.

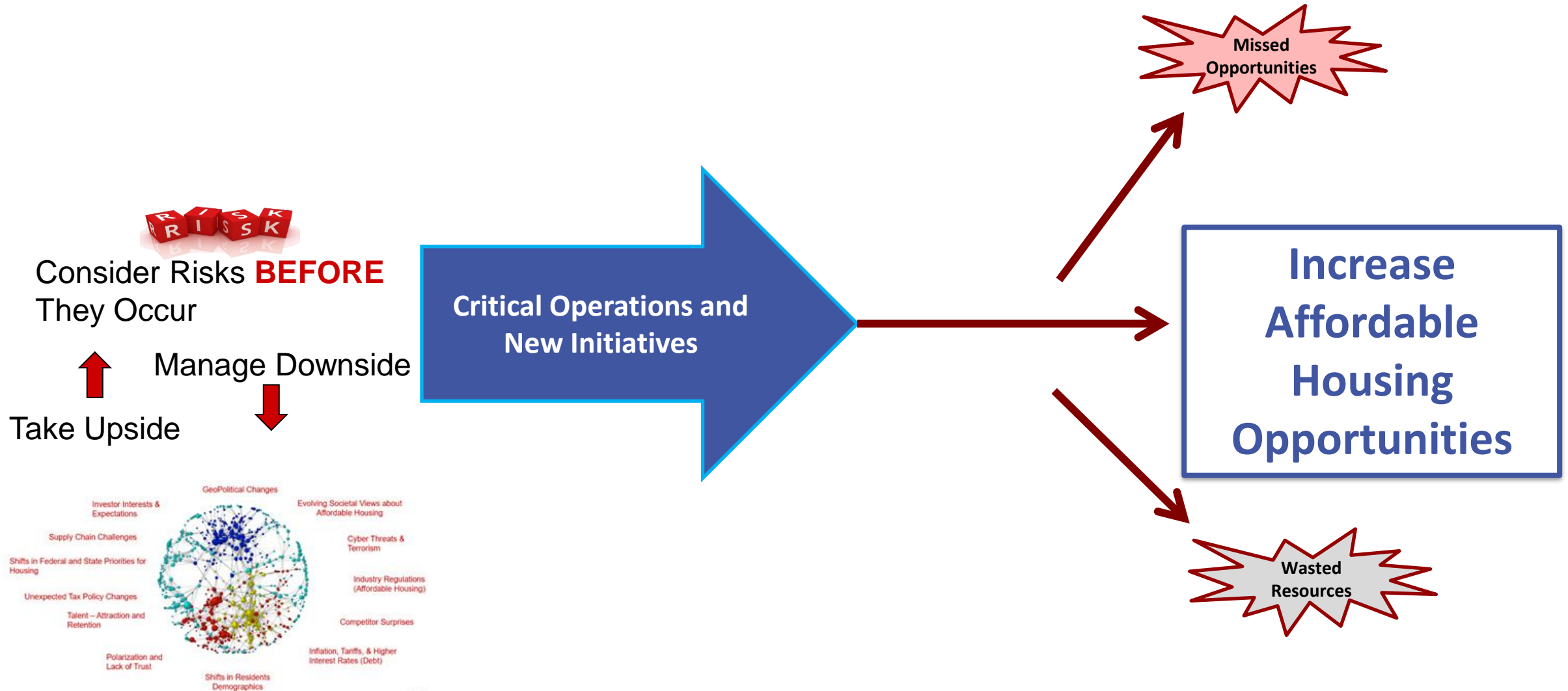
Polling Question #1

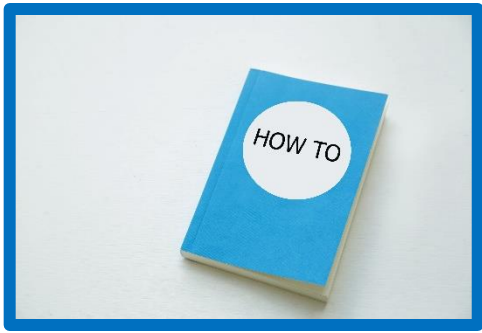
Approach to Identify Risks

Effective Risk Management Uses Strategic Lens to Pinpoint Risks



Goal – Identify Emerging Risks **BEFORE** They Happen

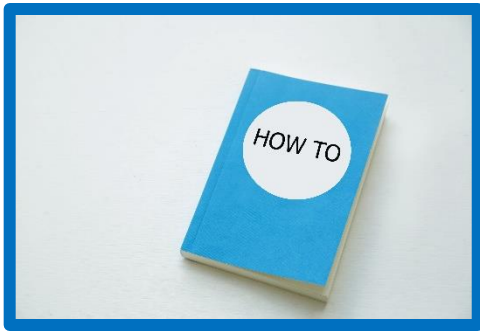




5 Examples to Engage Leaders in Risk Dialogue



1. Simple, Quick Approach
2. Moderate Approach
3. In-Depth Approach
4. Creative Approach
5. Embedded Approach

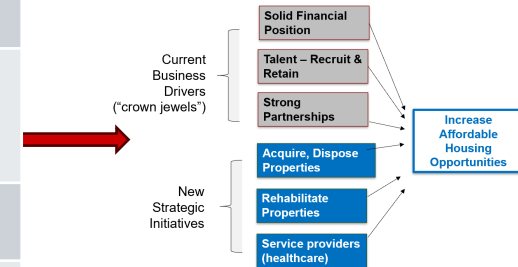


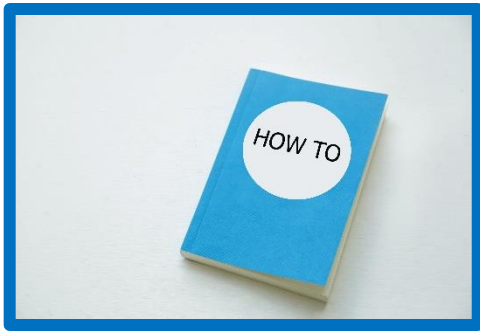
Example #1: A Simple, Quick Approach to Identifying Risks

Approach – Interview Top Entity Leaders Individually on a 1 on 1 Basis

Take These Steps:

1. Request **30 minutes** with **each** of the key leaders (i.e., C-Suite)
2. Before the interview, **remind them of what is strategically most important** for your entity's strategic success.
3. **Rank order the top 3 biggest risks.**
4. For each, **assign 5 points** to the #1 risk, 3 points to the #2 risk, and 2 points for the #3 risk.
5. Create a **score** for each risk by **aggregating** the points.





Example #2: A Moderate Approach to Identifying Risks

Approach – Facilitate a Workshop with Executives

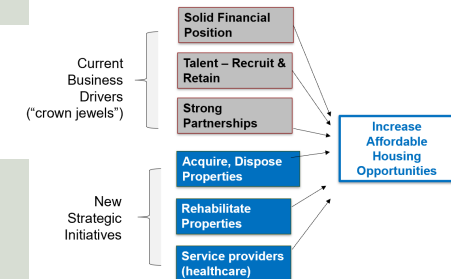
Take These Steps – **Before** the Workshop

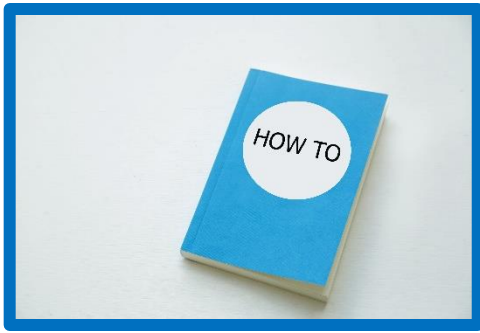


1. Set a date for a Risk Identification workshop.

2. Before the workshop, **remind them of what is strategically most important.**

3. Before the meeting, consider **assigning attendees to subgroups** who will work together at the meeting.





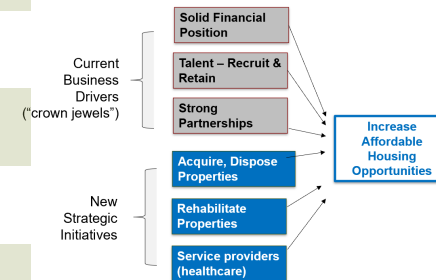
Example #2: A Moderate Approach to Identifying Risks

Approach – Facilitate a Workshop with Executives

Take These Steps – **At the Workshop**

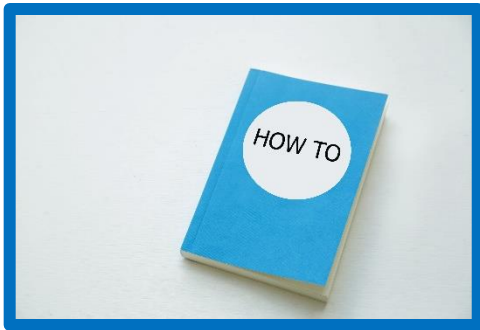


1. Assign 1-2 crown jewels and 1-2 strategic initiatives to each subgroup.
2. Ask each subgroup to discuss risks to their assigned strategy.
3. Have each group debrief their top risk concerns.
4. Have attendees “vote” on which risks are of greatest priority.
5. Review those risks receiving the greatest number of votes.



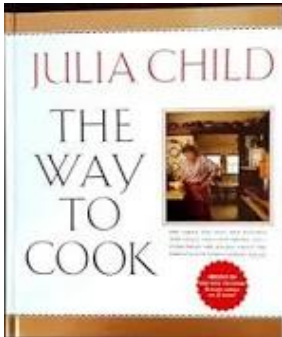
Polling Question #2

Insights for Critical Decisions



Example #3: More In-Depth Approach to Identifying Risks

Approach – Facilitate a Strategic Risk Analysis Workshop with Executives



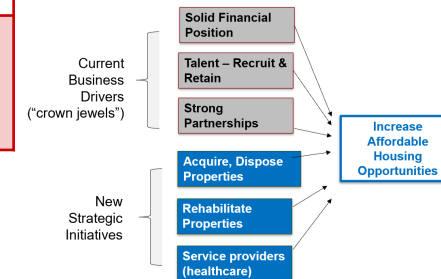
Take These Steps – **Before** the Workshop

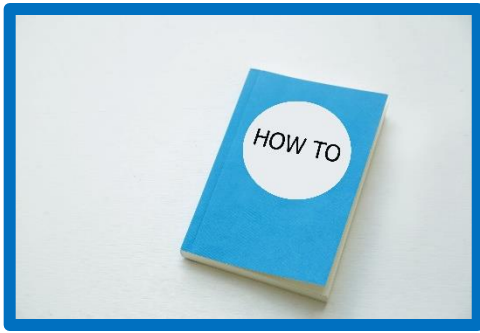
1. Set a **date** for a Risk Identification workshop.
2. Before the workshop, **remind them of what is strategically most important.**
3. Before the meeting, consider **assigning attendees to subgroups** who will work together at the meeting to identify risks.

Key Value Driver	Keys to Success of Driver What must go right for value driver to be successful? (Key people, processes, technologies, etc.)	Big Assumptions What are the big assumptions being made?	Impact of Extreme Success? How affect other parts of our business?
<i>Example:</i> Strong resident services	Property managers and other employees need to be knowledgeable of resident needs and wants. Communications and interactions with residents must be ongoing and easy. Residents need to be clear on needs and Property Managers and Employees listen and understand those needs.	Residential properties have features and services that match resident needs and wants. Other competitors are not as effective at resident services.	May be not be able to keep up with demand for features or services, ultimately frustrating residents. Resources used to provide high-level resident services limit opportunities to enhance other initiatives important to our success.

Apply Strategic Lens to Pinpoint Potential Risks

Potential Risks to Key Value Driver	Risks to Keys to Success of Driver What might emerge to prevent "keys to success"?	Risks Triggered by Assumptions What might emerge and change assumptions?	Risks of Extreme Success? What aspects of business impacted by success?
<i>Example:</i> Strong resident services	Turnover in employees may lead to deterioration of residential services knowledge. Engagement with residents may be unstructured and ad hoc. Residents may not be able to articulate what they really want and need.	Shifting resident demographics may be overlooked when designing portfolio of resident services offerings. Competitors launch innovative new resident interface that enhances communications.	Properties may not have infrastructures to support huge increase in residential services offerings.

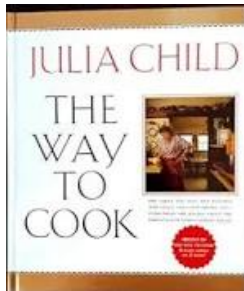




Example #3: More In-Depth Approach to Identifying Risks

Approach – Facilitate a Workshop with Executives

Take These Steps – At the Workshop



1. **Assign 1 crown jewel and 1 strategic initiatives** to each **subgroup** (this will depend on number of subgroups).
2. Ask each subgroup to **conduct a deep-dive analysis** of their **assigned initiative**.
3. Ask ach subgroup to **identify risks** for their assigned strategy:
4. Ask each subgroup to **pinpoint their top 3 risk** concerns for their assigned initiatives.
5. Have **participants vote** on top risk concerns.

Key Value Driver	Keys to Success of Driver What must go right for value driver to be successful? <i>(Key assets, processes, technologies, etc.)</i>	Big Assumptions What are the big assumptions being made?	Impact of Extreme Success? How affect other parts of our business?
<i>Example:</i> Strong resident services	Property managers and other employees need to be knowledgeable of resident needs and wants. Communications and interactions with residents must be ongoing and easy. Residents need to be clear on needs and Property Managers and Employees listen and understand those needs.	Residential properties have features and services that match resident needs and wants. Other competitors are not as effective at resident services.	May be not be able to keep up with demand for features or services, ultimately frustrating residents. Resources used to provide high-level resident services limit opportunities to enhance other initiatives important to our success.

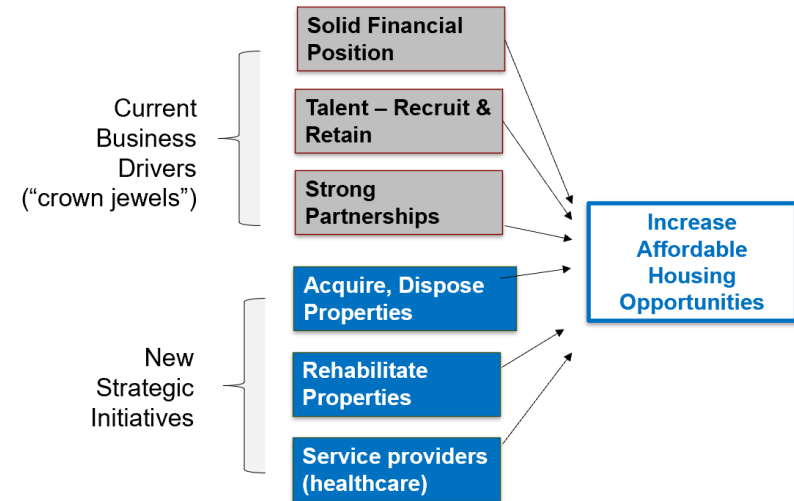
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Approach #3: Conduct Detailed Strategic Risk Analysis for Each Core Driver and Strategic Initiative

Deep-Dive Strategic Analysis of Each Driver and Initiative:

- 1. What must go right?*
- 2. What are the key assumptions?*
- 3. How might extreme success impact other parts of business?*



Approach #3: Questions to Tease Key Elements to Each Driver and Initiative

1. What must go right for this “crown jewel” or new initiative to drive value?

- Consider process from start to finish
 - How does it *start*?
 - *Who* is involved?
 - What *processes* must occur (almost flawlessly)?



Example: Strategic Risk Analysis of Value Drivers

Key Value Driver

Example:
Strong resident services

Keys to Success of Driver

What must go right for value driver to be successful? (Key people, processes, technologies, etc.)

Property managers and other employees need to be **knowledgeable** of resident needs and wants.

Communications and interactions with residents must be ongoing and easy.

Residents need to be **clear** on needs and Property Managers and Employees **listen** and understand those needs.

Approach #3: 3 Questions to Tease Key Elements to Each Driver and Initiative

2. What big assumptions are we having to make?

- *What are we assuming about our ability to be successful*
- *What is the basis for this assumption?*



Example: Strategic Risk Analysis of Value Drivers

Key Value Driver

Example:
Strong resident services

Keys to Success of Driver What must go right for value driver to be successful? (Key people, processes, technologies, etc.)	Big Assumptions What are the big assumptions being made?
<p>Property managers and other employees need to be knowledgeable of resident needs and wants.</p> <p>Communications and interactions with residents must be ongoing and easy.</p> <p>Residents need to be clear on needs and Property Managers and Employees listen and understand those needs.</p>	<p>Residential properties have products and services that match resident needs and wants.</p> <p>Other competitors are not as effective at resident service.</p>

Approach #3: Questions to Tease Key Elements to Each Driver and Initiative

3. What if we are wildly successful with this initiative?

- How might *success affect* other aspects of our business?
- To what extent is *infrastructure able* to support new demand?
- What are we assuming about our *ability to scale*?



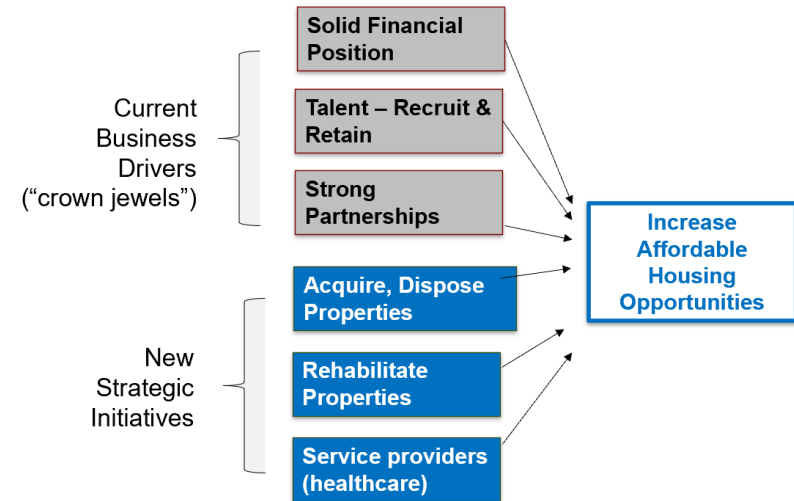
Example - Strategic Risk Analysis of Value Drivers

Key Value Driver	<u>Keys to Success of Driver</u> What must go right for value driver to be successful? (Key people, processes, technologies, etc.)	<u>Big Assumptions</u> What are the big assumptions being made?	<u>Impact of Extreme Success?</u> How affect other parts of our business?
<p><i>Example:</i> Strong resident services</p>	<p>Property managers and other employees need to be knowledgeable of resident needs and wants.</p> <p>Communications and interactions with residents must be ongoing and easy.</p> <p>Residents need to be clear on needs and Property Managers and Employees listen and understand those needs.</p>	<p>Residential properties have features and services that match resident needs and wants.</p> <p>Other competitors are not as effective at resident services.</p>	<p>May be not be able to keep up with demand for features or services, ultimately frustrating residents.</p> <p>Resources used to provide high-level resident services limit opportunities to enhance other initiatives important to our success.</p>

Approach #3: Conduct Detailed Strategic Risk Analysis for Each Core Driver and Strategic Initiative

Deep-Dive Strategic Analysis of Each Driver and Initiative:

- 1. What must go right?*
- 2. What are the key assumptions?*
- 3. How might extreme success impact other parts of business?*



Example - Strategic Risk Analysis of Value Drivers

Key Value Driver	<u>Keys to Success of Driver</u> What must go right for value driver to be successful? (Key people, processes, technologies, etc.)	<u>Big Assumptions</u> What are the big assumptions being made?	<u>Impact of Extreme Success?</u> How affect other parts of our business?
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Approach #3: Use Questions to Pinpoint Strategic Risks

Key Value Driver	<u>Keys to Success of Driver</u> What must go right for value driver to be successful? (Key people, processes, technologies, etc.)	<u>Big Assumptions</u> What are the big assumptions being made?	<u>Impact of Extreme Success?</u> How affect other parts of our business?
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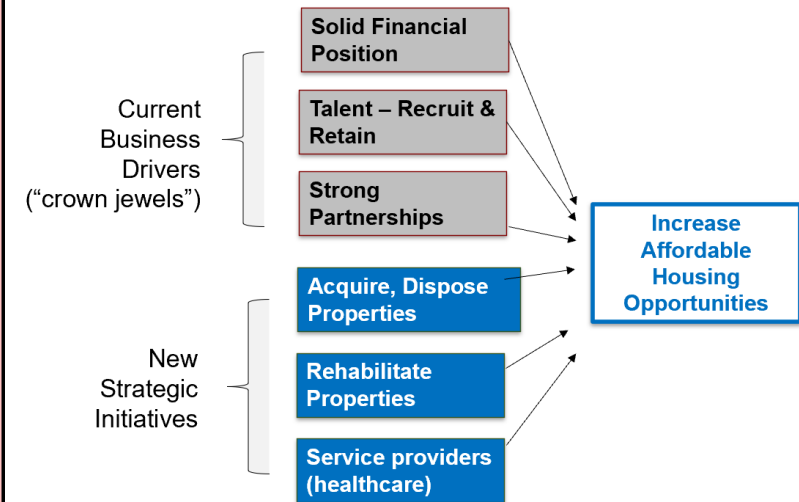
Flipping the Questions Begins to Tease Out Potential Risks



Approach #3 – Flip Questions to Tease Out Strategic Risks

Detailed Strategic Analysis of Each Driver and Initiative:

- 1. What might emerge to keep “what must go right” from occurring?*
- 2. What might emerge that changes key assumptions?*
- 3. What aspects of business are impacted by extreme success?*



Example - Strategic Risk Analysis of Value Drivers

Key Value Driver	<u>Keys to Success of Driver</u> What must go right for value driver to be successful? (Key people, processes, technologies, etc.)	<u>Big Assumptions</u> What are the big assumptions being made?	<u>Impact of Extreme Success?</u> How affect other parts of our business?
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Apply Strategic Lens to Pinpoint Potential Risks



Potential Risks to Key Value Driver	<u>Risks to Keys to Success of Driver</u> What might emerge to prevent "keys to success"?	<u>Risks Triggered by Assumptions</u> What might emerge and change assumptions?	<u>Risks of Extreme Success?</u> What aspects of business impacted by success?
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Tool: Using Strategic Risk Analysis to Identify Potential Risks to Strategic Initiatives

NC STATE Poole College of Management
Enterprise Risk Management Initiative

ERM Tool Using Strategic Risk Analysis to Identify Potential Risks to Strategic Initiatives

BRIEF DESCRIPTION OF TOOL

This template can be used to help business leaders identify potential risks that might impact the success of an important existing core business driver or new strategic initiative. An example of a core business driver may be that the entity is known for providing top-notch customer service and would like to protect and enhance that competitive advantage. An example of a new strategic initiative may be that the entity is hoping to expand its online offerings beyond what it provides today. This tool could be used to help business leaders analyze the risk to either one of these important aspects of their business.

HOW TO USE

Understand the Core Business Driver or Strategic Initiative: The template first prompts (see Sections A-C) business leaders to understand the core elements of the core business driver or new strategic initiative. In Section A within the top half of the template, business leaders are prompted to think about "what must go right" for this core business driver to continue being successful or "what must go right" for the new strategic initiative to work effectively. Then, Section B of the tool prompts business leaders to identify what assumptions they are making about the entity's ability to be successful with that core business driver or new strategic initiative. Every business has to make assumptions about the future given no one has a crystal ball to see into the future. It is important to understand what assumptions the entity is making about the future. Finally, Section C of the template prompts business leaders to consider how the success of a particular core business driver or new strategic initiative might impact other aspects of the organization.

Identify Risks that Threaten the Core Business Driver or Strategic Initiative: The bottom half of the template (see Sections D-F) is where business leaders will begin to identify potential risks. Section D of the template prompts business unit leaders to think about what risks might emerge that impact what must go right for success to continue. For example, perhaps business leaders note that employees must have deep knowledge of the entity's core products and services in order to provide high-quality customer service. A potential risk might be that high turnover of knowledgeable employees may occur making it difficult to provide high quality customer service. Section E in the template prompts business leaders to consider factors that might impact key assumptions. Users of the template might identify risks to the entity due to changing or inaccurate assumptions. Those risks would be summarized in Section E. Finally, Section F of the template prompts business leaders to consider how success with the core business driver or strategic initiative might actually create other risks for the entity.

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Part I: Strategic Risk Analysis Template Identifying Potential Risks to Important Strategy

START WITH UNDERSTANDING STRATEGY

KEY VALUE DRIVER	SECTION A: KEYS TO SUCCESS OF DRIVER	SECTION B: BIG ASSUMPTIONS	SECTION C: IMPACT OF EXTREME SUCCESS?
	What must go right for value driver to be successful? (Key people, processes, technologies, etc.)	What are the big assumptions being made?	How affect other parts of our business?

Part II: Strategic Risk Analysis Template Identifying Potential Risks to Important Strategy

APPLYING STRATEGIC LENS TO PINPOINT POTENTIAL RISKS

	SECTION D: RISKS TO KEYS TO SUCCESS OF DRIVER	SECTION E: RISKS TRIGGERED BY ASSUMPTIONS	SECTION F: RISKS OF EXTREME SUCCESS?
	What challenges might emerge to prevent "keys to success"?	What change assumption in future?	What aspects of business impacted by success?

Breakout Room #1 Discussion

- Discuss what big assumptions the industry is making about its strategic success over the next 3-5 years.
- What are the risks that might emerge if the assumptions are wrong?

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Apply Strategic Lens to Pinpoint Potential Risks			
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Debrief

Breakout Room Discussion

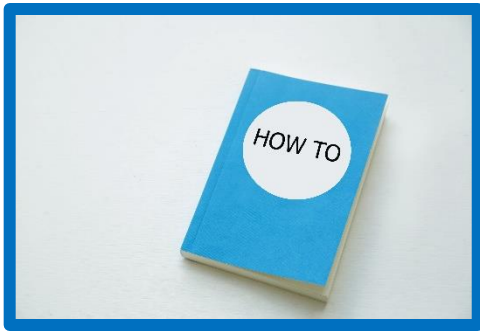
- Discuss what big assumptions the industry is making about its strategic success over the next 3-5 years.
- What are the risks that might emerge if the assumptions are wrong?

Polling Question #3

Challenges of Risk Identification

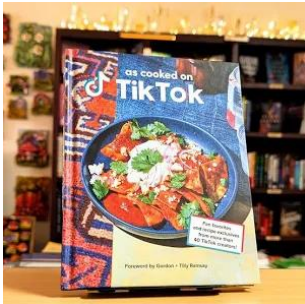


Take a
Break!



Example #4: Creative Approaches to Identifying Risks

Approach – Pick one of the Following Topics and Facilitate a Workshop to Engage in Discussion to these questions:



PESTLE Analysis

Question:

What is emerging externally along each of these dimensions that might impact our strategic success?

- Political
- Economic
- Social
- Technological
- Legal
- Environmental

Assumptions Workshop

Questions:

When you think about our ability to be successful, what are the 2-3 biggest assumptions we are making about our ability to be successful?

What if we are wrong in each assumption, what risks would emerge?

War Gaming Exercise

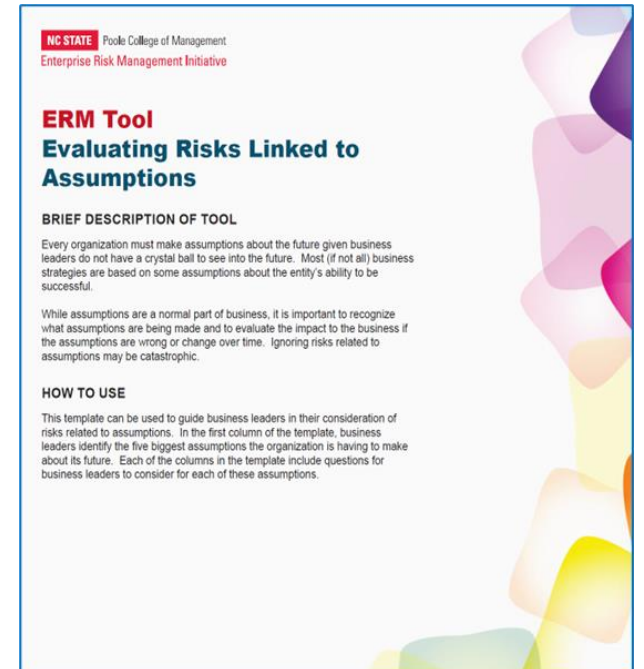
Question:

If our competitors knew what you know about our vulnerabilities, how could they take advantage of that intel and impact our business?

Approach #5: Evaluating Risks Linked to Assumptions



- We need to make assumptions for every strategy – don't have a crystal ball
- Explicit focus on assumptions can help tease out key risks to strategic success

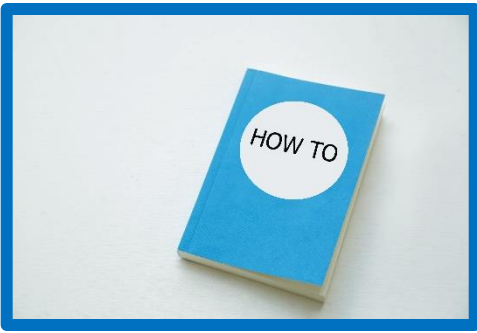


Approach #5: Brainstorm About Key Assumptions

Evaluating Risks Linked to Assumptions

This template helps prompt business leaders to think about how changing assumptions may create risks for the organization.

As you think about our business model and strategic plan what big assumptions are we making?	What is the basis for our assumption? What data or other information supports the assumption?	How reliable is our assumption?	How are we monitoring conditions that might trigger changes in our assumptions?	What risks might our business face if our assumption is "somewhat wrong"?	What risks might our business face if reality is 180 degrees opposite of our assumption?	What actions, if any, should we take to address these risks?
<p>1. <u>Example:</u></p> <p><i>Our business may be assuming that our customer service is high quality and better than our peers.</i></p>	<p><i>Anecdotal feedback we receive from customers is generally positive.</i></p>	<p><i>Somewhat reliable. We think we are better than peers, but do not have data to confirm that.</i></p>	<p><i>We periodically conduct customer surveys and we have informal conversations with our customer service reps.</i></p>	<p><i>Our competitors might take some of the market share from us.</i></p>	<p><i>Sales may significantly drop and we may face significant challenges in regaining lost customers.</i></p>	<p><i>We need to gather more detailed information about customer feedback and we need to develop a game-plan to enhance our customer service approaches.</i></p>
2.						
3.						
4.						
5.						



Example #5: Embed Risk Considerations in Strategic Planning and/or Budget Process

ERM Tool Embedding Risk Considerations in Strategic Planning and Budgeting

BRIEF DESCRIPTION OF TOOL

Most executives understand the relationship of risk & return: In order to generate higher returns, we may need to be willing to take greater risks. Despite appreciating the connections of risk and return, organizations often struggle to explicitly integrate risk considerations in strategic planning or budgeting processes. While discussions of potential new strategic initiatives or budget requests might lead to discussions of risks, those discussions are often ad hoc and a by-product of other discussions.

There may be benefits of having business leaders articulate risk considerations as part of their development of a business plan or budget request. This tool identifies questions that an organization might embed in its instructions that are provided to business unit leaders as they develop a strategic plan or budget request for their business unit. The questions prompt business leaders to explicitly consider risk dimensions as they develop their strategic plan or budget request.

HOW TO USE

These questions could be added to the instructions provided to business unit leaders when they are asked to prepare their unit's business strategic plan or budget request.

Embed risk questions into strategic planning template

Embedding Risk Considerations in Strategic Planning and Budgeting

This tool illustrates how risk considerations might be embedded in a strategic plan or budget development process.

EMBEDDING RISK CONSIDERATIONS IN STRATEGIC PLANNING

As part of strategic planning efforts, organizations often request business unit leaders to submit a strategic plan for their business unit. One way to integrate risk management into strategic planning is to embed prompts within the business plan development instructions for business unit leaders to explicitly address risks related to their business unit and risks related to their proposed strategic plan.

Consider including questions such as these in your strategic planning instructions provided to business unit leaders:

1. *What top 3 risks does your business unit face in its ability to achieve its strategic objectives over the next three-to-five years?*
2. *How does the business unit's proposed strategic initiatives contained within this business plan address the top risks identified in #1 above?*
3. *What assumptions are business unit leaders having to make about the unit's ability to achieve its strategic objectives over the next three-to-five years?*
 - a. *What is the basis of those assumptions and how do you know they are reasonable?*
 - b. *What risks would our organization face if the assumptions are significantly inaccurate?*
4. *What are the top 3-5 risks that might threaten the strategic success of the proposed strategic initiatives described in this business plan?*
5. *What are the business unit's strategies for managing the risks identified in #4?*
6. *What risks would our organization face if the strategic initiatives proposed in this business plan are wildly successful?*

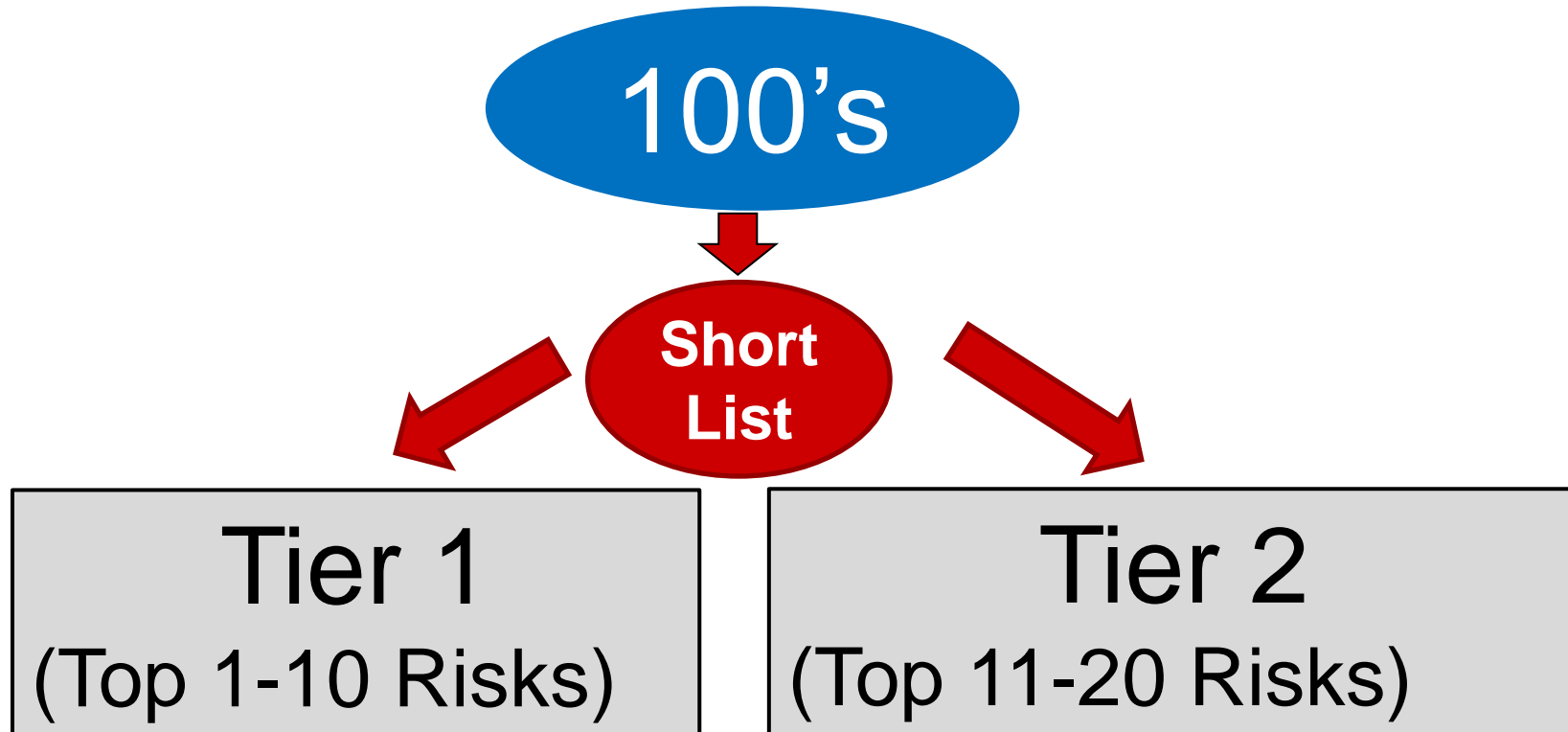
Polling Question #4

Management Support

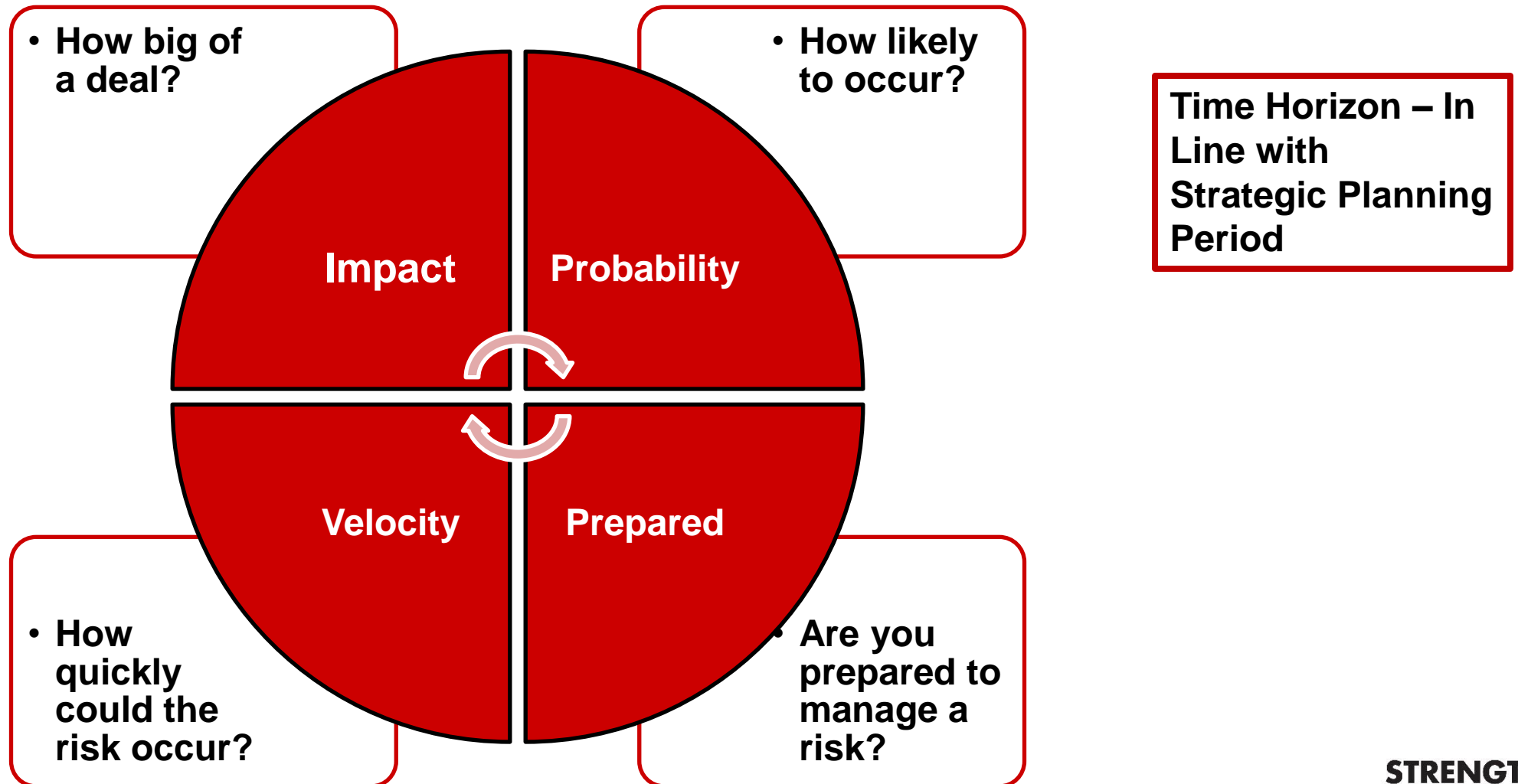
Assessment & Prioritization of Risks

Definitions and Considerations

Goal: To prioritize long list of risks to a short list of the most important risk themes.



Risk Assessment - Dimensions



Polling Question #5

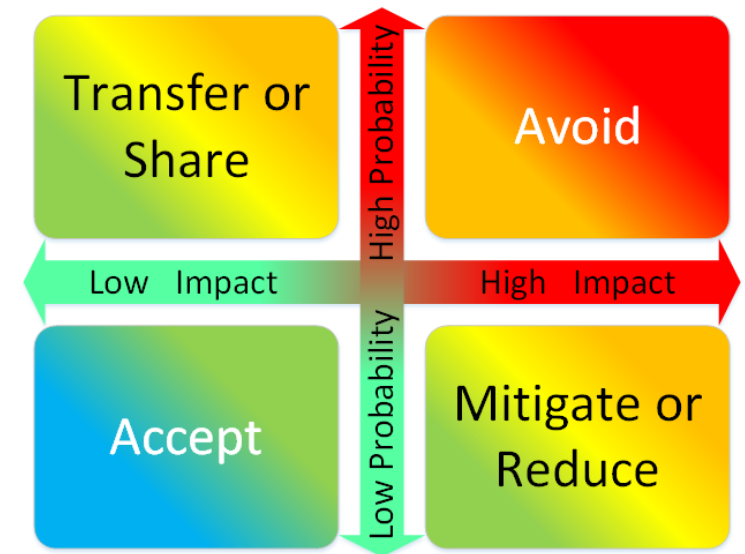
Prioritizing Risks

Risk Response

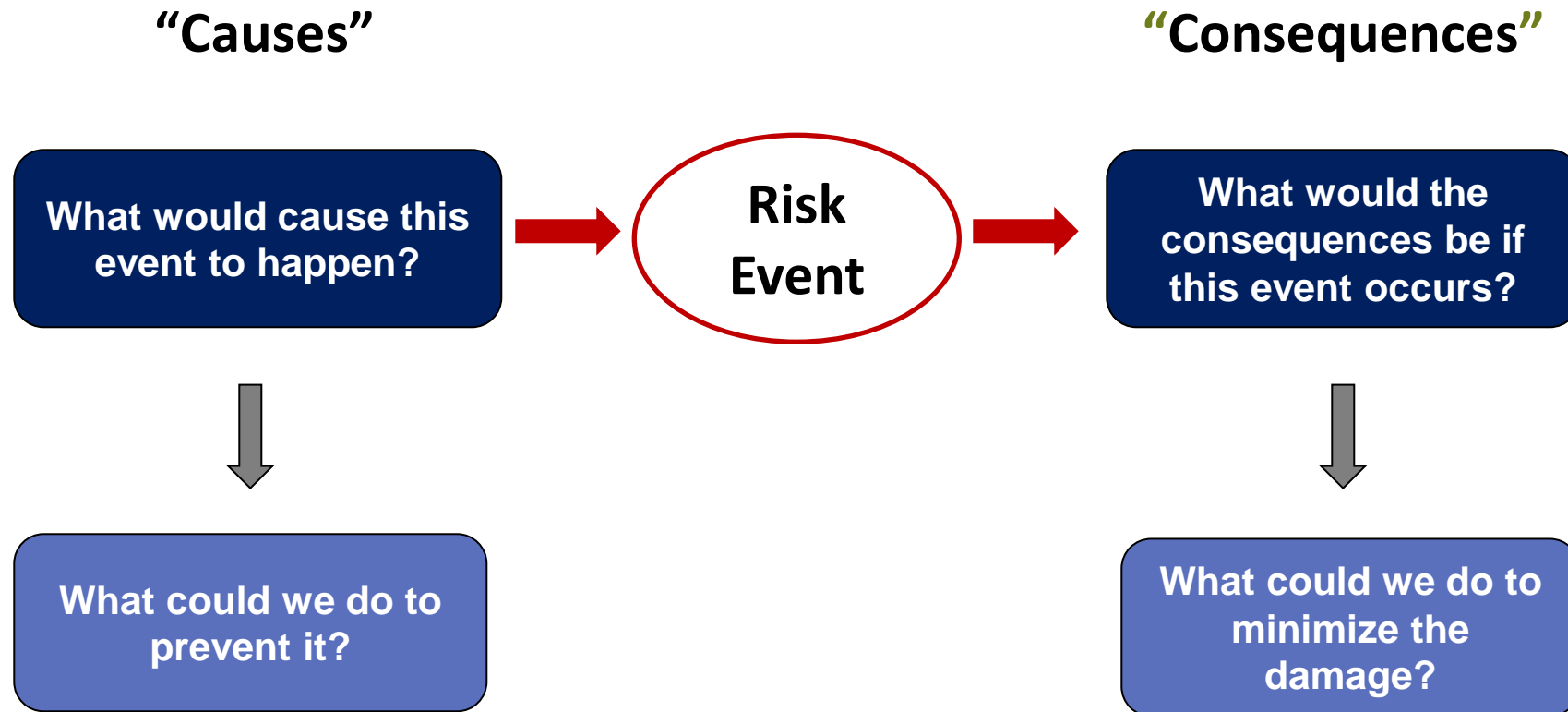
Tool – Bow-Tie Analysis and Risk Owners

Risk Responses (the Four T's)

- **Tolerate** - Risk **Acceptance** (risk is of low severity and will only be dealt with if it arises—may be monitored *actively* or *passively*)
- **Terminate** - Eliminate or **avoid** risk (risk is of high severity and is costly to mitigate effectively—take action to disengage from exposure altogether)
- **Transfer** - Risk **Sharing** (insurance, hedging, joint venture, outsourcing) – **Still own!**
- **Treat** - **Mitigate or control risks** (seek to reduce likelihood and/or impact to acceptable levels through policies, internal controls, etc.)



Responses: Proactive or Reactive?



How will we go about ensuring our responses will be effective?

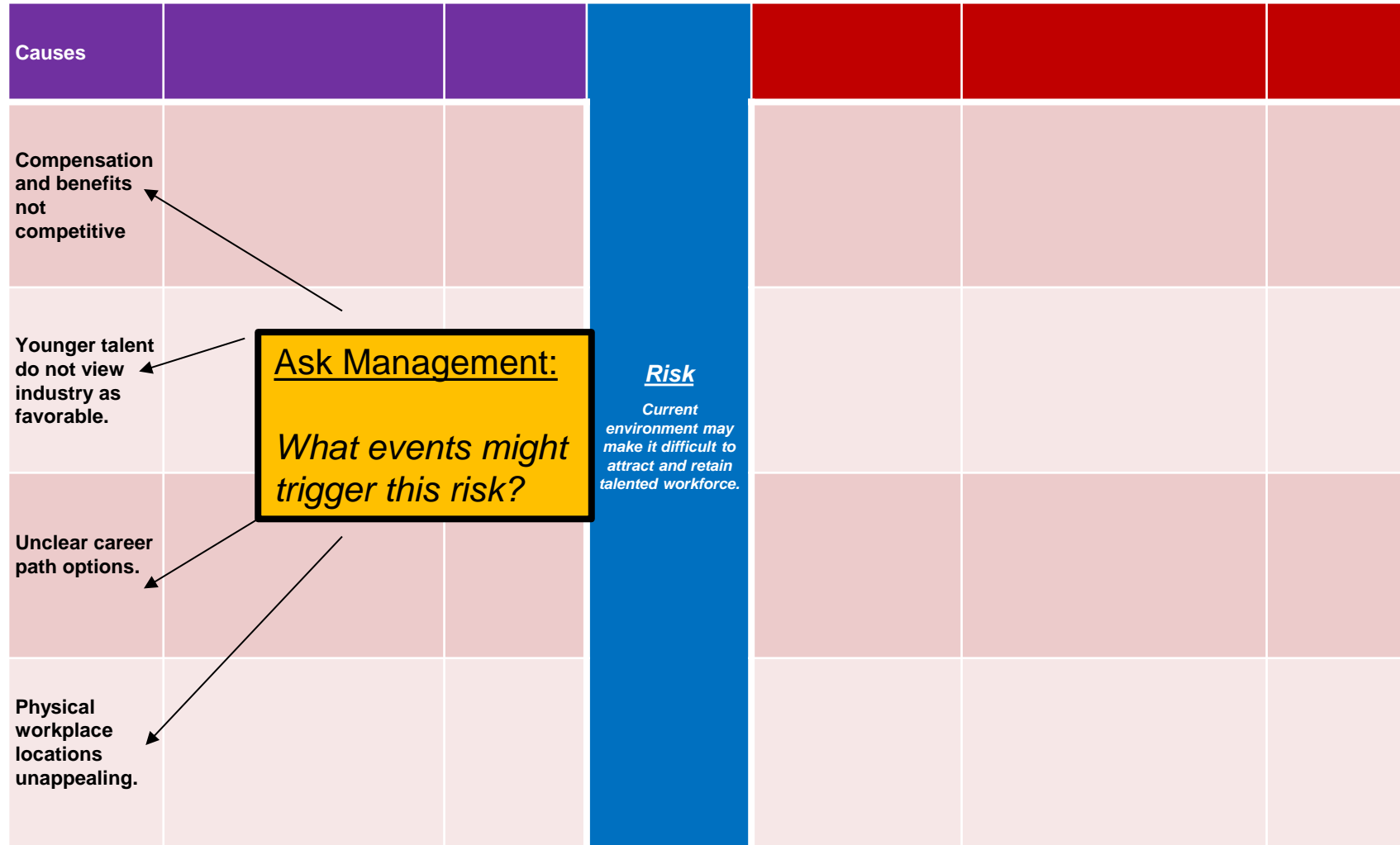
Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce



Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce



Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce

Causes	Responses to Prevent Risk	Owner of Response				
Compensation and benefits not competitive	Conduct benchmarking with entities who compete for same talent Status of Response:	Individual #1	<div style="border: 2px solid black; background-color: yellow; padding: 10px;"> <p><u>Ask Management:</u></p> <p><i>What is being done to prevent the cause?</i></p> <p><i>How effective is that response?</i></p> <p><i>What else should be done?</i></p> <p><i>Who is responsible for ensuring response is working?</i></p> </div>			
Younger talent do not view industry as favorable.	Develop awareness campaign of importance of industry. Status of Response:	Individual #2				
Unclear career path options.	Develop a leadership development program to layout career path options Status of Response:	Individual #3				
Physical workplace locations unappealing.	Upgrade facilities. Offer incentives to live in less desirable areas Status of Response:	Individual #4				

Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce

Causes	Responses to Prevent Risk	Owner of Response		Consequences		
Compensation and	Conduct benchmarking with	Individual #1	<p><i>Current environment may make it difficult to attract and retain talented workforce.</i></p>	Key operations are interrupted for period of time.		
<div style="border: 2px solid black; background-color: yellow; padding: 10px;"> <p><u>Ask Management:</u></p> <p><i>How would we recognize risk is now occurring?</i></p> <p><i>How would risk impact us?</i></p> </div>				Existing employee base has to work overtime		
Unclear career path options.	Develop a leadership development program to layout career path options Status of Response:	Individual #3		Over-taxed workforce continues to leave at faster pace		
Physical workplace locations unappealing.	Upgrade facilities. Offer incentives to live in less desirable areas Status of Response:	Individual #4		Certain initiatives have to be placed on hold.		

Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce

Causes	Responses to Prevent Risk	Owner of Response	Consequences	Responses to Minimize Impact	Owner of Response
	<div style="border: 2px solid black; background-color: yellow; padding: 10px;"> <p><u>Ask Management:</u></p> <p><i>What is our “playbook” to address the situation?</i></p> <p><i>How do we know the playbook will work?</i></p> <p><i>Who would lead the response team?</i></p> <p><i>Who else would need to be a part of the team?</i></p> </div>		Key operations are interrupted for period of time.	Prioritize functions that need staffing most and boost compensation packages to secure longer employment Status of Response:	Individual #5
			Existing employee base has to work overtime	Provide bonus incentives and other rewards to recognize extra efforts. Status of Response:	Individual #6
			Over-taxed workforce continues to leave at faster pace	Seek opportunities to outsource key functions to third parties. Status of Response:	Individual #7
			Certain initiatives have to be placed on hold.	Prioritize initiatives to place on hold first. Status of Response:	Individual #8

Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce

Causes	Responses to Prevent Risk	Owner of Response	Current environment may make it difficult to attract and retain talented workforce.	Consequences	Responses to Minimize Impact	Owner of Response
Compensation and benefits not competitive	Conduct benchmarking with entities who compete for same talent Status of Response:	Individual #1		Key operations are interrupted for period of time.	Prioritize functions that need staffing most and boost compensation packages to secure longer employment Status of Response:	Individual #5
Younger talent do not view industry as favorable.	Develop awareness campaign of importance of industry. Status of Response:	Individual #2		Existing employee base has to work overtime	Provide bonus incentives and other rewards to recognize extra efforts. Status of Response:	Individual #6
Unclear career path options.	Develop a leadership development program to layout career path options Status of Response:	Individual #3		Over-taxed workforce continues to leave at faster pace	Seek opportunities to outsource key functions to third parties. Status of Response:	Individual #7
Physical workplace locations unappealing .	Upgrade facilities. Offer incentives to live in less desirable areas Status of Response:	Individual #4		Certain initiatives have to be placed on hold.	Prioritize initiatives to place on hold first. Status of Response:	Individual #8

Tool for Using Bow-Tie Analysis to Pinpoint Risk Responses

NC STATE Poole College of Management
Enterprise Risk Management Initiative

ERM Tool Using Bow-Tie Analysis to Identify Risk Responses

BRIEF DESCRIPTION OF TOOL

Many organizations find that the "bow-tie" analysis tool is helpful in guiding business leaders through the design and implementation of effective risk responses. The "bow" in the tool is reflected below as the "risk" that is in the center of the diagram, similar to the knot in a bow-tie. This is the risk that is of concern.

HOW TO USE

Pinpointing Preventative Risk Responses: To the left of the "risk," the bow-tie prompts business unit leaders to think about risk causes that might cause the risk to emerge. Below that, the bow-tie tool prompts business leaders to think about what the entity can do to prevent the root cause from emerging. Those would represent "preventative risk responses."

Pinpointing Reactive Risk Responses: Not all risks can be prevented, especially when root causes of a risk are outside the entity. But, it is important for business leaders to think about what they can do to minimize the impact of a risk should it begin to occur. The right side of the bow-tie analysis prompts business leaders to think the consequences to the entity should the risk begin to occur. Below that, the tool prompts business leaders to identify what risk responses they could put in place to treat the risk once it begins to emerge. Those would represent "reactive risk responses."

An example of a completed bow-tie tool is shown on the next page.

```

    graph LR
      subgraph Causes
        C1[What would cause this event to happen?]
      end
      subgraph Risk_Event
        RE((Risk Event))
      end
      subgraph Consequences
        C2[What would the consequences be if this event occurs?]
      end
      C1 --> RE
      RE --> C2
      C1 --> P1[What could we do to prevent it?]
      C2 --> P2[What could we do to minimize the damage?]
      style P1 fill:#add8e6,stroke:#000,stroke-width:1px
      style P2 fill:#add8e6,stroke:#000,stroke-width:1px
      style RE stroke:#f00,stroke-width:2px
    
```

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NC STATE Poole College of Management
Enterprise Risk Management Initiative

ERM RESOURCE CENTER
www.erm.ncsu.edu

Bow-Tie Analysis

Example of a completed bow-tie analysis tool to identify preventative and reactive risk responses.

Causes	Responses to Prevent Risk	Risk Concern: Current environment may make it difficult to attract and retain talented workforce.	Consequences	Responses to Minimize Impact
Compensation and benefits not competitive.	Conduct benchmarking with entities who compete for same talent.		Key operations are interrupted for period of time.	Prioritize functions that need staffing most and boost compensation packages to secure longer employment.
Younger talent do not view industry as favorable.	Develop awareness campaign of importance of industry.		Existing employee base has to work overtime.	Provide bonus incentives and other rewards to recognize extra efforts.
Unclear career path options.	Develop a leadership development program to layout career path options.		Over-taxed workforce continues to leave at faster pace.	Seek opportunities to out-source key functions to third parties.
Limited opportunities for remote/hybrid schedule.	Offer hybrid work schedule. Provide options to live in another location and work remote full time.		Certain initiatives have to be placed on hold if can't fill key positions.	Prioritize initiatives to place on hold first.

Polling Question #6

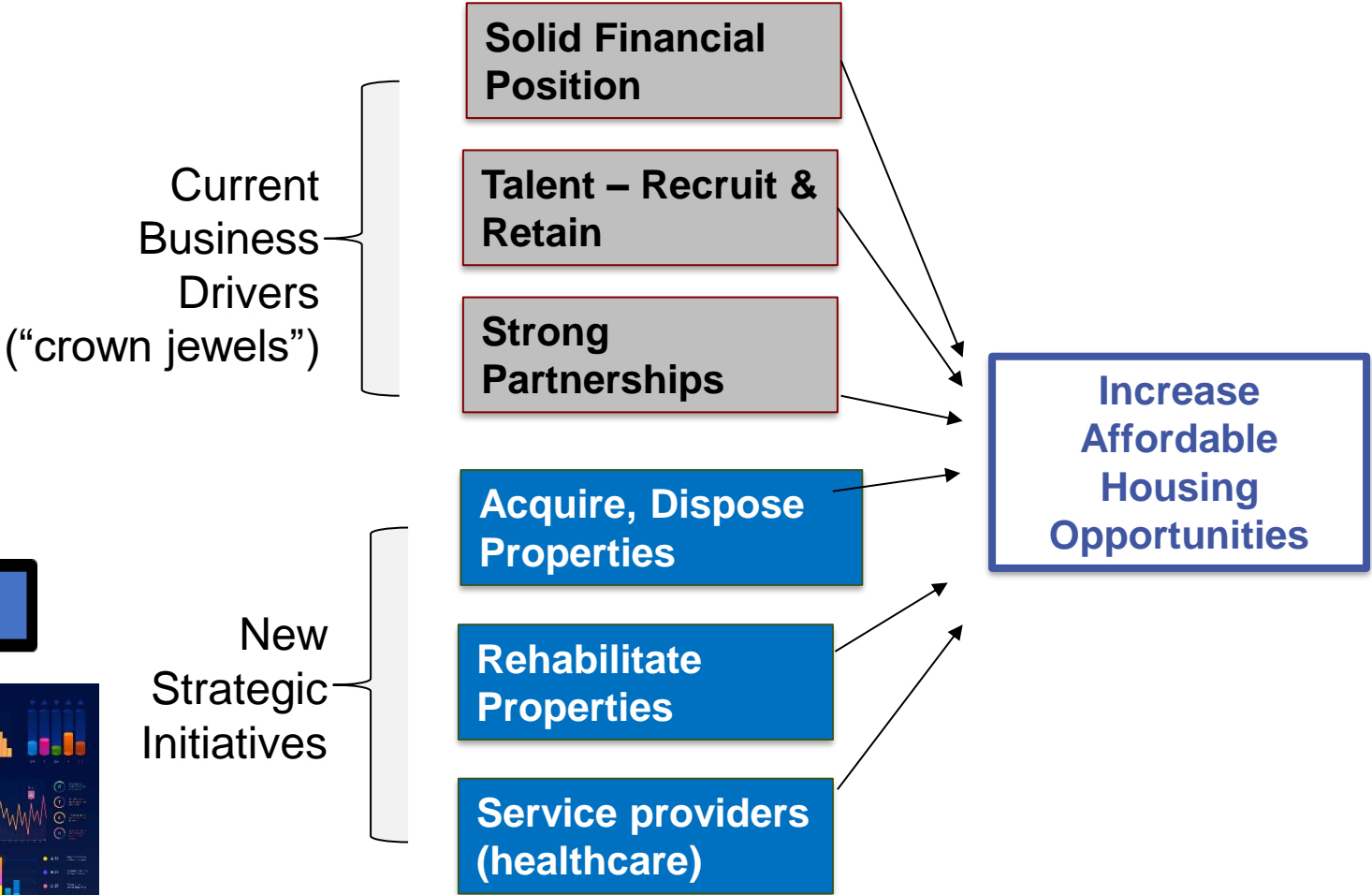
Confidence in how risks are managed

Risk Monitoring

Key Risk Indicators (KRIs)

*Comparison with Key Performance
Indicators (KPIs)*

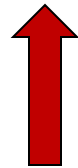
Goal: Have Dashboard of Metrics to Monitor Top Risks



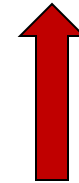
Key Risk Indicators



KPIs vs. KRIs



Historical



Forward Looking

Bow-Tie Tool to Develop Leading and Lagging KRIs

“Causes of Risk”

What would cause this event to happen?



What data tied to cause?

Leading KRI
Forward looking;
indicate changes



“Consequences if Risk Occurs”

What would the consequences be if this event occurs?

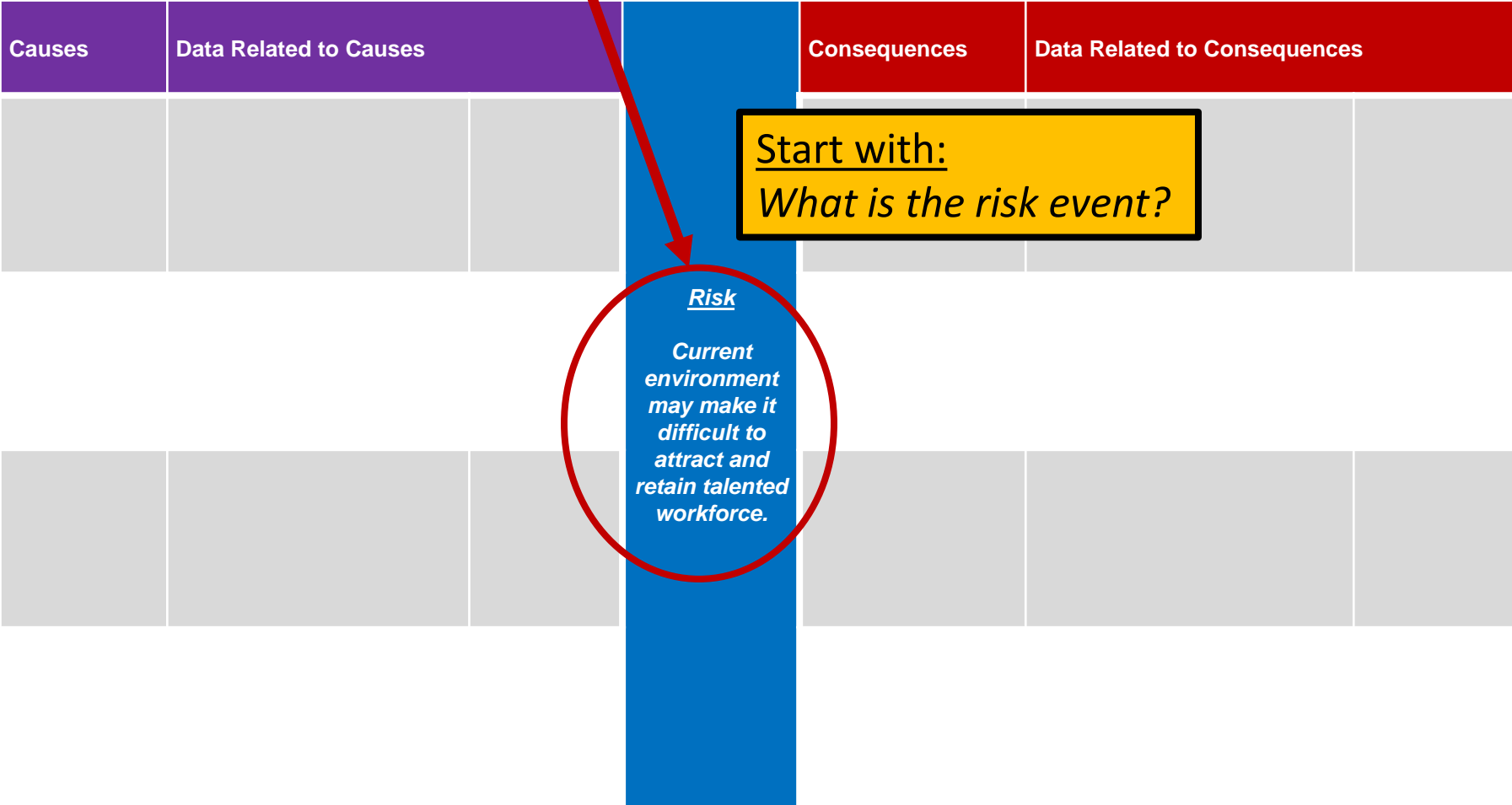


What data tied to consequences?

Lagging KRI
Based on
measures soon
after event

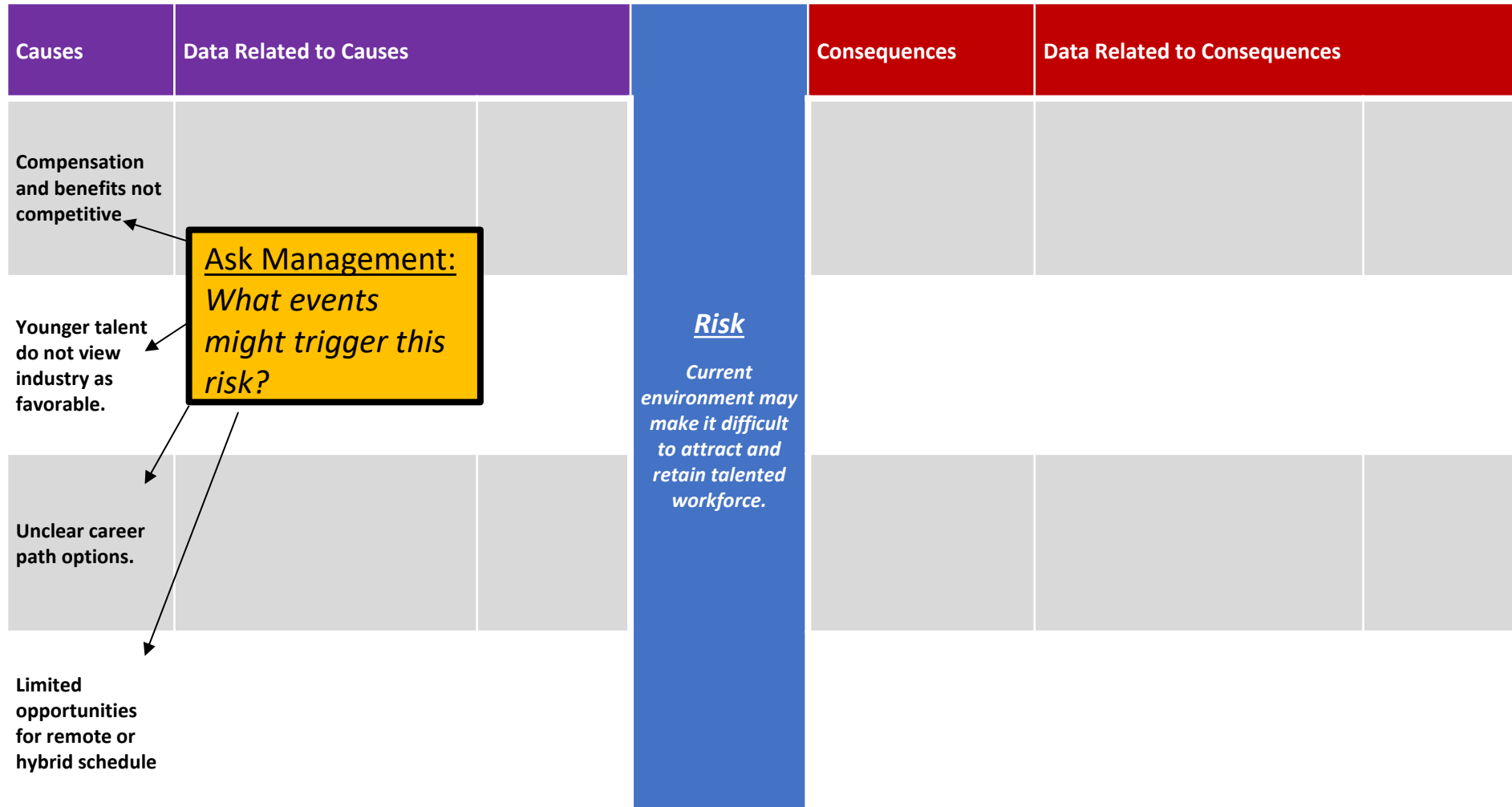
Example of a Bow-Tie Analysis Workshop

Risk: Current environment may make it difficult to attract and retain talented workforce.



Example of a Bow-Tie Analysis

Risk: *Current environment may make it difficult to attract and retain talented workforce.*



Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce.

Causes	Data Related to Causes		Consequences	Data Related to Consequences
<p>Compensation and benefits not competitive</p>	<p>Benchmarking data about compensation and benefits from industry.</p> <p>Complaints about compensation and benefits from exit interviews.</p>			
<p>Younger talent do not view industry as favorable.</p>	<p>Surveys about most desired industries for recent college graduates or young professionals.</p> <p>Average age or length of experience of applicants received by our organization.</p>			
<p>Unclear career path options.</p>	<p>Comments received by HR from existing employees in employee surveys and during annual review discussions.</p> <p>Percentages of positions filled with individuals from outside the organization.</p>			
<p>Limited opportunities for remote or hybrid schedule.</p>	<p>Comparison of flexible offerings with competitors, by role and industry.</p> <p>Employee requests from surveys.</p> <p>Higher turnover rates, by role/position</p>			

Ask Management:

*What kinds of **data** might be available to track causes?*

*What **internal** data might we have to help us track?*

*What **external** data might be helpful to monitor?*

Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce.

Causes		Risk Current environment may make it difficult to attract and retain talented workforce.	Consequences	
	Data Related to Causes			Data Related to Consequences
Compensation and benefits not favorable.	Benchmarking data about compensation and benefits from industry.	<div style="border: 2px solid black; background-color: yellow; padding: 5px; margin-bottom: 10px;"> <p>Ask Management: <i>How would risk impact us?</i></p> </div>	Key operations are interrupted for period of time.	
Unclear career path options.	Comments received by HR from existing employees in employee surveys and during annual review discussions. Percentages of positions filled with individuals from outside the organization.		Existing employee base has to work overtime	
Limited opportunities for remote or hybrid schedule.	Comparison of flexible offerings with competitors, by role and industry. Employee requests from surveys. Higher turnover rates by role/position		Over-taxed workforce continues to leave at faster pace	
			Certain initiatives have to be placed on hold if can't fill key positions.	

Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce.

Causes	Data Related to Causes		Consequences	Data Related to Consequences
Compensation and benefits not competitive	Benchmarking data about compensation and benefits		Key operations are interrupted for period of time.	Number of operations delayed or suspended due to inadequate staffing. Key turnover stats by function/operations.
Younger talent do not view industry as favorable.			Existing employee base has to work overtime	Percentage of workforce having to work overtime. Functions that have higher overtime workforce relative to all functions.
Unclear career path options			Over-taxed workforce continues to leave at faster pace	Key turnover stats by function/operations. Exit interview comments about excessive workload demands Frequency of comments/complaints posted on job related social media platforms
Limited opportunities for remote/hybrid schedule	Higher turnover rates by role/position		Certain initiatives have to be placed on hold if can't fill key positions.	Number of delayed initiatives and projects due to staffing needs Exit interview comments – leaving due to lack of flexible work schedule.

Ask Management:

How would we recognize risk is now occurring?

What data would help us see that happening?

What data might signal this event is happening to our competitors before it happens to us?

Example of a Bow-Tie Analysis

Risk: Current environment may make it difficult to attract and retain talented workforce.

Causes	Data Related to Causes		Consequences	Data Related to Consequences
Compensation and benefits not competitive	Benchmarking data about compensation and benefits from industry. Complaints about compensation and benefits from exit interviews.	<p><u>Risk</u></p> <p><i>Current environment may make it difficult to attract and retain talented workforce.</i></p>	Key operations are interrupted for period of time.	Number of operations delayed or suspended due to inadequate staffing. Key turnover stats by function/operations.
Younger talent do not view industry as favorable.	Surveys about most desired industries for recent college graduates or young professionals. Average age or length of experience of applicants received by our organization.		Existing employee base has to work overtime	Percentage of workforce having to work overtime. Functions that have higher overtime workforce relative to all functions.
Unclear career path options.	Comments received by HR from existing employees in employee surveys and during annual review discussions. Percentages of positions filled with individuals from outside the organization.		Over-taxed workforce continues to leave at faster pace	Key turnover stats by function/operations. Exit interview comments about excessive workload demands Frequency of comments/complaints posted on job related social media platforms
Limited opportunities for remote or hybrid schedule.	Comparison of flexible offerings with competitors, by role and industry. Employee requests from surveys. Higher turnover rates by role/position		Certain initiatives have to be placed on hold.	Number of delayed initiatives and projects due to staffing needs

Template to use a Bow-Tie to Develop KRIs

NC STATE Poole College of Management
Enterprise Risk Management Initiative

ERM Tool Using Bow-Tie Analysis to Develop Key Risk Indicators

BRIEF DESCRIPTION OF TOOL

Many organizations find that the "bow-tie" analysis tool is helpful in guiding business leaders through the design of effective metrics that they can use as key risk indicators to monitor risk trends. The "bow" in the tool is reflected below as the "risk" that is in the center of the diagram, similar to the knot in a bow-tie. This is the risk that is of concern.

HOW TO USE

Pinpointing Metrics to Monitor Risk Root Causes: To the left of the "risk," the bow-tie prompts business unit leaders to think about metrics that they can use to monitor trends related to root causes that might occur before the actual risk event is realized. Below that, the bow-tie tool prompts business leaders to think about what data or other measures they could use to monitor changes in the root cause. Those metrics would represent "leading key risk indicators."

Pinpointing Metrics to Monitor an Occurrence of the Risk Event: Not all risks can be identified before they begin to occur. That is, we may not recognize that a root cause has changed until signs of the actual risk event begin to emerge. The right side of the bow-tie analysis prompts business leaders to think of metrics that they can use to recognize the occurrence of a risk as soon as it begins to occur, but before its impact becomes significant. Those metrics would represent "lagging key risk indicators."

An example of a completed bow-tie tool is shown on the next page.

```

    graph LR
      subgraph Causes
        C1[What would cause this event to happen?]
        C2[What metric might reflect a root cause? Leading KRI]
      end
      RE((Risk Event))
      subgraph Consequences
        C3[What would the consequences be if this event occurs?]
        C4[What metric might signal the emergence of a risk event? Lagging KRI]
      end
      C1 --> RE
      RE --> C3
      C2 --> C1
      C4 --> C3
    
```

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Using Bow-Tie Analysis to Develop Key Risk Indicators				
Example of a completed bow-tie analysis tool to identify metrics that might serve as leading and lagging key risk indicators				
Causes	Metrics (Data) Related to Root Cause (Leading KRIs)	Risk Concern: Current environment may make it difficult to attract and retain talented workforce.	Consequences	Metrics (Data) Related to Initial Risk Impact (Lagging KRIs)
Compensation and benefits not competitive.	Benchmarking data about compensation and benefits from industry. Complaints about compensation and benefits from exit interviews.		Key operations are interrupted for period of time.	Number of operations delayed or suspended due to inadequate staffing. Key turnover stats by function/operations.
Younger talent do not view industry as favorable.	Surveys about most desired industries for recent college graduates or young professionals. Average age or length of experience of applicants received by our organization.		Existing employee base has to work overtime.	Percentage of workforce having to work overtime. Functions that have higher overtime workforce relative to all functions.
Unclear career path options.	Comments received by HR from existing employees in employee surveys and during annual review discussions. Percentages of positions filled with individuals from outside the organization.		Over-taxed workforce continues to leave at faster pace.	Key turnover stats by function/operations. Exit interview comments about excessive workload demands. Frequency of comments or complaints posted on job related social media platforms.
Limited opportunities for remote/hybrid schedule.	Comparison of flexible offerings with competitors, by role and industry. Employee requests from surveys Higher turnover rates by role/position.		Certain initiatives have to be placed on hold if can't fill key positions.	Number of delayed initiatives and projects due to staffing needs.

Polling Question #7

Bow-Tie Analysis

Example of a Risk Profile Template – Hypothetical Risk on Talent Challenges

Risk Theme: Talent Management	Tier 1 Risk Statement: <i>There is concern that we may struggle to attract and retain talent we need for strategic success.</i>	
	Risk Owner: <i>Jane Doe</i>	
High Level Summary of the Risk Issue (i.e., what's happening, what are the root causes):		
What is our overall tolerance for this risk?		
What are We Doing Now to Prevent Risk from Occurring (Preventive Response):	What are We Doing to Minimize Consequences of Risks If It Occurs (Reactive Response):	Need for Additional Responses to Better Manage Risk Responses
How is this Risk Trending? How Fast is This Risk Changing Over Time? (i.e., What is its Speed of Onset)	What Information Might Be Helpful to Monitor this Risk? (e.g., Key Risk Indicators (KRI's)):	When Would We Know <u>A</u> Different Action Should be Taken?
What is Greatest Concern About this Risk?		

Risk Theme: Talent Management	Tier 1 Risk Statement: <i>There is concern that we may struggle to attract and retain talent we need for strategic success.</i>
	Risk Owner: <i>Jane Doe</i>

High Level Summary of the Risk Issue (i.e., what's happening, what are the root causes):
Candidates for hire and existing employees may no longer view our business and industry as interesting and attractive. Our compensation packages may not be sufficiently competitive to attract and retain needed talent...

What is our overall tolerance for this risk?
We want a low amount of turnover in key positions important to our strategy and want vacancies in key positions to filled within 90 days.

What are We Doing Now to Prevent Risk from Occurring (Preventive Response):	What are We Doing to Minimize Consequences of Risks If It Occurs (Reactive Response):	Need for Additional Responses to Better Manage Risk Responses
<p><i>Our website and other external communications in hiring online sites are emphasizing how our organization is innovative and dynamic and positively impacting the stakeholders we serve.</i></p> <p><i>We have recently completed a compensation benchmarking analysis and have made market-adjustments to key positions...</i></p>	<p><i>We have entered into a contract with a professional staffing agency to provide temporary staffing needed for key position.</i></p> <p><i>Each key business function is cross-training individuals to ensure there is backup redundancy for key processes that must be operational.</i></p> <p>....</p>	<p><i>We need to evaluate our existing benefits package to bring it up-to-date with expectations in the marketplace.</i></p> <p><i>We need to boost our work schedules to allow for more work-hour flexibility and work-from-home options.</i></p> <p>...</p>

How is this Risk Trending?
Increasing at a steady pace on a month-by-month basis.

How Fast is This Risk Changing Over Time? (i.e., What is its Speed of Onset)
Escalation of this risk may occur at a gradual and moderate pace (probably quarter over quarter versus overnight).



What Information Might Be Helpful to Monitor this Risk? (e.g., Key Risk Indicators (KRI's)):

- *Turnover in key positions*
- *Percentage of employee complaints (or exit interviews) citing industry concerns or compensation/benefit concerns*
- *Trends in number of applications submitted for employment*

When Would We Know A Different Action Should be Taken?

When turnover exceeds ____ positions in key roles

Employee complaints begin to escalate to ____ percentage

Key processes are interrupted and can't be completed timely

What is Greatest Concern About this Risk?
If we can't reduce the risk of losing key talent and improve our recruiting efforts for new talent, our organization is likely to face delays in service deliveries that will lead to significant criticism and backlash from key stakeholders who are vocal in expressing their frustration in the media and other visible platforms.

ERM Tool – Risk Profile

ERM Tool Creating a Risk Profile Summary

BRIEF DESCRIPTION OF TOOL

Many organizations ask risk owners who are responsible for managing some of the top risks facing the organization to prepare a short (often 1-page) summary report that highlights key aspects of their assigned risk. These reports are often referred to as Risk Profile Summaries.

Requesting risk owners to use a standardized Risk Profile Summary helps facilitate the communication of different risks to senior executives and boards. Here, key information about each risk is presented in the same consistent format, making it easier for users of the summaries to read and review the risk. Having a Risk Profile Summary for a given risk helps senior executives and boards of directors quickly obtain a high-level understanding about top risks facing the organization including information about how the entity is managing the risks and keeping an eye on metrics to monitor the trending of that risk.

HOW TO USE

A Risk Profile Summary template is provided on the next page along with instructions about what to include in the template. This one-page summary captures key information about the assigned risk. Each cell in the template provides guidelines or prompts of the types of information to be provided about that risk in each section of the template. Risk Owners can use this to guide their completion of the Risk Profile Summary template for their assigned risk.

An example of a completed Risk Profile Summary follows as well.

Guidelines for Completing a Risk Profile

RISK THEME:
(Using 1-3 words provide a description of the risk)

RISK STATEMENT:
(State the risk concern in one sentence).

RISK OWNER:
(Identify the risk owner)

HIGH LEVEL SUMMARY OF THE RISK ISSUE (I.E., WHAT'S HAPPENING, WHAT ARE THE ROOT CAUSES):
(Use 3-4 sentences to provide more description about the overall risk – what is the overarching concern, what appears to be some of the contextual factors, and related potential causes or triggers for this risk. The goal is to provide some richness about the overall concern).

WHAT IS OUR OVERALL TOLERANCE FOR THIS RISK?
(Describe what is acceptable or not acceptable to leadership in regards to this risk's occurrence)

What are We Doing Now to Prevent Risk from Occurring (Preventive Response)?	What are We Doing to Minimize Consequences of Risks If It Occurs (Reactive Response)?	Need for Additional Responses to Better Manage Risk Responses
<i>(Describe what the organization is already doing that would prevent this risk from occurring or becoming a big issue. Provide enough details to describe how this response might prevent some of the root causes from taking place).</i>	<i>(Describe what the organization would do if this risk is not be preventable and occurs. Provide information about what the organization would do to minimize the impact should the risk unfold.)</i>	<i>(Think about gaps in the preventative and reactive responses. What else should the organization do to be better prepared to manage this event?)</i>
<p>HOW IS THIS RISK TRENDING? <i>(Do these kinds of issues seem to be occurring more frequently at the organization? Have we recently dealt with an issue that could have been managed better?)</i></p> <p>HOW FAST IS THIS RISK CHANGING OVER TIME? (I.E., WHAT IS ITS SPEED OF ONSET) <i>(How fast could this issue emerge – overnight?)</i></p>	<p>WHAT INFORMATION MIGHT BE HELPFUL TO MONITOR THIS RISK? (E.G., KEY RISK INDICATORS (KRI'S)) <i>(What signs might give leadership a hint that something might be brewing that could create a crisis – social media, whistleblower tips, rumors?)</i></p>	<p>WHEN WOULD WE KNOW A DIFFERENT ACTION SHOULD BE TAKEN? <i>(When would leadership want to step in to manage?)</i></p>
<p>WHAT IS GREATEST CONCERN ABOUT THIS RISK? <i>(Based on all of the above responses – describe what concerns you most? Responses? Lack of data to identify timely? Risk seems to be happening more and more?)</i></p>		

Polling Question #8

Risk Profile Template

Reminder of the ERM Tools Provided

Workshop 1:

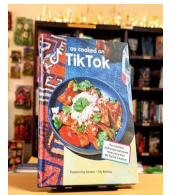
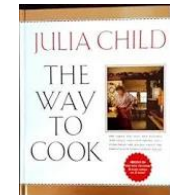
- Understanding the Organization's Core Strategic Drivers
- Using PESTLE Analysis to Identify External Risks
- Embedding Risk Considerations in Strategic Planning and Budgeting

Workshop 2:

- Using Strategic Risk Analysis to Identify Potential Risks to Strategic Initiatives
- Evaluating Risks Linked to Assumptions
- Using Bow-Tie Analysis to Identify Risk Responses
- Using Bow-Tie Analysis to Develop Key Risk Indicators
- Creating a Risk Profile Summary



Plus 5 Examples of Risk Interviews & Workshops



Polling Question #9

Application of Resources

Remember the Goal

Identify Emerging Risks **BEFORE** They Happen



Risk Management
is not becoming easier

But it is becoming
More Critical!

Polling Question #10

Session Attendance

Thank You!