# THE VENDOR SELECTION PROCESS

EXPERT CHOICE Inc.
5001 Baum Blvd.
Suite 644
Pittsburgh, PA  15213
1-800-447-0506

# Introduction

## Background

### Corporate Overview

Expert Choice, Inc. is a decision support software and services company that assists government and commercial organizations to make better and more justifiable strategic decisions. The company's product, Team Expert Choice (TeamEC™) is based on a theory of decision making called the Analytic Hierarchy Process developed by Dr. Thomas Saaty while he was a professor at the Wharton School of Business in the late 1970s. The company has a group of expert decision analysts including: Dr. Thomas Saaty, now a chaired professor at the Katz Graduate School of Business at the University of Pittsburgh, and Dr. Ernest Forman, Professor of Management Science at the School of Business and Public Management at The George Washington University. Dr. Forman and Dr. Saaty are the founders of Expert Choice, Inc. and are recognized as two of the pre-eminent minds in organizational decision making throughout the world today.

Expert Choice has been in existence since 1983 and our software is currently used by thousands of government and commercial organizations worldwide. Expert Choice is based in Pittsburgh, PA; our software sales and business operations are located there. Team Expert Choice consulting is located in Washington, DC, offering a variety of facilitation and decision analysis services to both the federal government and private industry.

### Software

TeamEC™ is a suite of decision support software on a PC based platform. TeamEC™ is used to make a variety of group decisions including vendor selection, strategic planning, resource allocation, project prioritization, technology selection, hiring decisions, employee evaluations, and many other types of alternative evaluations.

The major benefit of TeamEC™ is that it guides a group to prioritize both tangible and intangible information in a decision. TeamEC™ helps to level the knowledge among decision-makers and to minimize personal bias by driving the group to focus on the performance of alternatives against weighted organizational objectives. Decision-makers use radio frequency keypads to prioritize decision attributes based on the relative importance of various factors within a decision. The software aggregates individual judgments and presents prioritized criteria or objectives. The tool fosters discussion and builds consensus by guiding decision makers through a process to discuss those issues where there is disagreement and personal bias rather than wasting time on those issues where consensus already exists.

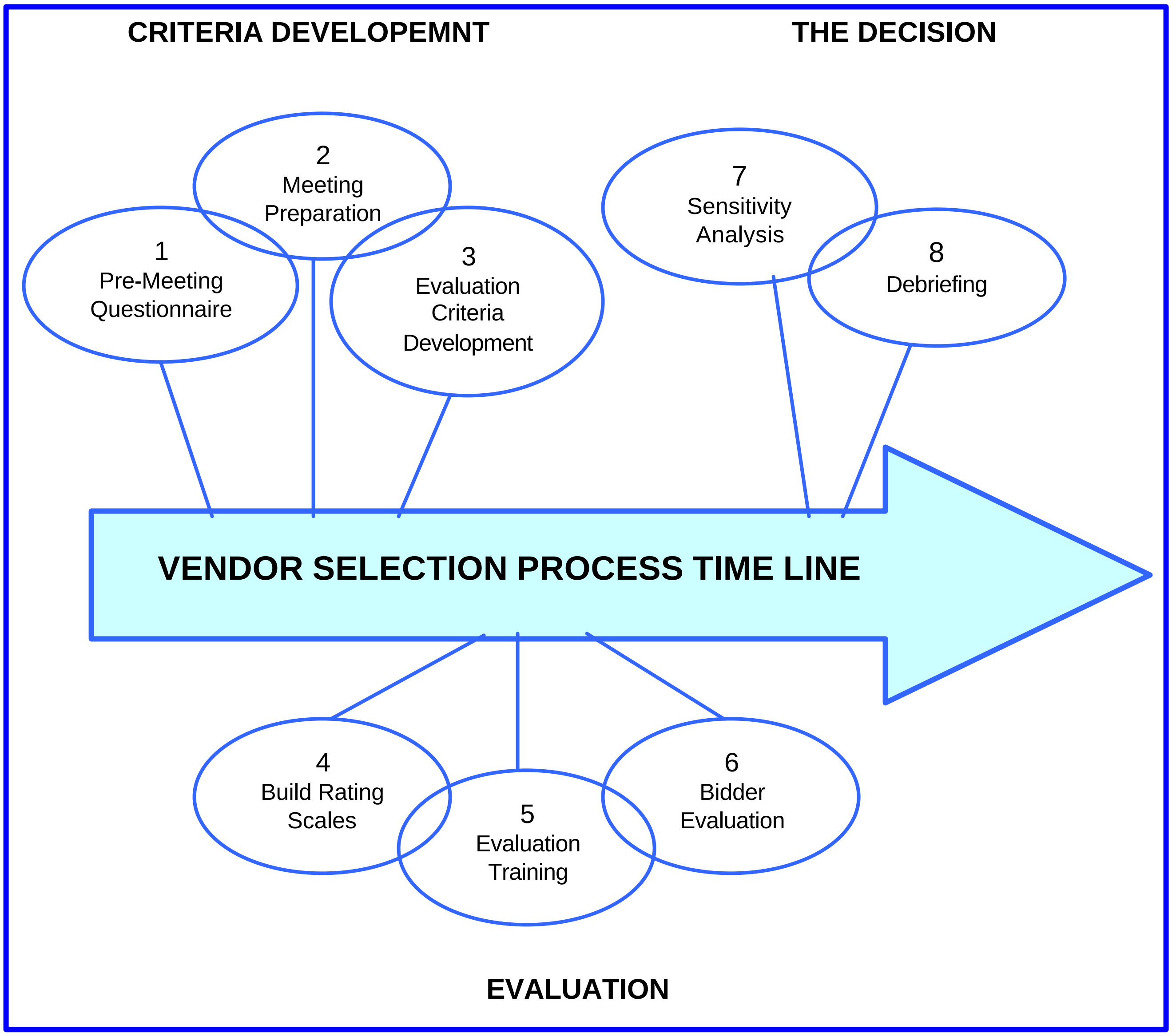
The results of these decision models are all exportable to Microsoft products for easy reporting. TeamEC™ generated decision reports present both detailed and summary information as well as easy to understand graphs. These graphs represent not only the criteria used for the decision but the relationships between the criteria. Decision-makers can dynamically test the sensitivity of the decision by changing the weights of the criteria directly through the graphs, there by providing new real-time results.

# TeamECä Selection Timeline

### Timeline

The standard TeamEC™ vendor selection can be represented by three phases constructed of eight unique Steps. Diagram 2.1 is the sequential representation assuming TeamEC™ is implemented from the onset of the process. It is important to note that TeamEC™ may be plugged into any step of the process with excellent results, but we advocate its implementation at the inception to ensure a balanced decision process with a comprehensive audit trail.

**FIGURE 0.1 TIMELINE**



### The TeamECä Vendor Selection Process

This paper describes the steps involved in the selection of any typical service consultant by a federal agency for a large contract with an estimated duration of five years. Our methodology employs the use of Team Expert Choice™ (TeamEC™) and the Analytic Hierarchy Process (AHP). This approach is logical, rational, and mathematically valid, yet it is easy to learn and use. It is also flexible and works equally well with tangible and intangible criteria. Before we describe in detail how this process works, it is important to keep in mind:

- TeamEC™ is a general-purpose tool, which can support many different kinds of evaluation processes outside of vendor selection.

- TeamEC™ is NOT an electronic vendor selection (ESS) evaluation software product. The purpose of ESS tools is to capture comments of individual evaluators and keep them organized in an electronic format. They are very powerful databases that can be useful in keeping a qualitative record of a proposal evaluation. They are often used in conjunction with TeamEC™, but they focus on recording rather than on measurement processes.

# Criteria Development

## Step One – Pre-Meeting Questionnaire

### Rationale

The Pre-Meeting Questionnaire is a critical element for a successful TeamEC™ decision. Its purpose is to be both the map and the legend for the selection journey. The primary function of a Pre-Meeting Questionnaire is to elicit key issues and objectives for the vendor selection from the leader of the decision process. The Pre-Meeting Questionnaire accomplishes this by eliciting information about evaluation criteria, specifying stakeholders and their issues, exposing political agendas, identifying potential barriers to communication and establishing goals for the evaluation process. These questions expedite the initial stages of criteria development.

The Pre-Meeting Questionnaire is used to construct an agenda and a portrait of the political and organizational influences affecting the decision. These negative influences may surface as stakeholders bring political and personal issues into the meeting. The pre-meeting questionnaire provides an opportunity to expose these issues prior to the next major step criteria development. If the decision leader can minimize or neutralize their impact on the selection process then the entire selection will flow more effectively.

### When

TeamEC™ can be plugged in at numerous stages of a decision but the optimal insertion point is prior to the construction of the RFP. By using TeamEC™ from the onset the evaluation team members can gain consensus early and produce a focused RFP, which concentrates on the most critical and heavily weighted criteria. If a group is given the opportunity to identify selection factors using a structured format then the process will take into consideration all stakeholders, there by producing a clear and quantitative breakdown of key criteria. Evaluators will now be more successful at developing an RFP that communicates to vendors the needs of the organization. Though the pre-meeting questionnaire does not accomplish this by itself it is the first step toward an educated and comprehensive vendor selection.

## Who

The Vendor Selection Committee Chair or the Decision Leader are the optimal personnel to address the Pre-Meeting Questionnaire. It can also be sent to the Technical Team Leader and the Cost Team Leader if the selection is large enough to have either. It is important that the Pre-Meeting Questionnaire be viewed and treated as a top down tool. It must be answered candidly by the person or persons who have been charged with leading the decision committee.

Figure 1.1 Sample Questionnaire

*(The following are general questions for a standard vendor selection. Any inappropriate ones may be omitted and any additional questions can be added.)*

- What is the actual meeting objective?
- What are the goals for the meeting?
  - Please List?
- What elements would make a meeting successful?
  - Please List?
- Are there any criteria that can be considered critical, without these the option is automatically excluded?
- Do you have any objectives or criteria already determined?
- Please List?
- How many people will be voting?
- Who are the stakeholders?

– Please List?

- What are their relationships to the project?
- Do you expect anyone to try and dominate the conversation?
- Is there anyone with a political agenda?
  - What is it?
- Is there anyone who will be threatened by the process?
  - Please List and Why?
- Are there any stakeholders who will not be present during the process?
  - Please List and Why?
- What is the budget?
- Are there any political constraints or regulations that apply to the funding of certain projects?
  - Please List and Explain?
- What is the timeline for this process?
- What is the implementation date for the selection?

### Critical Success / Failure Factors

The following factors help ensure the success and expedience of the vendor selection process. Conversely their absence detracts from the overall outcome of the decision. See Figure 1.1 for a sample pre-meeting questionnaire.

- *Completeness*- The answers to the Pre-Meeting Questionnaire must be as detailed as possible.
- *Candidness*- The decision leader must feel comfortable enough to answer the questions as truthfully and non-politically as possible. Surprises during the decision session only destroy faith and slow the process.
- *Personal Baggage*- In a selection, egos are not a decision criterion and there are no winners and losers, only informed decisions.
- *Identification of Pitfalls*- There may be a stakeholder who feels it is in their best interests to sabotage a decision, even the slightest hint of this at the Pre-Meeting Questionnaire stage can help minimize the damage or circumvent the problem.
- *Overall Objective*- It is imperative for the Decision Leader and the TeamEC™ facilitator to work together toward clearly defined objectives.

## Step Two – Meeting Preparation

### Rationale

Meeting Preparation is the second logical Step for the Vendor Selection of a consultant by a federal agency for a large contract with an estimated duration of five years. TeamEC™ facilitators play an important role in preparing for the ensuing meetings. With the guidance of a facilitator the group will establish an agenda, choose evaluators, and adopt ground rules and the hold the first discussion to define consensus.

### When

Following the logical implementation of a TeamEC™ selection, meeting preparation should begin immediately after the completion and evaluation of the pre-meeting questionnaire. We advocate the use of TeamEC™ from the inception of a vendor selection but, it is still extremely effective if TeamEC™ is plugged in anywhere during the process.

### Who

A TeamEC™ consultant and the Vendor Selection Committee Chair or the Decision Leader is required for Meeting Preparation. The Technical Team Leader and the Cost Team Leader can also be included if the selection is large enough to support either. Meeting Preparation is essential and must be a priority for the Decision Leader, disconnect here can be disastrous further into the process.

### Key Elements for Success

Setting an agenda is important for any meeting but it is critical for a structured decision process like vendor selection. It is essential to consider timing, flow, schedules and deadlines during agenda construction. The TeamEC™ consultant will provide accurate information on the required lengths of meetings and all equipment needs. Once the agenda is set and accepted it is important to adhere to it as strictly as possible because delays will erode the conviction of the decision-makers.

Choosing the correct stakeholders to participate as evaluators is an essential part of a successful vendor selection. By creating a group with a 360° view of the selection a complete and balanced decision can be reached insuring that all points of view are represented.

Defining and agreeing upon *consensus* is possibly the single most important element of a good decision process. During the meeting preparation step the TeamEC™ consultant will explain consensus to the decision leader and together they will present a unified definition for consensus to all of the evaluators. Consensus is simply defined as – not necessarily my most preferred choice but one that I can live with and support when I leave today. To arrive at this evaluators must ask themselves three simple questions; 1) can I live with the decision? 2) can I support it and apply resources to it like time and money? 3) can I not talk badly of the decision we made here today? This is important because if a group can't walk out of the room and speak well of the decision then there is little chance that the program will succeed.

At Expert Choice, we feel strongly about the need for ground rules during the vendor selection brainstorming and evaluation sessions. The decision leader needs to accept these rules as his/her own in order for the group to freely abide by them. These rules need to be the group's rules because the facilitator is not responsible for enforcing them. The facilitator is only responsible for identifying broken or ignored rules. The group leader has the responsibility of enforcing the ground rules.

We have found that these are the most important rules for a successful TeamEC™ session:

1) *No story telling*- It is essential to keep evaluators comments focused and concise. Providing supporting information from past experience is important but it should be kept to just the factual points. By setting this rule at the onset the facilitator has the ability to curtail a rambling speaker by evoking the rule rather than confronting him/her personally.
2) *Conversational Courtesy*- This rule may seem obvious and sometimes is never enforced but there may be rude participants who need reminding of basic communication etiquette.
3) *Justification*- There are four discoveries that can come form well developed justifications:
    1. There are no outrageous opinions only poorly justified ones. Any outlying opinion requires justification. A good justification can educate the entire group and move everyone's votes.
    2. The evaluator who presented the justification may realize that he / she has erred and change their opinions.
    3. Occasionally an evaluator may have a strong reason for their opinion that does not sway the group but is still held to be valid.
    4. Finally the evaluator may have been ignorant to the actual criteria being rated and the justification serves to educate the justifying evaluator.
4) *No Personal Attacks*- Evaluators must not fear ridicule when presenting an idea. The power of a good decision is derived from joining many voices. If an evaluator is afraid to contribute, the overall validity of the decision may be jeopardized.

# Step Three – Evaluation Criteria Development

## Rationale

Evaluation Criteria Development is the third logical step for the vendor selection of a consultant by a large organization. There are three key tasks the team must accomplish to successfully develop evaluation criteria. Evaluators must 1) establish common definitions; 2) develop criteria for evaluating the vendor selection; and 3) weight the developed criteria. It is important to note that evaluation criteria development, is more than simply brainstorming a list of potential factors to consider. Criteria development is the process of identifying and structuring criteria that will be used to evaluate proposals. Evaluation criteria are different from requirements that are in the RFP. The term 'requirement' traditionally refers to specific necessities or thresholds that, if not met in the proposal, will exclude an offeror from winning a bid. These are often among the first things to be written into an RFP. Evaluation criteria, on the other hand, are general criteria that assess the value added to the purchasing organization. They are often a mix of intangibles like innovation and corporate culture, with tangibles like system performance and cost.

**Figure 3.1 Sample Agenda for the Evaluation Criteria Development Session**

(Day One)

| | |
|---|---|
| 9:00 | Introduction- Review problem and meeting objective |
| 9:15 | Define consensus, ground rules and roles of meeting participants |
| 9:30 | Overview of the Analytic Hierarchy Process- Demonstration of TeamEC™ software for group decision-making |
| 10:00 | Criteria Development- Focused brainstorming session to define decision criteria using TeamEC™ Structuring tool. |
| 12:00 | Lunch |
| 13:00 | Complete Criteria Development Brainstorming<br>Continue to define decision criteria using TeamEC™ Structuring tool. |
| 15:00 | Criteria Prioritization- Group uses radio frequency keypads to prioritize decision criteria- Requirements will be mapped to criteria to prepare for rating scale development. |
| 17:00 | Wrap-up and define action items for development of rating scales. |
| 17:15 | Adjourn |

(Day Two)

| | |
|---|---|
| 9:00 | Introduction- Review problem, status and meeting objective |
| 9:15 | Recap defined criteria |
| 9:30 | Criteria Prioritization Completed- Group uses radio frequency keypads to prioritize decision criteria- requirements will be mapped to criteria to prepare for rating scale development and for export to RFP. |
| 12:00 | Lunch |
| 13:00 | Rating Scale development involves defining adjectival ratings, definitions, and associated requirements for each criterion. Evaluators will reach consensus on a rating scale. |
| 15:00 | Establishment of timeline for next two selection phases.<br>To include dates for; the completion of RFP, return of RFP, quick look evaluation of the RFP responses, aggregation of RFP responses, reading of RFP responses, oral presentations form respondees, the next TeamEC™ session for Evaluation, the TeamEC™ session for decision, presentation of decision to superiors, debriefing of those not selected. |
| 17:00 | Wrap-up |
| 17:15 | Adjourn |

### When

Following the logical implementation of a full TeamEC™ selection, evaluation criteria development should begin immediately after the completion, approval and distribution of the materials produced during the meeting preparation step. We do advocate the use of TeamEC™ from the inception of a vendor selection, but TeamEC™ can still add substantial value if the decision team has already developed criteria and weights. These attributes can be plugged into TeamEC™ and normalized to allow for a well-developed and documented selection. Plugging TeamEC™ into any ongoing selection process will help to yield a well-substantiated decision that reduces the overall risk of protest.

### Who

Our first step is to get the vendor selection leaders and any available key evaluators together for a criteria development session. The key evaluators were identified by the pre-meeting questionnaire and notified subsequent to the meeting preparation. A TeamEC™ consultant, usually assisted by a computer specialist will facilitate the evaluation criteria development. While it is possible to collect some preliminary criteria information asynchronously, it is essential that criteria be finalized in a same time setting. (Face-to-face or same time/same place is strongly preferred to same time/different place mode for this step.)

### Key Elements for Success

A successful selection depends on leveling the playing field of knowledge. During criteria development it is essential that all the evaluators understand the problem, agree on key terms and present criteria that they feel encompasses all the important aspects of a selection. By leveling the playing field the evaluators can avoid confusion about the selection. Finally, the evaluators must be able to determine which are the most important criteria so that ratings are based on priority rather than sentimental influences. The TeamEC™ decision process accomplishes all of this through the implementation of four sub-processes.

1. The establishment of *common definitions* is the first step to leveling the knowledge playing field. It is very common for many individuals from within the same organization to have considerably different interpretations of important terms. By pulling those terms, which are critical for the development of criteria out into a public forum, the group can share their personal definitions expanding all of the evaluators' knowledge. This exercise is also the first step in consensus building and developing group dynamics. The result is group consensus where despite minor differences; all panel members can support a definition and ultimately endorse the decision.

2. The *development of the evaluation criteria* is a dynamic process that is governed by ground rules set during meeting preparation. The results of the brainstorming are organized using an affinity-diagramming module imbedded in the TeamEC™ software (see Figure 3.1). Once the evaluators have finished their criteria development and structuring, TeamEC™ expands the clusters into a hierarchy, comprised of evaluation criteria and sub-criteria (see Figure 3.2).

FIGURE 3.1 Developing and Grouping Criteria with the TeamEC™ Structuring Tool:
The figure below shows an affinity diagram developed during the brainstorming of evaluation criteria. The user has grouped sub-criteria under four super-criteria.

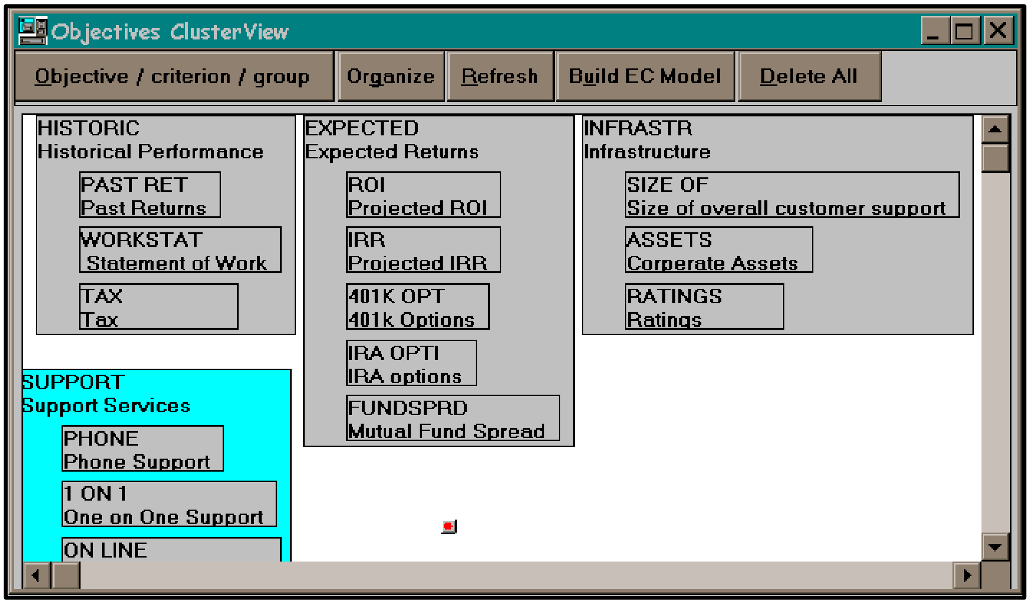
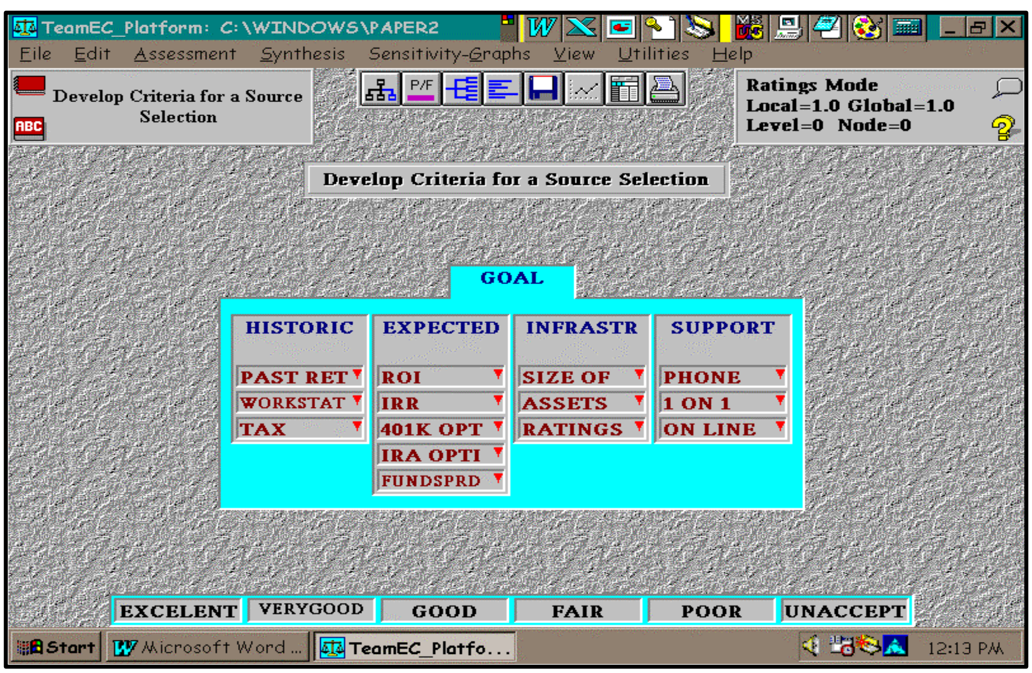


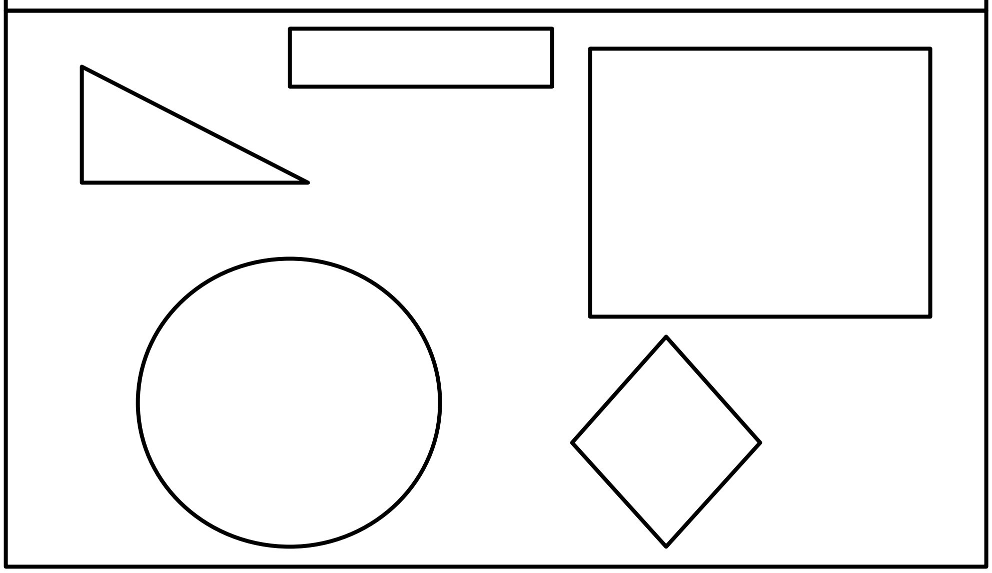

**FIGURE 3.2** Migrate the Structured Criteria into a Top Down Decision Model:



3. *Building Confidence in Pairwise Comparisons* - The human mind is extremely proficient at comparing two abstracts of similar size and complexity. Pairwise comparisons take advantage of this property of the human mind by focusing a comparison on only two features at a time. TeamEC™ comes with a sample called the Area Validation Model. This model can be used to build group confidence in the power of pairwise comparisons. It clearly demonstrates the power of pairwise comparisons against arbitrarily allocating resources based on perceived size importance. In Figure 3.3, a person is asked to allocate $100 to the 5 shapes based on their relative sizes. For example, if the circle is half the size of all objects combined, it gets $50. This example is used to show that with paired comparisons; people are closer to the actual percent of total for each shape then if they just throw numbers on the shapes. This method of throwing numbers is unfortunately the most common method employed in vendor selections

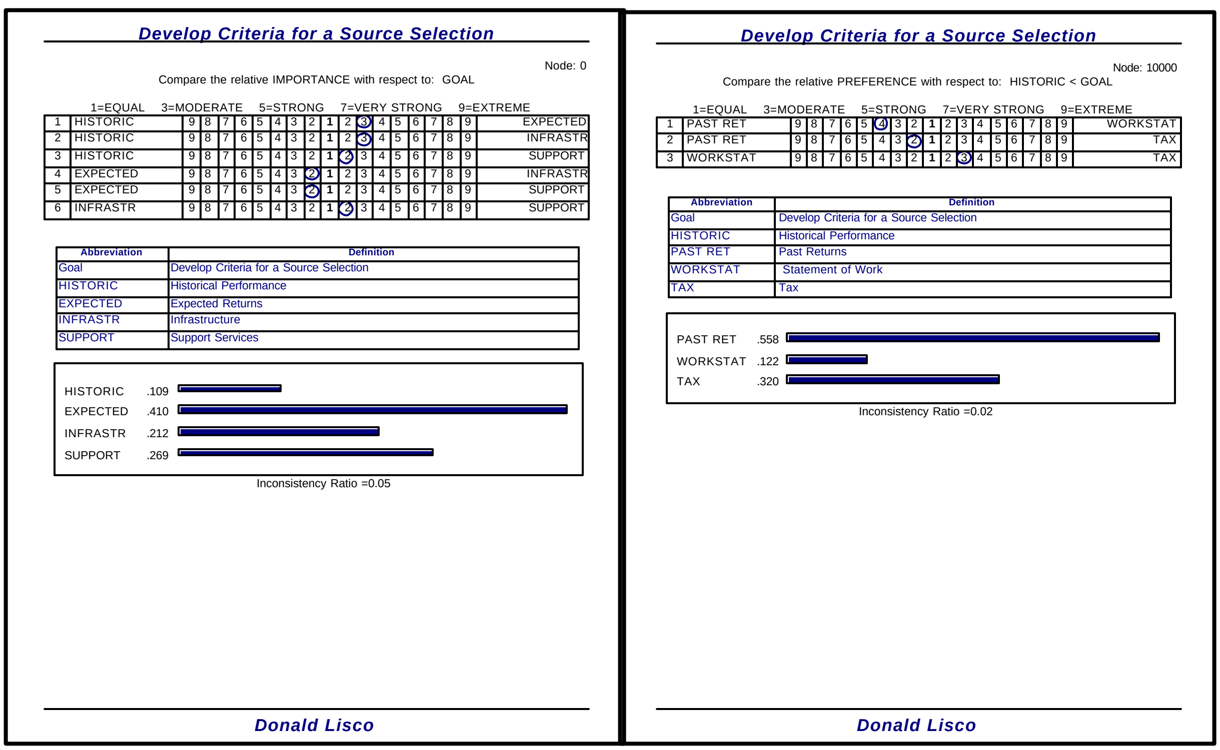
Figure 3.3

This set of geometric shapes which by pairwise comparisons will render a more accurate size distribution.



4. After the evaluation criteria have been defined, organized and accepted by the evaluators they must be prioritized. Deriving *criteria weights* is accomplished by comparing evaluation criteria to one another in a pairwise fashion, measuring proportionality by using a graphical ratio measurement ruler (see Figure 3.4). The middle point on this ruler indicates that the two factors being compared are equally important or preferable. This pairwise approach allows evaluators to compare tangibles to intangibles on a reliable scale. Each evaluator expresses an opinion using a wireless radio frequency keypad, and all individual judgments are collected and aggregated into an overall group judgment. Once all of the criteria have been weighted against each other TeamEC™ then calculates the relative weights of all criteria and formats them into an ordered list (see Figure 3.4). The ordered list is a set of priorities that demonstrate the actual difference between and the magnitude of the criteria, rather than just the order of importance.

**Figure 3.4** Output from a groups use of the radio scale ruler used to perform pairwise comparisons



# Evaluation

## Step Four – Rating Scale Development

### Rationale

Rating Scale Development is the fourth logical step for the vendor selection of a consultant by a federal agency for a large contract with an estimated duration of five years. In TeamEC™, rating scales are developed by the evaluators to ensure that an accurate numerical weight for a rating is used to evaluate each vendor with respect to an objective. It is vital that the degree of separation between rating tiers is representative of the value of the ranking.

### When

Following the logical implementation of a full TeamEC™ selection, evaluation rating scale development should begin immediately upon the receipt of the responses to the RFP or during the time when the responses are in the hands of the offerors.

### Who

Our first step is to get the vendor selection leaders and key evaluators together for a rating scale development session. A TeamEC™ consultant, usually assisted by a computer specialist will facilitate the rating scale development. This step requires that vendor selection leaders and available evaluators meet face to face at the same time and place.

### Key Elements for Success

For the evaluation of RFP responses to be both credible and complete the scale which individual criteria are compared and subsequently ranked against must reflect the organization's view on the degree of value <u>not</u> of the rating but on the distance between the ratings. Let's take a qualitative scale: Outstanding, Excellent, Satisfactory, Poor, and Unacceptable.  Evaluators are asked to compare Outstanding to Excellent, Excellent to Satisfactory, Satisfactory to Poor, and Poor to Unacceptable in a pairwise fashion:

The results are numbers on a ratio scale, whose values might look like this:

Outstanding = 100
Excellent = 72
Satisfactory = 37
Poor = 15
Unacceptable = 0

If these were the results, the evaluators would be saying that they give a lot of value to an Outstanding approach, and substantially less to an Excellent.  Now when evaluators present their ratings to offerors, the numerical scores will mean quantitatively what the evaluators mean qualitatively when they submit their scores.

In many cases, the same scale has a different meaning depending on what is being measured. For example, 'Outstanding' Past Performance might be valued as twice as good as 'Excellent' Past Performance, while an 'Outstanding' Statement of Work might be seen as only marginally better than an 'Excellent' Statement of Work. Table 4.1 shows two sample ratings scales for both Past Performance and the Statement of Work.

**TABLE 4.1** Sample rating scales

| SAMPLE RATING SCALE FOR PAST PERFORMANCE | | | | |
|---|---|---|---|---|
| Outstanding | Excellent | Good | Fair | Poor |
| 1.000 | .500 | .400 | .250 | .000 |

| SAMPLE RATING SCALE FOR STATEMENT OF WORK | | | | |
|---|---|---|---|---|
| Outstanding | Excellent | Good | Fair | Poor |
| 1.000 | .850 | .600 | .400 | .000 |

Throughout the evaluation process, the ratings scales and their associated weights or values can be customized to fit what is being measured. What is essential is that the distance between ratings must reflect the importance of one rating in respect to another. Table 4.2 displays sample ratings and their group agreed upon definitions prior to comparing ratings to one another.

### Addressing Risk

Risk is addressed in the rating scales by reducing a bidder rating in accordance with the confidence level of their potential performance. For example, if you are confident that the bidder understands and has addressed a criterion in a fashion deemed excellent, but you also feel that there is a risk that they will not perform to that level. Then a rating of Very Good would be assigned rather than Excellent.

**TABLE 4.2** Actual Rating Definitions from a Pentagon Selection

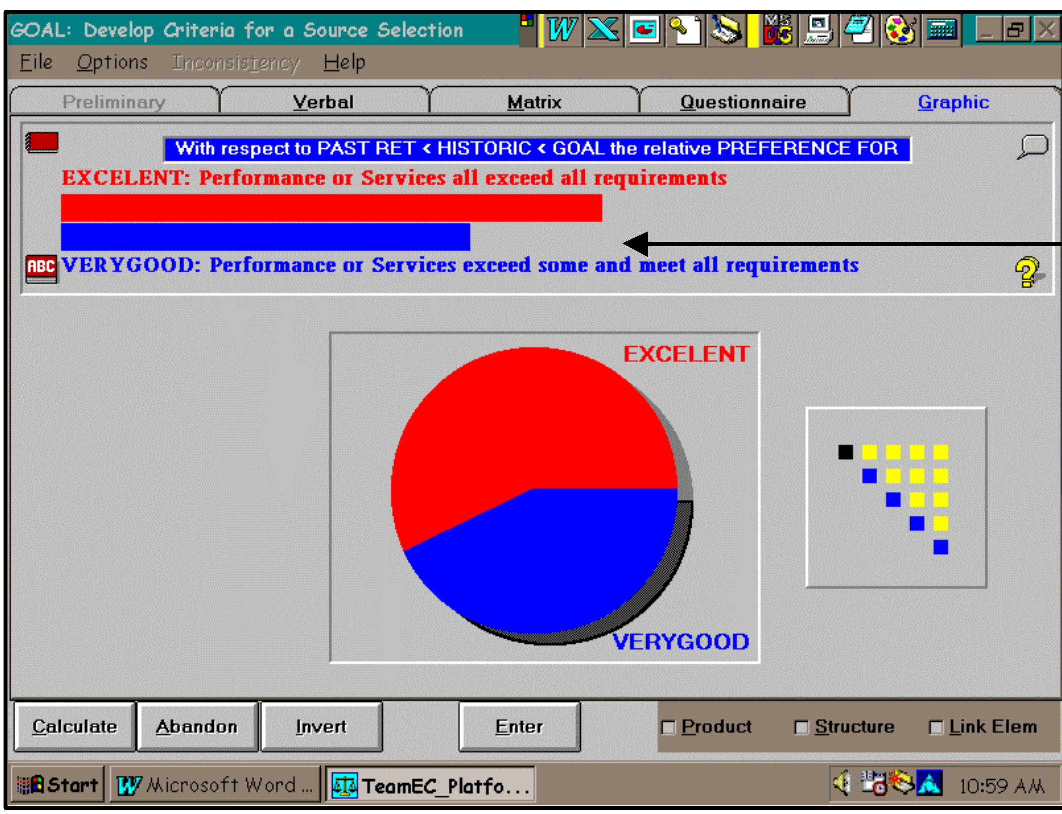
| Rating | Weight | Description |
|---|---|---|
| **Exceptional** | | Offeror's proposal demonstrates an **exceptional** understanding of the goals and objectives of the acquisition. One or more major strengths exist. No major weaknesses exist. Strengths significantly outweigh the weaknesses. Expected to cause **no** disruption in schedule, increase in cost, or degradation in performance. Will require **no** Government emphasis and monitoring to overcome difficulties. |
| **Very Good** | | Offeror's proposal demonstrates a **very good** level of understanding of the goals and objectives of the acquisition. Strengths outbalance weaknesses that exist. Any weaknesses are easily correctable. Expected to cause **minimal** disruption of schedule, increase in cost or degradation of performance. Will require a **low** level of Government emphasis and monitoring to overcome difficulties. |
| **Good** | | Offeror's proposal demonstrates a **good** level of understanding of the goals and objectives of the acquisition. There may be strengths or weaknesses, or both. Weaknesses are not offset by strengths, but the weaknesses do not significantly detract from the offeror's response. Weaknesses are correctable. Expected to cause **minimal to moderate** disruption of schedule, increase in cost or degradation of performance. Will require a **low to medium** level of Government emphasis and monitoring to overcome difficulties. |

| Rating | Weight | Description |
|---|---|---|
| **Marginal** | | Offeror's proposal demonstrates a **marginal** level of understanding of the goals and objectives of the acquisition. Weaknesses have been found that outbalance any strengths that exist. Weaknesses will usually be difficult to correct. Expected to cause **moderate to high** disruption of schedule, increase in cost, or degradation in performance. Will require a **medium to high** level of Government emphasis and monitoring to overcome difficulties. |
| **Unacceptable** | | Offeror's proposal demonstrates a **poor** understanding of the goals and objectives of the acquisition. No major strengths exist, and one or more major weaknesses exist. Weaknesses clearly surpass any strengths. Weaknesses are expected to be very difficult to correct or are not correctable. This feature is so poorly understood and demonstrated that it presents an **extremely high** risk to the success of the program. Expected to cause **significant, serious** disruption of schedule, increase in cost or degradation of performance. Will require a **significant or constant, high** level of Government emphasis and monitoring to overcome difficulties |

## Scale Development

Once the definitions for a rating scale are established, the process calls for the evaluators to perform consensus pairwise comparisons of the ratings. Figure 4.1 shows the graphical comparison tool being used for consensus pairwise comparison of each rating to its predecessor and successor. By comparing all ratings to each other the true distances or weights can be meaningfully assigned so that the final numerical scale represents the true value associated with a rating. It is important that evaluators employ the definitions in Table 4.2. when conducting the pairwise comparisons

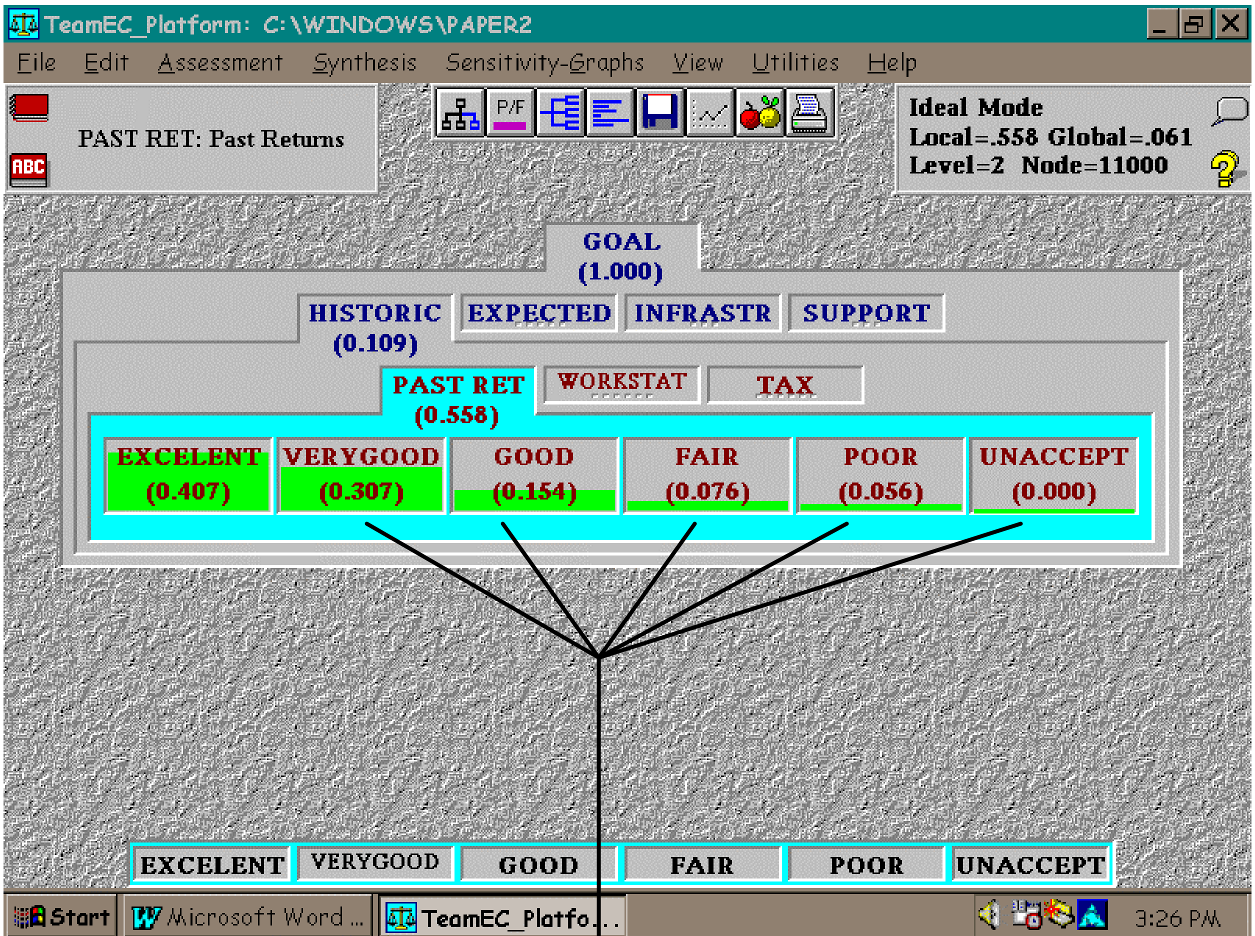
**Figure 4.1 The consensus pairwise comparisons of ratings**




The extended **RED BAR** graphically shows how much greater Excellent is compared to Very Good

After TeamEC finishes compiling and calculating all of the evaluators' consensus pairwise comparisons the scale is then normalized by Expert Choice so that an Excellent becomes a 1.0 and all of the other ratings become a percentage of the top score (see Figure 4.2). Normalization is simply dividing each weight by the largest weight, in order to represent it as a fraction of one.

**FIGURE 4.2** Sample Weighted Rating Scale




**Math Behind Normalization**

.407 / .407 = 1.00
.307 / .407 = .753
.154 / .407 = .377
.076 / .407 = .188
.056 / .407 = .138
.000 / .407 = .000

This box shows the rating scale normalized with all weights converted to a percentage of 100%.

| | |
|---|---|
| EXCELENT | =1.000 |
| VERYGOOD | =.753 |
| GOOD | =.377 |
| FAIR | =.188 |
| POOR | =.138 |
| UNACCEPT | =.000 |

## Step Five – Evaluation Training

### Rationale

Prior to the start of proposal evaluation, evaluators should be trained to explain how to rate proposals. In order for a group to make decisions the ground rules for discussion which were developed by the selection leader and the TeamEC™ consultant during the Meeting Preparation Step should be applied.

### When

Conducting evaluation training will take about 60 minutes to complete and should be done immediately after the rating scales are developed.

### Who

The vendor selection leaders and key evaluators will participate in the exercise. A TeamEC™ consultant, usually assisted by a computer specialist will facilitate the exercise. Face-to-face or same time/same place is strongly preferred to same time/different place mode for this step.

### Key Elements for Success

- *Defining Consensus*- The TeamEC™ consultant will explain the basic concept behind consensus. Reaching consensus is not forcing every participant to the exact same perspective on all judgements. Despite minor differences, members can reach a level of mutual understanding. Consensus is simply defined as – not necessarily my most preferred choice but one that I can live with and support when I leave today. To arrive at this evaluators must ask themselves three simple questions; 1) can I live with the decision? 2) can I support it and apply resources to it like time and money? 3) can I not talk badly of the decision we made here today? The TeamEC™ consultant will guide the evaluation team so that everyone will be able to see where he or she agree and disagree. Where there is no disagreement, the group will move on. Where there is disagreement, the group will spend time discussing the rationale behind different judgments. The discussions will help evaluators get a better understanding of performance level definitions, disagreement on bidder performance and confusion regarding the criteria definitions. This discussion is the most valuable aspect of the use of our methodology. It helps to clarify the level of understanding in the room and brings a team to a common, unified view of the entire evaluation. Because the group saves so much cycle time in other areas of the assessment process, the group has more time for discussion and clarification.

  Some teams adopt an approach that calls for preliminary votes to be collected using keypads, which record individual judgments or perspectives as a precursor to discussion. Then, after discussion, they agree to enter a consensus judgment for the team – rather than individual judgments – as their final assessment. Our process can synthesize this for a group.

  When evaluators come to consensus using our method, they are equipped with the methodology to arrive at clear definitions, derive factor weights for rating scales, and to evaluate bidder assessments. The evaluators will now thoroughly understand the criteria and the quantitative differences between ratings so that they give meaningful numerical scores to offerors. This helps to assure that all offerors are treated fairly - a major factor in protecting against protests.

- *Clarify and Reinforce Group Discussion Ground Rules*- Rules are essential for any meeting but when a group needs to reach consensus they become critical. There are four important ground rules to utilize for an efficient consensus selection; they are detailed in Step Two Meeting Preparation. *(Note, these are the rules identified as most important by Expert Choice, a group should not be limited to these. An entire set may be developed during the Meeting Preparation Step.)*

## The Five Elements of an Evaluation Training Process

Prior to the actual evaluation the selection leader must convey these definitions and facts to the selection group. They should be incorporated into a document and presented to all evaluators. After individual review the decision leader should cover it with the entire group and use it as checklist for ensuring that the selection group is ready to make an informed decision.

1- Evaluators should be familiar with the following:
- Key elements of the RFP
- Evaluation Criteria
- Factor Score Rating Scales
- Common definitions developed
- Factors, Sub-factors and Ratings Scale
- Proper assessment criteria applied to factors (e.g. value added, risk)

2- Definition of Criteria Factors and Sub-Factors
- Factors (*Weighted*)
  - Parent Categories
  - Scoring at the sub-factor level rolls up to the factor level
- Sub-factors (*Weighted*)
  - Level at which offeror is scored using rating scales (Weighted).
  - Scoring based on assessment of strengths and weaknesses against sub-factors
- Sub-factor Ratings
  - Strengths and Weaknesses
  - Deficiency Reports, Clarification Requests (what constitutes discussion?)

3- Explanation of Strengths and Weaknesses
- Be specific, every comment should be tied to:
  - A related evaluation factor
  - Related RFP requirements and proposal including paragraph and page numbers
  - Make it clear what you like or don't like
  - Benefit to the parent organization
  - Negative impact on the program

4- Essentials of a Clarification Request
   - When writing a clarification request you should:
     - List information in the proposal that is inadequate for evaluation (page number, paragraph)
     - Errors, minor omissions, misunderstandings
     - Contradictory statements

5- Essentials of a Deficiency Report
   - When writing a deficiency report you should:
     - Identify which section of the proposal is missing or unacceptable
     - Be specific about what is missing
     - Site where it was asked for in the original RFP

## Step Six – Rating Bidders

### Rationale

This is the most important step in a Vendor Selection. During this step evaluators will rate individual bidders against the evaluation criteria. Evaluators will use the rating scales developed specifically for this selection to score each bidder. The TeamEC™ consultant will guide the group during this process to ensure that consensus is reached.

### When

This step can take anywhere from days to weeks depending on the length and the complexity of the proposal. It should be initiated immediately after training is so that the group can move through all the criteria with as few interruptions as possible.

### Who

The vendor selection leaders and key evaluators who participated in the evaluation training exercise will conduct the bidder evaluation. A TeamEC™ consultant, usually assisted by a computer specialist will facilitate this step. Face-to-face or same time/same place is strongly preferred to same time/different place mode for this step. It is important to note that FAR does allow for some evaluators who have been deemed essential to a decision, but are not available to participate in person to conduct individual evaluations. TeamEC™ has a distributed model capability that allows decision-makers to enter ratings from remote locations. It is imperative that these evaluators be as informed as possible on the process. We recommend using as many virtual meeting techniques as possible including but not limited to; visual web meetings, video conferencing, conference call, networked voting, email of meeting minutes at regular intervals, and in the near future real-time web participation will be available. Even though the individual will be voting using the same criteria it is difficult to extract a justification from them to achieve true consensus. Because consensus is so important all efforts should be made to consolidate evaluators.

### Key Elements for Success

The process of synthesis or the ‘rolling up’ of results is carried out automatically by TeamEC™. Because we break a large, complex problem into small, manageable pieces and evaluate each piece on a meaningful scale, we are able to develop overall results that accurately represent the final scores of the vendors. If one vendor scores .67 overall and another scores .62, the winning vendor should be 5% better.

Each step in the process fortifies the validity of the final conclusions. If the criteria are pertinent and the evaluators are unbiased in their application of knowledge, the result is an accurate description of the overall vendor's performance.

***(These five steps correspond to the evaluation process outlined in Figure 6.1)***

1- *Quick Read*
- Conducted prior to the start of evaluations
- Designed to help evaluators "calibrate" the range of offeror proposal methods and approaches
- Evaluators should spend about 10 minuets on each proposal

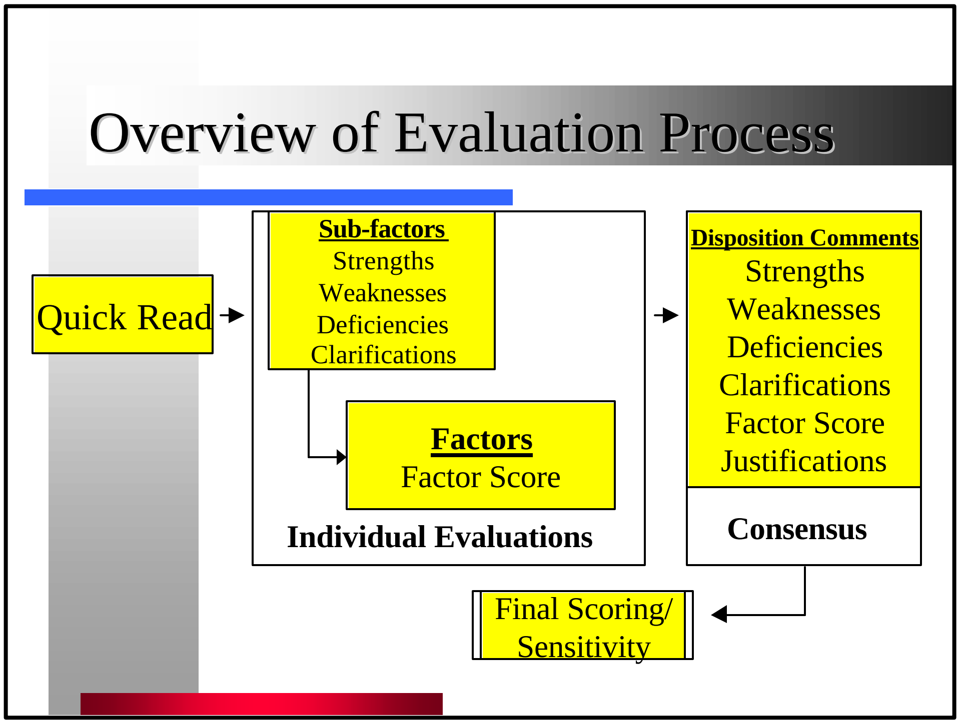
2- *Individual Evaluations*
- In-depth reading of data for thorough understanding
- Use references and criteria definitions while evaluating
- Encouraged to discuss proposals with other evaluators
- Develop independent, individual evaluations- key strengths, weaknesses and factor scores
- The form shown in Figure 6.2 should be completed for each Sub-Factor
- The figure should be moved closer to the reference if possible

3- *Factor Scoring for each Sub-Factor is Done Individually*
- Assess the "value added" for the approach proposed for a given factor
- Rating based on strengths and weaknesses
- Risk assessments (believability of the proposal) should be translated into weaknesses
- Summarize rationale for score - do not summarize the offeror's proposal

*4- Risk Assessment Scored as a Weakness*
- May occur as a result of a particular technical approach, the selection of materials, equipment or processes
- May cause disruption in schedule an increase in cost or a degradation in performance needing special monitoring to correct

*5- Consensus Evaluation*
- Objective
  - Develop panel consensus evaluation that despite minor differences, all panel members can support
- Develop Consensus Evaluation Report (CER)
  - Factor level scores with rationale
  - Strengths and weaknesses (synthesized from individual evaluations)
  - Clarification Requests and Deficiency Reports
  - If evaluators change their adjectival rating in consensus, they must go back to their individual evaluation worksheets and explain why they changed
  - Form shown in Figure 6.3 should be completed during this step

**FIGURE 6.1** Overview of Evaluation Process




**Use of Comment Labels** ***(Table 6.1)***

Evaluators use Comment Labels to produce a qualitative summary of their evaluations of each criterion, evaluators are asked to list the strengths and weaknesses (see Table 6.1) of the proposal. They will also be asked to label the strengths and weaknesses with the adjectives: Major, Significant, and Minor. A Major Strength is one that adds substantial value to the Government. Among other things, the benefit may result in reducing cost, saving time, increasing capability, or reducing risk. Conversely, a Major Weakness is one the does not add substantial value to the Government. A Major Weakness may result in increased cost, schedule slippage, a reduction in capability, or increased risk. Comment Labels are simply categories for evaluators to use as a frame of reference for binning comments. They are not weighted or used as ratings. Once evaluators have identified all the strengths and weaknesses for a criterion, they will be asked to come up with a rating of the proposal.

**Consensus Evaluation Report (CER)** ***(Figures 6.2 & 6.3)***

The Evaluators write consensus strengths and weaknesses in the CER. They then use TeamEC™ with individual keypads to put in their initial ratings. Discussion about their differences takes place in the form of votes with justifications. As new information is introduced it is recorded in the CER and then voting takes place again. The final score can either be an agreed upon rating or an average depending on the rules set by the vendor selection authority.

**TABLE 6.1** Sample Comment Label

| Comment Labels | |
|---|---|
| | |
| Major Strength | Minor Weakness |
| Significant Strength | Significant Weakness |
| Minor Strength | Major Weakness |
| | |

**FIGURE 6.2** Sample Evaluation Report

**Individual Evaluation Report for Bidder Sub-Factor:**

**Evaluator:**

**Rating:**

**Narrative:**

**Strengths:**
Major-
Significant-
Minor-

**Weaknesses:**
Major-
Significant-
Minor-

Evaluators fill out the form above to create an audit trail of their voting record during individual evaluations.

**FIGURE 6.3** Sample Consensus Evaluation Report

**Consensus Evaluation Report for Bidder Sub-Factor:**

**Evaluators:**

**Sub-Factor Weight:**

**Sub-Factor Score:**

**Rating:**

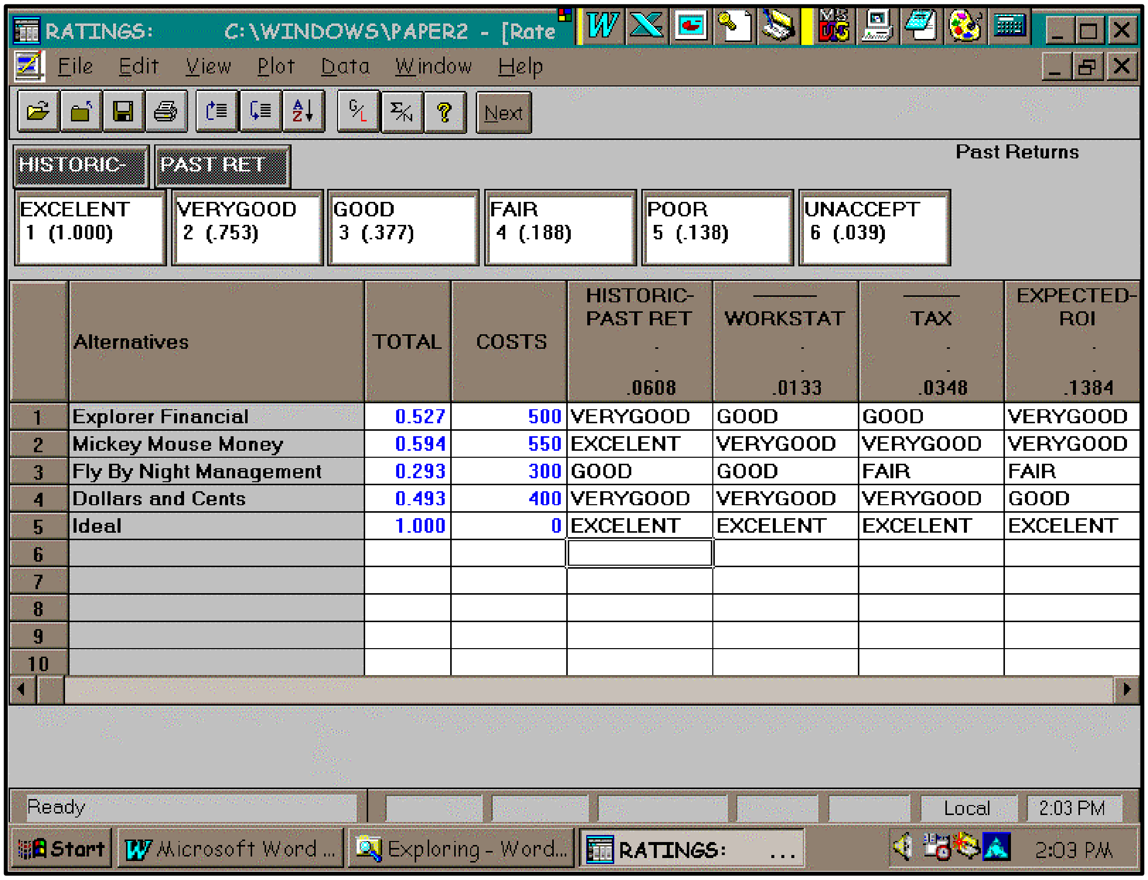
**Narrative:**

**Strengths:**
Major-
Significant-
Minor-

**Weaknesses:**
Major-
Significant-
Minor-

Evaluators get together and disposition individual comments during consensus.

**FIGURE 6.4** Sample Completed Bidder Evaluation




NOTE: The Ideal alternative is included to perform gap analysis. The difference in performance between an alternative and the Ideal alternative demonstrates areas for improvement, which represents the gap or potential.

**TABLE 6.2** Cost Benefit Analysis of Bidders

| Alternatives | Benefit | Cost | B/C | Cum C. | Cum B. |
|---|---|---|---|---|---|
| Ideal | 1.000 | 0.000 | 0.000 | 0.000 | 1.000 |
| Dollars and Cents | 0.508 | 400.000 | 12.700 | 400.000 | 1.508 |
| Explorer Financial | 0.535 | 500.000 | 10.700 | 900.000 | 2.043 |
| Mickey Mouse Money | 0.548 | 550.000 | 9.964 | 1450.000 | 2.591 |
| Fly By Night Management | 0.293 | 300.000 | 9.767 | 1750.000 | 2.884 |
| | | | | | |

# The Decision

## Step Seven – Sensitivity Testing

### Rationale
Having a solid assessment approach is very important, but the ability to explain it to a losing bidder is critical. Sensitivity Analyses permit the evaluation team to anticipate questions and challenges, by seeing how sensitive their selection is to changing scores at various levels. Performance sensitivity gives a top-level view of how each factor was weighted and how each bidder performed with respect to them.

### When
Sensitivity analyses can be done any time after all the bidder proposals have been rated. Unfortunately you can not take a decision made without the use of TeamEC™ and run our powerful sensitivity analyses on your outcome. If you recognize the power of sensitivity analyses and need to utilize it for a decision you have made without TeamEC™ then we recommend going to Step Five Evaluation Training and proceeding from there with the TeamEC™ process.

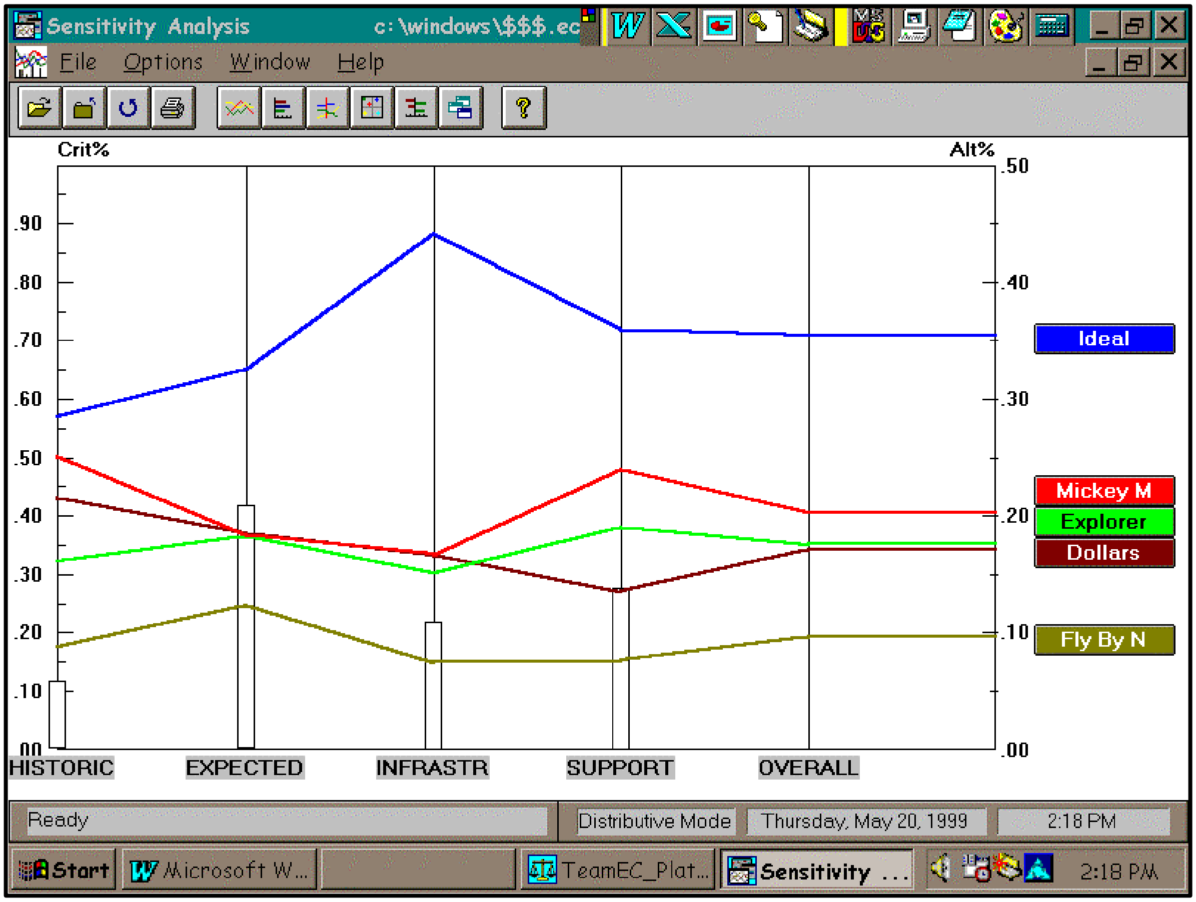
### Who
The vendor selection leaders and key evaluators who rated the bidders will use sensitivity analyses to validate their decision with the guidance of a TeamEC™ consultant. Once the group has affirmed their selection, the ownership of the resulting decision will transfer to the vendor selection team leader. Now the team leader can access the sensitivity analyses at will and incorporate its results into reports.

### Key Elements for Success
Sensitivity analyses of the preliminary selection or recommendation will pinpoint where more careful data collection and further investigation is needed. It will focus evaluation team efforts in areas where time should be spent, i.e., on issues to which the selection is highly sensitive. Conversely, it will also identify factors to which the selection is relatively insensitive. It is particularly effective at helping to explain to a losing vendor that a higher score on one factor or another might not have any effect on the overall selection.

Following are three examples of real-time graphical tools, which allow a user to test the sensitivity of a factor. These tools are also designed to be excellent presentation graphics for use in both internal briefings and external bidder debriefings.

How valuable is it to be able to say to a bidder that his/her challenge doesn't affect the overall outcome – and prove it them with a real-time graphical output? The performance analysis below allows *what ifs* to be simulated on computer screen to examine if the selection is sensitive to changes in a given area using the Performance Sensitivity Graph.

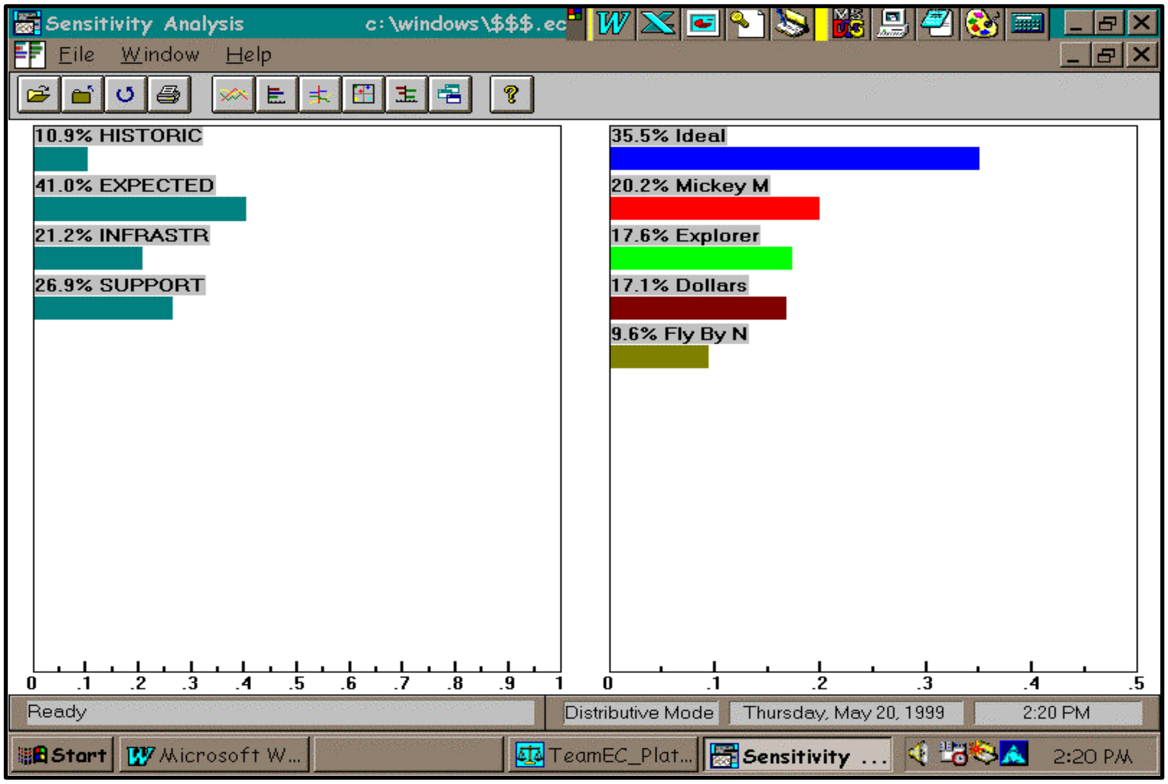
**FIGURE 7.1** Performance Analysis




If you follow the Red horizontal line labeled Mickey M across this grid you can study its performance and the gaps which exist between both the Ideal Alternative and the other bidders. The first vertical line that the red horizontal line intersects represents the criteria Historic Performance. We can derive numerous facts from this intersection; 1) Mickey M scored highest on this criterion, .50, 2) Historic performance was not a heavily weighted criterion as shown by the height of the solid vertical bar, .12, 3) Mickey M scored only 10% below the Ideal Alternative, 4) Mickey M scored about 7% more than its nearest competitor on the criteria historic performance.

The dynamic sensitivity graph shown in Figure 7.2 clearly shows the weights given to each major criterion. The TeamEC™ Dynamic graph can be changed in real-time, simply by sliding a criteria bar to the right and increasing its weight you can see how it effects the individual bidders.

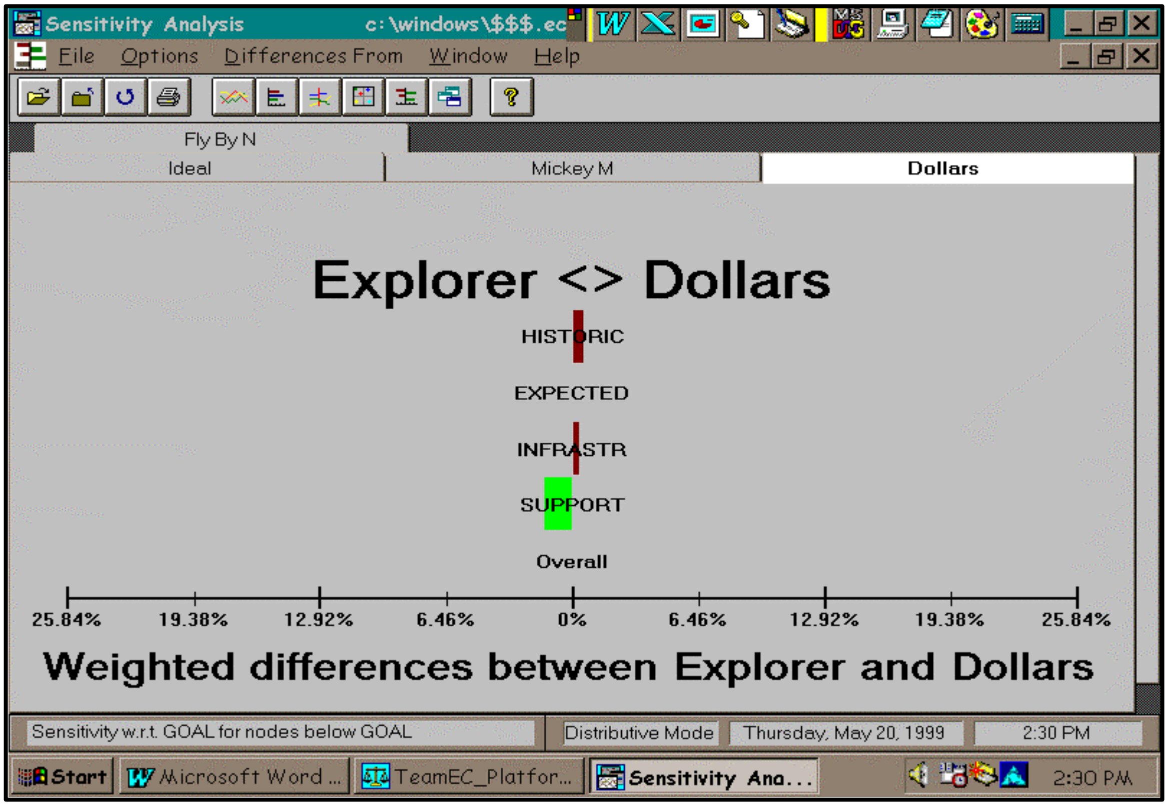
**FIGURE 7.2** Dynamic Bar Graph




The graph in Figure 7.2 displays a lot of information. The horizontal bars on the left represent the weights of the criteria, they are also labeled with the exact numeric values of those weights. This allows a user to not only read the value but to compare its magnitude visually with the other criteria. The horizontal bars on the right represent the total percentage score that each alternative captured. Since this graph is real-time the evaluator can slide any criteria bar right or left causing its weight to increase or decrease. As these *what ifs* are played out, the scores on the right representing the alternatives continuously adjust as well. This is a powerful graph for determining if a criteria was under or over weighted.

The graph below (Figure 7.3) is a Head to Head comparison graph. This sensitivity analysis allows the user to see how individual bidders performed on one specific criterion against another.

**FIGURE 7.3** Head – to – Head Comparison




The above graph (Figure 7.3) shows an evaluator how two alternatives scored against one another. In this example, if you look at the fourth criterion named Support you will see a horizontal bar protruding left. The left side represents the scores of the alternative Explorer. Even if the values of the differences are small (*here less than 3%*) the graphical representation helps you to see its significance. In this case the difference in Support is large between Explorer and Dollars.

# Step Eight – Debriefing

### Rationale

Having a solid assessment approach is important, but the ability to explain it to a losing bidder or appropriations committee is critical. There are two debriefings; one is internal usually for a budget or oversight committee, as their purpose is to approve the decision. Internal briefings represent all the work done by the selection team, if the final committee reviewing the decision and appropriating the money rejects the selection money, manpower and faith will be lost. The second briefing is external for the losing and winning bidders. The base purpose of this debriefing is to explain the award decision, instill confidence in the process, educated the losing bidders and reduce misunderstandings. The Federal Acquisition Regulation Manual (FAR) entitles losing bidders to debriefings.

### When

Debriefings can be conducted anytime after the formal selection report has been submitted. When compiling the formal selection report users should keep in mind that a well developed selection report will lend itself easily to a comprehensive debriefing. Unfortunately you can not take a decision made without the use of TeamEC™ and run our powerful sensitivity analyses on your outcome for use in a briefing.

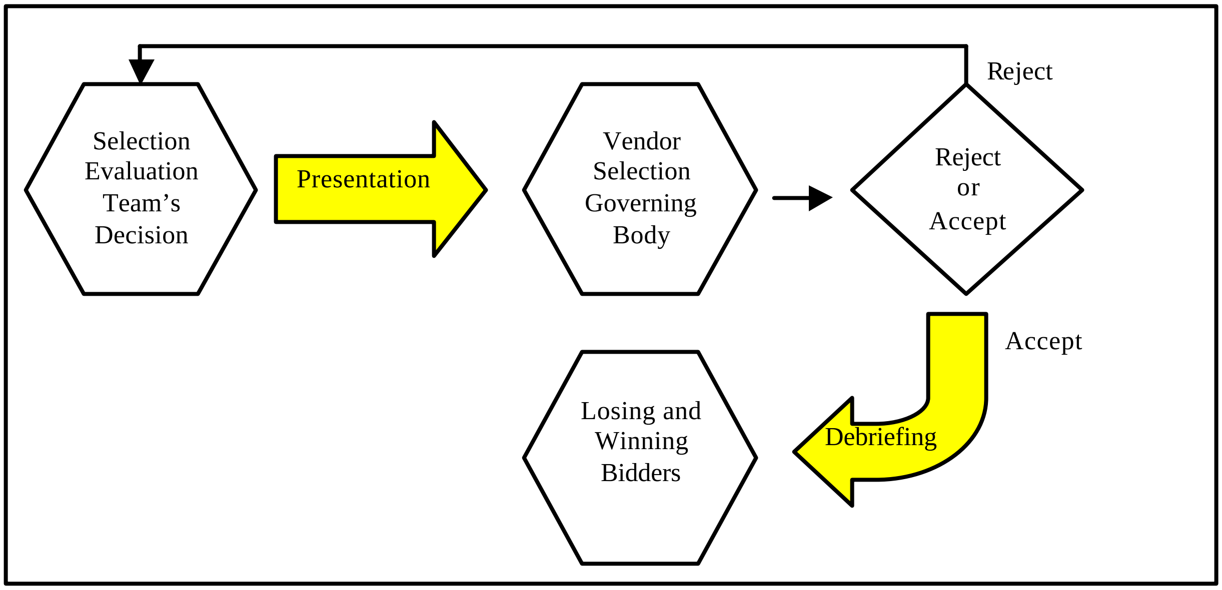
### Who

The vendor selection leaders along with their departmental staff will use sensitivity analyses to write the formal selection report, compile any necessary internal briefings and develop the material for the bidders' debriefing. A TeamEC™ consultant can be useful for presenting the formal selection report to any high level managerial or budget committees responsible for the final approval of a vendor selection. With a consultant present, the process and the significance of its results can be easily clarified for upper-management who were not involved in the selection process.

### Key Elements for Success

The Selection Committee decision recommendation presentation to the Vendor Selection governing body is represented in Figure 8.1 by the block arrow labeled presentation. Once the selection committee has concluded the selection process they must present their findings to a governing body in order to get final approval of their selection. More often than not the members of the governing body are not familiar with either the selection process or the project itself. This means that the selection committee must educate them about both the project and the selection process. TeamEC™ makes detailing the selection process easy and effective. The sensitivity graphs show not only the final rankings, they are also dynamic as they should be shown in real-time on a computer. This property allows the demonstration of *what ifs* and highlights the weight of factors and sub-factors. The simple color-coded outputs depicted on the graphs make rapid comprehension of results possible. Additionally the use of cost benefit analysis made possible by TeamEC™'s assignment of benefit points presents very clear and definitive results. Finally the structured process and detailed audit trail generated by following the entire TeamEC™ process clarifies practices and procedures followed to arrive at the decision. Moving through this presentation step rapidly and effectively will increase the organization's confidence in the project while minimizing resources and ensuring top down organizational buy-in.

**FIGURE 8.1** Debriefing Process Flow Diagram




The formal *debriefing* presented to the winning and losing bidders is represented in Figure 8.1 by the block arrow labeled debriefing. FAR requires that a debriefing be conducted within five calendar days of request. The request for debriefing must be submitted with three calendar days of the announcement of the decision. This means that there is not a lot of time available to assemble an effective debriefing. Conducting a through debriefing is important because an incomplete debriefing can lead to a formal protest. Even if the protest is lost it will still delay the start of the project and erode confidence in the decision.

The following is what FAR requires in the evaluation process overview section of a debriefing and where Expert Choice fits into the requirements:

1- Vendor Selection Objective – The TeamEC™ consultant along with the selection team leader will have guided to selection group with a clear and consistent objective throughout the entire selection process.
2- Basis of the Award – In order to make a selection the decision must be based on cost benefit analysis or on overall performance if cost is not a factor. TeamEC is designed to perform both of these calculations and with TeamEC™ advanced sensitivity analyses graphs the results will be clear.
3- Evaluation Criteria – Criteria Development is a major part of the TeamEC™ process. By showing the audit trail and the computer hierarchies developed within TeamEC™ there will be explicit evidence of well-developed substantive evaluation criteria.
4- Rating Scales – By employing consensus decisions along with pairwise comparisons the TeamEC™ process develops and uses weighted scales representative of each factor and selection. The computer outputs of these scales along with the documentation of the audit trail make presenting them during the debriefing effective and powerful.
5- Vendor Selection Process Flow – If TeamEC™ is used throughout the process and all steps are documented during the process the selection committee will have a complete and tested selection process flow that instills confidence in the decision as well as leaving little or no room for discrepancies.