Collect Input -- Local Results

Overview

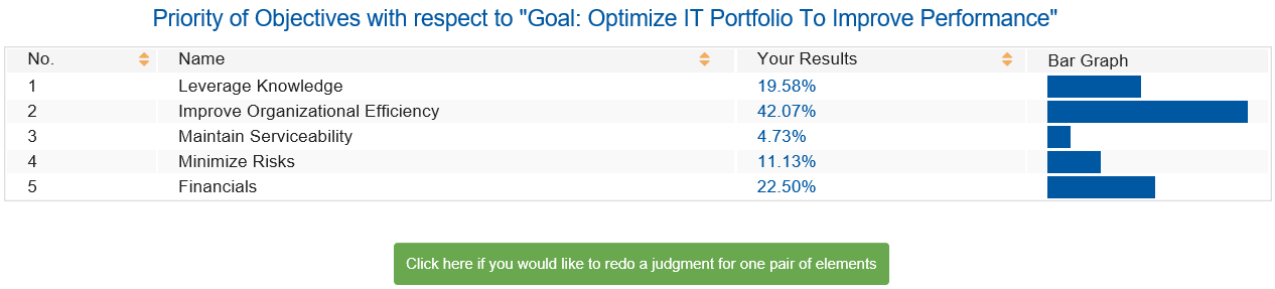
The priorities for elements in each cluster of the objectives hierarchy, as well as the priorities derived for the alternatives with respect to each covering objective, are referred to as "local" priorities and are displayed on the Intermediate Results page.

Intermediate results can be shown to or hidden from evaluators. If shown, their individual results can be shown, or the combined results, or both.

The inconsistency ratio can also be shown or hidden on this page. (Only pairwise comparisons can calculate inconsistency.)

Local Results when Inconsistency Ratio is hidden

If the Project Manager has specified that the inconsistency ratio for your judgments will not be shown, you will see the derived priorities for the elements in the current cluster:



You can click on any heading to sort by that column.

If you do not think the priorities are reasonable (i.e. are not intuitive), then click the "**Click here if you would like to redo a judgment for one pair of elements**" button.

This allows you to select a pair of elements you think may have too high a priority, and the other too low a priority, and re-evaluate them against each other.

On Desktop

Click the checkbox to the left of the two elements you want to re-evaluate. The checkboxes of the unselected elements will be disabled after you have selected two elements.

Click the **Re-evaluate** button.

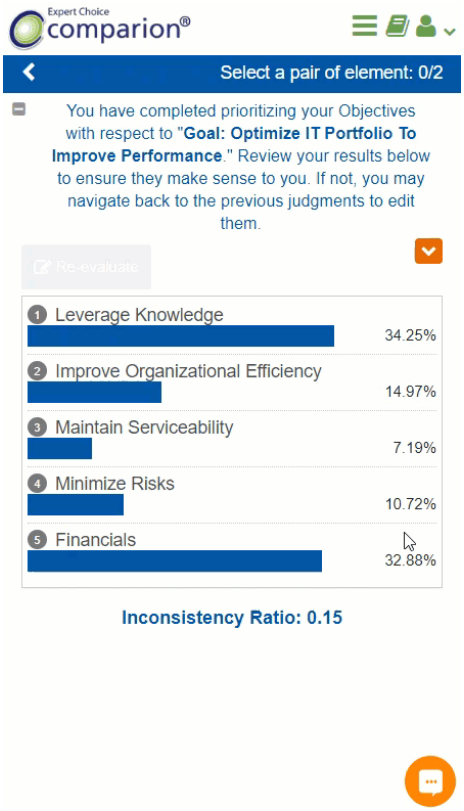
You will be taken to the screen where you can enter or revise the judgment comparing these two elements. After doing so and clicking **Next**, you will be taken back to the screen showing the revised cluster priorities.

On Mobile

Tap on the two elements that you want to re-evaluate.

Once done, click the **Re-evaluate** button.

You will be taken to a page where you can enter or revise the judgment comparing these two elements. Click '**next**', to be taken back to the priorities page. where you will see the revised priorities.

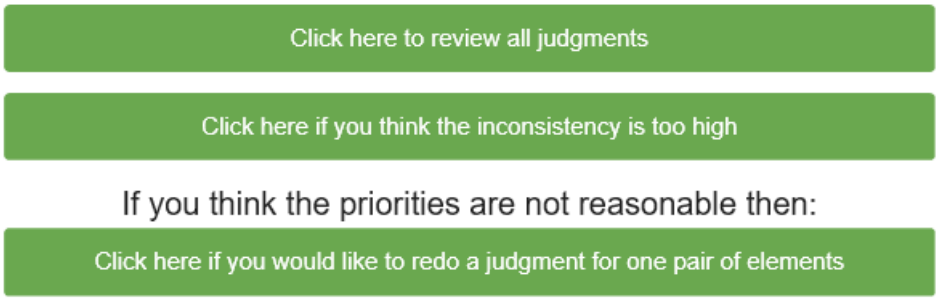


Local Results when Inconsistency Ratio is shown

The Project Manager can configure the Intermediate Results page to display inconsistency ratio. (See Math of AHP and Inconsistency Ratio)

As a very rough rule of thumb, the inconsistency ratio should be .10 or less. However, there are reasons for accepting results even if the inconsistency ratio is as high as .2 or .3. (See Inconsistencies, or *Decision by Objectives* on Professor Forman's Website or at Amazon.) It is more important that the priorities be reasonable to you than to have a low inconsistency ratio. You should NOT change judgments just because of inconsistencies. You *should* re-examine judgments because of high inconsistency and change only those judgments that you feel were incorrectly recorded or for which you have a change of opinion -- regardless of inconsistency.

If you feel that either the priorities are not satisfactory or you would like to review the judgments to address a high inconsistency ratio, click the button above. There are three ways to address high inconsistencies.



"**Click here to review your judgments**" will take you to the first step of the evaluation for the given cluster.

"**Click here if you think the inconsistency is too high**" will open the judgment table (see more details below).

"**Click if you would like to redo a judgment for one pair of elements**" will take you through the sequence explained at the top of this page (redo judgment for selected pair).

Judgment Matrix

"**Click here if you think the inconsistency is too high**" will display the judgment table. You can review and modify the pairwise judgments for the given cluster.

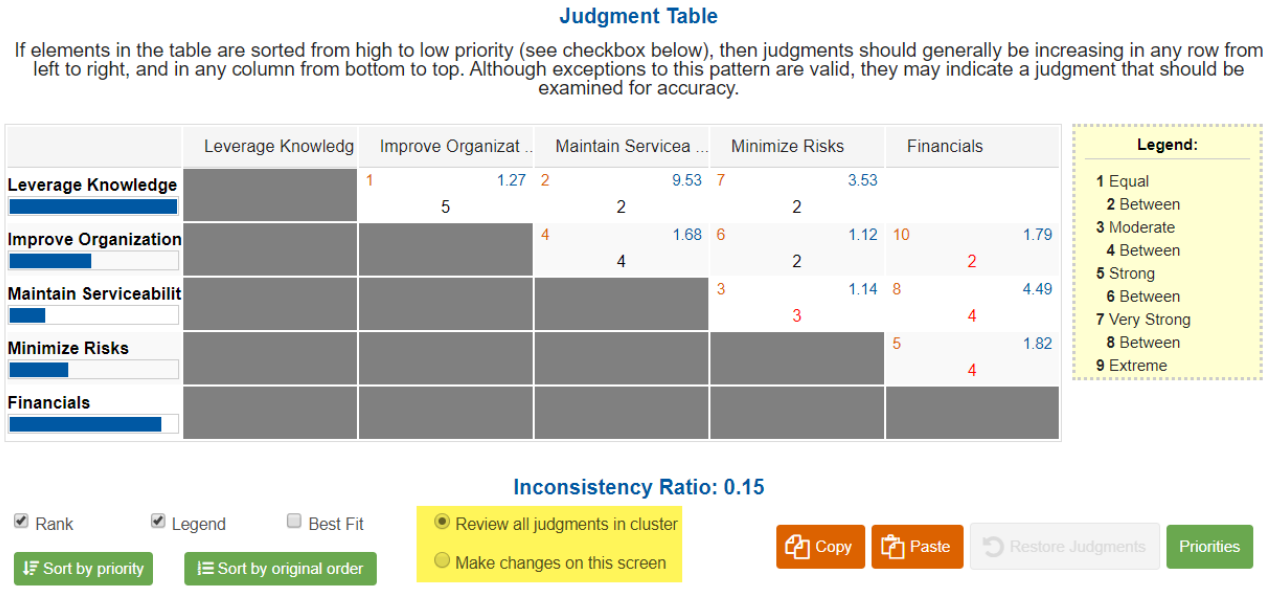
Every matrix cell contains the relative priority between the row element and the column element, on a scale of one to nine (1 - 9).

The judgment table has two modes:

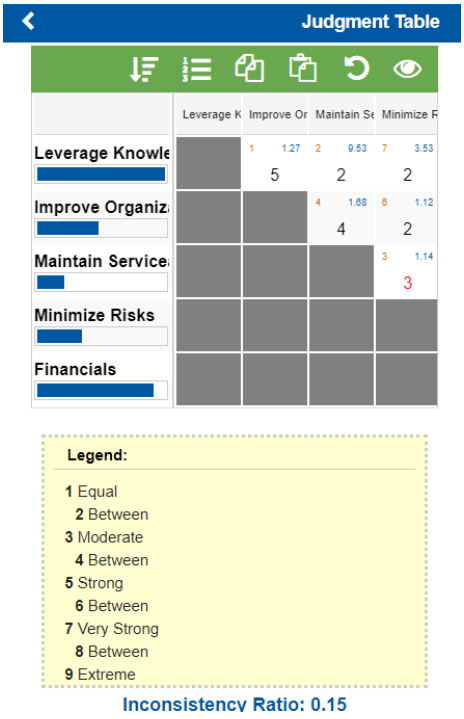
1. **Review all judgments in cluster** - makes the matrix cells clickable. Clicking on a matrix cell will redirect you to the step displaying the pairwise comparison for the row and column elements corresponding to that cell.
2. **Make changes on this screen** - allows you to make or investigate possible changes to judgments in the matrix

itself. The judgments are shown numerically in this matrix regardless of whether they were made in the verbal or numerical/graphical modes. You can type in judgments and then press enter to save.

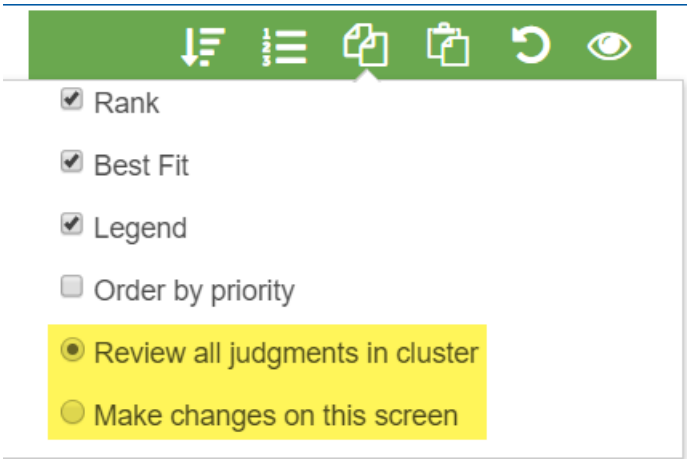
Desktop



Mobile



The Judgment table modes are available from the  eye icon.



Red matrix cell numbers represent "flipped" priorities. It can be useful to look at flipped priorities to find instances of judgments being entered on the wrong side. If you find any flipped judgments, it is easy to correct them right there.

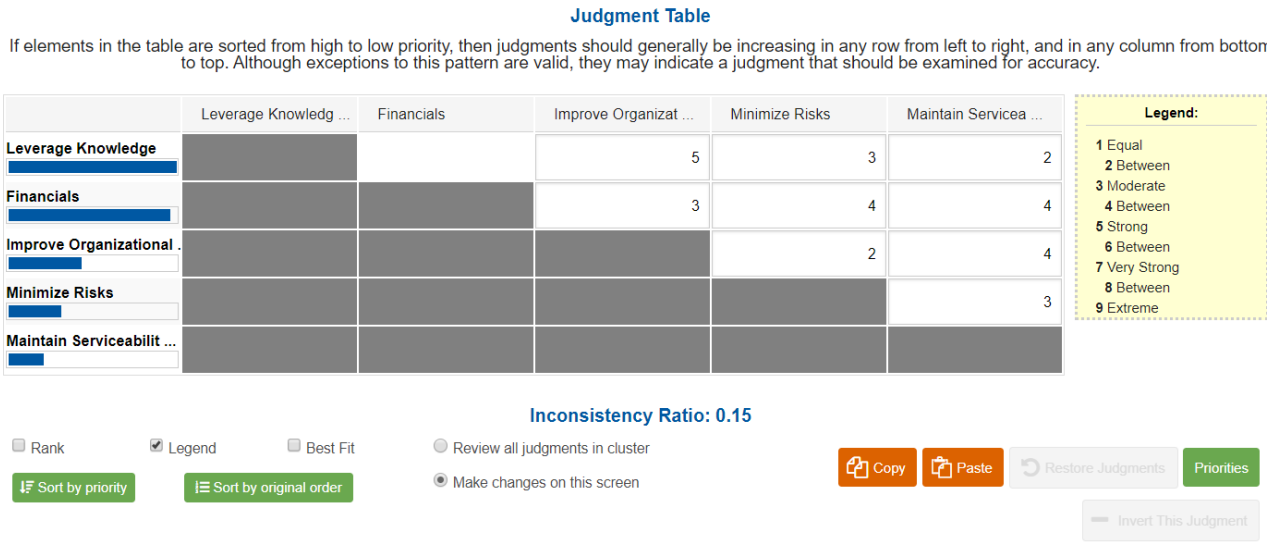
Blank matrix cells indicate a pairwise comparison that was not elicited or entered.

Conditions for Consistent Judgments

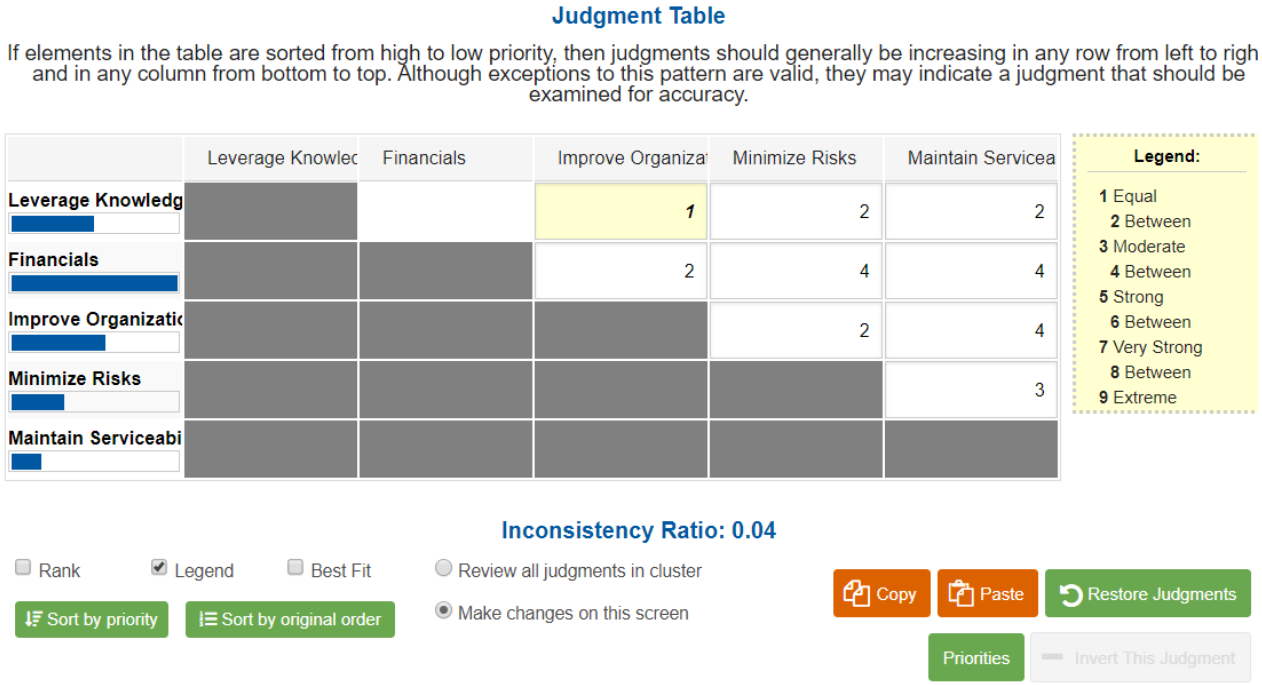
When the judgment table is sorted by priority, the judgments are perfectly consistent if they are increasing (or more precisely non-decreasing) as you look at them in the judgment table:

a) from left to right in each row, and

b) from the bottom up in each column.



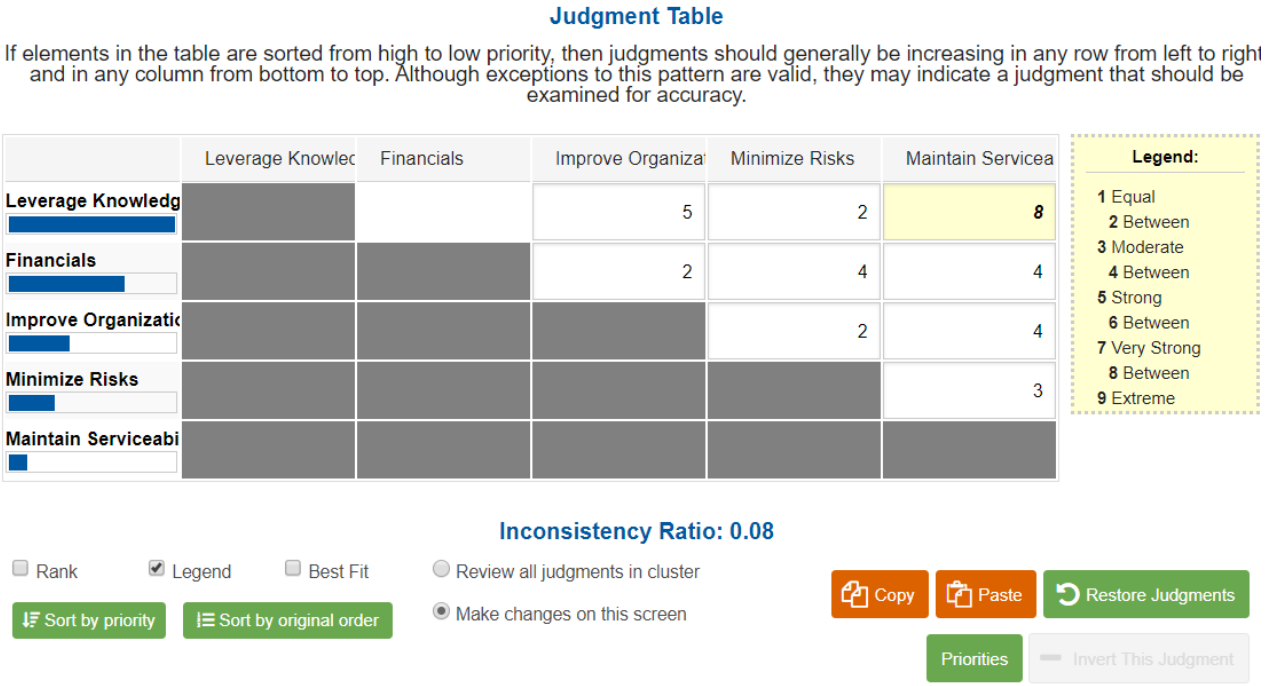
In the figure above, which corresponds to a "reasonably" low to an inconsistency ratio of 0.15, the most inconsistent judgment is the 5 in the top row, which violates condition a) above. Changing this judgment to a 1 (less than the 3 to its right) will decrease the inconsistency. However, changing judgments just to reduce the inconsistency is NOT A GOOD IDEA. Judgments should be changed only when the evaluator feels that the judgment itself was in error or is no longer warranted. If this judgment (Leverage Knowledge vs. Improve Organizational efficiency) is changed from a 5 to a 1, the matrix is refreshed, as shown below.



The modified cell will have a light yellow background (see 1 above)

Note: Click "Sort by Priority" to re-sort the elements after modifying judgment(s).

If the evaluator doesn't believe that a judgment of 1 (equal) is appropriate, or that the change in ranks of the objectives/alternatives is correct, then press the  button.



But once more we must say it is NOT A GOOD IDEA to change judgments merely to lower the inconsistency ratio. It is

more important to be correct than consistent.

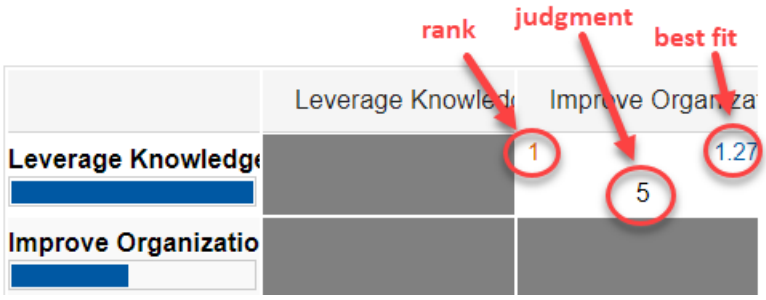
> Note: Comparion doesn't calculate inconsistency for evaluator groups.
>
> Inconsistency calculations are for one individual and one cluster, and should never be combined with other individuals or clusters.

Rank and Best Fit

You can display the inconsistency rank and the best fit by checking ☑ Rank and ☑ Best Fit respectively.

Inconsistency Rank is the small red number in the upper left corner of each cell.
Best Fit is the blue number in the upper right corner of each cell.

- **Inconsistency Rank** indicates the rank of each judgment's relative inconsistency on an ordinal scale from 1 to *n*. For example, the cell with a judgment of 5 (strong in the verbal mode) and a 1 in the upper left corner of the cell is the most inconsistent judgment and the judgment of 2 with a 2 in the upper right of the cell is the second most inconsistent judgment.
- **Best Fit**. The best-fit judgment is not necessarily the "best" judgment. Rather, it is the judgment that fits best with all of the other judgments that were made. It is not advisable to change judgments to the "best fit" values, but rather use the "best fit" values to give you an idea of which judgments you might want to reconsider in order to reduce the inconsistency.



In the example above, "Leverage Knowledge" (row) is 5 times more important than "Improve Organizational Efficiency" (column). 5 = "Strongly" on the Pairwise Verbal scale. This the most inconsistent judgment (rank =1) and the best-fit judgment for the cell is 1.27.

The Rank and Best Fit can be hidden by unchecking their corresponding checkboxes for desktop view or from the eye icon for mobile view.

Invert Judgments

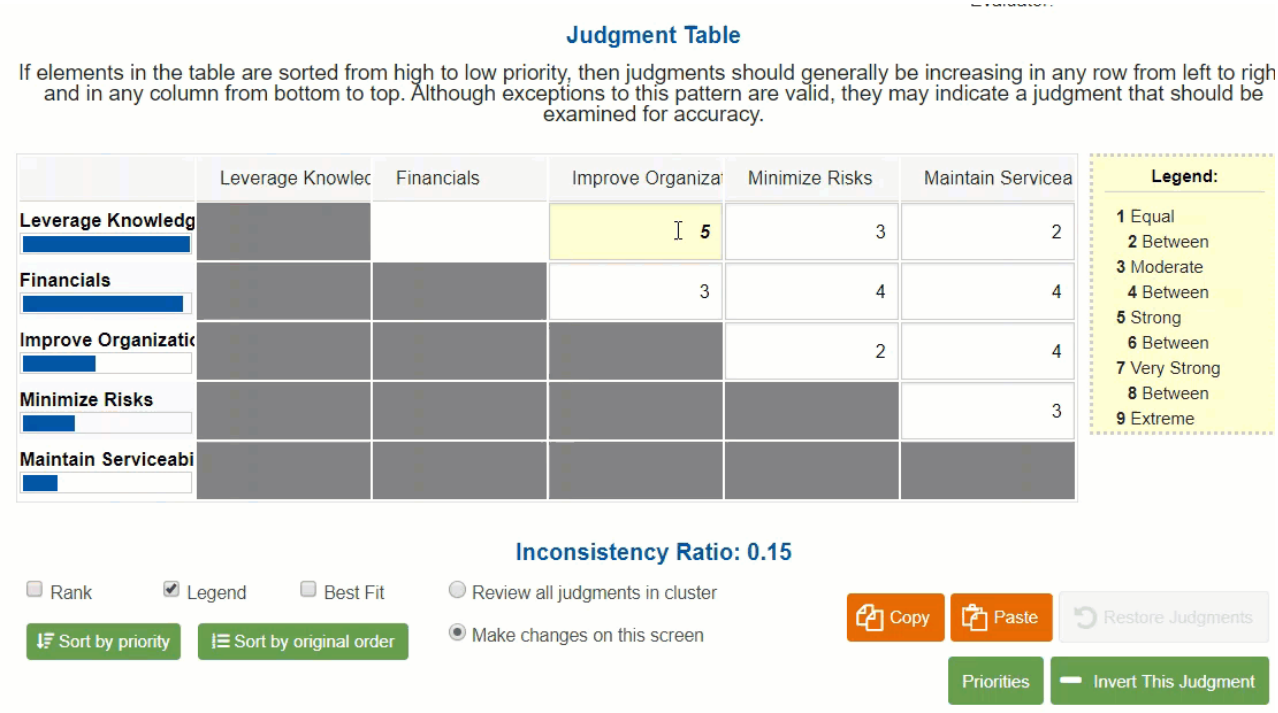
The numbers in the matrix cells indicate how much more important or preferable the row element is when compared to the column element. Judgments for which an element in the column is more important or preferable than an element in a row is shown in red.

You can invert judgments in the "Make changes on this screen" mode. To invert a judgment, change from black to red or

red to black, press either the - or 'i' keys.

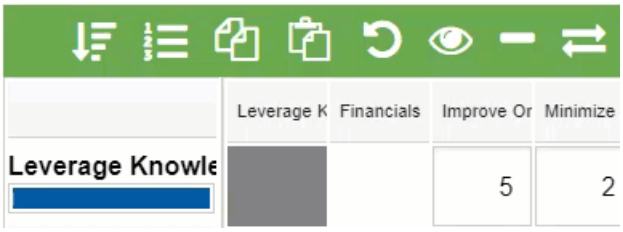
Desktop

You can invert a judgment using the "- Invert This Judgment" button:



Mobile

You can invert judgments using the **-** button:



Sort Elements

Desktop

By default, elements in the judgment matrix (they might be objectives or alternatives) are sorted as they are sorted in the model (sort by original order). Click the "Sort by Priority" button to sort by priority, High to Low.

1. Sort by priority
2. Sort by original order

Mobile

By default, elements in the judgment matrix (they might be objectives or alternatives) are sorted as they are sorted in the model (sort by original order). Click the "Sort by Priority" button to sort them by priority, high to Low.

1. Sort by Priority  (high to low)

2. Sort by original order  - based on the sorting of the elements in the model

Copy / Paste Judgments

You can copy and paste the judgments for a cluster from the judgments matrix page.

Desktop

To copy the judgments matrix, click the 

icon.

> Note: Judgments will be copied based on the original order of the elements.

Click 

to paste.

Mobile

To copy the judgment matrix to clipboard, click the copy button  or Ctrl-C (Cmd-C on MacOS) on your keyboard. Judgments are copied in the original order of the elements.

To paste judgments from clipboard click the paste button  or Ctrl-V (Cmd-V on MacOS) on your keyboard.