Analysis of pricing strategies for new product introduction

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Abstract

States that one weakness of new product introduction (NPI) is the elapsed time required to bring the product to market. Many manufacturing companies are losing the competitive race in this area to the speedy and effective execution process, which other successful companies (for example, some Japanese electronic manufacturers) use. Analyzes two sets of companies: those that bring the products to market early; and those which do so late. Describes the advantages of a company bringing product into the marketplace before its competitors, and how a company can wrestle away a larger share of the marketplace. Also provides some closed form algorithms for computing projected shares of sales volume. Using this formula, a company can compute what sales volume a company can lock-in by introducing a product to market when demand or need for a product is at its peak. Also provides a computational means for calculating possible loss of revenues when a company is not able to bring a product timely to the marketplace.

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Introduction

The combination of new and old practices, such as old fashioned habits, new life-cycle environment, organizational changes, and mounting regulations, has increased the complexity of the product development efforts. The complexity results from five main sources: inherent product complexity, process complexity, team cooperation and communication complexity, computer and network complexity, and a maze of specifications including international regulations and safety. Over the past several years, diversities, varieties and complexities of new product introduction (NPI) have grown from "very simple" to "very complex." While at the same time, the time to market aspect has shrunk (Prasad, 1994). This is shown in Figure 1. The changing market conditions (such as global manufacturing, economy, and new innovation), and international competitiveness are making the time-to-market a fast shrinking target. Today, an automobile – with complexity several times higher than before – can be manufactured in less time (often less than three years). The same product, about half a decade ago, used to take over five years to bring into the marketplace. Whereas, its complexity ten years ago, by today's standard, could be characterized only as "very simple." The workstation market is another good example. With new innovation in chip technology, workstation companies have continually shortened the time between new product introductions. In 1985, when a new central processing (CPU) was introduced, it was quite innovative – but was nowhere close to today's standard in complexity. Every 18 months thereafter, a new CPU, twice as complex was introduced at two times the performance at roughly half the price. In 1988, a four times as complex and four times faster CPU was introduced at a quarter of the price in a 12-month period. In 1990, the development cycle for a new 16 times faster CPU was introduced in only a six month time span nearly at 1/16th of its 1985 price. This type of trend goes on for many other products as well. The average development time for a compact disk (CD) player today is nine months, a PC is 14 months, and a knowledge-based engineering (software development) system ranges from two to four years. Among the web of such complexity, it is easy to overlook that

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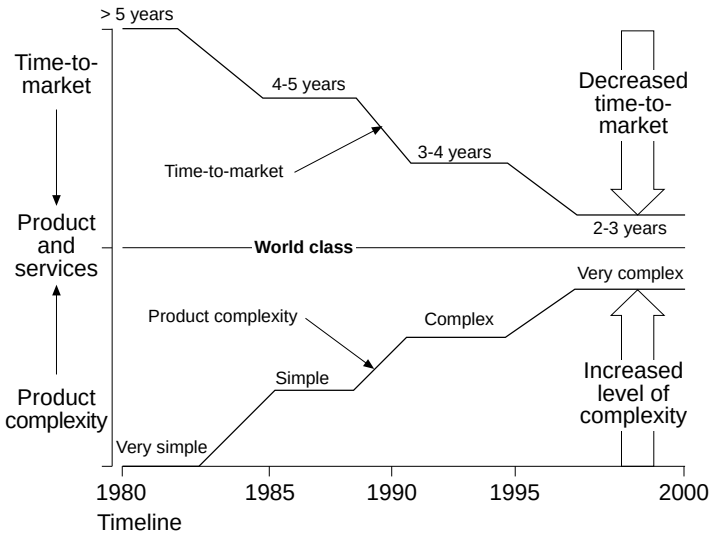
Figure 1 A case of a constantly moving target



requirements of the customer are also changing constantly. The customer is also becoming more sophisticated. Each time a company fulfills the customer wants in a product, the level of customers' expectation also moves up a notch. They demand customized products more closely targeted to their personal, social and cultural tastes. The same is true for the expectations of the performance indicators discussed by Prasad (1996). Products get old quickly, customers' excitements fade away, and demands decline. There is a great danger that a product introduced after few years of its development may not remain attractive for the market that existed at the launch time.

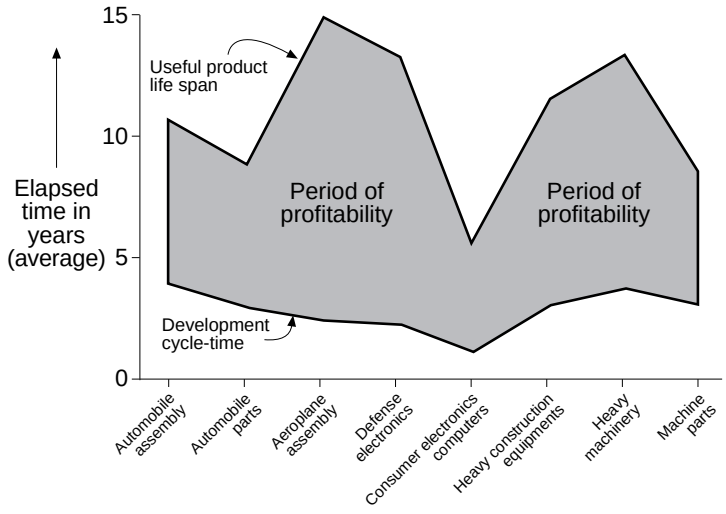
Strategically, introducing new products at frequent intervals is also not a good business solution. New products require significant investments in redesign, retooling and manufacturing costs. Development costs consist mostly of expenditures for employees, support staff and testing. These costs tend to increase proportionally with the overall time taken to complete the design. For this reason, most manufacturers have focussed on shortening the time taken for new models to be designed and tested. Toyota, for example, has set its sights on reducing the average development time of its automobiles from 30 months to 18 months by this year-end. US Department of Defense (DOD) Computer-Aided Acquisition and Logistics Support (CALS) initiative identifies concurrent engineering (CE) as an enabling technology that can help potentially lower development and operational costs while appropriately managing the moving targets.

Shrinking life cycle

The real pressure to reduce development costs and life-cycle time comes from overseas competition. Not too long ago, mechanical typewriters had a 30-year useful lifespan, and electro-mechanical typewriters an over ten-year life-span. They were both quickly replaced by word-processors and personal computers. Development time and cost are becoming crucial in all engineering industries. It is becoming particularly serious in electronics industries where profits have been squeezed the most over the last decade. For example, the development life cycle (when pay-off or returns-on-investment start coming in) of audio/video products, such as compact disk players and VCRs, is now less than a year (close to nine months). Whereas, the average useful lifespan when someone replaces an unit – already in use or broken – has gone down to about five years. Figure 2 shows such trends (average) in useful lifespan and development life cycle time of products across a number of key competitive manufacturing industries.

The pay-off period begins when the product development life-cycle time ends. It continues until the product remains in use. The hatched area in Figure 2, thus represents a time period during which the company reaps maximum

Figure 2 An industry-wide trend showing useful product lifespan and start of pay-off period



profits. This is referred to as "lead time." The period of profitability changes from industry to industry and from product to product. It is the lowest for consumer electronic industries and for computer products.

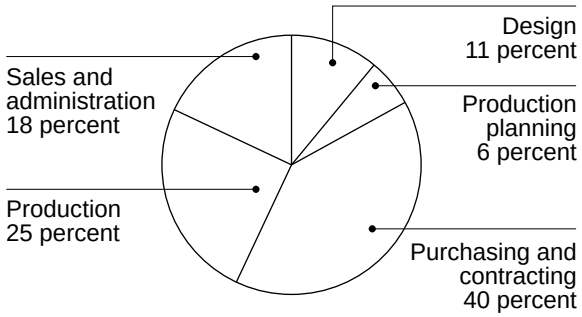
The global marketplace of the 1990s has shown no sympathy to tradition. Marketplace only recognizes results and is insensitive to efforts. The 1990s are not the first time the importance of time and results has been recognized. In the early 1980s, manufacturers (predominantly in Japan) had developed successfully a set of production techniques for "assembly-oriented plants" to supply the components parts on a "just-in-time" basis. This technique was clearly one of the first to emphasize "time" in its orientation.

'…Today, most companies are under extreme pressure to develop products within time periods that are rapidly shrinking…'

Today, most companies are under extreme pressure to develop products within time periods that are rapidly shrinking. As markets change, so do the requirements. This is more pronounced if the products are consumer-based. For instance, the product that a consumer wants today, may not be liked when delivered three years from now. Associated with this are the urgencies and pressures on the manufacturers to modify their product characteristics based on the up-to-date requirements, while the product is still being developed. This has chilling effects in managing the complexity of such continuously varying product specifications and handling the ongoing changes. This is because it takes extensive time and efforts to propagate a set of specifications throughout a product design, development and delivery (PD^3) process cycle. It takes additional time to turn them into opportunities for growth and profits.

Many companies are stepping up the pace of new product introduction, and are constantly learning and embracing new ways of engineering products more correctly the first time, and more often thereafter. In a separate investigation, Andreason *et al*. also report a very similar distribution of the operating costs incurred by various departments (Andreason *et al.*, 1987). This is represented in Figure 3 by a pie chart. Clearly the design is a tiny piece of the development pie, but it locks in a bulk of later (in downstream processes) spending. New product introduction is an important aspect of pricing and cost. This is discussed next.

Figure 3 Percentage of actual operating costs incurred by various departments



New product introduction

New product introduction is similar to the improvement aspect of change management process, which is described thoroughly in Chapter 3 of the *Concurrent Engineering Fundamentals* book – Volume I (Prasad, 1996). The product realization process in new product introduction involves iterative and multiple incorporation of changes across different elements of the end product, including all aspects of life cycle considerations. These are: simultaneous change management from its initial stage; life cycle configuration management; and insertions of several "new tools and technology" along the way in product and process areas. The simultaneity reinforces adherence to total quality management and other continuous process improvement change philosophies. Such adherence requires that a rationale of change be maintained to provide a basis for the product undergoing continuous change. A weakness of new product introduction is the lapsed time required to bring the product to market. Many manufacturing companies are losing the competitive race in this area to the speedy and effective execution process which other successful companies (for example, some Japanese electronic manufacturers) use. By introducing a product to market when demand or need for a

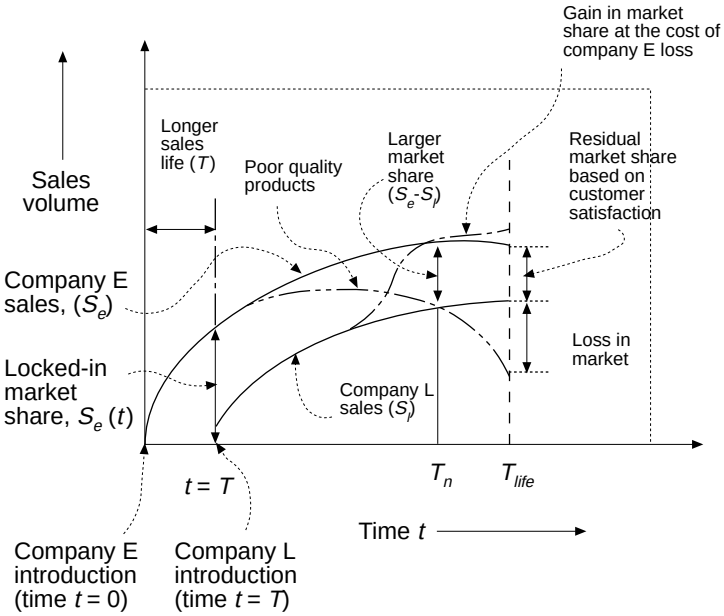
product is at its peak, a company can lock-in a large sales volume.

Early introduction

Concurrent engineering provides a way to bring the product into the marketplace early. Those companies that bring their product into the marketplace before their competitors, wrestle away a larger share of the marketplace. This is shown in Figure 4. Slow-to-market or slow responsiveness is due to inability to react quickly to changing market conditions. Such conditions force manufacturers inadvertently to lose market share to their competitors. As with the "big-3" (Ford, GM and Chrysler automobile manufacturers in USA) the mini-van and mid-size car truck market were heavily underestimated in the early 1990s. This caused consumers to wait for the mini-van, or buy mini-vans and trucks from the competitors. Sports cars with convertible tops were also underestimated for 1994 sales of the Ford Mustang and GM Pontiac TransAm.

Let us denote the sales volume of two very similar companies as:

Figure 4 Sales and market share advantages of early product introduction



Key
S: Sales
E;*e*: Early introduction
L;*l*: Late introduction
t = Time elapsed after initial introduction
T = Time when company L introduced its product

$S_e(t)$ = sales volume of company E, which introduced its products early to the marketplace.

$S_l(t)$ = sales volume of company L, which introduced its products late to the marketplace.

"*e*" and "*l*" are prefixes in the above nomenclatures come from "early" and "late."

$t = 0$; when company E introduced its product.

$t = T$; when company L introduced its product.

Market share is the ratio of the sales volume of a particular company to the total sales of all the companies, which are producing competitive products for that market. The total sales are equivalent to the total consumption of a section of consumers or buyers.

Market share or sales advantage of company E over L

$$= S_e(t) / S_e(t); \quad \text{for } t < T \tag{1}$$

$$= [\, S_e(t) - S_l(t) \,] / [\, S_e(t) + S_l(t) \,]; \quad \text{for } t > T. \tag{2}$$

The company E had a 100 percent market share up to time T. After time T, company L introduced its product and the market was shared between the two companies. If the company E were managed correctly, it could still enjoy higher market shares. The earlier a product is introduced by a company, the better are its prospects for achieving and retaining a larger market share. How long such market shares remain robust depends on many factors that are discussed in the later part of this paper. If the customers have realized significant productivity improvements with this early introduction of the products into their organization, they tend to continue using it and invest more into it. This tends to have a very positive effect on the resulting sales-volume of the company E. By the time a new competitive product was introduced by a competitor, company E had already captured and locked in a share of the market. This is shown in Equations (1) and (2). The locked in sales volume at time T is as follows:

$$\text{Locked-in sales volume at time } T = S_e(T) \tag{3}$$

$$\text{Longer sales life} = T. \tag{4}$$

The sales life of the product is also increased by a period of time T due to early introduction. On the other hand, a one month slip in product

introduction (or development delay) is one less month of sales.

The second benefit of early introduction is the price and cost advantages. Most of the profits from successful products are realized early after their introduction (see Figure 5). There are many views to what a price is. In this paper, a linear view of price is employed for simplicity.

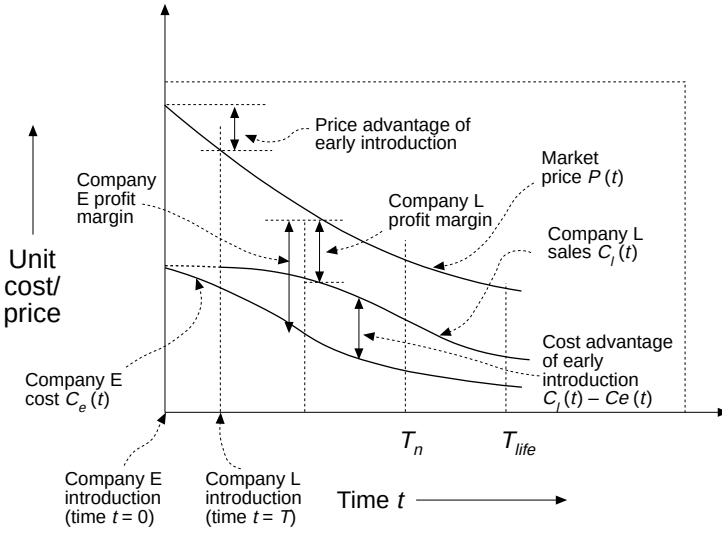
Price, from the perspective of the seller, is viewed in this paper as the sum of the costs incurred in design and production plus a reasonable mark-up margin or profit. In general, the selling price of the product is several times its manufacturing cost:

Price = Company Cost + Mark-up (5)

where company cost is the result of life-cycle costs:

Company Cost = Marketing Planning Cost + Design Development + Cost of Component Sub-assemblies + Assembly Cost + QC/Inspection Cost + Investment Tooling Cost + Production Cost + Distribution Cost + Warranty Service cost. (6)

Figure 5 Cost and price advantages of early product introduction



Key
C: Cost
P: Price
E;*e*: Early introduction
L;*l*: Late introduction
t = Time elapsed after initial introduction
T = Time when company L introduced its product

Figure 5 shows conceptually the plots of the unit costs and market price of a product introduced by companies E and L and drawn against time. For the purpose of discussion, let us denote:

$P(t)$ = Market Price of a product
$C_e(t)$ = Cost of developing a unit product by company E
$C_t(t)$ = Cost of developing a unit product by company L.

Thus:

Unit Profit Margin for company E
$= P(t) - C_e(t)$ for $t > 0$ (7)
Unit Profit Margin for company L
$= P(t) - C_t(t)$ for $t > T$. (8)

In the above equations, it is assumed that the development costs are unitized. In the absence of actual costs, a company can estimate these "unitized costs" based on either some projected sales volume, market research, or from historical data for a product being replaced. When a product is introduced late in the market, most such companies keep its (product) price lower than what their early competitors are asking for an equivalent product that is of a similar kind. In Figure 5, it is also assumed that due to competition, prices of the products cannot be set very far apart. The competition has forced the two companies to set a very "competitive" price of their products. This is taken to mean that prices of the products are very close to each other to a point when the products are considered to follow a "single price curve" line called "market price" $P(t)$. Cost advantage of early introduction with unit sale of the product is thus given by the following expression:

$= [\, C_t(t) - C_e(t) \,]$. (9)

Total cost of the products can be obtained by multiplying the sales volume and the unit product cost. When a new product is introduced (that is during an initial period $0 < t < T$), there is usually no or very little competition. The company has more pricing freedom and consequently can muster better profits margins. The total profit margins (TPM) of the two companies can thus be expressed as follows:

At time $t < T$;
Total profit margins (TPM) for company E:

$\mathrm{TPM}_e(t) = [S_e(t)] \times [P(t) - C_e(t)]$;
$t < T$ (10)
$\mathrm{TPM}_t(t) = 0$; $t < T$

TPM for company L = 0; for $t < T$, since the product does not exist.

During $T < t < T_{life}$, total profit margins for company E are:

$$\text{TPM}_e(t) = \{ S_e(t) \times [P(t) - C_e(t)] \}; \quad t > T \tag{11}$$

and total profit margins for company L at any time after $t > T$ are:

$$\text{TPM}_t(t) = \{ S_t(t) \times [P(t) - C_t(t)] \}; \quad t > T. \tag{12}$$

Thus, as shown in Figure 5, total profit advantage (TPA) of company E over company L can be computed by subtracting the above two TPMs as follows:

$$\text{TPA}(t) = \text{TPM}_e(t) - \text{TPM}_t(t) \tag{13}$$

$$\text{TPA}(t) = \{ S_e(t) \times [P(t) - C_e(t)] \}; \quad \text{for } t < T \tag{14}$$

and:

$$\text{TPA}(t) = [\,[S_e(t) \times \{P(t) - C_e(t)\}] - [S_t(t) \times \{P(t) - C_t(t)\}]]; \text{ for } t > T. \tag{15}$$

If the sales volumes are the same for both E and L companies (say S), then:

$$\text{TPA}(t) \qquad S(C_t - C_e); \text{ for } t > T \tag{16}$$

where the figure in the bracket represents the cost advantage of early introduction for a single unit of the product.

Figure 5 shows that market price of the product, $P(t)$, decreases with time, which is normal to expect in a competitive environment. The result is that after time T, the cost advantage gap between the early and late introductions narrows down steadily. There is still a cost advantage between the two; however; the TPA gap is smaller. Furthermore, there could be secondary benefits of being first, such as early acquisition of the manufacturing competence or being ahead in the learning curve. Other benefits include having time to react for market change, or react to change in product focus, etc.

For some products that have high switching costs, the benefits of early introduction are even larger. Besides the obvious cost advantage, which comes from early introductions, it has the potential of gaining more customers who maintain their loyalty due to the inherent cost burden of switching to other competitive products. Their loyalty often creates a residual sale trail, which can remain fairly uniform. Residual sales trail is the minimum sales volumes, if no new sales were made after time $t > T$. If a company new sales projection is superimposed over its residual sales trait, it gives what maximum sales volume company E can expect. Consequently an early introduction builds sales momentum, which is carried through the later part of its life-cycle. What does this mean to the net profits? According to McKinsey & Co. (Musselwhilte, 1990), a high tech product that reaches the market six months late, even on budget, will earn 33 percent less profit over five years. On the other hand, finishing on time, but 50 percent over budget, will reduce the company's profits by only 5 percent.

Increased product life

A by-product of early introduction – which is not so obvious – is that the product's sales life is extended. If a product is introduced earlier, it is seldom removed from the marketplace. It enjoys the same life as any new product introduced at a later time. Consequently, every month that is cut from its development cycle using concurrent engineering or similar concepts, is added to the sales life. This means that all the revenues and profits generated during a period of T units are additions to the company profits.

Revenues and profits (R&P)

The cumulative profit margin over a period of time ($t = T_n$) can be obtained by integrating the above curves over time t.

$$\text{Company E: (R\&P)} = \int_{t=0}^{t=T_n} S_e(t)\,[P(t) - C_e(t)]\,dt \tag{17}$$

$$\text{Company L: (R\&P)} = \int_{t=0}^{t=T_n} S_i(t)\,[P(t) - C_t(t)]\,dt \tag{18}$$

However, there are many situations that might affect the sales volume life-cycle curve. Economic factors, market trends and product quality are some of the major examples. Economic factors such as recession, high inflation, or high interest rates can change (increase or decrease) the product's life cycle in terms of sales volume. Market trends such as annual seasonal trends or fads could also lengthen or

shorten the sales volumes. An example is clothing styles, which are usually short-lived. Most importantly, the effect of quality or "perceived quality of the product" can have a lot of influence in determining its sales volume. This is discussed at a greater length in the "Discussion" section of this paper.

Calculation of revenue loss

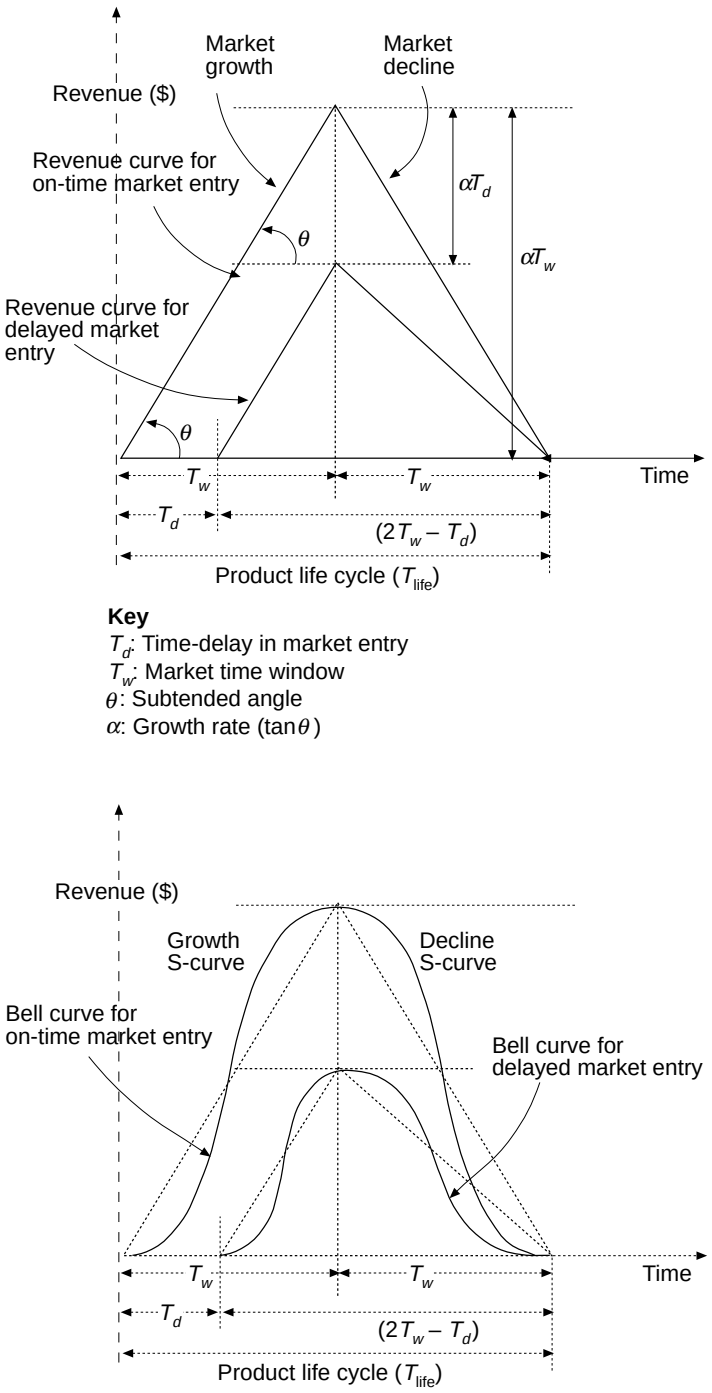
The trend for revenue, as shown through the equations (17) and (18), normally follows a profile of an S-curve. This is shown in Figure 6 for both market growth and a market decline. Each follows an S-curve trend. Together they form a bell shape. In Figure 6(bottom graph) two bell curves are shown; one bell curve is for the revenue when an early (or on-time) market entry; and the other bell curve is for a delayed market entry. In the growth S-curve case, the rate of growth is slow in the beginning, increases quite rapidly in the middle zone and then again slows down as it reaches the peak revenue. In the case of market decline S-curve, the decline is slow at the peak, sharply declines in the middle region and again flattens up in the lowest region.

T_w is the market window (time) when the growth revenue S-curve reaches its peak. If it is assumed that the time of decline is the same as the market window (time of growth), the two S-curves are symmetrical about the vertical axis. The assumptions are very reasonable, since the straight lines are approximately a median line of the S-curves. The total product life-cycle time can thus be computed as:

$$T_{\text{life}} = 2T_w \tag{19}$$

The S-curves (or bell curves) are often very symmetrical about a straight line connecting a peak revenue point to a start-point. The bell curves of Figure 6 are approximated by a series of straight lines. Two straight lines are drawn – one for the market growth S-curve and another for the market decline S-curve. Another set of two lines is shown for delayed "market entry and the market decline." Carter and Baker (1992) also used a straight line to measure the impact of delays in launching a product. As shown in Figure 6, both these bell curves are symmetrical about lines that form sides of a triangle. On the basis of this symmetry, the area under the bell curve can easily be approximated by the area under this triangle.

Figure 6 Computation of revenue loss due to delayed market entry



If θ is the slope of the revenue S-curve and α is the rate of revenue-growth or revenue-decline, the peak revenue can be expressed as:

$$\text{Peak-revenue} = \alpha T_w \tag{20}$$

where

$$\alpha = \tan(\theta). \tag{21}$$

Revenue generated in the case of on-time market entry and delayed market entry can

be computed by computing the area under the respective bell curves:

Total revenue for early (or on-time market introduction) = Area under the dotted curve:

$$R_{\text{early}} = (2T_w) \times (\alpha T_w)/2 \quad (22)$$

$$R_{\text{early}} = \alpha (T_w)^2. \quad (23)$$

Total revenue generated when product introduction is delayed by T_d units:

R_{delayed} = Area under the dotted hatched curve

$$R_{\text{delayed}} = (2T_w - T_d)\,(\alpha T_w - \alpha T_d)/2. \quad (24)$$

It is assumed that the growth rate for the delayed market entry is the same as the early or on-time market entry, meaning L remains constant. In actual practice, this seems to occur.

If R_{loss} denotes a revenue loss term due to delay in introducing the new product, then:

$$R_{\text{loss}} = \frac{R_{\text{early}} - R_{\text{delayed}}}{R_{\text{early}}} \quad (25)$$

or:

$$R_{\text{loss}} = \frac{[(T_w)^2 - (2T_w - T_d)\,(T_w - T_d)/2]}{(T_w)^2} \quad (26)$$

or:

$$R_{\text{loss}} = \frac{[(3T_w - T_d)\,T_d]}{2\,(T_w)^2}. \quad (27)$$

It is interesting to note that revenue loss is independent of the growth rate α.

The above equation (27) represents an approximation of the actual revenue loss, which must be computed using true S-curves or bell curves. This approximation can be used as a measure in calculating the impact of delays in launching a product. For example, considering a 12-month market window; i.e. $T_w = 12$.

A T_d month delay in a launching a product can be computed using the information given in Table I.

Discussion

Pricing change happens all the time in all organizations. Most often, however, pricing change is unplanned, unmanaged and uncomfortable. Pricing management means learning to deal with pricing for new product introduction, changing technologies and systems. It also means putting price factors for initiating quality leadership, process management, and shaping direction for change control. In addition, price factors may include carrying out needed design revisions, and for establishing an improved product development process. Strategic pricing management means establishing a process for systematically setting and incorporating a uniform pricing policy for new product families or new technology, handling continuity, and resetting prices for a revision-type product change.

In the previous sections, the emphasis was placed on the advantages and disadvantages of getting to market ahead of the competition, i.e. first mover advantage. In this section alternate pricing strategies are discussed. They are summarized here as answers and questions. The supporting arguments are drawn from the previous sections and from equations discussed earlier.

Question: Under what conditions should the first mover introduce a relatively high price? A relatively low price?

In some products, like software products and certain types of industries, when there is training and education involved, the potential locked-in opportunities for sales volume are quite substantial. Coincident with the initial introductions, buyers or users develop proficiency and commit resources such as:

- locked in capital investments;
- acquired training in the use of product;

Table I Revenue loss computation

Months late (T_d)	Revenue lost (R_{loss}) (%)	Remarks
1	12.2	A one-month market delay means 12.2 percent loss in total lifetime revenue
2	23.6	
3	34.4	A three-month market delay means 34.4 percent loss in total lifetime revenue
4	44.4	
5	53.8	
6	62.5	A six-month market delay means 62.5 percent loss in total lifetime revenue
7	70.5	
8	77.8	
9	84.4	A nine-month market delay means 84.4 percent loss in total lifetime revenue
12	100	

- developed productivity short-cuts in the use of the product.

It then becomes difficult for customers to switch to a newer product and to start the whole process all over again. For those classes of products, the first mover can afford to charge a high price and expect that the products would continue to do well (will sustain a handsome market share). For some products that have high switching costs, the benefits of early introduction are even larger.

For products that are commodities type, such as office products or consumer goods, customers only appreciate what features they find useful in the products, they do not care how a product manufacturer got there. The reality is that if the product manufactured does not meet the market (customers') needs, demand declines and profits shrink. As profit margins dwindle, so does the window of opportunity for a company to change profitably. Furthermore, suppliers, subcontractors, and partners all feel the squeeze as their clients begin to cut costs and reduce time to market. For those classes of products, if a company is not the first one, it can only enter the market by setting a relatively low entry price for its product.

Question: How does the retention of market share work?

The retention of the market share, if any, is commonly due to the following factors. Initial buyers or users of a product are often unsatisfied customers. They are looking for better products, technologies or features to support their business functions. They are willing to invest heavily at the introductory release of new or improved technology since either none is available or they are unsatisfied with what exists out there. In such circumstances, business customers usually make heavy capital investments on such new products and jump into serious employee trainee programs. As these investments accumulate, business customers find it difficult, culturally and economically, to switch later to a new product and start over again.

Question: In what situations can company E lose market superiority?

If the quality of the product deteriorates or if the competition introduces a better product, which far exceeds the customers' expectations, the product can lose market share (as shown by dotted lines in Figure 4). A similar situation can happen in the case of a product's recall. Its effect on the sales volume, however, depends on the severity of publicity or the quality problem that the product has experienced. A highly publicized recall (such as the case in Ford's Pinto or General Motors' side-saddle gas tank pick-up trucks) can have a much more pronounced effect on the sales volume than a silent recall. If any such adverse situation happens, it is in the best interest of company E to replace the old product and introduce a new product that exceeds or meets the customers' quality expectations.

Question: How long should the introductory price be set before adjusting in anticipation or in reaction to competition? At what point should a failing company take corrective measures?

The introductory price needs to be re-reviewed every time a competitor either adds a new feature to a product, adds a new technology, or introduces a new gyration of products. Reviews should occur to determine the technical and performance superiority of the product in relation to its price. Those characteristics should be compared with one's own. Because of less R&D need in the later part of the product introduction cycle, it is expected that the cost of producing a product will steadily decline over time. This is because in the later part of the life-cycle, the major cost drivers remain the production and operations costs. The company can afford to reduce the price of its previously introduced products and still be able to maintain a reasonably good profit margin. However, for some reason, if one of the circumstances mentioned in the previous paragraphs occurs, the company E must take some urgent corrective actions. These corrective actions must be timely – must occur well ahead of time $t = T_n$. In Figure 4, it is clearly shown how to recognize this point of time. At time $t = T_n$, the sales volumes of products E and L are nearly equal:

$$[S_e(T_n)] = [S_t(T_n)]. \quad (28)$$

The decision to replace the product must come ahead of this critical juncture. Meaning, if the company does not apply adequate corrective actions before this point, there is a danger that the company may not be able to recover at all or

could sustain irreparable damage. Contrary to this, if the company continues its production to its full life-cycle, there is a danger of losing a substantial market-share as well, as shown in Figure 4.

Concluding remarks

There are many factors that impact the sales of a product. Timing of product introduction was considered one of the important considerations for gaining the initial market share. For keeping the acquired market share once gained, strategies that govern economic factors, market trends and product quality are considered important. The paper in general provides a number of such "pricing strategies" and "timing strategies" for moving the products faster into the marketplace. Economic factors such as recession, high inflation, or high interest rates can change (increase or decrease) this balance. Market trends such as annual seasonal trends or fads could also lengthen or shorten the sales volumes. An example is clothing styles, which are usually short-lived. The effect of quality or "perceived quality of the product" can also have a very adverse influence in determining its market share. In many of those situations, "timing strategy" by itself such as early introduction is not enough. Both "pricing strategies" and "timing strategies" are required to maintain or to keep a good balance between the "initial market share" and "continued market growth."

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