Using a Pair-Choice Decision Matrix

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The Pair-Choice Decision Matrix provides an analytical method for ranking a set of options. For example, if you were attempting to rank five options - **A, B, C, D,** and **E**, you would start with a 5-by-5 matrix. Label the rows and the columns with the five options or shorthand symbols representing the options:

	A	B	C	D	E
A					
B					
C					
D					
E					

In each cell, you will record the result of comparing the option identified by that cell's row label with the option identified by that cell's column label. Since it does not make sense to compare an option to itself, you will not use the cells of the matrix diagonal. Also, since there are two cells in the matrix for each option pair and you only want to compare each pair once, you will not use any of the cells on one side of the diagonal. This example grays out the unused cells:

	A	B	C	D	E
A					
B					
C					
D					
E					

In each cell, ask yourself the question: "which option do I prefer - the one identified by the row or the one identified by the column?" and write the result in that cell. If you are lucky, you will have concrete criteria that you can use to choose between the two options. If you cannot decide between the two options, write both options in the cell.

	A	B	C	D	E
A					
B	B				
C	C	B			
D	A	B	C		
E	A,E	B	C	E	

For each option, count the number of cells in which that option was chosen. Give one point for each cell. If the cell contains a tie, give 1/2 point to each option in the cell. In this example, option **A** and option **E** get 1/2 point each for the tie in cell [E, A]. The totals look like this:

A = 1.5
B = 4
C = 3
D = 0
E = 1.5

Finally, rank the options in descending order by their totals. The option with the highest total is the highest ranked (most preferred) option. The totals for the options in the example give this ranking - **B** is the most preferred option, **D** is least preferred and **A** and **E** tied for third place:

1. **B**
2. **C**
3. **A E**
4. **D**

To use the Pair-Choice Decision Matrix in a group, simply add each person's totals together to get the group's totals.

If you have multiple criteria for choosing among the options, make one matrix for each criterion. In each cell, write the option that best satisfies the criterion associated with that matrix. (You can weight each criterion by assigning a multiple to it and multiplying the totals on the Pair-Choice Decision Matrix for that criterion by the multiple.) When all the matrices are complete, add the [weighted] totals together then rank based on the sum-totals.