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4.1 Introduction to marketing

Tool: BCG matrix

The Boston Consulting Group (BCG) matrix, also known as a growth-share matrix, is a tool that helps businesses that have multiple products to decide on their marketing strategies. Products are placed onto the matrix depending on two variables: market share and market growth.
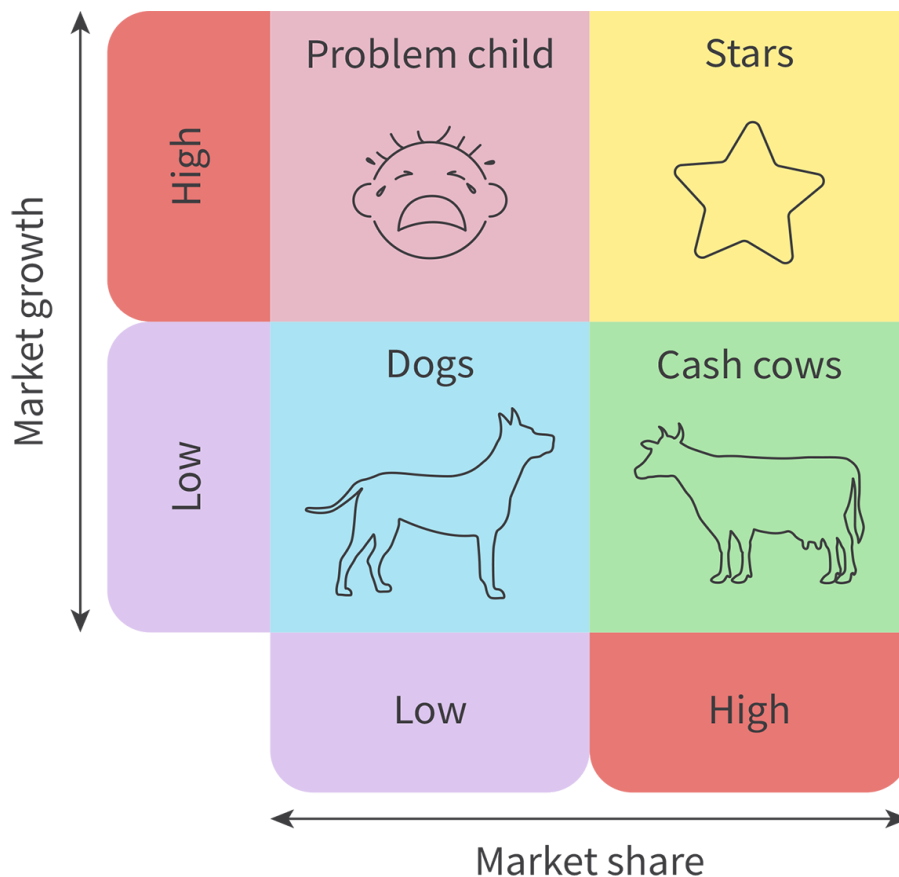

Figure 1. The Boston Consulting Group (BCG) matrix, also known as a growth-share matrix.

The BCG matrix can also serve as a reminder to businesses to build a diverse portfolio of products. Businesses may need a range of products that they can rely on for growth and for steady revenue streams. It is a good idea to have products that are earning large revenues, as well as products whose sales grow rapidly in growing markets. A business may also want to phase out products that are earning low revenues in markets that are not growing.

Products can be classified differently over time. When a product is first introduced in a market, it may have low market share and revenues in growing markets. Later, those products may gain market share in these strong markets. Eventually, products may again lose market share, or their market growth may decline. These stages are linked to a product life cycle, which will be discussed in Subtopic 4.5 (/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/the-big-picture-id-39004).

Market share and market growth

In Section 4.1.4 (/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/market-share-and-leadership-id-37439), you learned that market share is the percentage of total market sales controlled by a particular product. The formula for calculating market share is:

$$\text{Market share} = \frac{\text{number of units sold by the company}}{\text{total number of units sold in market}} \times 100 = \underline{\hspace{1cm}} \%$$

For example, an electronics company sells \$200 million worth of goods in a year. The entire industry sells \$1000 million worth of goods in that same year. The company's market share is:

$$\text{Market share} = \frac{\$200 \text{ million}}{\$1000 \text{ million}} \times 100 = \underline{\hspace{1cm}} \%$$

$$\text{Market share} = 20\%$$

Market growth refers to the total value or quantity of a particular good that is sold in a time period. The formula for calculating market growth is a simple percentage change:

$$\text{Market growth} = \frac{(\text{total market sales T2} - \text{total market sales T1})}{\text{total previous market sales T1}} \times 100 = \underline{\hspace{1cm}} \%$$

For example, an international clothing brand knows that the entire clothing market sales were \$950 million in 2020 and \$1000 million in 2021. It can then calculate the percentage growth of the market from 2020 to 2021 as follows:
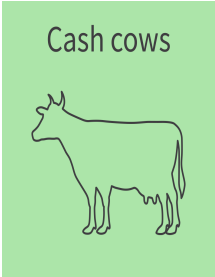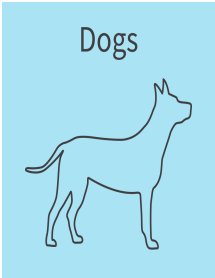
$$\text{Market growth} = \frac{(\$1000 \text{ million} - \$950 \text{ million})}{\$950 \text{ million}} \times 100 = \underline{\hspace{1cm}} \%$$

$$\text{Market growth} = 5.26\%$$

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Product classifications in the BCG matrix

Table 1 describes the product classifications in the BCG matrix.

Table 1. The product classifications in the Boston Consulting Group (BCG) matrix.

Type of product	Market share and market growth (high/low)	Description
Cash cows	High market share. Low market growth.	Cash cows are successful products in mature, slower-growing markets. They earn high sales revenue from an established customer base. Customer loyalty is likely to be high. Therefore, less money is needed for marketing. Promotion is likely to focus on replacement products and maintaining loyalty.
Dogs	Low market share. Low market growth.	Dogs have low market share in low growth markets. These products may be at the end of their product life cycle ([Section 4.5.1 (/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/product-life-cycle-id-39005)](#)), or perhaps they are niche products competing in mature low-growth markets.

Type of product	Market share and market growth (high/low)	Description
Stars	High market share.

High market growth. | Stars are products that have a high market share in growing markets. Revenues should be growing strongly. Netflix can be considered a star product, as it is the market leader in the rapidly growing streaming market. This type of product also requires significant investment to sustain growth. Marketing will focus on attracting new customers and establishing a brand image. Profitability will depend on how much its revenue is reinvested in future growth. Certainly, high growth businesses will be spending heavily to keep expanding their operations and sales. Therefore, it is possible for a star to have a negative cash flow. |

Type of product	Market share and market growth (high/low)	Description
Problem child	Low market share. High market growth.	Problem children (also known as 'question marks') have low market share but operate in high growth markets. These products are often recently launched in response to the rapidly growing revenues of competitors. In the streaming market, Amazon's Prime or Hulu can be considered in this category. If they are to gain market share, considerable investment will be required. Therefore, they are likely to have a negative cash flow.

International Mindedness

The product categories in the BCG matrix use terminology that may not work well across all cultures. The matrix was developed by the Boston Consulting Group, an American management consulting firm. The matrix uses slang terminology that would be well-known in the United States, but which may mean something different in other countries.

However, the matrix can work without these categories because it is essentially a product position map with two axes referring to high and low market growth and high and low market share. You will learn more about product position maps in Section 4.2.2 (/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/segmentation-and-targeting-id-37445).

Activity

Learner profile: Inquirers
Approaches to learning: Research skills (information literacy); Thinking skills (critical thinking)

Look at the data on the number of users of messaging apps globally (https://www.messengerpeople.com/global-messenger-usage-statistics/) and then answer the following questions:

1. Assume that WhatsApp, Facebook Messenger, WeChat, QQ, Telegram and Snapchat are the most significant apps used globally in October 2021. Calculate the market share of each of these apps. (These will be approximations, because there are apps used that are not accounted for in these figures.)

2. Global figures can be misleading about market share in particular countries. Do some quick research to find out what the most popular messaging app is in your country. The source linked above has some specific country information.

3. At first glance, it may look as if there are several businesses with high market share in the messenger apps market. However, note also the following information:

- Facebook (now Meta) bought WhatsApp in 2014 for 19 billion USD.

- WeChat is not used widely outside China.

How might this further information change your interpretation of the data?

4. If you wanted to classify WhatsApp in the BCG matrix, what other information would you need to know?

Exam tip

If you are using the BCG matrix in your internal assessment, make sure you can justify your classification using data on market growth and market share. A gut feeling about where products would be positioned in the matrix is not enough.

Uses and limitations of the BCG matrix

The BCG matrix can be a useful framework for businesses to consider different strategies for different products in their portfolio. Businesses can identify which products may have the potential to earn the highest revenues. For example, stars in the matrix are doing well with high market share in growing markets. But to maintain the high market share in a growing market, the business may have to invest money in the product and be flexible to respond to increasing competition. The business can use the BCG matrix to guide some investment decisions.

Like all business management tools, you must use the BCG matrix carefully along with other methods of analysis to make judgements about a business. If you do not have clear data on a product's market share and market growth, your classification of products in

the BCG matrix will be subjective. Even where you have data, the information does not consider other information about the external environment that can have an impact on the success of the product.

An example of this issue is the 'problem child' classification. Low market share in a high growth market could tell you that there is not a good product–market fit. But low market share in a high growth market can also occur when a product is newly introduced to a market. So some sources label the 'problem child' element of the BCG matrix as a question mark instead.

Another example is the 'dog' classification. A business might think that low market share in a low growth market means that the product should be phased out. However, there could be strong reasons to keep it in the portfolio, such as future market growth due to changes in the external environment. It is important to consider the product life cycle (Section 4.5.1 (/study/app/y12-business-management-a-hl-may-2024/sid-351-cid-174702/book/product-life-cycle-id-39005)), the external environment and even the internal strengths and weaknesses of the business in order to understand the full context when making strategic decisions.

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