Kilbride's Tools for Managers and Teams



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Criteria Grading Matrix

What is it?

A decision-making tool in which the team generates options, clarifies the criteria it will use to make a decision, weights those criteria to reflect the group's values and priorities, and uses the criteria weightings to grade options and select a preferred alternative

How do I use It?

- State the decision to be made in the form "Choose the best X". Recognize the statement you write implies some decisions have already been made.
- Clarify roles and allow 45-60 minutes. What type of decision is it? (Consensus, Consult, Command, or Delegate). This determines who to involve and when.
- You may identify ALTERNATIVES before or after developing Criteria. You often go back and forth between them:
 - Use the Pros/Cons associated with different alternatives as the basis for criteria, and
 - Use the criteria to help direct the search for alternatives.

- TOOL TIP:
- P: To generate options, use Brainstorming (page xx), Affinity Diagram (page xx), or Brainscribing, (page xx).

Brainstorm a list of CRITERIA.

Criteria express your feelings, values, and intuition related to a decision. Once articulated, you use them to rationally evaluate alternatives.



Decide whether the alternatives *MUST* or *SHOULD* meet each criterion.

- Write MUSTS in Pass/Fail terms, so you can clearly say if an option does or doesn' t meet it. Beware too many MUSTS!
- Write SHOULDS in favorable terms, i.e., Lower Cost, Higher Quality, Better Reliability.

Two acronyms for remembering potentially important criteria dimensions are provided on the next page.



- Evaluate each alternative versus the MUST criteria.
 - Circle **Pass or Fail** to indicate whether it passes or fails.
 - If it fails, note why and draw a large X through the entire column. Do not consider it any further.



This is why you need to be careful with MUST criteria; they are powerful because they eliminate options from further consideration. They are best when you have lots of options, i.e., more than 8, because they allow you to eliminate some and focus your information gathering and evaluation on the options remaining after review versus the MUST criteria.

• Grade the remaining alternatives versus each of the SHOULD criteria using the following "grading scale".

"How well does this option meet this criteria?"

A = Excellent	= 10
B = Very Good	= 7
C = Average	= 4
D = Poor	= 1
F = Terrible	= 0

Start with the first criteria and grade all options on how well it meets that criteria item. Ask:

- "Which alternative best meets this criteria?"
 "Does that option deserve an A?"
 If so, grade that an "A" and score it 10 points.
- Then ask, "Are there any other options that meet that criteria equally well?" If so, give it the same grade and point score.
- "Which is the next best option?"
 "What grade does it deserve?" etc.
 - HINT: Let actual data inform the grades for each option. To do so, have team members gather information on how well each option prior performs with respect to the various criteria items. If so, concentrate your data collection efforts on those criteria with the highest weights.

The Score for each alternative equals the Weighting x the Grading

e.g., 25 x B(7) = 175

• Total the scores for each alternative.

Any difference less than 10% is probably not a clear choice.

Remember, these numbers are only used to objectify a subjective process, not for numerical precision.



- Look at which grades are driving the difference between leading candidates.
- Make sure the grades for these criteria are based upon sound data.
- Does the choice feel right? Why? Why not?
- To adjust scores for **risk**:
 - Brainstorm COULDS (possible risks, disadvantages, consequences, or problems) associated with the alternatives.
 - Evaluate the *Probability* and *Significance* of these possible risks for each option to determine a Risk Rating for that option.

Use the following 0-5 Scales to evaluate the Probability and Significance of each COULD:

SIGNIFICANCE
If it does, how large will the negative impact be?
5 = Enormous
4 = Very large
3 = Large
2 = Moderate
1 = Small
0 = None at all

 Multiply Probability and Significance to establish a Risk Rating (R) for each alternative (P x S = R).

 Subtract the Risk Rating (R) from the Total Scores calculated in Step #9 to determine a Risk-Adjusted Score for each option (Total Score - R = Risk Adjusted Score).



HINT: Risk Analysis is especially useful when selecting suppliers, to ensure you discuss with each of the leading candidates how risks (*COULDS*) will be prevented (to minimize their Probability) or handled if they occur (to minimize their Significance).

1 Some alternative **uses** of the matrix are described.

 Cost-Benefit--If you remove all cost or price criteria from your evaluation, you are left with a numerical rating of the perceived "benefit" of each option. These "benefit" ratings can be used with actual cost data to calculate cost/benefit ratios. Remember, cost data can be accurate, but "benefit" ratings are inherently subjective.

Following is an example, which assumes 4 options have been rated and each has the following actual cost and "benefits" rating:

Options	Cost	÷	"Benefit" rating	=	Cost/Benefit Ratio	ſ
А	\$2299	···	475	=	4.84	
В	\$1978	···	430	=	4.60	
С	\$2299	• •	475	=	4.84	
D	\$2919	·ŀ·	580	=	5.03	

The lower the Cost/Benefit ratio, the more favorable the option. Therefore, Option B is the "best" option when viewed on a cost-benefit basis, with Options A and C relatively close behind.

 Compare with "Ideal"-- The "ideal" option would be graded A (10 points) for each criteria item, and would therefore receive a total score of $1,000 (10 \times 100 = 1,000)$.

If none of your options scored 50% of the "ideal" (i.e., 500 points), consider whether or not you need more/better options before making a choice?

Building agreement-- People often second guess or complain about decisions that have been made simply because the thought process that went into making the decision was invisible to them.

Therefore, by making the thought process public and visible to others, they can see that a decision was not made arbitrarily, but with clear, deliberate thought.

The Criteria Grading Matrix does the best job of any tool in this section at documenting the thought process that goes into a decision.

For this reason, Criteria Grading can be used:

- After a decision has been made to explain its rationale to interested parties.
- As a means of building agreement in a step-by-step manner.

The latter use is recommended when you are facing a decision where you believe that no matter what choice is made, some team members or stakeholders will be unhappy.

In such cases, you can create the matrix step-bystep, using it to build agreement as you go.

When used in this manner, you must decide when and how to let stakeholders participate in the decision process.

The step-by-step approach is as follows:

Decision and Options--Steps 1-3 of the Criteria Grading Matrix involve developing the decision statement, clarification of roles and decision type, and development of options.

You can allow stakeholders to review the decision statement and help to generate options, or review the options being considered.

In any case, be certain you clarify the Type of decision being made, i.e., Consult or Consensus.

□ Criteria and Weighting--In Steps 4-6 you develop criteria and weight *SHOULD* criteria.

You can allow stakeholders to review the criteria and weightings and provide feedback.

Data and Grading--Steps 7-9 involve gathering data on alternatives, objectively grading them, and determining the best options using total scores.

You can have stakeholders gather the data that will be used to evaluate the options.

In teams, it is quite common to assign each individual one of the options being considered and allow them to research and gather facts about that option relative to each criteria item.

After individuals submit the information gathered, it is used to evaluate the options. In this way, the facts drive the grades.

While this approach does not guarantee stakeholders will be pleased with the decision outcome, it does increase your chances.

On the next page is an example, followed by a blank Criteria Grading Matrix worksheet.



Criteria Grading Matrix

2 Roles

• Decision: <u>CHOOSE a</u>	Decision: <u>CHOOSE a new notebook computer</u>														Scribe: <u>M ike D</u> .										Facilitator: BillG.											
Date: <u>March 15, 200</u>	Date: <u>March 15, 2000</u> Participants: <u>Mary, Harry</u> , Barry, Carrie, Larry, Jerry																									Tin	nekee	per	: <u>Te</u>	dW.						
Who will decide? Bill	lG.	Review decision process? Steve J.													Be consulted prior to? Participants listed above Be informed after? Entire com pany																					
4 CRITERIA															ALTERNATIVES																					
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Criteria Grading Matrix

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Who will decide?	Review decision process?											Be consulted prior to? Be informed after?																				
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