level of distribution.[4] The test market must be allowed to run long enough for the full program to be implemented, including achieving target levels of distribution. For consumable products, the test must be long enough for several rounds of repeat purchase so that the adoption or steady state sales level can be judged. This can seldom be accomplished in less than a year. If, based on early results, revisions are made to the introductory plan, the test market must be further extended to test the affect of these changes. Several models are available that process test market trial and repeat sales data to predict long term product sales and market share.[5]

The National Launch Decision. The decision to take a product national utilizes all of the experience of the new product to date, but the judgment should be dominated by the test market experience. Objectivity in making the decision is aided if, as suggested above, success standards were set in advance of test marketing.

If the decision is made to go forward with national launch, timing and breadth of launch must be decided. Timing of the launch should consider the season for the product, the danger of competitive preemption, the availability of production capacity, and the timing of other new product introduction efforts by the firm. After test market, the firm may elect to introduce the product to the total market at once or they may elect a **rollout,** the gradual introduction of the product in one market or region at a time. Rollout stretches out resource demands and reduces the level of risk. However, if there is danger of competitive preemption and if resources for introduction are plentiful, full national marketing may be desirable.

A program for monitoring the introduction should be in place from the beginning of the launch. Sales should, of course, be carefully monitored and compared with test market results. In addition, diagnostic measures should be employed to suggest improvements in the marketing strategy.

[4]Cadbury, "When, Where, and How," p. 101.

[5]These models are reviewed and evaluated in Chakravarthi Narasimhan and Subrata Sen, "New Product Models for Test Market Data," *Journal of Marketing* 47 (Winter 1983), pp. 11–24.

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C.19 New Product Pricing

NEW PRODUCT PRICING: SIMILARITIES AND DIFFERENCES

New product pricing is part of the **new product development process** (see GLOSSARY entry C.17). It is important that pricing be considered as part of the marketing planning process for a new product. This assures that it receives direction from the product **positioning** and that its interactions with other elements of the **marketing mix** are considered.

What Is Considered a New Product? Products that are new to a company, but are similar to products already on the market and are entering a mature product category, do not pose a pricing problem unlike established products. The **product pricing** approach suggested in GLOSSARY entry C.23 is applicable to these products.

However, pricing of new products that are unique to the market require special consideration. These products represent true innovations and their introduction marks the beginning of a new **product life cycle.** Introductory pricing of these unique new products is the subject of this entry.

Differences in the New Product Situation. The problem of pricing a new product is different because the situation facing a unique product is uncertain and subject to rapid change. Some of the differences in the new product situation that affect pricing are these.

- *Competitive Environment.* When a unique new product is introduced, it has no close competitors. The new product has a monopoly, but that monopoly can disappear quickly as competitors are attracted by the success of the pioneer product. The pricing of the new product is an important determinant of the speed with which competitors enter the market. Thus the marketer cannot price like a monopolist purely to maximize profits, but must also consider the effect of the pricing decision on prolonging the monopoly.[1]

  The lack of direct competition also means that there is no pricing standard or no going market price to use for comparison, either for the marketer or for the consumer. The pioneering product sets the pricing standard.
- *Consumer Demand.* A major difference in pricing new products is that demand is unknown and difficult to estimate. There is no historical information on which to base an estimate of market size or the likely growth rate. Demand, or the quantity that consumers would buy at various prices, cannot be estimated from statistical analysis of historical data because there are none (see GLOSSARY entry A.16 on **sales forecasting** for more on new product sales forecasting). Further, estimating demand through survey techniques is difficult because consumers are not familiar with the product and have difficulty in giving valid answers (see GLOSSARY entry C.21 on demand estimation).
- *Cost Experience.* Product cost is one of the major determinants of price, but for new products, there is no production experience and no cost history on which to base estimates. As a result, cost estimates and **experience curve** estimates are more uncertain with new products.

New Product Pricing and the Product Life Cycle. A unique new product establishes a new product category and begins a new product life cycle. The product life cycle describes the stages that a product goes through from the introduction of a product, through growth, maturity, and eventual decline as another unique new product again usurps the market (see GLOSSARY entry A.15). The movement of a product through the product life cycle is fueled by the entrance and marketing activities of competitors. As the market matures, brands become more standardized, consumer acceptance of the product becomes more widespread, and competition stabilizes.[2]

The product life cycle is significant to marketers because it predicts changes that will be required in a brand's marketing strategy as the cycle matures. One of the changes that must take place is a change in price. In pricing a new product, the marketer must look beyond the introductory stage and anticipate price changes necessary as competitors enter the market.

In addition, the marketer must consider how the product's life cycle can be prolonged. The duration of a product life cycle is influenced by many factors, including the rate of competitive entry, the rate of consumer adoption of the product, and the level of disruption that adoption of the new product causes the consumer. Many of these factors are beyond the marketer's control, but introductory pricing can have an influence

[1]See Joel Dean, "Techniques for Pricing New Products and Services," in *Handbook of Modern Marketing,* ed. Victor P. Buell and Carter Heyel (New York: McGraw-Hill Book Co., 1970), pp. 5-51–5-61.

[2]This section based on Joel Dean, "Pricing Policies for New Products," *Harvard Business Review* (November–December 1976), pp. 141–53.

on the pace of the product life cycle. A low introductory price, also termed a **stay-out price,** makes the market look unattractive to competitors, discourages them from entering, and prolongs the product life cycle. A high introductory price has the opposite affect.

Application of the Price Setting Process to New Products. The process for arriving at a product price has three steps: (1) set a pricing objective, (2) analyze the determinants of price, and (3) select and apply a pricing method (see GLOSSARY entry C.23). This broad framework is applicable for new products as well as mature ones. However, many of the considerations at each of these steps are different for new products. The second section of this entry highlights the differences that must be considered in new product pricing.

THE NEW PRODUCT PRICING PROCESS

Most of the variations in new product pricing stem from the absence of historical information and the difference in the competitive environment.

Setting the New Product Pricing Objective. The pricing objective defines what the marketer hopes to accomplish with price, usually by specifying what the relative price level will be. One choice to be made in setting new product pricing objectives is between a high (skimming) introductory price and a low (penetration) price. Intermediate positions are, of course, also possible. In addition, two related pricing objectives may also be adopted to guide new product pricing.[3]

- *Skimming Price Objective.* Under a **skimming price** objective, initial price is set high to gain high-profit sales from the most inelastic segments of demand. The high price is often coupled with heavy promotion, made affordable by the higher prices and designed to educate consumers to the new product. After these early sales are "skimmed" from the market, the price is gradually lowered to capture more price sensitive segments of demand and to respond to newly entering competitors.

  A skimming price objective is most appropriate when (1) the product is a radical departure from existing solutions to the problem; (2) the product is difficult for the consumer to value; (3) there are segments of the market with inelastic demand, (4) **experience curve** effects (reduction of cost through cumulative production) are uncertain or not expected; and (5) high initial cash flow is needed to finance further expansion of the product.

  A disadvantage of a skimming price is that it may make the market seem attractive and hasten the entry of competitors.
- *Penetration Pricing Objective.* Under a **penetration pricing** objective, initial price is set low with the objectives of stimulating early market growth, gaining a dominant share of market, and discouraging competitive entry. Penetration pricing is less likely to realize profits at the early stages of introduction than is the skimming approach.

  A penetration policy is most likely to be appropriate when (1) demand is elastic because reasonable substitute products are available, (2) there are no segments of inelastic demand, (3) cost reductions are expected from experience curve effects as volume increases,[4] and (4) there is a threat of early competitive entry into the new market. Competitive entry is more likely and, thus penetration pricing more appropriate, when market potential is large, barriers to entering the market are low, and the product is not protected, permitting it to be easily copied.
- *Segmentation Pricing Objective.* Under a segmentation pricing objective, the firm sets different prices for each market segment entered. **Segmentation of markets** means dividing a market into subgroups of consumers who have similar needs (see GLOSSARY entry B.3). The marketer then develops a separate marketing mix for each segment entered. The **price elasticity** of demand will vary by segment, depending upon the uniqueness of the brand's fit to segment members' needs (see GLOSSARY entry

[3]The discussion of pricing objectives is based on Dean, "Pricing Policies," pp. 141–53.

[4]See George S. Day and David B. Montgomery, "Diagnosing the Experience Curve," *Journal of Marketing* 47 (Spring 1983), pp. 44–58, and also the discussion in GLOSSARY entry A.17.

A.14). A segmentation pricing objective simply suggests that price level should be separately determined, segment by segment, depending upon the price elasticity created by the particular marketing mix offered to that segment. A segmentation pricing objective is appropriate when **target market coverage** elects multiple segments. Criteria for making that choice are presented in GLOSSARY entry B.4.

- *Pricing Objective in Maturity.* During the introductory marketing planning process, marketers, in setting the pricing objective for introduction, should also look ahead to consider how the pricing objective will change as the product life cycle matures. As the product moves toward maturity, market conditions will change. Because of the rivalry among competitive products, product differentiation will diminish, leading to more elastic brand demand and lessening brand loyalties. The market will reach saturation and sales growth will slow. Product costs will be low, but will be increasingly uniform among competitors (see GLOSSARY entry A.15).

  The changes in the market as the product moves toward maturity call for a change in pricing objective. As the market becomes more homogeneous and takes on the characteristics of an oligopoly, there will be pressure to eliminate price differentials by adopting a pricing objective closer to the market price. The marketer will become more concerned with price stability, switching competitive emphasis to other elements of the marketing mix. See GLOSSARY entry C.23 for more on **pricing objectives** for mature products.

Analyzing New Product Price Determinants. The second step in the pricing process is to analyze the determinants of price. **Price determinants** are the factors that should be taken into consideration when setting price. They are presented in detail in GLOSSARY entry C.21. In the case of new products, analysis of price determinants has some differences, in part because there is less information available for a new product. Some of the differences in analyzing price determinants for new products are considered below.

- *Evaluation of Demand.* Demand, the quantity of a product that consumers will buy at various prices, is an important determinant of price that sets a ceiling on the amount that can be charged. Methods used for estimating demand for mature products are less applicable to new products. There are no historical price-quantity data available for analysis. Surveying consumers on their willingness to pay various prices is limited if the new product is unique and outside the consumers' experience.

  One suggested approach to evaluating demand for a new product is to estimate a price range through comparison with substitute products. Even for unique new products, there are usually products that are currently purchased to solve the same problem. Industry experts, distributors or dealers, or industrial buyers can be asked to estimate the highest and the lowest price premium that consumers would pay over the substitute products for the new product.[5] Sometimes consumers can be used by asking similar tradeoff questions.

  Moving from a range of prices to a full-scale demand curve is best done by conducting market tests of the product at different prices (see GLOSSARY entry C.18).

  For industrial products, Dean suggests using a **rate-of-return** approach to determine the upper limit to price.[6] Under this approach, the marketer determines the increase in profit that the customer would realize by installing the product. The upper price limit is then estimated by determining what price the customer could pay and still realize an acceptable rate of return on the investment.

- *Analysis of Cost.* In the case of new products, three different costs should be analyzed,[7] (1) Even though there are no historical cost data for guidance, producer's costs must be estimated at various levels of output, and experience curve effects estimated. Product development and introduction costs should be considered an investment with the contribution from sales providing the return on that investment. For new products, the producer's cost, as in the case of mature products, serves as a lower limit on price. In addition, at the product development stage, projected producer costs help the marketer determine the economic feasibility of the product.

  (2) Analysis of competitors' costs is helpful because it helps predict whether or not a com-

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[5]Dean, "Pricing Policies," pp. 144–45.

[6]Dean, "Techniques for Pricing."

[7]Based on Dean, "Techniques for Pricing."

petitor will be able to enter the new market and how competitive their pricing is likely to be. Having an estimate of competitors' costs will also indicate how deeply they may be willing to cut price if they choose to be price aggressors.

(3) Analysis of the prospective buyers' costs are needed if the rate-of-return analysis discussed above is to be conducted. Knowing the buyers' costs enables the marketer to predict savings that could be realized by buying the new product. That permits estimating the value of the new product to the buyer or what they would be willing to pay.

- *Analysis of Competition.* In new products, as in mature ones, competitive prices serve as a pricing standard. The difference in new product pricing is that there may appear to be no directly competitive products. However, a consumer point of view should be adopted to determine what they consider to be substitute products. No matter how unique the product, it is rare that there is not some alternative way of solving the same problem. Such substitute products serve the consumer as a frame of reference for value and are the basis on which they evaluate price.

  The analysis of competition for a new product should also attempt to identify the producers likely to enter the new market and determine the strengths that they would have. The expected strength of competition will influence the price level objective as well as the specific price.

- *Requirements of the Marketing Mix.* Product pricing is interdependent with other elements of the marketing mix. For this reason, it is important that the price of a new product be decided as part of a marketing planning process at the same time that other elements of the marketing mix are determined. Some of the interactions that must be considered are these.

  Product design and pricing are closely related. New products must be designed so that product costs make competitive pricing economically feasible. Tentative pricing must be established early in product development so that realistic cost guidelines can be established. Product design also influences the level of price that can be charged. Products that are unique, differentiated, or especially tailored to the needs of a segment will have more inelastic demand curves and will be able to sustain higher prices (see GLOSSARY entry C.25).

  The design of the channel of distribution and the resulting trade discount structure will influence new product price. If the price that is defined is the price to the end user, as it often is, provision must be made for the discounts and allowances to be paid to the channel members with the remainder going to the producer as its revenue (see GLOSSARY entry C.11 on **discount structure determination.**) The amount of this provision for trade discounts depends on the **number of channel levels** used and the **intensity of distribution.** It will also be influenced by the incentives to be given for **channel cooperation.** Each of these channel decisions must be considered simultaneously with setting of price.

  There is a tradeoff between promotional expenditures and price level. If high promotional expenditures are needed to support the product and educate consumers to its attributes, then high price may be needed to provide margins to pay for the promotion. On the other hand, penetration level pricing will generate low initial margins and promotion may have to be at a low level.

Selecting a Pricing Method. The final step in product pricing is to select and apply a pricing method. Alternative pricing methods for mature products are discussed in GLOSSARY entry C.22. They include the cost-plus, rate-of-return, value-pricing, at-the-market, marginal, and multidimensional methods. All of these approaches are conceptually applicable to new product pricing.

However, in practice, something like the multidimensional approach is probably most useful. Under this approach, a tentative price is first estimated, perhaps based on the price of substitute products, and then adjustments based on other of the determinants of price are successively made. Monroe suggests, "Pricing a new product should be a continuing process of successive approximations."[8] The multidimensional pricing method fulfills this requirement, allowing a tentative price to be established early in the product development process. It can then be continuously revised as more

[8]Kent B. Monroe, "Techniques for Pricing New Products and Services," in *Handbook of Modern Marketing,* 2d ed., ed. Victor P. Buell (New York: McGraw Hill Book Co., 1986), p. 32-1–32-12.

precise information on the price determinants becomes available.

The last step of the multidimensional method includes the testing of alternative prices to provide more precise information on demand that can be used for further adjustment of price. This is particularly appropriate for new products where the demand schedule is likely to be highly uncertain and difficult to estimate. Most price testing uses experimental methods, sometimes in the field and sometimes in laboratory settings.[9]

[9]See Gordon A. Wyner, Lois H. Benedetti, and Bart M. Trapp, "Measuring the Quantity and Mix of Product Demand," *Journal of Marketing* 48 (Winter 1984), pp. 101–109. See also GLOSSARY entries C.32 and C.20.

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C.20

C.20 Personal Selling

THE NATURE OF PERSONAL SELLING

The personal selling program, developed as part of the marketing mix, is implemented by **recruiting and selecting salespeople** (GLOSSARY entry C.31), **training of salespeople** (GLOSSARY entry C.39), and **personal selling,** the subject of this entry.

Determinants of Selling Effectiveness. The stereotype of the successful salesperson, still carried in the minds of many, is of a hard-driving, egocentric, back-slapping, smooth-talking "Music Man." We now know that successful personal selling requires more than a particular set of personality characteristics. The factors that lead to success in personal selling are complex and not fully understood. Yet, if marketing managers are to direct personal selling programs and be able to diagnose problems in personal selling programs, they must understand the elements of effective selling.

Walker, Churchill, and Ford developed a model of personal selling effectiveness that integrated available empirical evidence on sales force performance.[1] The model suggests that a salesperson's effectiveness is determined by five factors:

- *Role Perception.* A salesperson's role is the set of attitudes and behavior expected of that job. A salesperson's perception of the role is formed by communication with sales supervisors, customers, and other salespeople. If salespeople have a negative, conflicting, or unclear perception of their role, they will likely be dissatisfied and ineffective. If the salesperson's role perception differs from the role perception held by a customer, communication between the two will be ineffective and lead to poor sales performance.[2] One of the barriers

[1]See Orville C. Walker, Jr., Gilbert A. Churchill, Jr., and Neil M. Ford, "Motivation and Performance in Industrial Selling: Present Knowledge and Needed Research," *Journal of Marketing Research* 14 (May 1977), pp. 156–68. The model is also presented in the authors' textbook *Sales Force Management*, 2d ed. (Homewood, Ill.: Richard D. Irwin, 1985), pp. 297–306. This section draws from both of these sources.

[2]Frederick E. Webster, Jr., "Inter-personal Communication and Salesman Effectiveness," *Journal of Marketing* 32 (July 1968), pp. 7–13.

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