

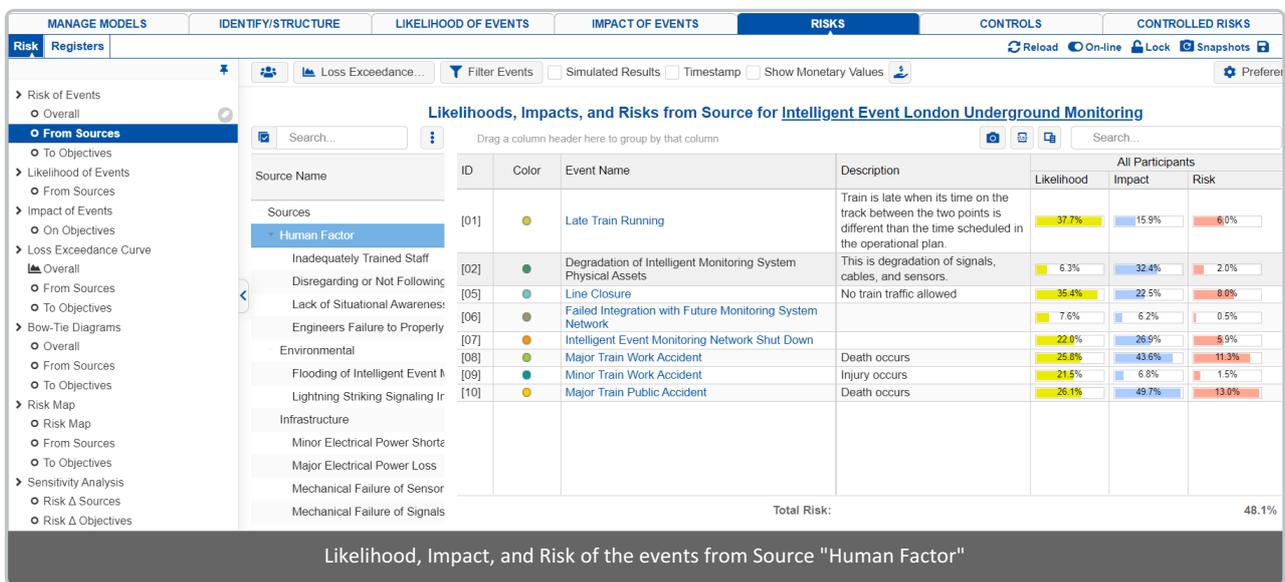
Risk of Events From Threats

Overview

This page displays the **Likelihoods, Impacts, and Risks** of each Event **from specific Threats**.

In Riskion, we refer to **threats, causes, hazards, and sources** interchangeably. While they may have slightly different nuances depending on the context in which they are used, they serve the same purpose -- they are all threats/sources of risk (for Risk Events) or sources of opportunity (for Opportunity Events). In our sample model, we are using the terminology "Source(s)".

The Likelihoods, Impacts, and Risks of the events from Source "**Human Factor**" is displayed below:



Likelihood, Impact, and Risk of the events from Source "Human Factor"

A Source is selected from the Sources Hierarchy at the left.

Source Name	ID	Color	Event Name	Description	All Participants		
					Likelihood	Impact	Risk
Sources							
Human Factor	[01]	Yellow	Late Train Running	Train is late when its time on the track between the two points is different than the time scheduled in the operational plan.	37.7%	15.9%	6.0%
Inadequately Trained Staff	[02]	Green	Degradation of Intelligent Monitoring System Physical Assets	This is degradation of signals, cables, and sensors.	6.3%	32.4%	2.0%
Disregarding or Not Following	[05]	Blue	Line Closure	No train traffic allowed	35.4%	22.5%	8.0%
Lack of Situational Awareness	[06]	Grey	Failed Integration with Future Monitoring System Network		7.6%	6.2%	0.5%
Engineers Failure to Properly	[07]	Orange	Intelligent Event Monitoring Network Shut Down		22.0%	26.9%	5.9%
Environmental	[08]	Light Green	Major Train Work Accident	Death occurs	25.8%	43.6%	11.3%
Flooding of Intelligent Event M	[09]	Dark Blue	Minor Train Work Accident	Injury occurs	21.5%	6.8%	1.5%
Lightning Striking Signaling Ir	[10]	Yellow	Major Train Public Accident	Death occurs	26.1%	49.7%	13.0%
Infrastructure							
Minor Electrical Power Shortc							
Major Electrical Power Loss							
Mechanical Failure of Sensor							
Mechanical Failure of Signals							
Total Risk:					48.1%		

You can also select the top node "Sources" which will show the same results as with the [Overall Risk Results](#) page.

The Events on the grid may vary depending on the [contributions of the events](#) given the selected source.

Note: It is possible to select multiple sources at once, this is explained [here](#).

Select Participants and Groups

By default, the results shown are for the "All Participants" group.

By selecting from the  "Participants and Groups" icon, you can display the results for other participants or groups

Participants and Groups

Search:

	Participant Name	Email Address	Has data?	
<input type="checkbox"/>	Brian Quigley	quigleybf@gwu.edu	Yes	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Chief Engineering Officer	ceo@gwu.edu	Yes	<input type="checkbox"/>
<input type="checkbox"/>	Chief Executive Officer	che@gwu.edu	Yes	<input type="checkbox"/>
<input type="checkbox"/>	Chief Risk Officer	cro@gwu.edu	Yes	<input type="checkbox"/>
<input type="checkbox"/>	Denis Risman	denisrisman@gwu.edu	Yes	<input type="checkbox"/>
<input type="checkbox"/>	Devin Nagy	devinnagy@gwu.edu	Yes	<input type="checkbox"/>
<input type="checkbox"/>	Grace	grace@eci.com		<input type="checkbox"/>
<input type="checkbox"/>	IT Supervisor	its@gwu.edu	Yes	<input type="checkbox"/>
<input type="checkbox"/>	James	james@eci.com		<input type="checkbox"/>
<input type="checkbox"/>	John Doe	j.doe@eci.com		<input type="checkbox"/>
<input type="checkbox"/>	Michael Mankowski	mmankowski@gwu.edu	Yes	<input type="checkbox"/>

	Group name	Has data?	Select all users with data
<input checked="" type="checkbox"/>	All Participants	Yes	<input type="checkbox"/>
<input type="checkbox"/>	C-Level Executives	Yes	<input type="checkbox"/>
<input type="checkbox"/>	Engineering	Yes	<input type="checkbox"/>

[Select all](#) | [Deselect all](#)

After selecting participants and groups to display, click OK.

Source Name	ID	Color	Event Name	Description	All Participants			Chief Engineering Officer			
					Likelihood	Impact	Risk	Likelihood	Impact	Risk	
Sources											
Human Factor	[01]	●	Late Train Running	Train is late when its time on the track between the two points is different than the time scheduled in the operational plan.	37.7%	15.9%	6.0%	4.6%	11.4%	0.5%	
Inadequately Trained Staff											
Disregarding or Not Following Proper Po	[02]	●	Degradation of Intelligent Monitoring System Physical Assets	This is degradation of signals, cables, and sensors.	6.3%	32.4%	2.0%	0.6%	32.3%	0.2%	
Lack of Situational Awareness	[05]	●	Line Closure	No train traffic allowed	35.4%	22.5%	8.0%	18.3%	18.1%	3.3%	
Engineers Failure to Properly Install Equi	[06]	●	Failed Integration with Future Monitoring System Network		7.6%	6.2%	0.5%	0.0%	2.4%	0.0%	
Environmental	[07]	●	Intelligent Event Monitoring Network Shut Down		22.0%	26.9%	5.9%	1.1%	9.6%	0.1%	
Flooding of Intelligent Event Monitoring I	[08]	●	Major Train Work Accident	Death occurs	25.8%	43.6%	11.3%	19.4%	14.3%	2.8%	
Lightning Striking Signaling Infrastructure	[09]	●	Minor Train Work Accident	Injury occurs	21.5%	6.8%	1.5%	2.2%	5.6%	0.1%	
Infrastructure	[10]	●	Major Train Public Accident	Death occurs	26.1%	49.7%	13.0%	19.4%	12.8%	2.5%	
Minor Electrical Power Shortage											
Major Electrical Power Loss											
Total Risk:								48.1%		9.5%	

Open Bow-tie diagram from Grid

Clicking the Event Name will open a modal that displays the bow-tie diagram for the selected event.

From the Bow-tie diagram, you analyze the **likelihoods** (left) and **impacts** (right) of the selected **event** (center) For **Threats with controls**. Click "[Bow-tie Diagram From Threats](#)" for more details.

Expert Choice **riskion** Workgroup: Riskion Help Risk model: Intelligent Event London Underground Monitoring John Doe

MANAGE MODELS IDENTIFY/STRUCTURE LIKELIHOOD OF EVENTS IMPACT OF EVENTS **RISKS** CONTROLS CONTROLLED RISKS

Risk Registers Reload On-line Snapshots

Loss Exceedance... Filter Events Simulated Results Timestamp Show Monetary Values Preferences

Likelihoods, Impacts, and Risks from Source for Intelligent Event London Underground Monitoring

Search... Drag a column header here to group by that column Search...

Source Name	Co...	Event Name	Description	All Participants		
				Likelihood	Impact	Risk
Human Factor	1	Late Train Running	Train is late when its time on the track between the two points is different than the time scheduled in the operational plan.	37.70%	15.87%	5.98%
Inadequately Trained Staff	2	Degradation of Intelligent Monitoring System Physical Assets	This is degradation of signals, cables, and sensors.	6.30%	32.43%	2.04%
Disregarding or Not Following Proper Poli...	3	Line Closure	No train traffic allowed	35.40%	22.54%	7.98%
Lack of Situational Awareness	4	Failed Integration with Future Monitoring System Network		7.56%	6.25%	0.47%
Engineers Failure to Properly Install Equi...	5	Intelligent Event Monitoring Network Shut Down		21.97%	26.94%	5.92%
Environmental	6	Major Train Work Accident	Death occurs	25.88%	43.63%	11.28%
Flooding of Intelligent Event Monitoring In...	7	Minor Train Work Accident	Injury occurs	21.45%	6.77%	1.45%
Lightning Striking Signaling Infrastructure	8	Major Train Public Accident	Death occurs	26.09%	49.70%	12.97%
Infrastructure						
Minor Electrical Power Shortage						
Major Electrical Power Loss						
Mechanical Failure of Sensors						
Mechanical Failure of Signals						
Mechanical Failure of Cables						
Terrorism						
Conventional Attack on the Signalling Infr...						

Shortcuts Advanced mode is OFF Version: 6.2.001.42282 © 2007-2021 Expert Choice, Inc. All Rights Reserved

Export Grid into excel or image format



You can export the grid into a .xlsx file by clicking 

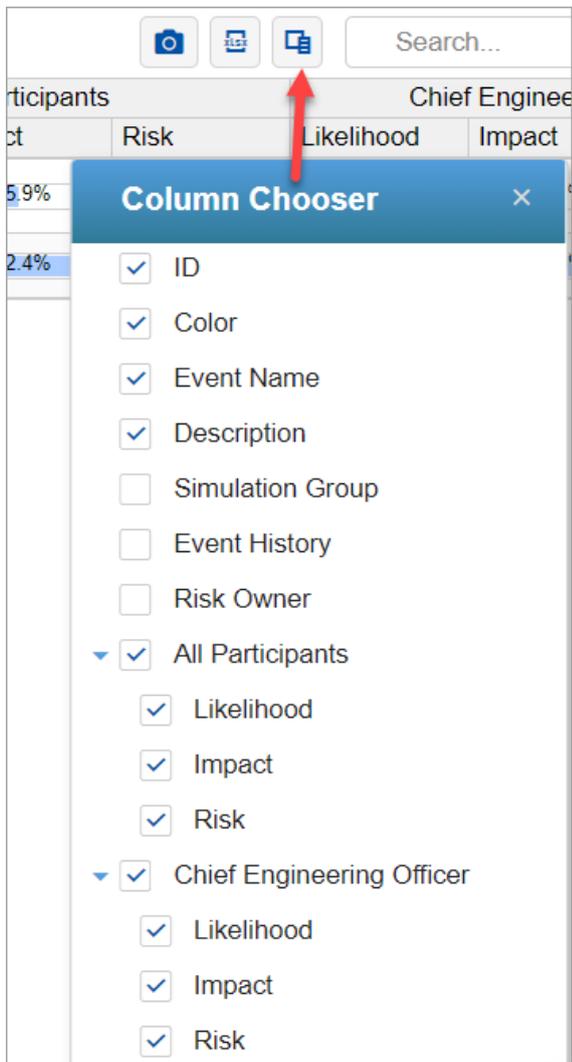
You can also export the results page into an image file (.png) by clicking 

Show or Hide columns

You can show/hide columns both for:

- the main results grid at the right, and
- the hierarchy tree at the left

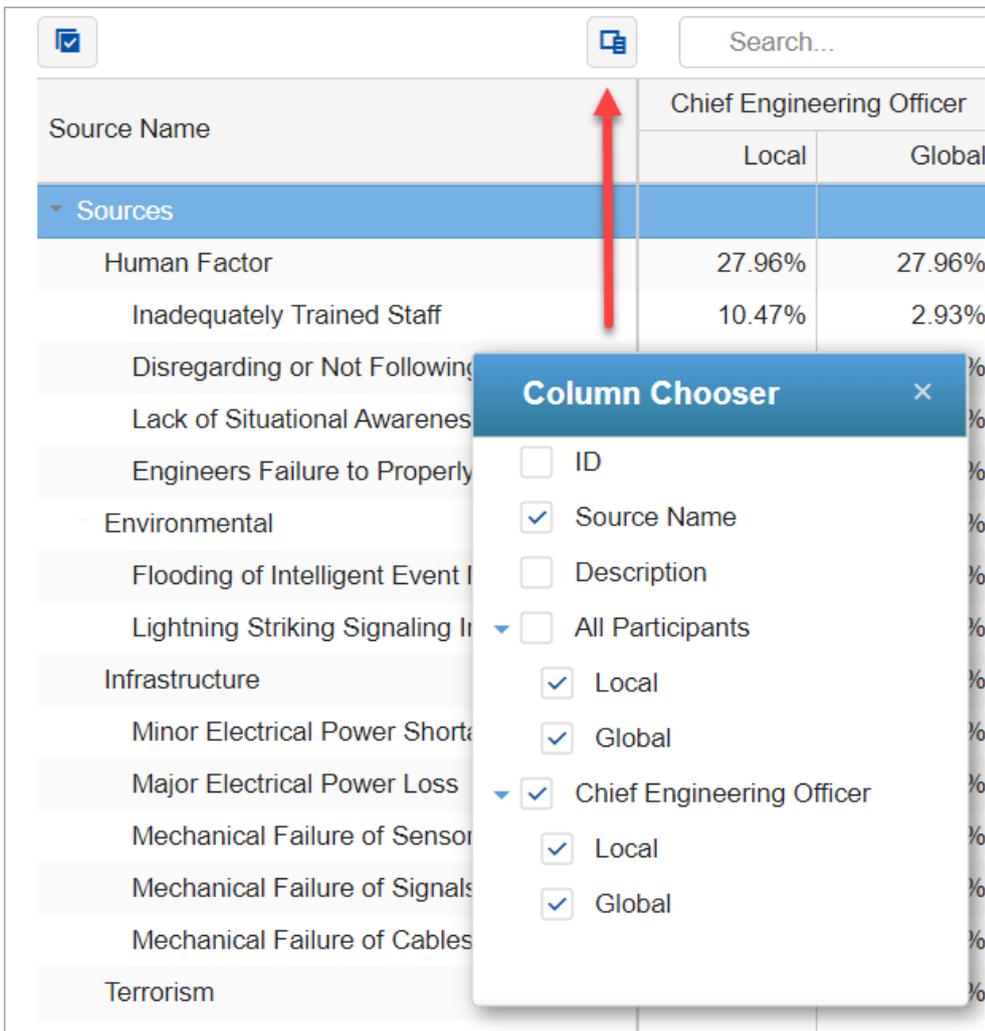
For the main results grid, click the column chooser at the top of the grid:



Simply check/uncheck the column(s) you want to show/hide.

The events attributes can also be displayed on the grid, from above the "Event History" and "Risk Owner" are events attributes.

For the Sources Hierarchy, click also the column choose on its top:



Here you can select:

- ID - Source ID
- Source Name
- Description - source's description or information document
- Local and Global - local or global likelihoods of the sources based on the selected participant/group judgments

Sort by Column

Clicking the column header can sort the grid in ascending or descending order by that header.

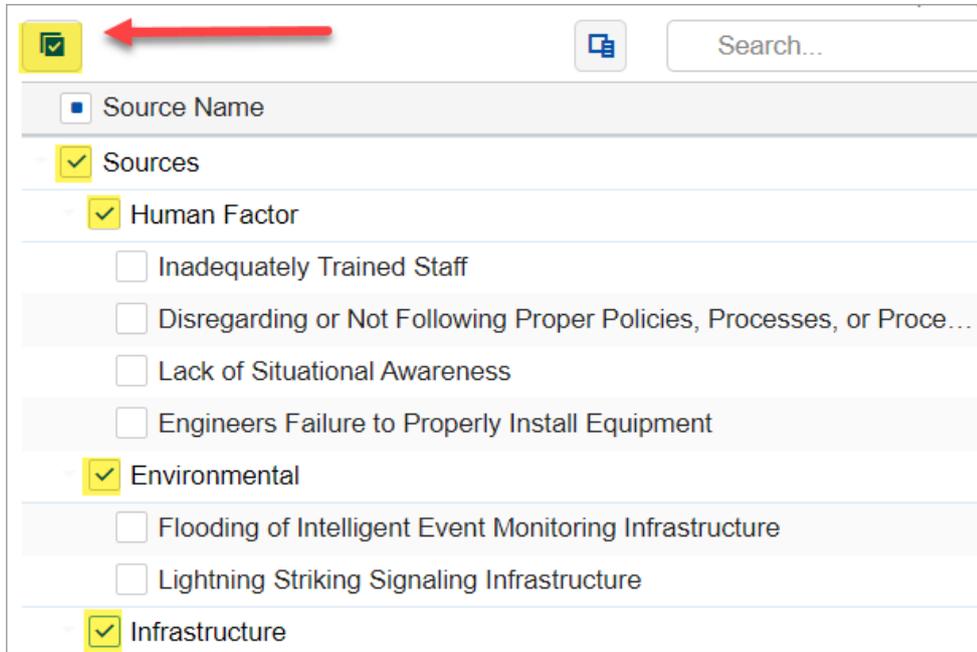
ID	Color	Event Name	Description	All Participants		
				Likelihood	Impact	Risk
[01]	●	Late Train Running	Train is late when its time on the track between the two points is different than the time scheduled in the operational plan.	35.5%	15.9%	5.6%
[02]	●	Degradation of Intelligent Monitoring System Physical Assets	This is degradation of signals, cables, and sensors.	11.2%	32.4%	3.6%
[05]	●	Line Closure	No train traffic allowed	27.2%	22.5%	6.1%
[06]	●	Failed Integration with Future Monitoring System Network		15.6%	6.2%	1.0%
[07]	●	Intelligent Event Monitoring Network Shut Down		18.6%	26.9%	5.0%
[08]	●	Major Train Work Accident	Death occurs	17.6%	43.6%	7.7%
[09]	●	Minor Train Work Accident	Injury occurs	14.7%	6.8%	1.0%
[10]	●	Major Train Public Accident	Death occurs	17.7%	49.7%	8.8%
Total Risk:						38.8%

You can reset the sorting by pressing the Ctrl key on your keyboard and clicking again the column header where the sorting is currently active.

Select Multiple Source Nodes

Instead of showing results only from one WRT Source, you can also select multiple source nodes at once.

To enable multi-select, click the multi-select icon at the top of the Sources Hierarchy. By doing so, you will see checkboxes to the right of the source names where you can select the WRT source nodes you want to see the results.



A new column, WRT Source, will be displayed on the main results grid to indicate the WRT nodes for each event.

ID	Color	Event Name	All Participants			WRT Source
			Likelihood	Impact	Risk	
[01]	●	Late Train Running	35.5%	15.9%	5.6%	Sources
[02]	●	Degradation of Intelligent Monitoring System Physical Assets	11.2%	32.4%	3.6%	Sources
[05]	●	Line Closure	27.2%	22.5%	6.1%	Sources
[06]	●	Failed Integration with Future Monitoring System Network	15.6%	6.2%	1.0%	Sources
[07]	●	Intelligent Event Monitoring Network Shut Down	18.6%	26.9%	5.0%	Sources
[08]	●	Major Train Work Accident	17.6%	43.6%	7.7%	Sources
[09]	●	Minor Train Work Accident	14.7%	6.8%	1.0%	Sources
[10]	●	Major Train Public Accident	17.7%	49.7%	8.8%	Sources
[01]	●	Late Train Running	37.7%	15.9%	6.0%	Human Factor
[02]	●	Degradation of Intelligent Monitoring System Physical Assets	6.3%	32.4%	2.0%	Human Factor
[05]	●	Line Closure	35.4%	22.5%	8.0%	Human Factor
[06]	●	Failed Integration with Future Monitoring System Network	7.6%	6.2%	0.5%	Human Factor
[07]	●	Intelligent Event Monitoring Network Shut Down	22.0%	26.9%	5.9%	Human Factor
[08]	●	Major Train Work Accident	25.8%	43.6%	11.3%	Human Factor
[09]	●	Minor Train Work Accident	21.5%	6.8%	1.5%	Human Factor
[10]	●	Major Train Public Accident	26.1%	49.7%	13.0%	Human Factor
[01]	●	Late Train Running	0.2%	15.9%	0.0%	Environmental
[02]	●	Degradation of Intelligent Monitoring System Physical Assets	0.2%	32.4%	0.1%	Environmental
[05]	●	Line Closure	0.0%	22.5%	0.0%	Environmental

From above, we can see the likelihoods, impacts, and risks of the events WRT the Overall Sources (top-node), Human

Factor, and Environmental.

You can also group the grid by WRT source for better display, this is done by dragging the WRT column header to the top left of the grid:

The screenshot displays a software interface for risk assessment. On the left is a sidebar with a search bar and a tree view of categories: Source Name, Sources (checked), Human Factor (checked), Environmental (checked), and Terrorism. The main area contains a table with columns: ID, Color, Event Name, Likelihood, Impact, Risk, and WRT Source. The table is grouped by WRT Source, with rows for Sources, Human Factor, and Terrorism. Each row includes a color-coded dot and a bar chart showing Likelihood, Impact, and Risk percentages. A 'Total Risk' of 87.1% is shown at the bottom right.

ID	Color	Event Name	All Participants			WRT Source
			Likelihood	Impact	Risk	
[01]	●	Late Train Running	35.5%	15.9%	5.6%	Sources
[02]	●	Degradation of Intelligent Monitoring System Physical Assets	11.2%	32.4%	3.6%	Sources
[05]	●	Line Closure	27.2%	22.5%	6.1%	Sources
[06]	●	Failed Integration with Future Monitoring System Network	15.6%	6.2%	1.0%	Sources
[07]	●	Intelligent Event Monitoring Network Shut Down	18.6%	26.9%	5.0%	Sources
[08]	●	Major Train Work Accident	17.6%	43.6%	7.7%	Sources
[09]	●	Minor Train Work Accident	14.7%	6.8%	1.0%	Sources
[10]	●	Major Train Public Accident	17.7%	49.7%	8.8%	Sources
[01]	●	Late Train Running	37.7%	15.9%	6.0%	Human Factor
[02]	●	Degradation of Intelligent Monitoring System Physical Assets	6.3%	32.4%	2.0%	Human Factor
[05]	●	Line Closure	35.4%	22.5%	8.0%	Human Factor
[06]	●	Failed Integration with Future Monitoring System Network	7.6%	6.2%	0.5%	Human Factor
[07]	●	Intelligent Event Monitoring Network Shut Down	22.0%	26.9%	5.9%	Human Factor
[08]	●	Major Train Work Accident	25.8%	43.6%	11.3%	Human Factor
[01]	●	Degradation of Intelligent Monitoring System				Human Factor

Total Risk: 87.1%

Show Monetary Values

Simulated vs Computed Event Likelihoods, Impacts, and Risks (Flaw of Averages)

Preferences