
QuickTip – Decision Grid

A decision grid helps select the best option from several defined choices. The options are evaluated on important criteria. For example, a decision grid can be used to help a car purchase decision by rating alternative car models on important features like safety, gas mileage, performance, and styling. Criteria can be treated equally or given weights relative to each other – for example, for some people styling is twice as important as anything else. Often the chief value of a team rating exercise is in the discussion and prioritization that it encourages rather than in the absolute point winner.

This tip describes a simple rating system that is sufficient for many uses. There are more sophisticated methods of weighting priorities and rating options, such as used in quality function deployment (QFD).

When to Use

- Selecting the best option from several well-defined choices
- Making priorities and feature comparisons explicit

Procedure

Decide which criteria will be used to rate the options. They should reflect the essential features desired in the solution. Clearly define them and determine what weights, if any, should be assigned. If this is complicated or contentious, use a separate technique such as pairwise analysis or weighted voting to determine the criteria.

Name and clearly describe each of the options to be evaluated so that participants have a thorough understanding. Create a rating matrix with option names on one axis and criteria on the other. Define a rating scale that clearly defines the possible rating values.

As a group, rate the performance of each option against all criteria by entering a value into every cell in the matrix. It may be difficult to reach consensus on a value, indicating either a need for further research or for a decision, depending on the situation. Use an appropriate tool to get the needed information (e.g., research) or decision (e.g., voting).

Considerations

1. Start filling in the matrix by rating an item that is not contentious and is on one extreme of the rating scale. This will serve as an “anchor” for other ratings.
2. Rate all options on a particular criterion before going to the next criterion.

3. Encourage a spread in the ratings. If most ratings are a middle value, it will be difficult to distinguish between the options.
4. It is normal to discover part way through the process that a previous weighting, criterion, or rating should be changed. This may indicate legitimate new understanding but be careful of a subtle bias to get the preferred answer.
5. Define criteria and ratings such that desirable ratings convert to consistent numbers on the scale. For example, if you are rating on a scale of one to five, don't define criteria so that lowest (best) cost is rated a one and highest (best) performance is rated a five.
6. Small differences in rating totals may not be significant. Don't be tempted to assign too much precision to the values.

Criteria	Weight	Options			
		Ferrari	Civic	Miata	Caravan
Performance 5 = highest					
Best Cost 5 = lowest					
Safety 5 = safest					
Availability 5 = immediate					
Total					