

# **REAL-TIME RIGHT-SIZED RISK MANAGEMENT**

## **AS-IS GROUP ACTIVITY**

## **IDEAL/TO BE GROUP ACTIVITY**

## Breakout 1: Brainstorming Risks

- Confirm roles:
  - Creator – the person who will enter new ideas or worries.
  - Validator – the person(s) who will determine if the idea or worry is something for which action should be taken.
  - Owner – the person(s) who organize the analysis and action plan.
  - Management – the person(s) who approve allocation of resources.
- Review your business unit description.
- Brainstorm and record ideas or worries (reference Idea/Worry Formula Worksheet, Appendix C).
- Debrief when prompted.

## Breakout 2: Entering and Validating Risks

- Review list of ideas/worries.
- Pick 2-5 items.
- Creator logs in here: [nsieng.crm.dynamics.com/apps/RIIMS](https://nsieng.crm.dynamics.com/apps/RIIMS).
- Creator enters ideas/worries into the tool.
- Submit ideas/worries for Validation.
- Validator presents ideas/worries to the team.
- Team determines which ideas/worries to validate (refer to validation criteria from Management) and determines Owner.
- Validator logs in here: [nsieng.crm.dynamics.com/apps/RIIMS](https://nsieng.crm.dynamics.com/apps/RIIMS).
- Validator validates and assigns to Owner\* as agreed up on by team.
- Present results when prompted.

\*Owner can be any Creator on the team

## Breakout 3: Analyzing and Planning

- Owner logs in as “CREATOR(X)@riims.onmicrosoft.com” here: [nsieng.crm.dynamics.com/apps/RIIMS](https://nsieng.crm.dynamics.com/apps/RIIMS).
- Owner reviews idea or issue with Team.
- Team performs analysis and identifies Root Cause.
- Team determines 2-3 tasks to address root cause.
- Owner enters information and tasks.
- Present when prompted.

# Attachment A: Terminology

**Risk** – events, situations, or conditions that can affect our entity’s ability to achieve its objectives; can be good (“opportunities”) or bad (“threats”).

**Entity** – a collective effort focused on achieving objectives. May be an organization, business unit, department, group, team, program, project, discipline, etc.

**Effectivity/Effectiveness** – achieving objectives as desired (per plan with intended outcomes)

*Other terms may be used; if you want to discuss any, please ask.*

# Attachment B: Risk Sources

## The PESTLE MODEL (Aguilar, F. *Scanning the Business Environment*. 1964)

Identify risks using the following areas:

**Political** factors include government policies, leadership, and change; foreign trade policies; internal political issues and trends; tax policy; regulation and de-regulation trends.

**Economic** factors include current and projected economic growth; inflation and interest rates; job growth and unemployment; labor costs; impact of globalization; disposable income of consumers and businesses; and likely changes in the economic environment.

**Social** factors include demographics (age, gender, race, family size); consumer attitudes, opinions, and buying patterns; population growth rate and employment patterns; socio-cultural changes; ethnic and religious trends; and living standards.

**Technological** factors affect marketing in (1) new ways of producing goods and services; (2) new ways of distributing goods and services; and (3) new ways of communicating with target markets.

**Environmental** factors are important due to the increasing scarcity of raw materials; pollution targets; doing business as an ethical and sustainable company; and carbon footprint targets.

**Legal** factors include health and safety; equal opportunities; advertising standards; consumer rights and laws; product labeling and product safety.

## FTA Project and Construction Guidelines – Table 3.1 Risk Checklist

<p><b>I. Project Feasibility</b></p> <ul style="list-style-type: none"> <li>A. Technical feasibility</li> <li>B. Long-term viability</li> <li>C. Political circumstances</li> </ul> <p><b>II. Funding</b></p> <ul style="list-style-type: none"> <li>A. Sources of funding</li> <li>B. Inflation and growth rates</li> <li>C. Accuracy of cost and contingency analysis</li> <li>D. Cash flow</li> <li>E. Exchange rates</li> <li>F. Appropriation</li> </ul> <p><b>III. Planning</b></p> <ul style="list-style-type: none"> <li>A. Scope</li> <li>B. Complexity of the project</li> <li>C. Technical constraints</li> <li>D. Sole source material or service providers</li> <li>E. Constructability</li> <li>F. Milestones (schedule)</li> <li>G. Time to complete (schedule)</li> <li>H. Synchronization of work and payment schedules</li> </ul> <p><b>IV. Engineering</b></p> <ul style="list-style-type: none"> <li>A. Design and performance standards</li> <li>B. Unreliable data</li> <li>C. Complexity</li> <li>D. Completeness of design</li> <li>E. Accountability for design</li> <li>F. System integration</li> </ul> <p><b>V. Type of Contract</b></p> <ul style="list-style-type: none"> <li>A. Lump sum</li> <li>B. Unit price</li> <li>C. Cost plus</li> </ul> <p><b>VI. Contracting Arrangement</b></p> <ul style="list-style-type: none"> <li>A. Turnkey</li> <li>B. Joint venture</li> <li>C. Single prime contractor</li> <li>D. Several prime contractors</li> <li>E. Innovative procurement methods</li> </ul>	<p><b>VII. Regional and Local Business Conditions</b></p> <ul style="list-style-type: none"> <li>A. Number of bidders</li> <li>B. Unemployment rate in construction trades</li> <li>C. Workload of regional contractors</li> </ul> <p><b>VIII. Contractor Reliability</b></p> <ul style="list-style-type: none"> <li>A. Capability</li> <li>B. Capacity</li> <li>C. Credit worthiness</li> <li>D. Personnel experience</li> </ul> <p><b>IX. Owner Involvement</b></p> <ul style="list-style-type: none"> <li>A. Management of project</li> <li>B. Supplying of material</li> <li>C. Testing and inspection</li> <li>D. Safety programs</li> <li>E. Communications and problem solving</li> <li>F. Partnering</li> <li>G. Start-up operations</li> <li>H. Quality Assurance/Quality Control</li> </ul> <p><b>X. Regulatory Conditions</b></p> <ul style="list-style-type: none"> <li>A. Licenses, permits, approvals</li> <li>B. Environmental regulations and requirements</li> <li>C. Patent infringement</li> <li>D. Taxes and duties</li> <li>E. DBE involvement</li> </ul> <p><b>XI. Act of God</b></p> <ul style="list-style-type: none"> <li>A. Storm</li> <li>B. Earthquake</li> <li>C. Flood</li> <li>D. Fire</li> <li>E. Impact of site location on any of the above</li> </ul>	<p><b>XII. Site</b></p> <ul style="list-style-type: none"> <li>A. Access</li> <li>B. Congestion</li> <li>C. Underground conditions <ul style="list-style-type: none"> <li>• Soil conditions (rock vs soil, etc.)</li> <li>• Water</li> <li>• Utilities (existing and new)</li> <li>• Archeological finds</li> <li>• Hazardous wastes</li> </ul> </li> <li>D. Noise, fume, dust</li> <li>E. Abutting structures</li> <li>F. Security</li> <li>G. Disruption to public</li> </ul> <p><b>XIII. Labor</b></p> <ul style="list-style-type: none"> <li>A. Productivity</li> <li>B. Strikes</li> <li>C. Minority representation</li> <li>D. Sabotage</li> <li>E. Availability</li> <li>F. Work ethics</li> <li>G. Wage scales</li> <li>H. Substance abuse</li> <li>I. Local rules</li> <li>J. Unions</li> <li>K. Materials</li> <li>L. Workman's compensation</li> </ul> <p><b>XIV. Loss or Damages</b></p> <ul style="list-style-type: none"> <li>A. Owner's responsibility</li> <li>B. Contractor's responsibility</li> <li>C. Engineer's responsibility</li> <li>D. Vandalism, sabotages</li> <li>E. Accidents</li> <li>F. Third-Party Claims</li> </ul> <p><b>XV. Guarantees</b></p> <ul style="list-style-type: none"> <li>A. Schedule</li> <li>B. Performance</li> <li>C. Consequential losses</li> <li>D. Liquidated damages</li> </ul>
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# Attachment C: Idea/Worry Formula Worksheet

## FORMULA: TRIGGER EVENT + OUTCOME = IMPACT

### Probability

### How to format the statement

Anything other  
than 100%

“IF (TRIGGERING EVENT HAPPENS), there is a(n) IDEA or WORRY (select one) that (OUTCOME OF TRIGGERING EVENT HAPPENS) which may result in an (IMPACT TO OUR ENTITY’S ABILITY TO MEET OBJECTIVES (describe the impact))”

100% (something  
has happened;  
ain’t no goin’  
back)

“BECAUSE (EVENT THAT HAS HAPPENED), IF (ACTION NOT TAKEN OR TAKEN), there is a(n) IDEA or WORRY (select one) that (OUTCOME OF NOT TAKING/TAKING ACTION) which may result in an (IMPACT TO OUR ENTITY’S ABILITY TO MEET OBJECTIVES (describe the impact))”

### Examples:

“IF (*the county design approval is delayed based on the proposal*), THERE IS A WORRY THAT (*that work completed before the county's approval will require rework*), WHICH MAY RESULT IN (*increased costs and a negative schedule impact*).

### If an impacting condition exists already:

“BECAUSE (*the workshop is scheduled after lunch*), IF WE DON’T/DO (*create/integrate participant activities in a meaningful way*), THERE IS A WORRY THAT (*participants may fall asleep or not enjoy the process*) WHICH MAY RESULT IN (*loss of reputation for our working group/lack of interest in the topic.*)

- IF THREAT: A NEGATIVE IMPACT TO ONE OF OUR SPECIFIC OBJECTIVES
- IF OPPORTUNITY: A POSITIVE IMPACT TO ONE OF OUR SPECIFIC OBJECTIVES

### Idea/Worry #1

“IF ( \_\_\_\_\_ ), THERE IS A(N) (IDEA OR WORRY) THAT ( \_\_\_\_\_ ) WHICH MAY RESULT IN \_\_\_\_\_.

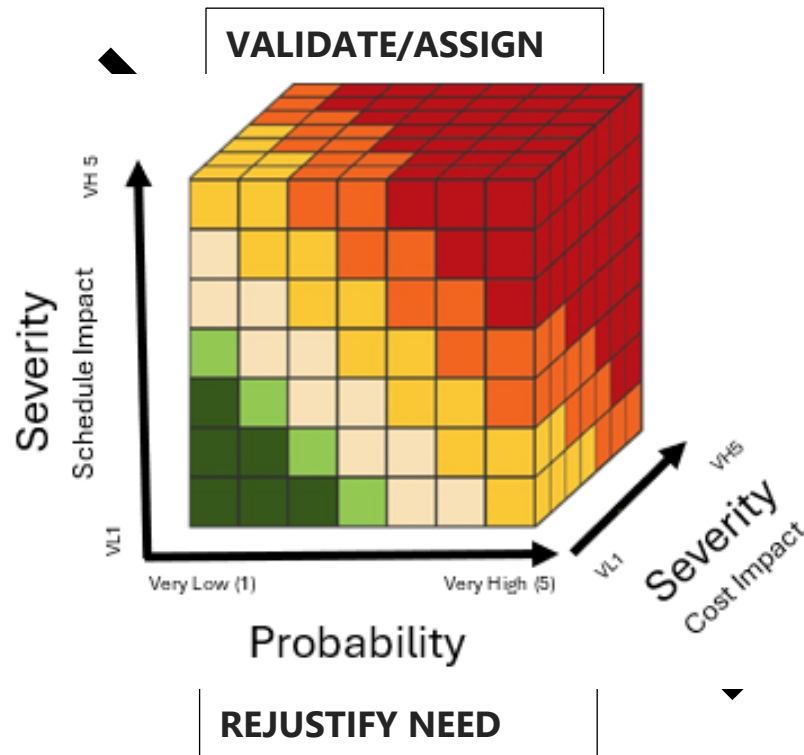
### If an impacting condition exists already:

“BECAUSE ( \_\_\_\_\_ ), IF WE DON’T/DO ( \_\_\_\_\_ ), THERE IS A(N) IDEA/WORRY THAT ( \_\_\_\_\_ ) WHICH MAY RESULT IN \_\_\_\_\_.

- IF THREAT: A NEGATIVE IMPACT TO ONE OF OUR SPECIFIC OBJECTIVES
- IF OPPORTUNITY: A POSITIVE IMPACT TO ONE OF OUR SPECIFIC OBJECTIVES

## Attachment D: Validation Criteria

Resources are not unlimited; Leadership cares how we use what we have



## HOW ARE RISK SCORES DETERMINED?

$$\text{RISK SCORE} = \text{Probability} \times \text{Impact} \times \text{Velocity}$$

- Probability = how likely something is to happen
- Impact = the greater (positive or negative) impact of key criteria such as cost, schedule
- Velocity = the rate at which the idea or worry is approaching which influences allocation of resource



## Attachment E: Making it Important

It all comes down to how much an entity, and the people who comprise that entity, truly are in pursuit of fulfilling their entity's vision, mission, goals, and objectives. This requires that leadership commits to continually communicating with the people in these entities and reminding them that everything they do – or should do – is tied to the entity's vision, mission, goals, and objectives. That commitment sounds good on paper but unless leadership walks the talk and puts processes and tools in place, with training on how to successfully navigate those processes and tools, people will not fully embrace the importance of the work they do as a constituent component of the entity's larger purpose.

Risks, Lessons Learned, and Improvement Actions are intended to aid an entity in its pursuit of excellence. Keeping these systems, processes, and tools in perspective is key to successful and sustained deployment. Resources are not infinite thus the concept of risk-based decision-making is important for leadership to understand and consistently apply. Risk-based decision-making almost always leads to the choice of allocating resources or walking away...and sometimes, walking away.

## Attachment F: In case you were curious....

Below is a Risk Summary used in the preparation of this workshop:

**Objective:** to promote conversation about the possible need for better ways to capture and analyze ideas and worries that may present risks to an entity.

**Statement:** If the workshop is not conducted as planned, there is a worry that the conversation and outcome of the workshop will not meet our objective which may delay advancing better ways to capture ideas and worries.

Risk Parameter	Baseline	Post-mitigation
Probability	Medium	Low
Impact - Reputation	High	Low
Velocity	High	Medium

### Action plan:

Analysis	Type of issue	Mitigation Action	Status
Nobody attends	Reputational	Early promotion	Done
Internet crashes	Technical	Use Hot Spot	Ready if needed
Attendees can't log into the Production site	Technical	Set up user access to the Test site	Done
Attendees don't engage in activities	Leadership	Facilitators have pre-set answers to spark conversation	Done
Attendees don't like the conversation	Leadership	Facilitators monitor conversation to keep on track and monitor tone	Done
Not enough computers	Technical	Facilitator to loan computer	Ready if needed
In-workshop presentation tools don't work	Technical	Facilitator-led conversation	Ready if needed