

## Structuring

In conformity with the second of the three AHP axioms originally proposed by Saaty, the elements of any cluster should be "homogeneous," meaning that they should differ in importance from one another by no more than an order of magnitude. This requirement is not absolute, but rather a guideline in the structuring of an AHP model.

It is commonly accepted that each cluster possess no more than seven, plus or two elements, so that (a) the thinking during the pairwise comparison process does not exceed human cognitive limitations – in particular short term memory, and (b) the number of pairwise comparisons does not grow beyond reason.

The terminology used to refer to the elements in clusters in AHP models varies, depending on both the purpose of the model as well as the preference of the modeler. For typical AHP models to choose a "best" alternative, the elements in the clusters below the goal can be referred to as objectives or criteria. The lowest level in a hierarchy, sometimes referred to as covering objectives (since they "recover" the alternatives to be evaluated) or terminal objectives, may represent attributes of the alternatives.

We strongly recommend that the higher level elements be referred to as objectives rather than criteria or attributes. For other types of AHP models, such as forecasting models, cluster elements can be referred to with other terms, such as influencing factors and scenarios.

---