GLOBAL EDITION

STRATEGIC MANAGEMENT

A Competitive Advantage Approach

Concepts and Cases

17th Edition

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A COMPETITIVE ADVANTAGE APPROACH

Relative market share position is given on the *x*-axis of the BCG Matrix. The midpoint on the *x*-axis usually is set at 0.50, corresponding to a division that has half the market share of the leading firm in the industry. The *y*-axis represents the **industry growth rate (IGR)** in sales, measured in percentage terms—that is, the average annual increase in revenue for all firms in an industry. The growth rate percentages on the *y*-axis could range from –20 to +20 (or −10 to +10) percent, with 0.0 being the midpoint. The average annual increase in revenues for several leading firms in the industry would be a good estimate for the IGR value. Also, various sources, such as the *S&P Industry Surveys* and www.finance.yahoo.com would provide this value.

Based on each division's respective (*x, y*) coordinate, each segment can be properly positioned in a BCG Matrix. Divisions located in Quadrant I (upper right) of the BCG Matrix are called "Question Marks," those located in Quadrant II (upper left) are called "Stars," those located in Quadrant III (lower left) are called "Cash Cows," and those divisions located in Quadrant IV (lower right) are called "Dogs." The four BCG quadrants are described below:

- *Question Marks*—Divisions in Quadrant I (upper right) have a low relative market share position, yet they compete in a high-growth industry. Generally, these firms' cash needs are high and their cash generation is low. These businesses are called **question marks** because the organization must decide whether to strengthen them by pursuing an intensive strategy (market penetration, market development, or product development) or to sell them. An example question mark could be Snap's portfolio of virtual reality technology devices; virtual reality is a high-growth industry, but Snap has a low relative market share.
- *Stars*—Divisions in Quadrant II (upper left) represent the organizations' best long-run opportunities for growth and profitability, and are therefore called **stars**. Divisions with a high relative market share and a high industry growth rate should receive substantial investment to maintain or strengthen their dominant positions. Forward, backward, and horizontal integration; market penetration; market development; and product development are appropriate strategies for these divisions to consider, as indicated in Figure 6-7. A star example could be Facebook's portfolio of virtual reality devices; Facebook is one of the leaders in the industry in revenues in these devices.
- *Cash Cows*—Divisions in Quadrant III (lower left) have a high relative market share position but compete in a low-growth industry; they are called **cash cows**. Because they generate cash in excess of their needs, they are often milked. Many of today's cash cows were yesterday's stars. Cash cow divisions should be managed to maintain their strong position for as long as possible. Product development, or diversification, may be an attractive strategy for strong cash cows. However, as a cash cow division becomes weak, retrenchment or divestiture can become more appropriate. A cash cow example is Hewlett-Packard (HP) with its desktop computers; HP is a market leader in terms of revenues, but desktop computers are a low-growth industry.
- *Dogs*—Divisions in Quadrant IV (lower right) have a low relative market share position and compete in a slow- or no-market-growth industry; they are **dogs** in the firm's portfolio. Because of their weak internal and external position, these businesses are often liquidated, divested, or trimmed down through retrenchment. When a division first becomes a dog, retrenchment can be the best strategy to pursue because many dogs have bounced back after strenuous asset and cost reduction to become viable, profitable divisions.

The basic BCG Matrix appears in Figure 6-7. Each circle represents a separate division. The size of the circle corresponds to the proportion of corporate revenue generated by that business unit, and the pie slice indicates the proportion of corporate profits generated by that division.

The major benefit of the BCG Matrix is that it draws attention to the cash flow, investment characteristics, and needs of an organization's various divisions. The divisions of many firms evolve over time: dogs become question marks, question marks become stars, stars become cash cows, and cash cows become dogs in an ongoing counterclockwise motion. Less frequently, stars become question marks, question marks become dogs, dogs become cash cows, and cash cows become stars (in a clockwise motion). In some organizations, no cyclical motion is apparent. Over time, organizations should strive to achieve a portfolio of divisions that are stars.

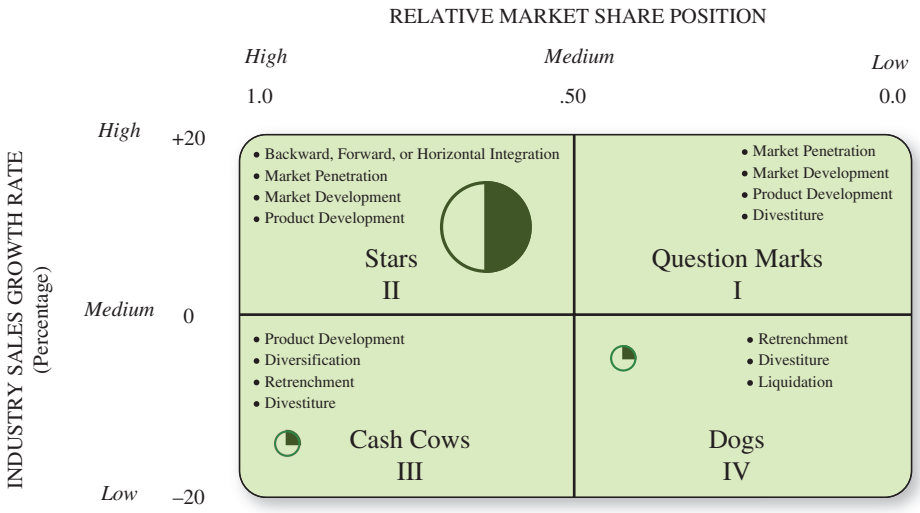
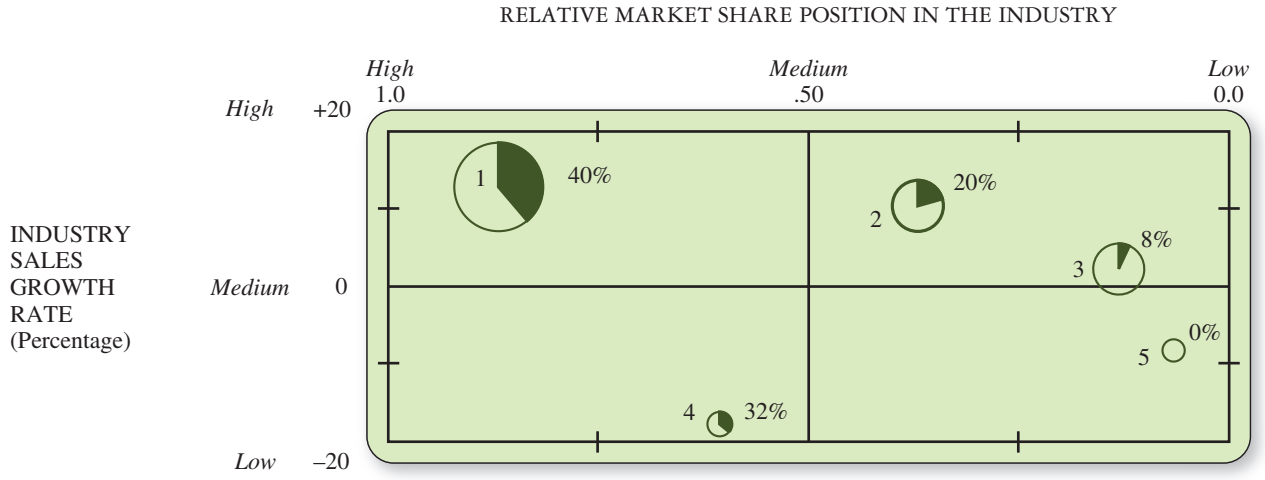


FIGURE 6-7
The BCG Matrix

Source: Based on the BCG Portfolio Matrix from the Product Portfolio Matrix, © 1970, The Boston Consulting Group.

An example of a BCG Matrix is provided in Figure 6-8, which illustrates an organization composed of five divisions with annual sales ranging from $5,000 to $60,000. Division 1 has the greatest sales volume, so the circle representing that division is the largest one in the matrix. The circle corresponding to Division 5 is the smallest because its sales volume ($5,000) is least among all the divisions. The pie slices within the circles reveal the percent of corporate profits contributed by each division. As shown, Division 1 contributes the highest profit percentage, 39 percent, as indicated by 39 percent of the area within circle 1 being shaded. Notice in the diagram that Division 1 is considered a star, Division 2 is a question mark, Division 3 is also a question mark, Division 4 is a cash cow, and Division 5 is a dog.

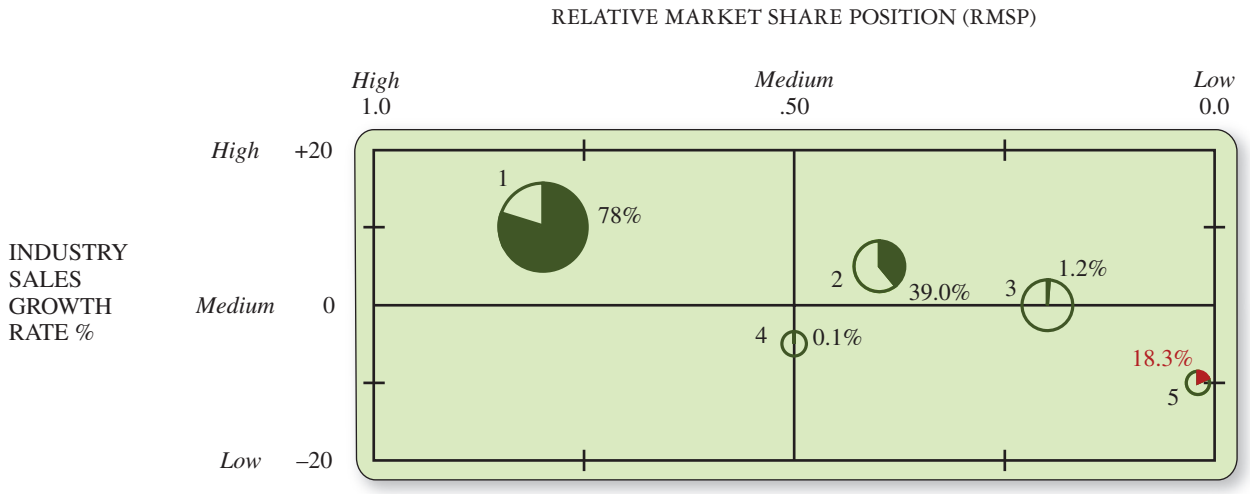


Division	*Revenues*	*Percent Revenues*	*Profits*	*Percent Profits*	*Relative Market Share*	*Industry Growth Rate (%)*
1	$60,000	37	$10,000	40	.80	+15
2	40,000	24	5,000	20	.40	+10
3	40,000	24	2,000	8	.10	+1
4	20,000	12	8,000	32	.60	–20
5	5,000	3	–500	0	.05	–10
Total	**$165,000**	**100**	**$24,500**	**100**	—	—

FIGURE 6-8
An Example BCG Matrix

The BCG Matrix, like all analytical techniques, has some limitations. For example, viewing every business as a star, cash cow, dog, or question mark is an oversimplification; many businesses fall right in the middle of the BCG Matrix and thus are not easily classified. Furthermore, the BCG Matrix does not reflect if various divisions or their industries are growing over time; that is, the matrix has no temporal qualities, but rather it is a snapshot of an organization at a given point in time. Finally, other variables besides relative market share position and industry growth rate in sales, such as the size of the market and competitive advantages, are important in making strategic decisions about various divisions.

Another example BCG Matrix is provided in Figure 6-9. As you can see, Division 5 had an operating loss of $188 million as indicated by its red shading. The remaining pie slices add up to over 100 percent profits to account for negative net income associated with Division 5 (This is a different way to portray divisional losses in a BCG matrix analysis).



Division	*$ Sales (millions)*	*% Sales*	*$ Profits (millions)*	*% Profits*	*RMSP*	*IG Rate %*
1	$5,139	51.5	$799	78.0	0.8	10
2	2,556	25.6	400	39.0	0.4	05
3	1,749	17.5	12	1.2	0.2	00
4	493	4.9	4	0.1	0.5	–05
5	42	0.5	–188	(18.3)	0.02	–10
Total	**$9,979**	**100.0**	**$1,027**	**100.0**		

FIGURE 6-9
An Example BCG Matrix

LO 6.6 The Internal-External (IE) Matrix

The **Internal-External (IE) Matrix** positions an organization's various divisions (segments) in a nine-cell display, as illustrated in Figure 6-10. The IE Matrix is similar to the BCG Matrix in that both tools involve plotting a firm's divisions in a schematic diagram; this is why both tools are forms of portfolio analysis. In both the BCG and IE Matrices, the size of each circle represents the percentage of revenues or number of stores each division contributes, and pie slices reveal the percentage of operating profits contributed by each division. But there are four important differences between the BCG Matrix and the IE Matrix, as follows:

1. The *x*- and *y*-axes are different.
2. The IE Matrix requires more information about the divisions than does the BCG Matrix.
3. The strategic implications of each matrix are different.
4. The IE Matrix has nine quadrants versus four in a BCG Matrix.

For the above reasons, strategists in multidivisional firms often develop both the BCG Matrix and the IE Matrix in formulating alternative strategies. A common practice is to develop

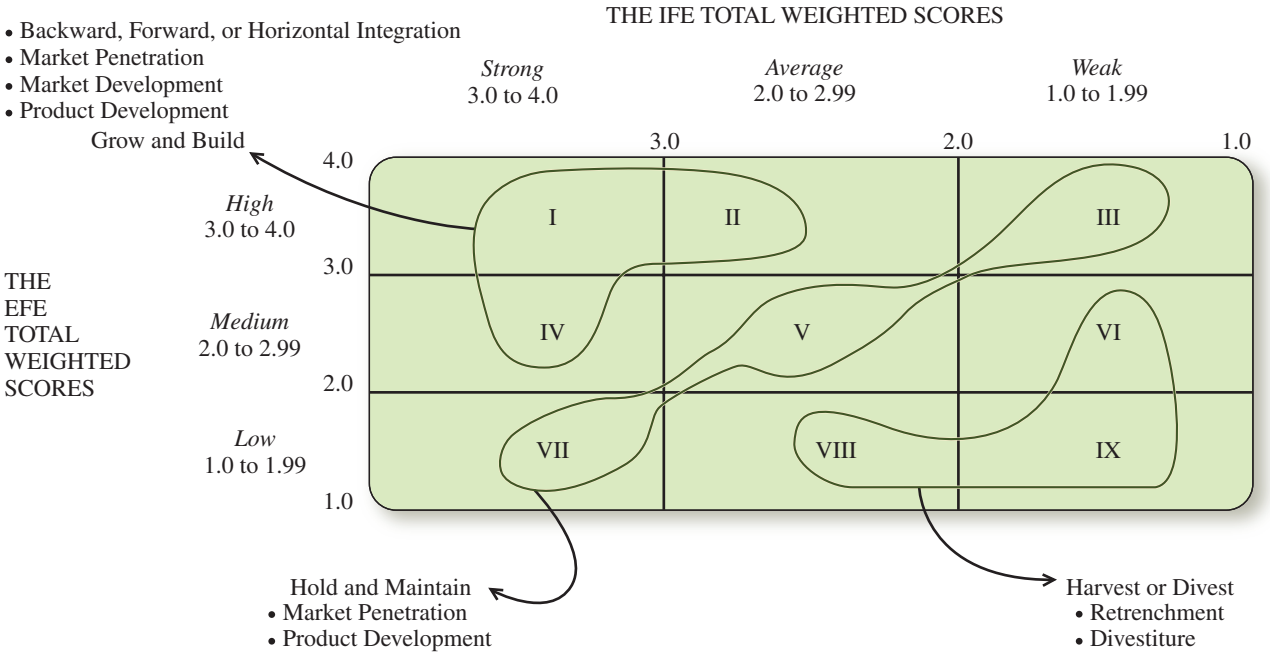


FIGURE 6-10

The Internal-External (IE) Matrix

Source: Based on: The IE Matrix was developed from the General Electric (GE) Business Screen Matrix. For a description of the GE Matrix, see Michael Allen, "Diagramming GE's Planning for What's WATT," in R. Allio and M. Pennington, eds., *Corporate Planning: Techniques and Applications* l par; New York: AMACOM, 1979.

a BCG Matrix and an IE Matrix for the present, and then develop projected matrices to reflect expectations of the future. This before-and-after analysis can be quite effective in an oral presentation, enabling students (or strategists) to pave the way for (justify or give some rationale for) their recommendations across divisions of the firm. Also, commonly a BCG Matrix will be developed by region and an IE Matrix by product, or vice versa.

The IE Matrix is based on two key dimensions: (1) the IFE total weighted scores on the *x*-axis and (2) the EFE total weighted scores on the *y*-axis. Recall that each division of an organization should construct an IFE Matrix and an EFE Matrix for its part of the organization, but usually in performing case analysis, strategic-management students simply estimate divisional IFE and EFE scores, rather than prepare those underlying matrices for every division. Regardless, it is the total weighted scores derived from the divisions that allow construction of the corporate-level IE Matrix. On the *x*-axis of the IE Matrix, an IFE total weighted score of 1.0 to 1.99 represents a weak internal position; a score of 2.0 to 2.99 is considered average; and a score of 3.0 to 4.0 is strong. Similarly, on the *y*-axis, an EFE total weighted score of 1.0 to 1.99 is considered weak; a score of 2.0 to 2.99 is average; and a score of 3.0 to 4.0 is strong. Circles, representing divisions, are positioned in an IE Matrix based on their (*x, y*) coordinate.

Despite having nine cells (or quadrants), the IE Matrix has three major regions that have different strategy implications, as follows:

- *Region 1*—The prescription for divisions that fall into cells I, II, or IV can be described as *grow and build*. Intensive (market penetration, market development, and product development) or integrative (backward integration, forward integration, and horizontal integration) strategies can be most appropriate for these divisions. This is the best region for divisions, given their high IFE and EFE scores. Successful organizations are able to achieve a portfolio of businesses positioned in Region 1.
- *Region 2*—The prescription for divisions that fall into cells III, V, or VII can be described as *hold and maintain* strategies; market penetration and product development are two commonly employed strategies for these types of divisions.
- *Region 3*—The prescription for divisions that fall into cells VI, VIII, or IX can be described as *harvest or divest*.

An example four-division IE Matrix is given in Figure 6-11. As indicated by the positioning of the four circles, *grow and build* strategies are appropriate for Divisions 1, 2, and 3. But Division 4 is a candidate for *harvest or divest.* Division 2 contributes the greatest percentage of company sales and thus is represented by the largest circle. Division 1 contributes the greatest proportion of total profits; it has the largest-percentage pie slice.

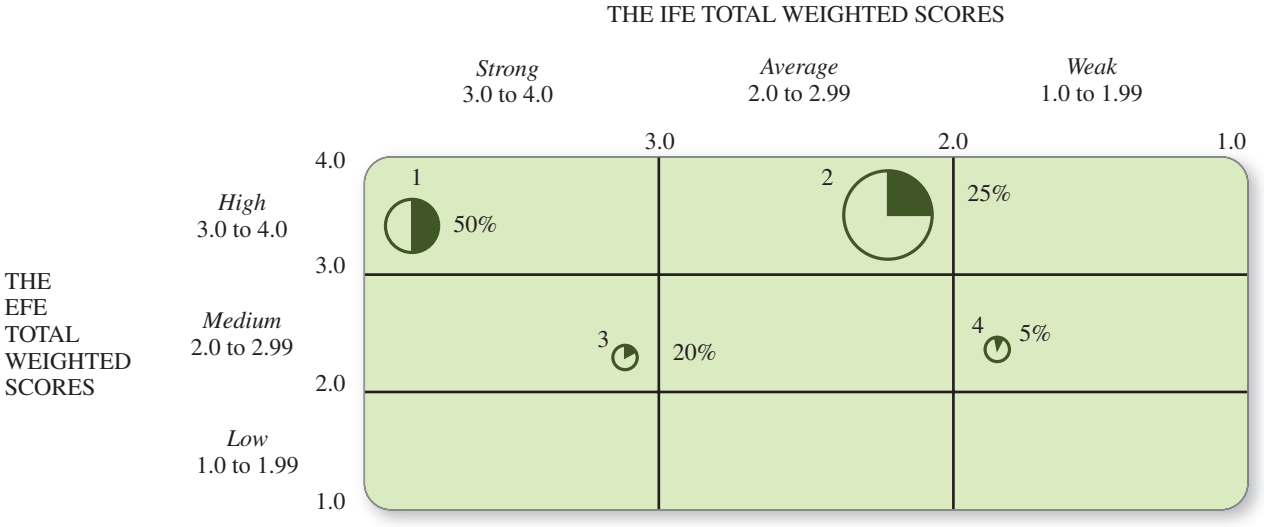
An example five-division IE Matrix is given in Figure 6-12. Note that Division 1 has the largest revenues (as indicated by the largest circle) and the largest profits (as indicated by the largest pie slice) in the matrix. It is common for organizations to develop both geographic and product-based IE Matrices to more effectively formulate strategies and allocate resources among divisions. This latter idea minimizes the limitation of these matrices being a "snapshot in time."

Important Note: Whenever a particular company is known, such as in doing case analysis or in the real world, be more specific with proposed strategies rather than using generic terms in regards to resultant IE Matrix strategies. Couch your strategies in quantitative and divisional terms to the extent possible. (This is true also with strategies derived from the BCG, SPACE, GRAND, and even SWOT analyses; specificity is golden—avoid vagueness)

LO 6.7

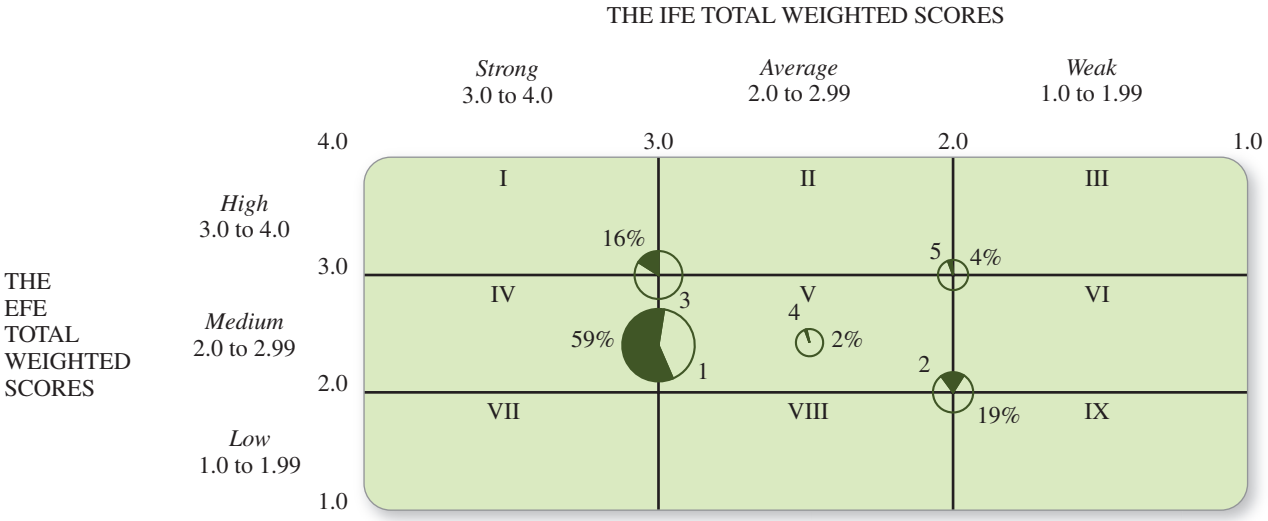
The Grand Strategy Matrix

In addition to the SWOT Matrix, SPACE Matrix, BCG Matrix, and IE Matrix, the **Grand Strategy Matrix** is a popular tool for formulating alternative strategies. All organizations can be positioned in one of the Grand Strategy Matrix's four strategy quadrants. A firm's divisions likewise could be positioned. As illustrated in Figure 6-13, the Grand Strategy Matrix is based on two evaluative dimensions: (1) competitive position on the *x*-axis and (2) market (industry) growth on the *y*-axis. Any industry whose annual growth in sales exceeds 5 percent could be considered to have rapid growth. Appropriate strategies for an organization to consider are listed in sequential order of attractiveness in each quadrant of the Grand Strategy Matrix.



Division	*Sales*	*Percent Sales*	*Profits*	*Percent Profits*	*IFE Scores*	*EFE Scores*
1	$100	25.0	$10	50	3.6	3.2
2	200	50.0	5	25	2.1	3.5
3	50	12.5	4	20	3.1	2.1
4	50	12.5	1	5	1.8	2.5
Total	**$400**	**100.0**	**$20**	**100**		

FIGURE 6-11
An Example IE Matrix



Grow and Build

Division	*$ Revenue*	*Percent Revenue*	*Profits*	*Percent Profits*	*EFE Scores*	*IFE Scores*
1	$7,868	71.5	$3,000	59	2.5	3
2	1,241	11.3	1,000	19	2	2
3	1,578	14.3	800	16	3	3
4	90	0.8	100	2	2.5	2.5
5	223	2.1	200	4	3	2
Total	**$11,000**	**100**	**$5,100**	**100**	—	—

FIGURE 6-12
The IE Matrix

FIGURE 6-13
The Grand Strategy Matrix

Source: Based on Roland Christensen, Norman Berg, and Malcolm Salter, *Policy Formulation and Administration* (Homewood, IL: Richard D. Irwin, 1976), 16–18.