# FIVE SIMPLE CONCEPTS FOR MAKING SOUND DECISIONS

By Jim Suhr

Early during sound-decisionmaking classes and workshops, the participants learn five basic sound-decisionmaking concepts and their labels. To introduce the five concepts, we often use make-believe canoe decisions. (They are not quite as simple as the decision in this paper).

## **Concept #1: Factor**

Elements, or parts, of a decision – such as a canoe-weight, stability, and color – are called *factors*. Factors contain data that are required for making a decision. (A factor is not the same as an attribute).

## **Concept # 2: Alternative**

People, things, or plans from which one is to be chosen are called *alternatives*. They are also called *options*. (In careful usage, they are never called *choices*).

# Concept #3: Attribute

A characteristic, quality, or consequence of *one* alternative (one person, one thing, or one plan) is called an *attribute*. (The key word in this definition is *one*.)

Here is a pair of questions that expert decisionmakers ask themselves:

Q: In what factors are there differences among the attributes of the alternatives?

Q: How large are the differences?

- Here is why the first question starts with the word *in*: A factor is a container.
- To answer the two questions, decisionmakers must acquire the applicable data.

Think about a decision where there are just two alternatives: Canoe C and Canoe A. When the decisionmakers collected the applicable data, they found that there are differences between these two alternatives in just two factors: canoe-weight and stability. Both canoes have the same color, the same length, the same carrying capacity, and so forth. The attributes of the two canoes in canoe-weight, and the difference between the two attributes, are shown in the following chart:

Factor:	Canoe-Weight	
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Alternatives:	Canoe C	Canoe A
Attributes:	65 Pounds	75 Pounds
Difference:	10 Pounds	

The attributes of the two canoes in stability, and the difference between the two attributes, are shown in the following chart:

#### Factor: Stability

Alternatives:	Canoe C	Canoe A
Attributes:	Moderately Stable	Moderately Stable
Difference:	Although both attributes are labeled as Moderately Stable, they are not exactly the same. There is a very small difference. It is so small that only an expert canoeist would be able to detect it.	

### **Concept #4: Advantage**

An advantage is a benefit, gain, betterment, or improvement. It is a difference between the attributes of *two* alternatives. (The key word in this definition is *two*).

#### **Concept #5: Criterion**

A standard, rule, or test on which a judgment or decision can be based is called a *criterion*. A criterion is a decision that guides further decisionmaking.

This is important: As shown in dictionaries, the meaning of the word *criterion* is not the same as the meaning of the word *factor*. Canoe-weight, stability, color, and so forth are factors, not criteria. (They are also not attributes or advantages.)

Here is an example of a criterion: In the canoe-weight factor, based on their plans for using the cane, the decisionmakers decided that *lighter is better*.

In the next step, in the canoe decision, the decisionmakers answered this question: "Which canoe has the advantage in canoe-weight?" To answer this question, they were guided by the above criterion. The following chart displays their answer:

Alternatives:	Canoe C	Canoe A
Attributes:	65 Pounds	75 Pounds
Difference:	10 Pounds Lighter	

In the next step, the decisionmakers answered this question: "Which canoe has the advantage in stability?" An expert canoeist told them that the stability of Canoe A is slightly better than the stability of Canoe C. Therefore, as follows, Canoe A has the advantage in stability.

Factor: Stability		
Alternatives:	Canoe C	Canoe A
Attributes:	Moderately Stable	Moderately Stable
Advantage:		Slightly Better Stability

To actually choose between Canoes C and A, a simple display, called the Two-List Format, would replace the above two charts (if a display was needed). Now, here is the final question:

- Q: Is the advantage of Canoe C, in the canoe-weight factor, more important than the advantage of Canoe A, in the stability factor or, is the advantage of Canoe A more important than the advantage of Canoe C?
- A: Because the advantage of Canoe A is extremely small (it's almost zero), the decisionmakers decided that the advantage of Canoe C is more important than the advantage of Canoe A. Therefore, they selected Canoe C.