## Evaluation - Top down or bottom up

When an individual or small group derives priorities in an AHP model, they can evaluate either from the top down (from goal to objectives to alternatives) or bottom up (from alternatives, to covering objectives, to top level objectives).

A top down evaluation is advantageous in that the strategic importance of the top level objectives is paramount and not overly influenced by tactical considerations (the alternatives). This is consistent with the 3rd AHP axiom – hierarchic composition.

On the other hand, a strategy that is pursued without adequate consideration of the means available to achieve the strategic objectives can be shortsighted. That is, *the hierarchic composition axiom which states that judgments about, or the priorities of, the elements in a hierarchy do not depend on lower level elements, is not necessarily realistic.* There is a formal, mathematical way to measure and incorporate feedback. But a simpler and more intuitive way is to evaluate the hierarchy from the bottom up. In so doing, the decision makers gain an insight into the trade-offs among the alternatives before being asked to evaluate the importance of the objectives. This is referred to as feedback.

A Bottom up evaluation is recommended when alternatives are not yet well understood. Doing a bottom up evaluation can save time compared to iterating later on. Both top down and bottom up can be employed iteratively.