Industry Life Cycle

Life cycle models are not just a phenomenon of the life sciences. Industries experience a similar cycle of life. Just as a person is born, grows, matures, and eventually experiences decline and ultimately death, so too do industries and product lines. The stages are the same for all industries, yet every industry will experience these stages differently, they will last longer for some and pass quickly for others. Even within the same industry, various firms may be at different life cycle stages. A firm's strategic plan is likely to be greatly influenced by the stage in the life cycle at which the firm finds itself. Some companies or even industries find new uses for declining products, thus extending their life cycle.

The growth of an industry's sales over time is used to chart the life cycle. The distinct stages of an industry life cycle are: introduction, growth, maturity, and decline. Sales typically begin slowly at the introduction phase, then take off rapidly during the growth phase. After levelling out at maturity, sales then begin a gradual decline. In contrast, profits generally continue to increase throughout the life cycle, as companies in an industry take advantage of expertise and economies of scale and scope to reduce unit costs over time.

STAGES OF THE LIFE CYCLE

Introduction

In the introduction stage of the life cycle, an industry is in its infancy. Perhaps a new, unique product offering has been developed and patented, thus beginning a new industry. Some analysts even add an embryonic stage before introduction. At the introduction stage, the firm may be alone in the industry. It may be a small entrepreneurial company or a proven company which used research and development funds and expertise to develop something new. Marketing refers to new product offerings in a new industry as "question marks" because the success of the product and the life of the industry is unproven and unknown.
A firm will use a focused strategy at this stage to stress the uniqueness of the new product or service to a small group of customers. These customers are typically referred to in the marketing literature as the "innovators" and "early adopters." Marketing tactics during this stage are intended to explain the product and its uses to consumers and thus create awareness for the product and the industry. According to research by Hitt, Ireland, and Hoskisson, firms establish a niche for dominance within an industry during this phase. For example, they often attempt to establish early perceptions of product quality, technological superiority, or advantageous relationships with vendors within the supply chain to develop a competitive advantage. Because it costs money to create a new product offering, develop and test prototypes, and market the product, the firm's and the industry's profits are usually negative at this stage.

Any profits generated are typically reinvested into the company to solidify its position and help fund continued growth. Introduction requires a significant cash outlay to continue to promote and differentiate the offering and expand the production flow from a job shop to possibly a batch flow. Market demand will grow from the introduction, and as the life cycle curve experiences growth at an increasing rate, the industry is said to be entering the growth stage. Firms may also cluster together in close proximity during the early stages of the industry life cycle to have access to key materials or technological expertise, as in the case of the U.S. Silicon Valley computer chip manufacturers.

Growth

Like the introduction stage, the growth stage also requires a significant amount of capital. The goal of marketing efforts at this stage is to differentiate a firm's offerings from other competitors within the industry. Thus the growth stage requires funds to launch a newly focused marketing campaign as well as funds for continued investment in property, plant, and equipment to facilitate the growth required by the market demands. However, the industry is experiencing more product

standardization at this stage, which may encourage economies of scale and facilitate development of a line-flow layout for production efficiency.

Research and development funds will be needed to make changes to the product or services to better reflect customers' needs and suggestions. In this stage, if the firm is successful in the market, growing demand will create sales growth. Earnings and accompanying assets will also grow and profits will be positive for the firms. Marketing often refers to products at the growth stage as "stars." These products have high growth and market share. The key issue in this stage is market rivalry. Because there is industry-wide acceptance of the product, more new entrants join the industry and more intense competition results.

The duration of the growth stage, as all the other stages, depends on the particular industry or product line under study. Some items—like fad clothing, for example—may experience a very short growth stage and move almost immediately into the next stages of maturity and decline. A hot toy this holiday season may be non-existent or relegated to the back shelves of a deep-discounter the following year. Because many new product introductions fail, the growth stage may be short or non-existent for some products. However, for other products the growth stage may be longer due to frequent product upgrades and enhancements that forestall movement into maturity. The computer industry today is an example of an industry with a long growth stage due to upgrades in hardware, services, and add-on products and features.

During the growth stage, the life cycle curve is very steep, indicating fast growth. Firms tend to spread out geographically during this stage of the life cycle and continue to disperse during the maturity and decline stages. As an example, the automobile industry in the United States was initially concentrated in the Detroit area and surrounding cities. Today, as the industry has matured, automobile manufacturers are spread throughout the country and internationally.

Maturity

As the industry approaches maturity, the industry life cycle curve becomes noticeably flatter, indicating slowing growth. Some experts have labelled an additional stage, called expansion, between growth and maturity. While sales are expanding and earnings are growing from these "cash cow" products, the rate has slowed from the growth stage. In fact, the rate of sales expansion is typically equal to the growth rate of the economy.

Some competition from late entrants will be apparent, and these new entrants will try to steal market share from existing products. Thus, the marketing effort must remain strong and must stress the unique features of the product or the firm to continue to differentiate a firm's offerings from industry competitors. Firms may compete on quality to separate their product from other lower-cost offerings, or conversely the firm may try a low-cost/low-price strategy to increase the volume of sales and make profits from inventory turnover. A firm at this stage may have excess cash to pay dividends to shareholders. But in mature industries, there are usually fewer firms, and those that survive will be larger and more dominant.

While innovations continue they are not as radical as before and may be only a change in colour or formulation to stress "new" or "improved" to consumers. Laundry detergents are examples of mature products.

Decline

Declines are almost inevitable in an industry. If product innovation has not kept pace with other competing products and/or service, or if new innovations or technological changes have caused the industry to become obsolete, sales suffer and the life cycle experiences a decline. In this phase, sales are decreasing at an accelerating rate. This is often accompanied by another, larger shake-out in the industry as competitors who did not leave during the maturity stage now exit the industry. Yet some firms will remain to compete in the smaller market. Mergers and

consolidations will also be the norm as firms try other strategies to continue to be competitive or grow through acquisition and/or diversification.

PROLONGING THE LIFE CYCLE

Management efficiency can help to prolong the maturity stage of the life cycle. Production improvements, like just-in-time methods and lean manufacturing, can result in extra profits. Technology, automation, and linking suppliers and customers in a tight supply chain are also methods to improve efficiency.

New uses of a product can also revitalize an old brand. A prime example is Arm & Hammer baking soda. In 1969, sales were dropping due to the introduction of packaged foods with baking soda as an added ingredient and an overall decline in home baking. New uses for the product as a deodorizer for refrigerators and later as a laundry additive, toothpaste additive, and carpet freshener extended the life cycle of the baking soda industry.

Promoting new uses for old brands can increase sales by increasing usage frequency. In some cases, this strategy is cheaper than trying to convert new users in a mature market.

To extend the growth phase as well as industry profits, firms approaching maturity can pursue expansion into other countries and new markets. Expansion into another geographic region is an effective response to declining demand. Because organizations have control over internal factors and can often influence external factors, the life cycle does not have to end.

An example is feminine hygiene products. Sales in the United States have reached maturity due to a number of external reasons, like the stable to declining population growth rate and the aging of the baby boomers, who may no longer be consumers for these products. But when makers of these products concentrated on foreign markets, sales grew and the maturity of the product was prolonged. Often so-called "dog" products can find new life in other parts of the world. However, once world saturation is reached, the eventual maturity and decline of the industry or product line will result.

LIFE CYCLES ARE EVERYWHERE

Just as industries experience life cycles, studies have documented life cycles in many other areas. Countries have life cycles, for example, and we traditionally classify them as ranging from the First World countries to Third World or developing countries, depending on their levels of capital, technological change, infrastructure, or stability. Products also experience life cycles. Even within an industry, various individual companies may be at different life cycle stages depending upon when they entered the industry. The life cycle phenomenon is an important and universally accepted concept to help managers better understand sales growth and change over time.

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