

Does the Decline Phase of the Product Life Cycle Ends Up in Death?

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Abstract

This article attempts to show how despite the general notion that the life of a product ends after it enters the decline phase of the Product Life cycle, numerous example exist that demonstrate that it is not always the case. In particular the product might for different reasons experience a revival, or become an exclusive type of good or still attract a certain number of customers. It also tried to explain under what circumstances those phenomena could occur, and to facilitate the product planning when it reaches the decline stage.

1. Introduction

The concept of the product life cycle has been around for over 60 years. Formalized by Theodore Levitt (1965), this classical version states that as a general pattern, a successful product passes through four phases in its life: the introductory, growth, maturity and decline stages. This model has been used, subsequently by different authors (Berenson (1967), Cox (1967), Wells (1968), Wasson (1968), Cunningham (1969), Scheuing (1969), Polli et al. (1969),...) Starting in the 1970's, though, researchers started to criticize the model pointing out its limitations and offering some modifications (Michael (1971), Field (1971), Catry et al. (1974), Dahlla et al. (1976), Enis et al. (1977), Giddi (1978),...). Several variations of the original models can be found in the literature. Even so, the Product Life Cycle Concept remained a tool of analysis and topic of research in the following decades (Sachs (1987), Von Braun (1990,1991),Azhar et al. (1993),Rhyne(1996), Falcioni (1999), Shankar et al. (1999), Magnan et al. (1999),Wansink et al. (2001), Bradley et al. (2008), Vasudevan et al. (2012), Orbach et al. (2014), Delre et al. (2016)...) This phenomenon has been summarized in a key article entitled "Product life cycle: the evolution of a paradigm and literature review from 1950-2009", in which Cao et al. 2012 declare that "despite significant criticism, the classical model of the Product Life Cycle (P.L.C.) has shown remarkable resilience in the past five decades". The present paper focuses on the decline stage of the Product Life cycle, when sales of the product dip toward zero. The decline may be fast or slow. Kotler et al. (2012) gives as an example of a product that experienced fast decline: the VHS tapes, as opposed to oatmeal cereals undergoing slow decline. There are numerous reasons why a product reaches the decline phase. A frequent cause for sales decline is technological change. The emergence of a new product may bring additional benefits to the consumer. For example, the invention of electrical lamp has caused a decline in oil lamp sales because it provides a stronger light and is more practical. Changes in the regulatory environment sometimes cause the sales of a product to decline rapidly. This has been the case for Asbestos, or D.T.T. and tobacco for pipes. Evolution of cultural norms has presumably brought about the decline of sales of corsets, and church attendance in much of the western world. Economical changes like an increase in income brings a decrease in sales of the so called inferior goods (wooden shoes for example). Non technological innovation might also throw some products into decline. Supermarkets have considerably reduced the sales and the number of local grocery stores

The general recommendation to businesses (Kotler et al., 2012) is to get rid of a product once it reached the decline stage, since its profitability in all likelihood is dropping, and it is a waste of resources to continue investing in it. Obviously the disinvestment strategies may take different trajectories, since two situations are never exactly alike. Nevertheless, it has appeared that, in spite of conventional wisdom, there are exceptions, and a product in its

decline phase could still be profitable. There are in fact four situations when this phenomenon occurs. The first one occurs when, in spite of the fact that the vast majority of the market has abandoned the product for a technologically superior one, some market segments cannot use the latter. As an example, typewriters are still manufactured (although in a small quantity) first for those prison inmates who are not allowed to use computers, and for places without electricity. Similarly, Ice boxes and gas lamps are still produced for camping. The second situation occurs when in spite of the appearance of strong competition as far as a specific need satisfaction is concerned; there remains a smaller market that prefers the older product. Examples are plentiful. There is still a clientele for Monopoly game, in spite of the arrival of numerous new games on the market since 1936. The same is true for accordions, which have been somehow supplanted by the electrical organs; stamps albums although stamps collection is a much less popular activity; studies of classical Greek and Latin, etc...

The third situation has been called **Reincarnation** (Field, 1971) or **Revival**. It refers to a situation where the sales of a product that has entered the decline phase are gaining new vitality, and often surpass its previous peak. Three examples come to mind. The first is the “passenger liner” that went through a serious decline stage during the 1970’s, because of the airplanes competition, to the point where almost none was built during that period. Today, thanks to the cruise industry, the construction of passenger liners is a flourishing industry. A second example is the bicycle that went through a difficult period during the 1950’s and early 1960’s because of the popularity, and the increased affordability of cars, motorbikes, and mopeds. However starting in the 1970’s, as people became more aware of the necessity of physical fitness, the sales of bicycles have enjoyed a tremendous comeback as leisure and sport equipment. The third example, the revival of the condom in the 1980’s is the consequence of the spread of new mortal venereal diseases (AIDS ,etc...) , after a long period of relative unconcern, due to the discovery of the therapeutic virtues of penicillin against previously dangerous infections, and the discovery of more comfortable birth control devices. A fourth situation in which a product in decline could still be profitable is when it becomes a “**specialty product**” (Kotler 2012) i.e. a consumer product or service “with unique characteristics or brand identification for which a significant group of buyers is willing to make a special purchase effort”.

This situation generally occurs when the big companies in an industry abandon a product because of declining sales that have been caused generally, by the emergence of a more practical or technologically superior good. Nevertheless a small group of customers remain faithful to the original product and are ready to pay a high price for it, which makes it advantageous for smaller business to cater to its preferences. A first example is the “Sleeper”. After futile attempts to compete with airlines on London- Istanbul, Moscow-Beijing or New York- San Francisco axes, through lower prices, regular railways companies have often

abandoned these services to smaller operators who refurbished the cars and managed to attract a prosperous class of non-hurried customers, interested in a luxurious land cruise, which for some of them is also a nostalgic trip in the past. A second example is the classical record player sold to people with vast collections of non-digital records, or to disk jockeys or sophisticated music lovers who find a certain type of purity to the sound coming from a vinyl record. More than a hundred years after the invention of the safety razor by Gillette and close to eighty years after the arrival on the market of the electrical shaver, some men still like to have their beard shaved by a professional “barber”, probably as a treat. The price paid of this service that was low in the 19th century (when many, somehow clumsy men, challenged by the handling of a razor required this service on an almost daily basis) is almost equal today to the price of a haircut. Fountain pens are still being produced for people who like calligraphy, or the panache associated with its ownership. The question we will try to answer in this paper is what the reasons that some products experience revival, others become specialties, while most disappear totally after the phase of decline.

2. Explanations

Here it is necessary to differentiate between the two last situations described above (Revival vs. transformation into a specialty product)

2.1 Revival

As indicated above, some products that seemed doomed have experienced a new life that may generate higher profits than in its previous glory days. One possibility is the development of a new technology connected to the product itself. After years of neglect, Amtrak has decided to invest in a high speed train linking Boston and Washington. High speed trains in Europe, starting in 1981 with the TGV (Train à grande vitesse) between Paris and Lyon in France, have stopped the decline of railways travel (due to the competition of air transport) and even reversed it on many itineraries. This was made possible by the development of a new technology that enabled a tremendous increase of speed. Obviously the trend was also stimulated by the increasing requirements, for security reasons, to arrive earlier in airports, in order to catch a flight. A second reason could be the development of a new complementary product. As the electrical shaver became more and more popular during the 1950’s and 1960’s, it seemed that the lifecycle of the safety razor was reaching its end. The discovery and marketing of the shaving foam spray, by reducing tremendously the time required to cover one’s face with shaving cream, stopped and even reversed that trend. A third reason might be a change in the macro- environment. In the 1930’s the city of Paris (as many others) completely dismantled its tramways network, to replace it with the more flexible buses. Because of the late increase in ecological awareness, railways tracks have been reinstalled in the Paris area, and in other cities worldwide.

A fourth reason is a change in the economical and lifestyle environment. This explains the increased popularity of sea cruises, and as a consequence the revival of the passenger ships construction. A fifth reason is the rise in the interest associated with a once marginal or unknown benefit of the product. Aspirin has been for years sold mainly as an analgesic. It is only later that its virtue as a preventive means to heart diseases has been discovered, and as a consequence its sales have increased substantially. In the 1930's 1940's most people who bought bicycles did it so to go from one place to another. Physical exercise was not at the time the main reason for riding a bicycle. The increased awareness of the necessity to be physically fit has been the main reason for the revival of this product.

2.2 Transformation into a Specialty Product

As was indicated before, a mass-market product that went through the decline stage can become a specialty product, or possibly, a luxury or exclusive good. Some of the factors that will turn a mass-market product in decline into an exclusive article will now be described. A first factor relates to the *consumption structure of the product*. Although there might be people who long for the stagecoach, for long distance travelling, this type of demand cannot be satisfied, because the necessary infrastructure (coaching inn, post houses...) for stagecoach travelling has disappeared. This is also true for residential gas lighting, and other products that did require a heavy infrastructure but have been outmatched by technologically more advanced products. With the demise of the infrastructure there is no possibility of supplying the product. However, if the infrastructure is still in place (railways, harbors...), or the consumption of the product does not necessitate any, there is no obstacle for its transformation into a specialty good. A second factor is *the appeal of exclusiveness*. Most men buy ready to wear suits and shoes, since their cost is substantially lower than made-to-measure products. Nevertheless, in addition to the fact that some customers cannot find, for physiological reasons, ready to wear apparel, the mere fact that custom made products are more expensive, makes them attractive to people looking for exclusiveness. This is true for many hand-made products that are much more expensive, but not necessarily of objectively better quality than their manufactured competitors. The third factor is linked to *an accessory benefit of the product*, that when its sales decline becomes a main reason for purchasing it. For example, during the 18th century, the main reason why people were riding horses was transportation, the pleasure associated with the riding was not necessarily universal, and certainly a minor motivational factor for most purchases. Today horseback riding is mostly (with the possible exception of the mounted police) a sport activity, and a specialty product.

In a similar manner, men go for a shave to a barber for the pampering experience, and people use the Orient-Express train for its relaxing quality, the view of the landscape, and the uniqueness of the experience. All of those benefits used to only be marginal advantages of those products in the past. A fourth factor is the sentimental value (nostalgia) and

conservatism. Fedoras, cufflinks, fabric handkerchiefs and diapers, are still being produced although in a much smaller quantity than before, for a market composed of customers who do not want to change their habits or who find a special benefit in those products that they cannot find in their more modern substitute, Top hats, dial phones, steam train services are mostly purchased for nostalgia reasons. Conservatism and nostalgia are factors that keep a certain number of customers loyal to a certain form of product that becomes a specialty good. However, this sometimes might only be a passing phenomenon, since those two factors are clearly connected, for a specific product, to the traditions of a particular generation that will disappear with time.

3. Conclusion

This article has attempted to show that despite the general notion that the life of a product ends after it enters the decline phase of the Product Life cycle, numerous examples exist that demonstrate that it is not always the case. In particular the product might for different reasons experience a revival, or become an exclusive type of good or still attract a certain number of customers. It also tried to explain under what circumstances those phenomena could occur, and to facilitate the product planning when it reaches the decline stage.

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