

9. TUTORIAL FOR THE GE PORTFOLIO MODEL (ge.xls)

CASE: PRODUCT PLANNING USING THE GE/MCKINSEY APPROACH AT ADDISON WESLEY LONGMAN, P. 216

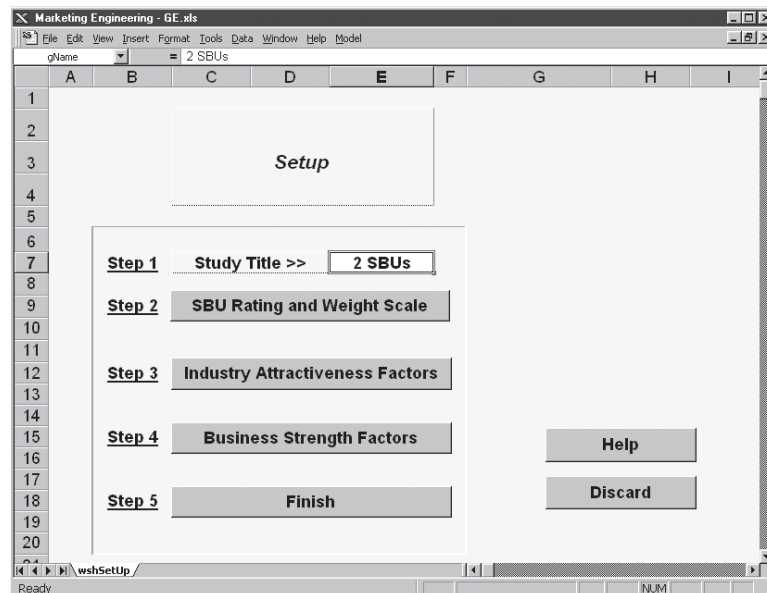
The idea behind the GE/McKinsey approach is to evaluate a business along two composite dimensions: industry attractiveness and business strength. These dimensions, in turn, are composed of a series of weighted factors. Both the factor weights and the factors themselves may vary from one application to another; for example, industry attractiveness includes measures of market size, growth rate, competitive intensity and the like, while business strength normally includes such measures as market share, share growth and product quality. Management then gives each business a rating for each factor and gives each factor a weight. These factor ratings are multiplied by the weights and summed to arrive at a position in the strength/attractiveness matrix.

The matrix has nine cells, and the three in the upper right are those in which the company has a strong position and would be considered for investment and growth. The three along the diagonal are of intermediate attractiveness, and the company should consider a policy selectively enhancing business in those cells to generate earnings. And finally, the three cells in the lower left corner are low in overall attractiveness, and the company should consider harvesting and divesting businesses in those cells.

To run the GE model, select the **Model** menu, choose **GE: Portfolio Planning (ge.xls)** and then **Generalized Model** to see the **Introduction** screen.



Click **OK** to get to the main worksheet, which will prompt you for your input.



* Tutorial 9, June 2005

As an example, set up a simple problem consisting of two SBUs. Provide a study title and click **SBU rating and Weight Scale** to advance to the next screen and set up the model.

You will be asked to enter the minimum and the maximum values for SBU ratings and weights. The software will check to see that your input values fall within these ranges. Once you have entered those values, click **OK**.

The screenshot shows a spreadsheet window titled "Marketing Engineering - GE.xls". A dialog box titled "Step 2: SBU Rating and Weight Scale" is displayed over the spreadsheet grid. The dialog box contains the following fields and buttons:

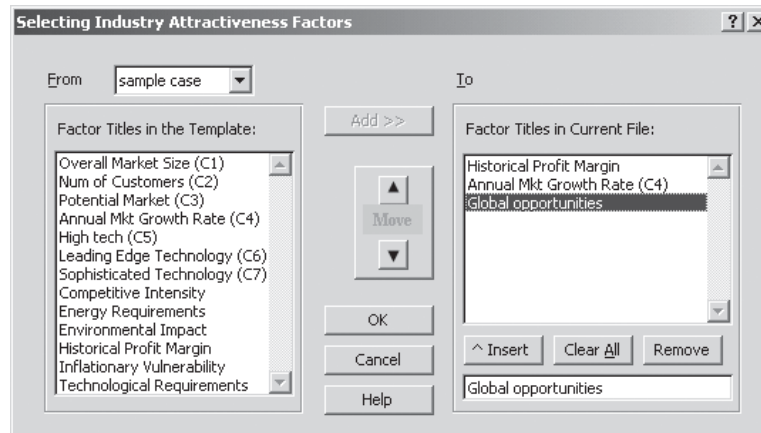
- Minimum SBU rating =
- Maximum SBU rating =
- Minimum Weight =
- Maximum Weight =
- Buttons: Help, Discard, OK

For step 3, select **Industry Attractiveness Factors**. Choose the industry attractiveness dimensions on which the SBUs will be evaluated. Some prospective factors are listed. Click each item in the list that you wish to include and then click **Add**, and the program will include it in your analysis. (Note: the items with a "C#" after them refer to the factors defined by Cooper [1993], which are useful for evaluating new product concepts using the GE/McKinsey approach).

The screenshot shows a dialog box titled "Selecting Industry Attractiveness Factors". It has a "From" dropdown set to "sample case" and an "To" dropdown. The dialog box contains two lists and several buttons:

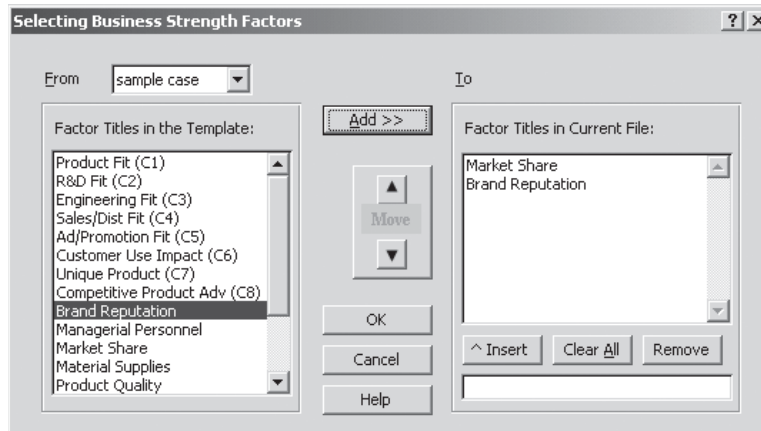
- Factor Titles in the Template:** Overall Market Size (C1), Num of Customers (C2), Potential Market (C3), Annual Mkt Growth Rate (C4), High tech (C5), Leading Edge Technology (C6), Sophisticated Technology (C7), Competitive Intensity, Energy Requirements, Environmental Impact, Historical Profit Margin, Inflationary Vulnerability, Technological Requirements.
- Factor Titles in Current File:** Historical Profit Margin.
- Buttons: Add >>, Move, OK, Cancel, Help, Insert, Clear All, Remove.

You can also add your own dimensions indicating industry attractiveness. In this example, we added the item “Global opportunities” to the list by entering it in the bottom right area and clicking the **Insert** button. If you are dissatisfied with a selection, you can highlight an item and click **Remove** or you can **Clear All**.



Click **OK** to get back to the initial setup screen. For step 4, click **Business Strength Factors**. (Again, the items with a “C#” after them refer to the factors defined by Cooper [1993]).

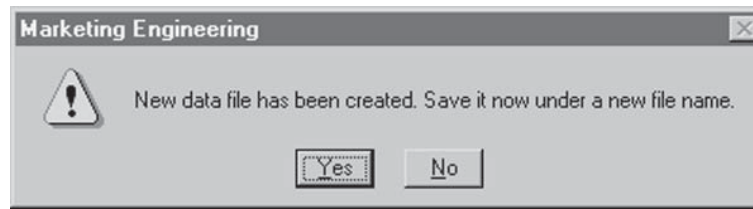
Now you need to list the factors that serve as indicators of business strength. Choose from Factor Titles in the Template using **Add** or enter your own factors in the lower right area using **Insert** as you did with the Industry Attractiveness factors. Click **OK** when you are finished.



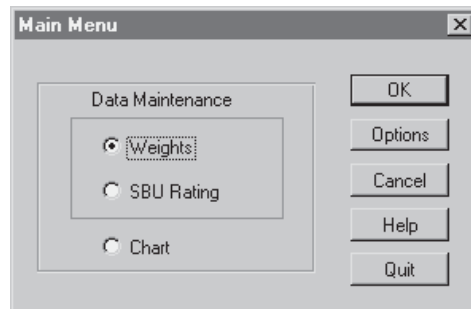
Again click **OK** to get back to the initial setup screen. Once you have finished the initial setup, click **Finish** (step 5) to continue or select **Discard**.

If you choose **Finish**, the system will customize the worksheet according to your setup and then prompt you for a file name under which to save your basic model setup.

Generally it is a good idea to save your newly configured model now. Give it a name other than GE.xls.

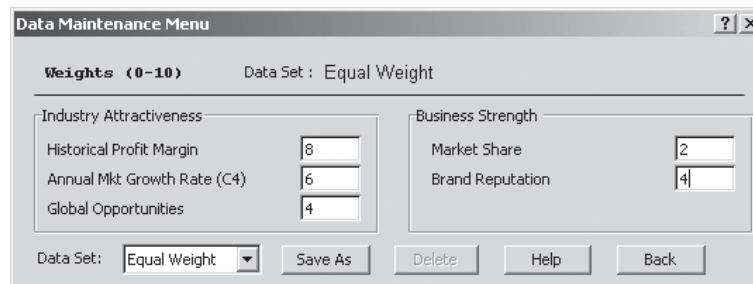


Now you are set to assess the SBUs of interest on the basis of the dimensions you just specified. The following screen shows the **Main Menu** for the evaluation task.



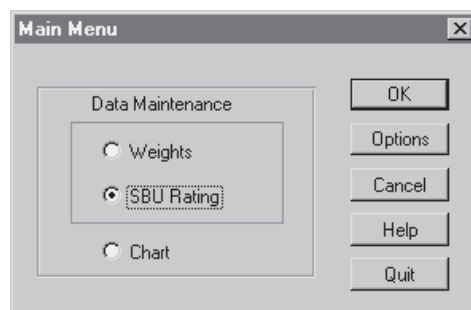
First select **Weights** to indicate the important weights for each of the factors you chose. The weights are multipliers of the SBU item ratings you will set subsequently.

Note: These are relative weights, so giving every item a '1' is the same as giving every item a '2'.



Click **Save As** to save your weights for future use. You can define multiple sets of importance weights saving each under a different name.

Click **Back** to get back to the **Main Menu**. Next choose **SBU Rating**.

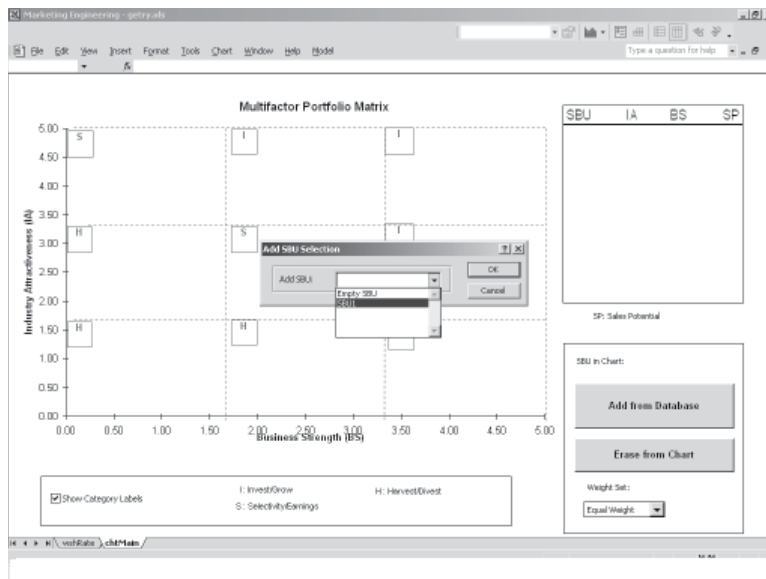


Rate the first SBU on the Industry Attractiveness and Business Strength dimensions and save these by clicking **Save As**.

Note: The rating for Sales Potential does not affect the location of the SBU in the GE matrix, but it will determine the size of the circles in the resulting chart

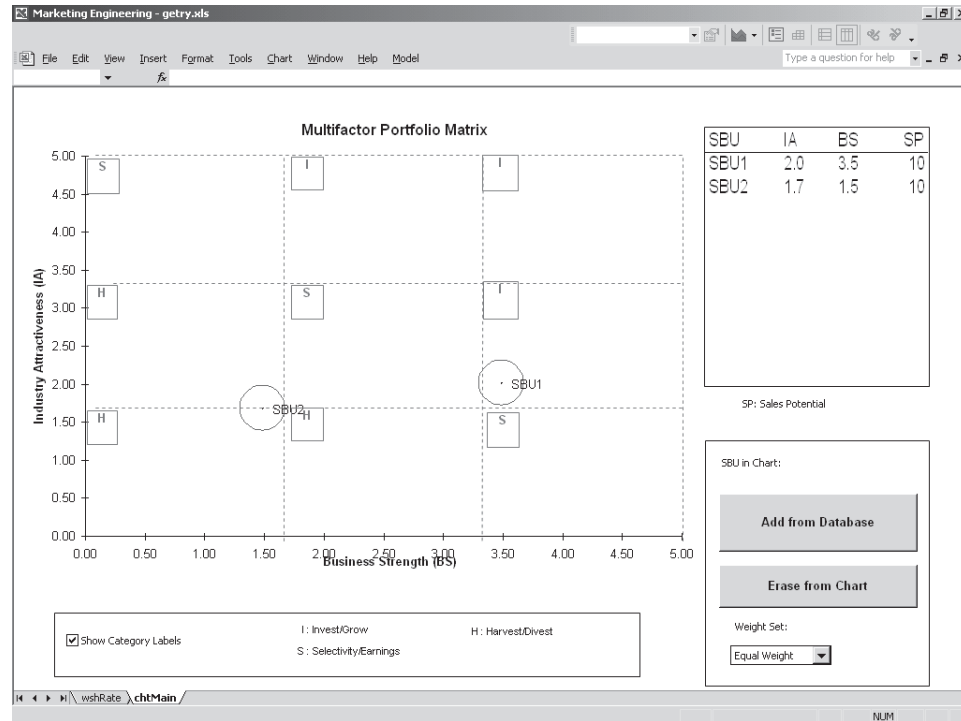
Repeat the procedure to include other SBUs for analysis. Click **Back** to go back to the **Main Menu**.

Finally select **Chart** and click **OK**. You will see an empty Multifactor Portfolio Matrix. To see the result for your input, load the rating information about the SBUs into the chart by clicking **Add from Database**.



You can test what happens when you apply different weighting schemes, e.g., customized weights versus equal weights (a set of weights that are included as a default option). If different managers weight the factors differently, it can be a very valuable exercise to examine the strategic consequences of those differences.

Strategy implications for individual SBUs can be drawn from their positions on the matrix, as indicated by the category labels. For example, SBU 1 belongs to the category “H,” which stands for Harvest and Divest.



If you need to make changes or additions to the weight sets or the SBU rating sets, go to **Model** in the main menu bar and choose **Main Menu**.

LIMITATIONS OF THE SOFTWARE

Maximum number of industry attractiveness indicators	15
Maximum number of business strength indicators	15
Maximum number of cases plotted in chart	10

REFERENCE

Cooper, Robert G. 1993, *Winning at New Products*, second edition, Addison Wesley Longman, Reading Massachusetts, p. 310.