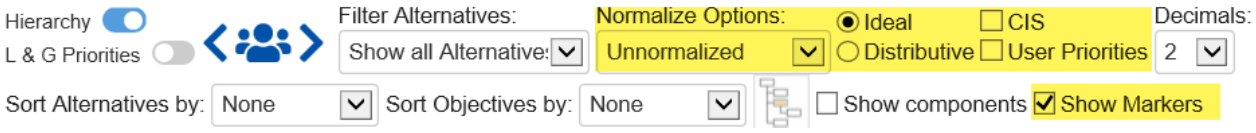
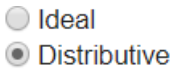
Advanced Mode: Synthesize (Distributive, Normalization, AIP, CIS, User Priorities)

When the Advanced mode is ON, you will see the advance options (if applicable) on Synthesize pages.



Ideal and Distributive Synthesis

Results can be computed as an**Ideal** mode (default) or D**istributive** mode synthesis.



Originally, AHP had only one synthesis mode – later called the "distributive" synthesis mode. A distributive synthesis distributes priorities from the goal down through the alternatives and is analogous to dividing priorities in a pie chart, which is intuitive for decision-makers to comprehend. The sum of the global priorities for each alternative with respect to each covering objective represents the overall priority of that alternative. The priorities have ratio scale properties (as well as, of course, interval and ordinal properties), which means that they can be used in making a choice, or in allocating resources. This synthesis operation can be thought of as distributing the goal's priority of 1.0 to the alternatives under consideration and is today called the distributive synthesis mode. Originally, this was the only synthesis mode of AHP. Critics of AHP pointed out situations where a different synthesis mode is more appropriate.

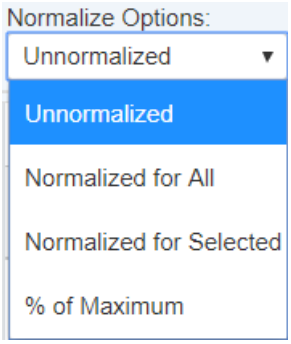
Aggregating Individual Priorities (AIP)

Clicking the **AIP** check-box will show results based on aggregating individual priorities, known as AIP, instead of aggregating individual judgments (AIJ). When AIP is checked, overall alternative priorities are computed for each participant and then an average of these priorities is computed.

NOTE: Due to the nature of AIP, objectives charts, objectives grid, and all sensitivity analysis pages are disabled when AIP is selected.

Normalization Options

In Advanced mode, you can display results based on various normalization options:



- **Unnormalized:** The priority is the sum of the products of each covering objective's global priority times the priority of the alternative with respect to each covering objective. If an alternative has a priority of 1 for every covering objective, it will have an unnormalized priority of 1 and is referred to as an ideal alternative. Note: "Unnormalized" is not available and not applicable when using Distributive mode.
- **Normalized for All:** Sum to 1 for all the alternatives.
- **Percentage of Maximum:** The alternative with the highest priority is 1 and all others are a percentage of this.
- **Normalized for Selected:** Sum to 1 for the selected alternatives.

Combined Input Source(CIS)

If the Combined Input Source (CIS) is on (see below), then results for individuals are computed by combining the priorities derived from judgments or ratings for which they had roles, with the combined results for any parts of the model where they did not have a role.

Apply User Priorities

If priorities (weights) have been specified for participants, the "User Priorities" check box will enable you to apply or ignore these priorities in generating the results.