

Group Decision Making

By Thomas Saaty



**PEOPLE TEND TO RESIST THAT
WHICH IS FORCED UPON THEM.
PEOPLE TEND TO SUPPORT
THAT WHICH THEY HELP TO
CREATE.**

VINCE PFAFF

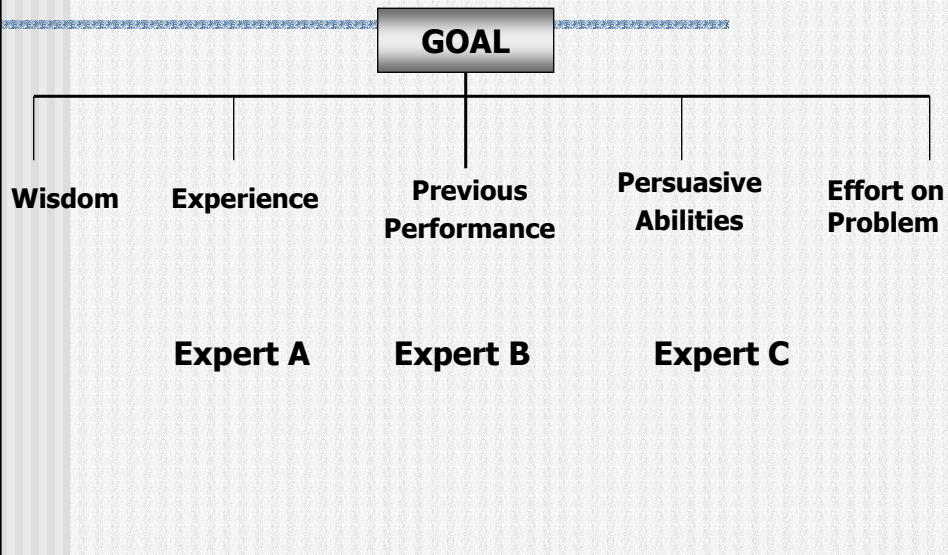
MAKING GROUP DECISIONS

- Majority vote is not always the best way to obtain a group decision.
- Sometimes the group can establish a hierarchy to judge the relative power or knowledge of the individual making the judgments.
- Include such criteria as experience, power, political favors, wealth, fame, and the ability to threaten disruption or withhold participation. Compare the individuals for their relative influence using consensus or structured debate.

MAKING GROUP DECISIONS (CONT.)

- A set of priorities is obtained from the power hierarchy which is used to weight the individuals' judgments by raising them to that power. The issues should first be debated by the group.
- The outcome is one weighted by power and merit rather than one obtained through consensus. The relative power of the participants may shift as the issues change.

EXAMPLE HIERARCHY FOR RANKING OF EXPERTS



EXPECTATION

When we have a group there is no way to make everybody happy on every issue.

- First, people from different walks of life can claim that they believe differently than any theory tells them. We can only hope to bring people together to learn from each other.
- Second, people's expectations may be unjustified fantasies that keep changing so they need to defend their point of view.

GROUP DECISIONS STRUCTURAL AND JUDGMENT SYNTHESIS ISSUES

- 1) Groups at large- too many people; need statistical synthesis of judgments; voting.
- 2) Group, small but cannot get together; questionnaire.
- 3) Group gets together to reach agreements. Structure hierarchy together and seek consensus on judgments. Allow adequate time for debate. Engage everybody.
 - A) Experts-all form hierarchy but each works out assessment.
 - 1) Use geometric mean of outcome if all judges are equally important
 - 2) Use weighted geometric mean by creating a hierarchy to prioritize judges.
 - B) Beginners-combine judgments in each comparison by geometric mean.
- 4) If it is a conflict problem, use AHP approach to conflict resolution.

Questionnaire

Compare X and Y with respect to a criterion

X over Y				OR	Y over X			
Extreme	Very Strong	Strong	Moderate	Equal	Moderate	Strong	Very Strong	Extreme
9	8	7	6	1	3	4	5	6
3	4	5	6		7	8	9	

Political and Psychological Issues in Group Decision Making

- 1- Homework before meeting- used to brief audience on issues and hierarchy. Invite outside consultants to define the issues and discuss the problem. The AHP tries to scale reality more comprehensibly.
- 2- AHP not a tool for an isolated application, but a process that has ongoing validity and usefulness.
- 3- Dominance by an individual or a faction. Ask for other people to participate, break into small groups.
- 4- Hidden Agenda; political commitments, reluctance to participate.
- 5- Insistence on including alternatives to serve own purpose, criteria to cover own concerns; and exaggerating and distorting preferences; needs referees to decide if it is justified or an intentional distortion.

6- Disagreements and conflicts brought out strongly in meeting. Summarize conclusions, clarify, bring new information and more discussion.

7- Lack of rich framework for compromise in case of impasse. Diversify participants and expand the hierarchy.

8- Specialization of knowledge. Different groups provide judgment for their part of the hierarchy.

9- Not enough time. Exercise in relaxed environment held over several sessions.

10- Too many people. Divide into smaller groups which also helps to control bias.

11- Not enough knowledge of subject. Invite briefing by knowledgeable people who can offer judgment for discussion.

12- Too much knowledge and information. Cutting through excessive detail.

13- Impatience of people with other people's discussion. Break up into groups for individualized clarifications. Summarize positions and take straw vote.

14- Preoccupation of people with other matters and falling asleep but later demanding to know what they voluntarily ignored.

