During the 1970s, the Boston Consulting Group (BCG 1973) developed an approach to strategic analysis that compares a firm’s market share to the anticipated growth of its market in the next five years. The BCG matrix, as the approach became known, is usually used to analyze corporations with multiple divisions or business units. However, it can also be used to analyze a company with only one unit, or even to analyze individual product offerings. Because of its flexibility in this area, the BCG matrix is often called a “portfolio analysis tool.” By placing market growth rate on the vertical axis and relative market share on the horizontal axis, a four-block matrix can be developed, as shown in Exhibit 12.1.

Once the firm’s business units are positioned on the BCG matrix, strategies are developed based on the units’ relative positions. The four quadrants of the matrix, derived by categorizing the two variables into “high” and “low” areas, allow the units to be grouped into four categories: “stars,” “question marks,” “cash cows,” and “dogs” (see Exhibit 12.2). The idea behind the arrangement is that the higher the market growth rate, the more cash is needed from the firm to stay competitive and grow. At the same time, the higher the firm’s market share, the more cash can be generated. The cash generated by the high “cash generation” divisions can be used to fund the high “cash consumption” divisions.

If mathematical precision is desired, a quantitative scale can be placed on each axis. For example, if the analyst anticipates that over the next five years the market will grow 30 percent, then the vertical axis can be divided into 5 percent increments, from 0 to 30, and the division’s anticipated growth rate can be plotted against it. The division’s growth

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**EXHIBIT 12.1**
Boston Consulting Group Matrix

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**Diagrams and Illustrations:**

- Four-block matrix
- Quantitative scale for market growth rate
- Categorization of divisions as “stars,” “question marks,” “cash cows,” and “dogs”
rate would be presented as the division exists today, before any strategic intervention. The market share axis would be shown as a logarithmic scale. This scale would indicate the market share of a division relative to the market share of the largest competitor in its market. For example, Company A may have a 5 percent market share, and the leading competitor, Company B, has a 20 percent market share. Company A’s market share relative to Company B’s market share is 25 percent, or $0.25 \times$. Alternatively, if Company A has a 20 percent market share and Company B has a 5 percent market share, Company A’s market share relative to Company B’s is 400 percent, or $4.0 \times$.

The ideal movement for a company, division, or product is to move from dog to question mark to star to cash cow. A dysfunctional movement would go in the reverse direction. New products often start in the question mark box. They are introduced into what is anticipated to be a high-growth market but have not generated much cash yet. Time will tell if they move into the star box or the dog box.

A health-related example can be seen in the eye care industry, in the optical dispensary that sells specific products to consumers. Imagine a provider seeks to increase sales in sports vision, which is currently in the dog category. The provider sees a specific need in the community, due to recent sports-related ocular injuries, and starts to educate the public on the need to wear sports eyewear. A combined marketing approach helps move sports vision from dog to question mark, and the unit then shows movement into the star category.

The following sections examine dogs, question marks, stars, and cash cows in greater detail.

## Dogs

Dogs are divisions that are not doing well. They have low market share in markets that have low growth. Generally, they tend to neither draw much cash from the parent company nor generate much cash—although sometimes they will require a corporation’s cash
in order to remain in business. At best, dogs are not adding significant value; at worst, they are drawing off cash and management’s time and attention. Therefore, the typical strategies for dogs seek to turn them around and move them toward the question mark box, to divest them, or to shut them down. However, a firm may have strategic reasons for keeping a dog. In the eyewear example above, a niche exists for sports protection; even if positive movement is not seen, the firm may be wise to continue to offer products in, although not focus on, this category.

**Question Marks**

Question marks are divisions that have low market share in markets that are growing. Because the market is growing, question marks tend to require cash for continued competition. Rather than being net cash generators, question marks tend to draw off a corporation’s cash. In these cases, the strategic approach is not clear—hence the term question mark. If the strategist sees potential to grow the division’s market share and move the division into the star box, strategies may include product development, market penetration, market development, and other growth strategies. If the analyst does not see the potential to improve the division, or if the company does not have the cash to invest in the unit, divestiture may be an option.

**Stars**

Stars are divisions that have high market share in markets that are growing rapidly. These businesses generate excitement. They also generate a lot of cash due to their high market share. At the same time, they require significant cash to fuel their continued growth in the rapidly expanding market and to fend off competitors who wish to take away their market share. The cash the stars generate usually tends to net out. In that sense, they are similar to dogs, but they continue to have huge upside. Strategic approaches include continuing to fuel the growth and expand market share through market penetration and market development, product development, integration strategies, and even joint ventures. Defensive moves intended to maintain the large market share are also considered. If a star maintains its dominant market share as the market life cycle matures, it moves into the cash cow category; at this point, other competitors drop out and the star requires less cash to fuel the strong financial results. However, if a star fails to maintain its share, it degrades into a dog.

**Cash Cows**

Cash cows have a dominant market share in markets that are not growing significantly. Because market domination tends to correlate with pricing power, they have significant profit margins. In addition, they require only limited cash investment due to the market’s lower growth, meaning they generate significantly more cash than they consume. Strategies for cash cows involve continuing to support the division without having to
invest significant cash, then using the cash generated to reinvest in turning around dogs or moving question marks into stars.

When divisions are placed on the BCG matrix, they are indicated by a circle. Usually, the size of each circle indicates the relative significance of each business unit to the organization in terms of cash generated (see Exhibit 12.3). Alternatively, the circles could be the same size but with pie slices in each. The pie slice would be shaded to show the relationship between the cash generated by that division (the slice) and the whole.

The BCG matrix allows a quick visualization of a company’s portfolio relative to market share, market growth, size of cash contribution, and relative strength or weakness. The matrix can also be used to show a target company and its position relative to its competitors, by placing the company on the matrix and then placing the competitors appropriately. The BCG matrix is the first analysis tool we have seen that begins to suggest strategy in addition to simple analysis.

Reference

For your project company, review the previous analyses and develop a BCG matrix. Plot all the divisions or business units of your organization.