# **Judgment Options**

## Impact: Judgment Options Overview

The Impact's Judgment options page consists of the evaluation options for evaluating the Objectives and the Events with respect to Objectives.

The page has three sections:

- Evaluate Objectives Options left section (blue), which consists of options to evaluate Objectives.
- Evaluate Events Options -right section (light green), which consists of the options to evaluate Events given Objectives.
- **Common Options** the bottom section (white background-color) which is the options applicable for both Objectives and Events.

Impact Judgme	nt Options Copy all settings to Likelihood
Evaluate Objectives Order for evaluating Objectives within hierarchy: Top down Gotown Gotown	Evaluate Events Default measurement type: Rating Scale
When prioritizing Objectives on each screen, evaluate: • One pair of Objectives with respect to parent objective • All pairs of Objectives with respect to parent objective (AnyTime Evaluation only)	When prioritizing Events on each screen, evaluate:           IF Pairwise:           One pair of Events with respect to a covering objective           All pairs of Events with respect to a covering objective (AnyTime Evaluation only)           IF Ratings or Direct:           One objective and all Events (AnyTime Evaluation only)           One event with respect to a covering objective, followed by the next event with respect to that covering objective           One event with respect to a covering objective, followed by that event with respect to the next covering objective           One event with respect to a covering objective, followed by that event with respect to the next covering objective           Show Event Numbers:         ID
Trade-off between accuracy and # of comparisons:         (Number of pairs)         All pairs (maximum accuracy)         Two diagonals         One diagonal (least time)         Force most comparisons if fewer than         5       elements in the cluster         Select the type for pairwise comparison:         Graphicalinumerical         9         9         9         9         9         9         9         9         9         9         9         9         9         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19 </th <th>Trade-off between accuracy and # of comparisons: (Number of pairs)         Ø All pairs (mound maccuracy)         ``Wo diagonals         One diagonal (east time)         Ø Force most comparisons if fewer than 5 elements in the cluster         Select the type for pairwise comparison:         Graphicalinumerical         0         199         O unlimited         Ø Vetbal         Ø Vetbal</th>	Trade-off between accuracy and # of comparisons: (Number of pairs)         Ø All pairs (mound maccuracy)         ``Wo diagonals         One diagonal (east time)         Ø Force most comparisons if fewer than 5 elements in the cluster         Select the type for pairwise comparison:         Graphicalinumerical         0         199         O unlimited         Ø Vetbal         Ø Vetbal
Change the wording when making pairwise comparisons for Objectives and sub-Objectives: Which of the two Objectives below is more important	Change the wording when making pairwise comparisons for Events: Which of the two Events below is more consequential
Order of evaluation (top down or bottom up):            Evaluate Objectives first (top down)         Evaluate Events first (toottom up)         Extra measurement options         Apply values from names automatically	

# Turn ON/OFF Evaluation for Objectives or Events given Objectives

The Project Manager can turn ON or OFF the evaluation for Threats/Objectives or for Events given Threats/Objectives.

The default option is to evaluate:

- threats,
- events given threats

- objectives
- events with respect to objectives

Although a Project Manager might want to do the evaluation in stages over a period of time, and turn off the evaluation of threats/objectives and evaluate only events, or vice versa, during one of these phases (for both Anytime and TeamTime evaluations).

This can be done on **LIKELIHOOD OF EVENTS > MEASURE > SET MEASUREMENT OPTIONS >** <u>Judgments Options</u> for the evaluation for Threats and for Events given Threats.

Here you can check/uncheck the options to evaluate the Threats and the Events.

Manage Models	Identify/Structure	Likelihood of Eve	Impact of	of Events	Risks	Controls	Controlled Risks
Structure Visual Brainstorming Measure Synthesize			Reports				2 0 🔒 🖸 🖬
Likelihood Judgment Options Copy all settings to Impact							
Evaluate Threa	its			🗹 Evaluate	Events		

Similarly, you can turn ON/OFF the evaluation for Objectives or for Events with respect to Objectives on **IMPACT OF EVENTS > MEASURE > SET MEASUREMENT OPTIONS > Judgments Options**.

Manage M	odels	Identify/Struct	ure Like	lihood of Eve	Impact o	fEvents	Risks	Controls	Controlled Risk
Structure	Visual	Brainstorming	Measur	e Synthesize	Reports			i	C O 🔒 🖸 🖬
Impact Judgme					udgmen	t Optio	าร	Copy all settin	ngs to Likelihood
✓ Evaluate Objectives					🗹 Evaluat	e Events			

Unchecking these options will hide the respective options below them since they will not be applicable once the evaluation for Threats, Objectives or for Events is disabled.

## Order for evaluating within the Threats or Objectives hierarchy

When there is more than one level of threats/objectives, it is customary to proceed from the **top-down** -- that is, evaluating the relative importance of the main threats/objectives, then the relative importance of the sub-threats/objectives with respect to the threats/objectives, and so on.

However, for reasons similar to the above where it was recommended to proceed **bottom-up** -- evaluating events before the threats/objectives -- it is also recommended to evaluate the various levels in the threats/objectives hierarchy bottom-up as well. Doing so will enable the evaluators to have a better idea of the significance of the elements contained within the higher-level threats/objectives when they are evaluated.

Depending on the hierarchy you are working, you can specify the order of evaluation on:

• LIKELIHOOD OF EVENTS > MEASURE > SET MEASUREMENT OPTIONS > Judgments Options.

Order for evaluating Threats within hierarchy: Top down Bottom up

• IMPACT OF EVENTS > MEASURE > SET MEASUREMENT OPTIONS > Judgments Options.

## Default Pairwise Display: One or All pairs on the display

When prioritizing Threats, Objectives, or Events on each screen using Pairwise Comparisons, the Project Manager can select to display one pair or all pairs elements.

For Likelihood, this can be set on LIKELIHOOD OF EVENTS > MEASURE < SET MEASUREMENT OPTIONS > Judgment Options:

MANAG	EMODELS	IDENTIFY	//STRUCTURE	LIKELIHOC	D OF EVENTS	IMPACT	OF EVENTS	RISKS	CONTROLS	CON	ITROLLED RISKS
🕂 Structur	e 🕼 Visual Bra	instorming	📟 Measure	내 Synthesize	🖶 Reports				C Reload OD On-lin	e 🔓 Lock	C Snapshots 🔒
When prid One pa All pair	oritizing Threats o ir of Threats with re s of Threats with re	n each screer spect to parent spect to parent	i, evaluate: it threat t threat (AnyTime	e Evaluation only)			When prioritizin IF Pairwise: One pair of E All pairs of Ev	ng Events on each screen, evalu vents with respect to a covering th rents with respect to a covering thr	a <b>te:</b> reat eat (AnyTime Evaluation only)		

For Impact, this can be set on IMPACT OF EVENTS > MEASURE < SET MEASUREMENT OPTIONS > Judgment Options:

	MAN	IAGE MODELS		IDENTIFY/STRUCT	URE LIK	ELIHOOD OF EVE	INTS	IMPACT	OF EVENTS	RISKS	CONTROLS	CONTRO	LLED RISKS
Û	O	+ Structure	۷	Visual Brainstorming	📟 Measure	네 Synthesize	🖶 Reports	6			🔁 Reload	On-line	C Snapshots
	When One All	prioritizing Obje e pair of Objective pairs of Objective	ctive: s with s with	s on each screen, evalu n respect to parent objecti respect to parent objectiv	a <b>te:</b> ve ve (AnyTime Eva	aluation only)			When prioritizin IF Pairwise: One pair of E All pairs of Ev	ng Events on each screen, evalu vents with respect to a covering ob vents with respect to a covering ob	i <b>ate:</b> bjective jective (AnyTime Evaluation only)		

Note: The All pairs setting is only applicable for AnyTime Evaluation.

Note: The setting in this page is the default and can be overridden per cluster from the Measurement Methods page.

# Default Number of diagonals (Trade-off between accuracy and # of comparisons)

These options apply to the number of pairwise comparisons to be made within each cluster of elements. Let's consider an example of a cluster with five elements, A, B, C, D, and E:

The non-dark cells in the following figure illustrate all possible ((5 \* 4)/2 = 10) pairwise comparisons for a cluster of five elements.

A	В	С	D	E
	2.88			

The most accurate results are achieved with the first option above but at the expense of taking more time. If the number of elements in a cluster is small, then this option provides the most redundancy and hence most accurate results.

The choice of firsts and second diagonals in the above example would entail 4+3 judgments. This would consist of 3 'redundant' judgments (since at least 4 judgments are required for a spanning set) and would be reasonable even if verbal judgments were made.

Choosing the minimum number of comparisons is not recommended unless pairwise graphical judgments are made and you have confidence in the accuracy of each of the judgments.

This option can be set when evaluating using pairwise comparisons for:

- Threats
- Events given threat
- Objectives
- Events with respect to an objective

Depending on what you are working on, this can be done on:

 LIKELIHOOD OF EVENTS > MEASURE < SET MEASUREMENT OPTIONS > <u>Judgment Options</u> - for Threats (left) and for Events given Threat (right)

	MAM	AGE MODELS	IDENTIFY/STRUCTU		ENTS IMP	PACT OF EVENTS	RISKS	CONTROLS	CONTROLLED RISKS
(	0	Structure [	Z Visual Brainstorming	Measure 🔟 Synthesize	🖶 Reports			🔁 Reload	d 🛈 On-line 🖸 Snapshots
						IF Ratings or D One threat ar One event wi One event wi V Show Event I	rect: d all Events (AnyTime Evaluation h respect to all covering Threats ( h respect to a covering threat, follow th respect to a covering threat, follow numbers:	only) AnyTime Evaluation only) wed by the next event with respect wed by that event with respect to	t to that covering threat the next covering threat
	Trade (Numi O All O Tw O On	<b>-off between accur</b> ber of pairs) pairs (maximum acc o diagonals e diagonal (least tim	racy and # of comparisons: curacy) ne)			Trade-off betwe (Number of pairs All pairs (max Two diagonal One diagonal	en accuracy and # of compariso ;) imum accuracy) s (least time)	ins:	

### IMPACT OF EVENTS > MEASURE < SET MEASUREMENT OPTIONS > <u>Judgment Options</u> - for Objectives (left) and

for Events given Objectives (right)

	MAI	AGE MODELS	IDENTIFY/STRUCTURE	LIKELIHOOD OF EVE	NTS IM	IPACT OF EVENTS	RISKS	CONTROLS	CONTROLLED RISKS
G	0	A Structure	🕼 Visual Brainstorming	easure 💷 Synthesize	🖶 Reports			C Reloa	d 🛈 On-line 🖸 Snapshots
						One objective     One event wit     One event wit     objective     One event wit     objective     Show Event N	and all Events (AnyTime Evaluati h respect to all covering Objective h respect to a covering objective, h respect to a covering objective, lumbers: ID	on only) (anyTime Evaluation only) followed by the next event with res followed by that event with respect	pect to that covering to the next covering
	Trade (Num All Tw Or	-off between acc ber of pairs) pairs (maximum a o diagonals e diagonal (least t	uracy and # of comparisons: accuracy) ime)			Trade-off betwe (Number of pairs All pairs (max Two diagonals One diagonal	en accuracy and # of compariso ) imum accuracy) s (least time)	ons:	

This setting is only the default and can be overridden per cluster from the Measurement Methods page.

## Default Question Wording for Pairwise Comparison

The model elements terminologies for **Events**, **Causes**, **Objectives**, and **Controls** -- both singular and plural, are defined from the **IDENTIFY/STRUCTURE > Model Properties > <u>Model Details</u>** page.

In addition, you can also specify the wording to use during the evaluation, specifically for pairwise comparison (and rating, see explanation below) evaluation. This can be found on the **MEASURE > SET MEASUREMENT OPTIONS > Judgment Options** page.

Depending on the model you are working on (Likelihood or Impact), you can see the following options on the Judgments Options page:

#### Likelihood

Change the wording when Causes and sub-Causes:	making pairwise comparisons for	Change the wording when making pairwise comparisons for Events:
Which of the two Causes	below is more likely V	Which of the two Events below is more likely V

#### Impact

Change the wording when making pairwise comparisons for Objectives and sub-Objectives:	Change the wording when making pairwise comparisons for Events:
Which of the two Objectives below is more important	Which of the two Events below is more consequential V

After "*Which of the two*" is the name of the element being compared. These terminologies (Causes, Objectives, Events) are the same and in sync with what's on the <u>Model Wording</u> page (plural). To edit, simply type in the desired wording on the text box

When changing the plural terminologies from the Judgments option page, keep in mind to also update the corresponding singular terminologies on the Wording Template page to make sure that the singular-plural wordings are consistent.

The pairwise evaluation phrase is defined from the second dropdown:

#### Likelihood

For Causes

Change the work sub-Causes:	ding when mak	ing pair	wise comparisons	for (
Which of the two	Causes	below	is more likely	~
			is more likely	
			has more impact	
			has more influence	
			is more influential	
			— Custom —	

#### For Events Given Causes

Change the wording when making pairwise comparisons for Events:							
Which of the two Events below	is more likely						
	is more likely						
	is more influential						
	— Custom —						

### Impact

#### For Objectives

Change the wording when making pairwise comparisons for Objectives and sub-Objectives:						
Which of the two	Objectives	below	is more important	~		
			is more important			
			has more impact			
			has more influence	:		
			— Custom —			

For Events wrt Objectives

Change the wording when making pairwise comparisons for Events:						
Which of the two Events below	is more consequential ${\color{black} }$					
	is more consequential					
	has more impact					
	is more likely					
	has more influence					
:	— Custom —					

Simply select the phrase that best suits your model.

Selecting a predefined phrase will apply a similar phrase for Rating evaluation. For example, if you selected "**is more likely**", the Rating wording will be "**Rate the likelihood**".

You can also select --Custom-- and type in a custom phrase (e.g. is more influential, has more importance, etc.).

Custom wording will not be applicable for Rating evaluation -- the default will be used.

If in case you want to fully customize the evaluation questions, you can edit the question from the evaluation page itself.

