

## “ICE” Problem Solving

### Background

In 2003 Wayne Vick, CPF and Charles Markert, CPF were discussing and exploring problem solving models when they asked themselves how do most Americans approach solving problems? In general they determined that most people approach problem solving by:

- describing the immediate problem, probably a superficial part of the overall problem,
- determine likely answers based on a limited field of options to correct the problem,
- make a decision that best fits their current situation and level of knowledge, often the safest with the least use of resources and one that the manager is most familiar with, and
- implement the decision.

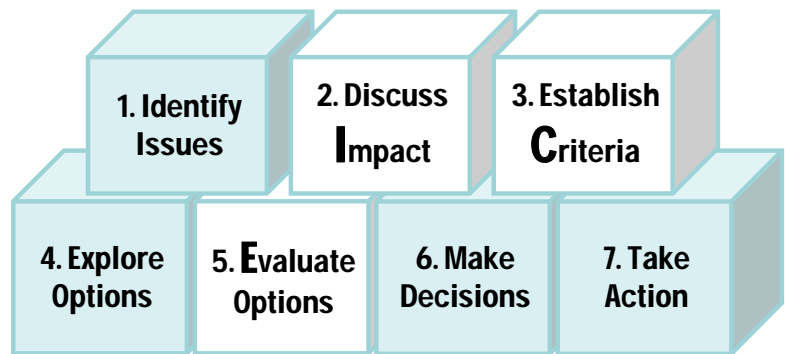
What they felt they had uncovered was three elements, generally required for long-term success, were missing.

They called these three elements “ICE” or

- Impact of the problem,
- Criteria for evaluating options, and
- Evaluation of the options based on the established and objective criteria.

The following describes the ICE Model:

1. **Identify Issues:** or Define the Problem. It is said that a well defined problem is already half solved. So, take the time to explore and define the problem. In some cases this may be identifying issues as a means of defining the problem. You may wish to go further to create a problem definition



statement that encompasses the issues identified.

2. **Discuss Impact:** When you have identified the issues or defined the problem, we believe the problem definition should move another step to examine the real impact. What happens if it isn't fixed? What does the problem affect? Learning the impact helps to establish what solutions must address to be successful. Addressing this in the discussion also helps with the next step.
3. **Establish Criteria:** These are the factors that are used to assess the proposed options against. Instead of making a gut level decision, identifying the criteria to be used to evaluate the options against provides factors that help ensure a complete and consistent evaluation of the options is undertaken.
4. **Explore Options:** Based on your definition of the problem and the impact, what options that may lead to a solution. This starts with brainstorming possible solutions. Discussion should follow focused on finding additional options. Try mixing elements of each option. The idea is to identify any possible options.

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5. **Evaluate Options:** Once the options have been identified it's time to evaluate them against the criteria. Will any of the options adequately solve the problem? Generally, some scoring method is used against each option to determine which options best address the most criteria.
6. **Make Decisions:** Of the options assessed which best meets the criteria? Were there any unintended consequences identified? What option are we going to implement? If none of the options are sufficient to adequately solve the problem should any of them be implemented?
7. **Take Action:** What actions need to take place to implement the decision?

### Application

Inherent in a facilitators repertoire of techniques are group discussion frameworks. These frameworks enable a group to engage in discussion with focus and purpose aimed toward taking action. In a way discussion models are fundamental frameworks of a streamlined problems solving approach. We have aligned the FEMA discussion framework in the table below to show the relationship between the typical approach to problem solving, the

ICE Model	FEMA Framework
1. ID Issue	Facts
2. Impact	Emotions
3. Criteria	Meaning
4. Options	
5. Evaluation	
6. Decision	Action
7. Action	

elements of ICE and the discussion framework. As you can see the typical approach doesn't even begin to address the reflective or interpretive side of a discussion. While the FEMA approach is somewhat intuitive.

Now, granted, a discussion framework is an incomplete problem solving model in itself. However, it illustrates for us what we tend to miss in our discussions and in our problem solving; the internalization part of the analysis. How does it affect us and what are the repercussions?

As the reflective and interpretive elements are crucial to a great discussion, ICE elements are critical to a well solved problem. ICE examines the internalization elements of a problem by scrutinizing the impact issues have on the people and systems involved. It goes further by establishing, after discussion of the issues and impacts, the criteria by which options are evaluated. This is done before the options are examined.

The ICE Model of Problem Solving is a basic problem solving model that can be used as the structure of a problem solving meeting or as an element of a problem solving activity in a larger more complex meeting.

### References

<http://www.facilitationcenter.com>

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