

# Likelihood: Dynamic Analysis

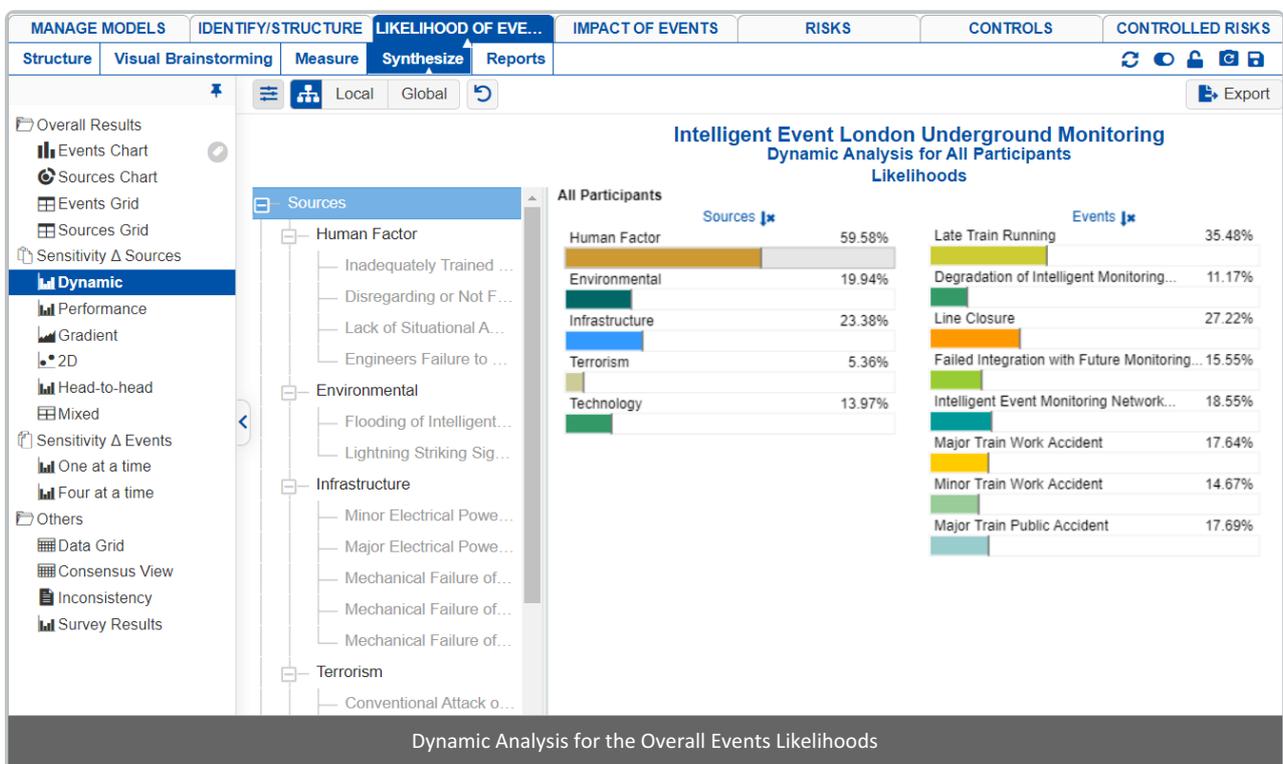
## Overview

Dynamic Sensitivity analysis for Likelihood is used to dynamically change the likelihoods of the threats to determine how these changes affect the likelihoods of the events.

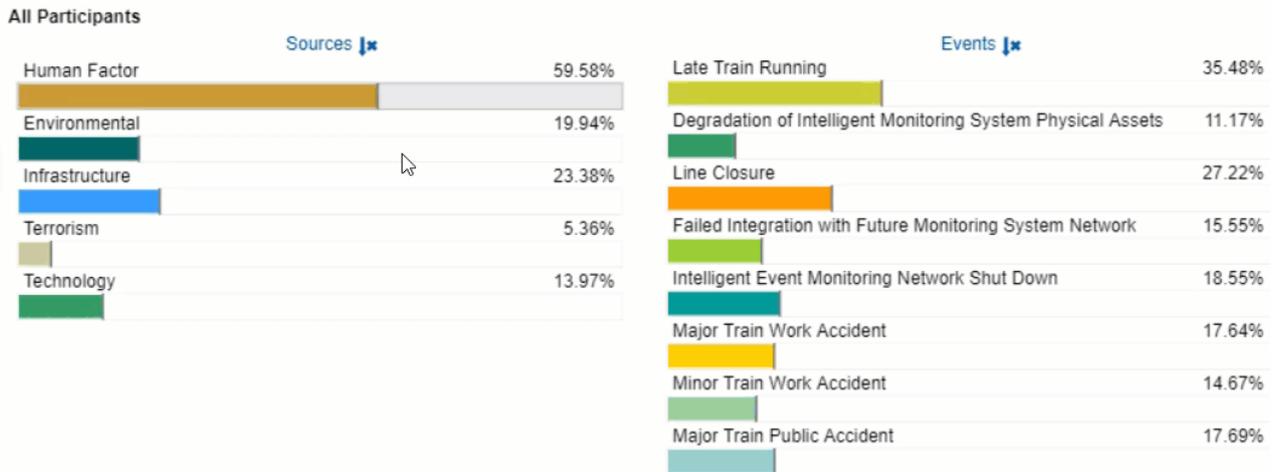
In Riskion, we refer to **threats**, **causes**, **hazards**, and **sources** interchangeably. While they may have slightly different nuances depending on the context in which they are used, they serve the same purpose -- they are all threats/sources of risk (for Risk Events) or sources of opportunity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

In our sample model, we are using the terminology "Source(s)".

The bars at the left represent the likelihood of the sources, while the bars at the right are the likelihood of the events.



By dragging the source's likelihoods back and forth in the left column, the likelihoods of the events will change in the right column.

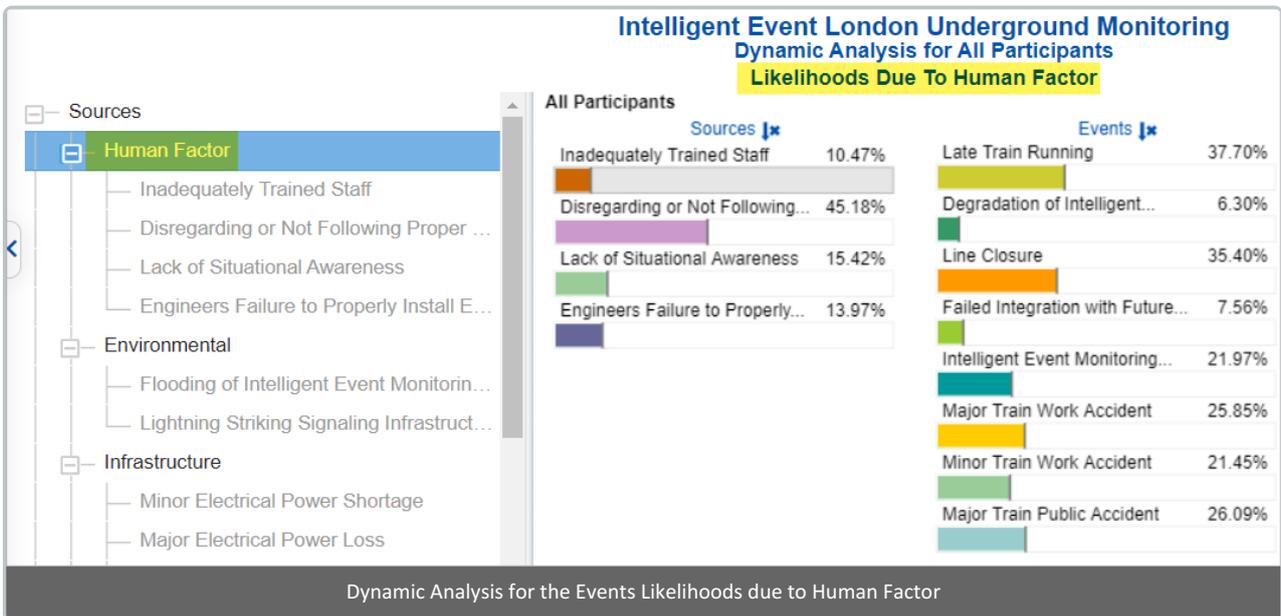


The black | markers on the source and event bars indicate the original sources' and events' likelihoods.



After temporarily changing the likelihoods of one or more of the sources, you can press the  reset icon.

By selecting an element in the hierarchy other than the top node, you can see the results due to this element rather than the overall results due to the "Sources" node.



You can show the local and global source's likelihoods on the Source Hierarchy at the right using the Local-Global buttons:

Sources	All Participants	
	Local	Global
[-] Sources		
[-] Human Factor	59.58%	59.58%
[-] Inadequately T...	10.47%	6.24%
[-] Disregarding o...	45.18%	26.92%
[-] Lack of Situati...	15.42%	9.19%
[-] Engineers Fail...	13.97%	8.32%
[-] Environmental	19.94%	19.94%
[-] Flooding of Int...	2.03%	0.4%
[-] Lightning Striki...	1.08%	0.22%
[-] Infrastructure	23.38%	23.38%
[-] Minor Electrica...	19.22%	4.49%
[-] Major Electrica...	7.91%	1.85%

You can hide the Sources Hierarchy at the left using 

Click  to show/hide the toolbar options:

				Filter events: Show all events	Show Likelihood	Decimals: 2	Sort Sources by: None	Sort Events by: Priority	<input type="checkbox"/> Active Sorting	<input type="checkbox"/> Show Components
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**DIDN'T SEE WHAT YOU ARE LOOKING FOR?** Try enabling the [Advanced Mode](#) switch at the bottom of the page, this will show the advanced options on this page.

## Select Participants and Groups

You can select to display results for **one** participant or group using



Clicking the  button will open a window where you can select a participant or a group.

You can use the prev  and the next  buttons to cycle through each participant or group.

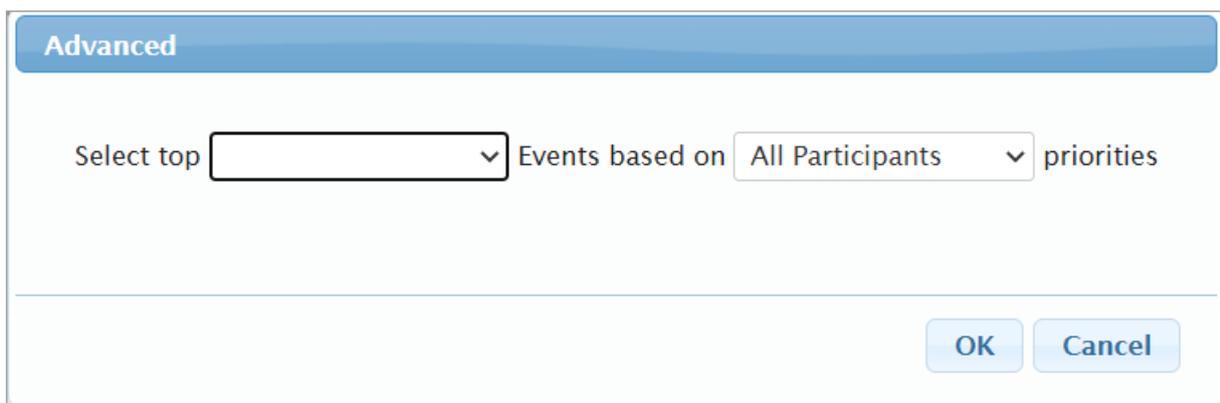
## Filter Events

By default, all events are displayed.



You can select to display the top or bottom 5, 10, or 25 events based on the "All Participants" group likelihoods.

The Advanced filter, allows you to select a specific number for the top N, and base it on another group or participant.



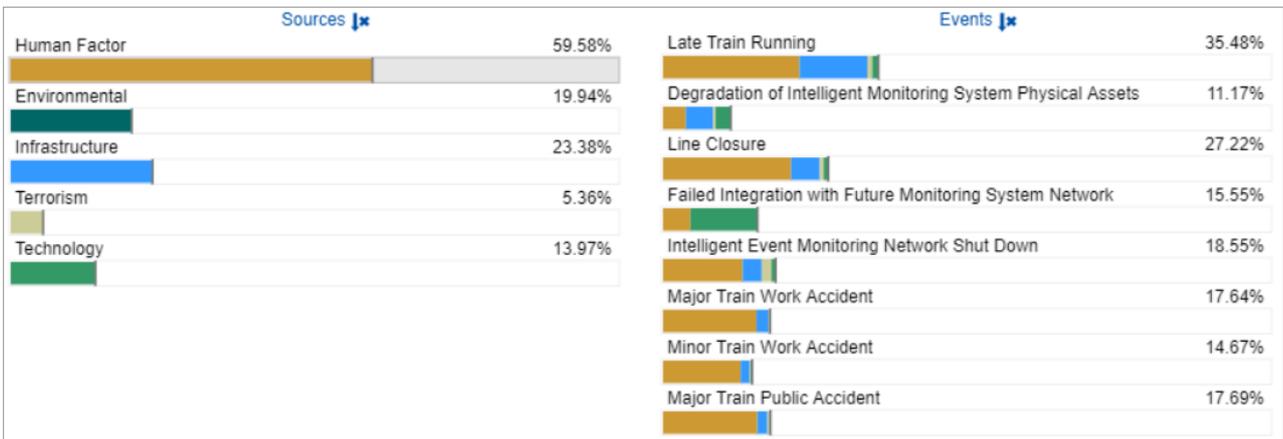
The select /deselection option, allows you to check/uncheck the events.

The filter by events attributes, filter the events base on the attributes specified on the Events page.

The show risks only / Show opportunities only are applicable for the Mixed model where events can be Risk or Opportunity.

## Events Components

Checking the  **Show Components** displays the breakdown of each of the source's contributions or share to the likelihoods of each of the events

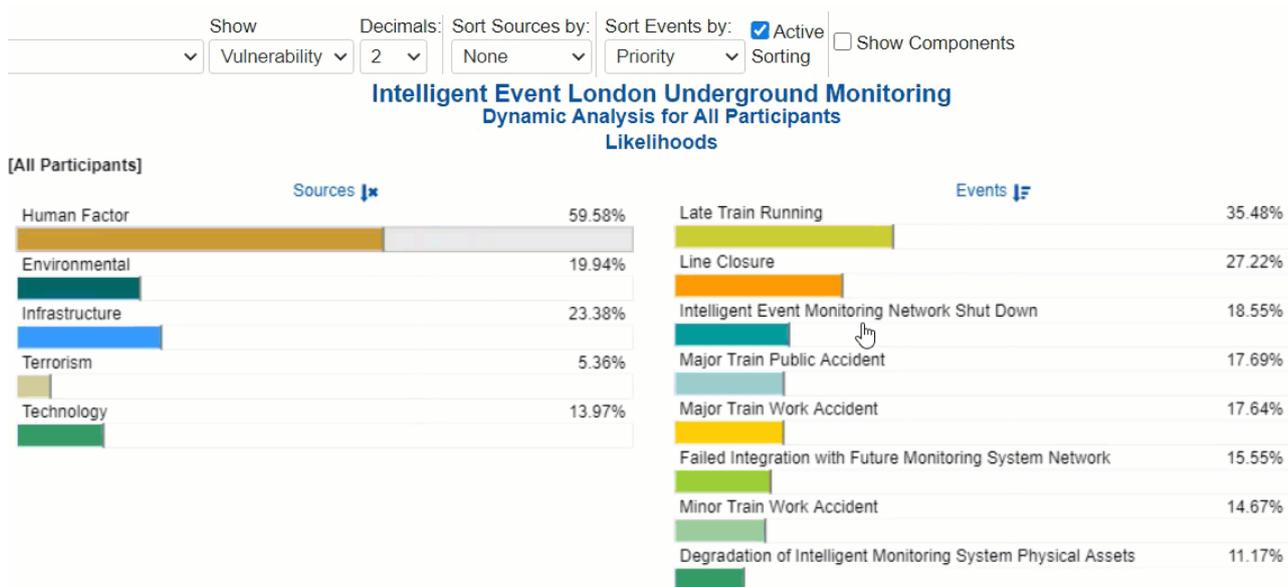


The breakdown colors of the event bars at the right corresponds to each of the sources at the left.

## Active Sorting (Keep Sorting)

Active Sorting is only enabled when Events are Sorted by Likelihoods.

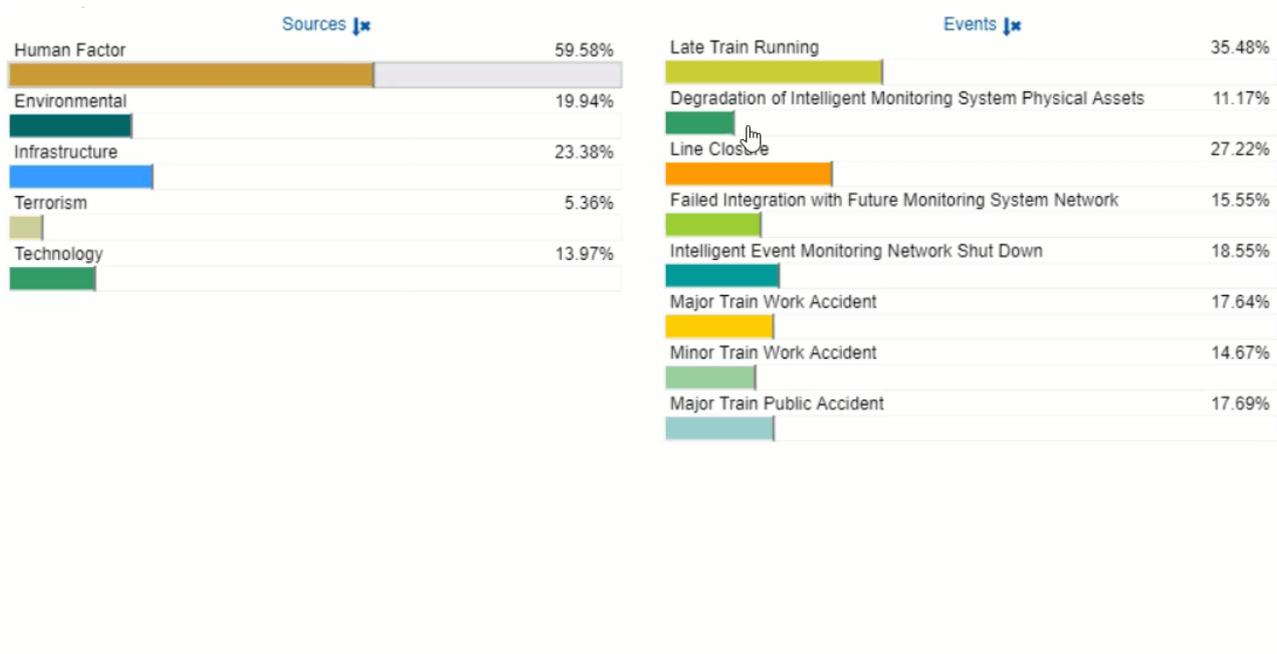
Checking the Active Sorting checkbox actively re-sorts the events as the source likelihoods are being adjusted.



When the Active Sorting is OFF, the initial sorting of the events will be remembered.

## Change Events Color

Clicking on the event bar will open a color picker where you can select and change the color assignment.



You can also change colors from the Events and Threats/Sources Grid.

**DIDN'T SEE WHAT YOU ARE LOOKING FOR?** Try enabling the **Advanced Mode** switch at the bottom of the page, this will show the advanced options on this page.

## Advanced Mode Options

1 Filter events: Show all events

2  CIS  User Priorities

Decimals: 2

Sort Sources by: None

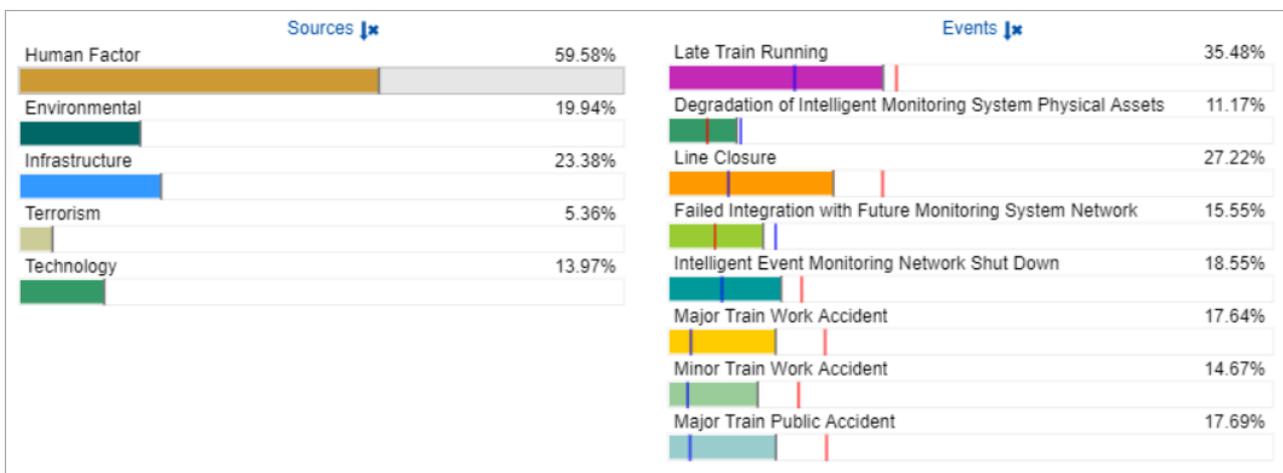
Sort Events by:  Asc  Desc

3 Priority

4  Show Components  Show Markers

### 4. Show Markers

Checking the  **Show Markers** checkbox displays red and blue markers on the events bars indicating the likelihood when the selected source is dragged to the maximum (100%) or minimum (0%) respectively.



The selected source in the example above is the "Human Factor" as indicated by its light gray background. When the

"Human Factor" bar is dragged to the maximum (100%), the events' bars at the right will be filled up to where the red marker is. When it is dragged to the minimum (0%), the events bars at the right will be filled up to where the blue marker is.

Depending on the event, red might be on the right and blue on the left, or vice-versa.

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