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Principles of Pricing Consumer Items

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Pricing consistent with one's defined objectives is at the very heart of business success. Buying skills combined with proper retail pricing provide the bulk of monetary resource and incentive for doing business. Yet our knowledge of pricing is extremely limited and the management of pricing is one of the most neglected functions of marketing.

The principles of business management are aimed at achieving those efficiencies which enable one to be price competitive. The business community and our business schools seem to regard pricing as a resultant rather than as a controllable force in marketing. Accordingly, the principles of product pricing receive little attention by the merchant who often reduces it to some simple routine or formula. To many, it would seem, prices are made in heaven, something sacrosanct, something beyond the control of man. Thousands of books have been written on retailing, personnel management, marketing, accounting, and salesmanship but there is not a single comprehensive treatise on the principles of product pricing.

Thus today we are going to explore a very controversial subject--controversial simply because so very little is known about it. In many respects ignorance breeds experts. Everyone from the sales clerk to the corporation president is a self-professed expert on pricing. In no other marketing function do we seem to have so many rules of thumb, fixed notions, superstitions and odd-ball ideas. Perhaps it only seems this way because there are so many different business objectives in pricing, so many different methods employed and so many different types of shopper responses to pricing. The involved nature of pricing not only discourages orderly and meaningful research on the subject but also makes it difficult to establish generalized principles, particularly those having universal applicability.

It goes beyond the realm of reason to argue that there will ever be a sophisticated, precise method of retail pricing. Even so pricing remains a major management responsibility and the more we know about the effects of certain practices and their applicability the more nearly we can tailor pricing decisions to particular business aims.

To begin with, four distinct methods of retail pricing can be identified. The first and by far the most common is "me too" pricing which consists of doing little more than emulating a competitor even though there may be no compulsion to do so. The second method is to accept, sometimes without option, the retail price prescribed or suggested by the supplier. In this case the manufacturer is shackled with the pricing dilemma. The third method is simply to apply some standard mark up to the cost of the product. Such cost pricing is the very antithesis of good merchandising but the simplicity of it relieves one of the need to have any kind of pricing skill. Finally there is the method of backward costing, the reverse of cost-plus pricing. The merchant starts with a predetermined retail price and margin and seeks out products available or built to fit the appropriate cost. The competitive objective under this method is to provide the best value compatible with allowable net cost. In the early days of discounting in the United States this method placed much of the pricing decision on the buyer and contributed substantially to establishing an inferior quality image. It made the discount house a junk shop rather than a store known for good values.

When you ask management which method of pricing they use, you commonly get a vague description that involves all four methods with a little bit of homespun philosophy and black magic thrown in. Most retailers have no pricing policy unless it be one of meeting competition. "Me too" or emulative pricing leaves little room for price merchandising. It contributes to the intensification of price competition while one of the aims of price merchandising is to do just the opposite.

The overriding force in pricing is provided by the accepted economic doctrine of the negative sloping demand curve. As price rises, quantities purchased decrease and as price falls, quantities taken increase. Doubt is left only as to the question of elasticity, the question of how much volume will respond by altering price. By cutting price will enough volume be generated to increase total revenue or will it decrease. What will it do to net margins? In an atmosphere of rigorous competition the concept of an inelastic product has little or no practical meaning. The businessman seldom thinks about the possibility of increasing revenue by raising prices. When he must raise prices he does so out of cost rather than profit considerations. In other words he raises prices to stay in business and he lowers prices to gain profit through volume generation. This is the price behavioral backdrop for price merchandising. Basically, it is a pricing concept generated out of an agarian society trading in undifferentiated commodities. Traditional price theory remains a viable force in modern merchandising more as a result of our beliefs, of our being brainwashed with economic theory, than of our observed actions of the shopper in the marketplace. Gradually we are becoming aware that price does more than regulate volume in an economic sense -- that price has many psychological appeals that seem to run counter to accepted economic doctrine. Thus effective psychological pricing is not a substitute for the traditional economic theory of pricing but rather a superstructure operating with certain constraints imposed by economics. One of the most common examples of this is the widespread use of odd-cent pricing in today's market.

Many retailers consider a price of $2.99 much more attractive than one of $3.00 but they see little advantage of $2.98 over $2.99. A few years back the Irish merchant probably preferred a price of 3/11 over 4/0 and probably saw little advantage to 3/10 over 3/11. The rationale is that the odd-cent price appears a much better buy. In fact, such pricing is commonly called psychological pricing.

It is interesting to note that netiher the apparent origin nor present impact of so-called psychological pricing is based on the inference of a low price or bargain! The first extensive use of odd-cent pricing can be traced to a department store in which odd-cent pricing was used to reduce internal theft. It was designed to force the sales clerk to come to the cash box to make change thus reducing his opportunity to pocket receipts. The practice was rapidly emulated by other merchants for its merchandising appeal. Today it has become so commonplace that its value lies in the inference of a real or expected price as contrasted with a shock or phony price. The shopper expects to see 19 not 20 cent prices. The latter is not as "real" as the former and becomes subject to suspect on those items customarily priced in odd-cent units. If the advantage of 19¢ or 20¢ lies in the inference of a bargain, then one might logically assume 18¢ to offer some advantage over 19¢ but this, although of a greater percentage difference, appears to have less impact. In fact 18¢ is so unexpected, so unreal that 20¢ prices are often more effective in stimulating sales.

There is strong evidence to suggest that the bulk of odd-cent pricing results from "me tooism" more than in planned merchandising. For example, witness the number of advertisements exhorting the shopper to save $2.98! Certainly such practice does not stem from an intent to infer great savings. Last year my car dealer, after privately pushing the pencil a bit, said he could allow me $1995 on my old car. I got nothing but a blank look when I told him he was buying not selling. Further evidence of extensive emulation is the common usage of odd-cent pricing on prestige items and in prestige shops. The kind of pricing appropriate to Saks Fifth Avenue may well not be appropriate to Saks 34th Street.

It is amazing that so little research on the subject of odd-cent pricing has been done. The lack of such work and the common reference of the merchant to "experience" leads one to wonder how much we "know" that is simply not true. How much of our "experience" is the result of forcing unfounded beliefs on the market? What proportion of shoppers draw little distinction among 17, 18 and 19¢? What proportion regard 19 and 20¢ as essentially the same? Definitive answers obviously depend on many variables such as shopper price awareness and sensitivity toward different products. As we discuss the principles of product pricing it is well to keep in mind the distinction between awareness and sensitivity. There may be awareness without sensitivity but there can't be sensitivity without awareness. Anyway, in the absence of good pricing research much subjectivity, conditioned by personal bias, will dominate our pricing decisions. But even with good research there will remain the danger of taking particular findings and generalizing them inappropriately. Even so the more we can learn about and classify product characteristics and relate segments of consumer pricing response to such characteristics the more pricing can be used in gaining competitive advantage.

One of the most intriguing aspects of psychological pricing lies in its role of building a quality image. It is intriguing because it seems to run counter to accepted economic doctrine...counter to that which we would expect. As products become more numerous and technical, shoppers place an increasing trust in price and a decreasing trust in their senses in the judgement of quality. There are many examples in which sales volume has been increased by raising prices. Many writers have mistakenly identified this as a "reverse" or positively sloping demand curve. In doing so they fail to distinguish between the role of price as a rationer of quantity in its true economic sense and as a builder of value in a psychological sense. In the latter case we are really talking about two distinct products differentiated by means of price. Each has a distinctive negatively sloping demand curve. I have delved into the academics of this because the effective use of premium pricing depends not only on an awareness of the distinction but also on a keen sensitivity of the economic limits within which it operates.

At first thought the merchant may regard premium pricing as inappropriate to his business, until he realizes that indiscriminate and universal price discounting also has psychological effects in detracting from his quality image. Skillfully used premium pricing can offset or prevent such occurrence. It is most aptly applied to "low demand" products for which there is high price-awareness and low price-sensitivity...to products which normally vary in quality. Shoppers expect quality and price to be related. In a very real sense quality and price are partners. Either can build or destroy the other both in the shopper's mind and in reality. Manufacturers who cut price often find it necessary to cut quality which leads to further price cutting. Shoppers like bargains but they dislike the thought of being cut short on quality.

Quality is judged by price in a number of different ways. Price tends to be used as a substitute for product information and this is particularly significant in self-service marketing where there is an absence of help or advice from sales personnel. In another way shopper evaluation of a product is related to the effort spent in shopping. Subconsciously the shopper recognizes money as stored expended effort. The expenditure of money is thus substitutable for the expenditure of effort which in turn is related to product evaluation. In terms of rationale it gives the shopper reason for trading up in price. Another well-known reason for trading up is snob appeal or social conformance which has primary play with luxury items and items for which there is a high degree of price awareness. And finally there is a risk element related to some products. Component parts, in particular, offer an illustration. For example, a shopper may be reluctant to use cheap paint on an expensive house or a low cost part on a new car. The risk is greater than the price sacrifice.

Some twenty years ago an associate of mine published the results of a market test he had conducted on the consumer acceptance of tree-ripe versus green-ripe peaches. He reasoned that it would cost about 2¢ a pound more to market tree-ripe peaches so he ran his test by offering shoppers tree-ripe along side green-ripe with the former priced 2¢ a pound higher. He concluded that two-thirds of the shoppers were willing to pay 2¢ more for tree-ripe peaches. I argued that he didn't know whether or not people bought tree-ripe peaches because of their ripeness or the higher price he had placed on them.

Like most arguments over prices we got nowhere so we set up an experiment in 12 supermarkets. Peach season was over so we used apples setting up paired displays of identical apples priced at 2 pounds for 19¢ and 2 pounds for 23¢.

Early one Monday morning we set up the first store. A graduate student and myself had first put up price signs and were busy stocking the counter from a common shipping container when the first shopper appeared on this peculiar scene. I was stocking the high-priced side and the graduate student, the low-priced side. The shopper looked at the price signs and at the common shipping container then looking at me she said, "What's the difference?". The graduate student quickly came to my rescue saying, "These are 2 pounds for 19¢ and these are 2 pounds for 23¢," whereupon the shopper proceeded to pick up 4 pounds from the high-priced side. Over a period of 3 weeks in 12 stores 40 percent of the sales' volume was in high-priced apples.

We then offered apples in half the stores at 19¢ and in the other half at 23¢. After 3 weeks we reversed the prices. Our sales' volume was greater in the 19¢ stores than in the 23¢ stores as you would expect. But with the size of display held constant sales in either case were not as great as they were when both prices were present.

Except for experimental purposes one might question the propriety of simultaneously offering the same product at two different prices. Much depends on our attitude and established beliefs concerning the role of price. If we look at price only in its strict economic sense, we arrive at a conclusion quite different than if we recognize the psychological value-adding function of price. Why did the first shopper buy 23¢ apples? We can find an answer only in our own minds by rationalization but the true answer never will be known. How much of her satisfaction or evaluation of her purchase would have been destroyed by the absence of 19¢ apples? The fact that a false inference of quality may have influenced some purchases certainly does not mean that it influenced her purchase. If it is morally wrong to differentiate price on identical products what cost or action is necessary to justify any given price difference.

The inference of such dual pricing is significantly altered when differently priced products are mixed in the display. Our research shows that .7 percent of all items in food supermarkets in the States appear mixed on the shelf with two different prices. While this is the result of errors resulting from poor pricing management it is interesting to note that a substantial proportion of the lower priced product is sold first. Most of this is with uniformly packaged and branded product. We have found that we can actually increase sales of a product at its regular price by blending in some units at higher prices. This was done, not in advocacy of a merchandising technique, but rather to study the many peculiar inferences price has to the shopper. But even here the causes of shopper behavior must be rationalized. Unfortunately, systematic research in this whole area is very limited.

The reason I have explored this aspect of price with you in some depth is not only to show how price relates to quality but also to demonstrate the use of price lining which is but a second cousin to dual pricing. In my opinion Sears & Roebuck, a mail order house in the States, offers one of the most dramatic illustrations of how price lining has been used to raise the entire quality image of the firm with good, better and best product price lining. Direct, in-store comparisons are used to establish product values.

Before leaving the subject of premium pricing I would make the observation that most cases of premium pricing in the marketplace seem to be more the result of cost inefficiencies or differences than the direct result of intentional price management. Some firms have established a quality reputation only because they are inefficient in their production. Few have established such an image by the deliberate management of price. I have definite knowledge of only one manufacturer of a quality product which intentionally maintains its prices above its major competition. This company which attempts to hold its prices at no more than ten percent above its major competition finds that it loses market share when it exceeds the 10 percent level as well as when its prices fall below that of competition. It's difficult to sell quality products at bargain prices.

At least it's difficult to convince the shopper that this can be done. This strikes at the very heart of the mass retailer for it is both his challenge and aim.

Of course, the mass retailer has a much more complicated pricing job on his hands for he is concerned with selling a very broad product mix. He must manage price in such a way that it attracts shoppers to his outlet but at the same time does not destroy either his performance or quality image. His most potent tool for doing this is the one used by all merchants, that of price specialing.

There is a certain antinomy between maintaining an impressive price image and that of specialing. How can a retailer offer minimum prices on all products and yet offer some of them at still lower prices on special? This appears to be a question that seldom bothers the logic of the shopper. Stores that advertise everyday low prices still do extensive specialing. By way of justification the merchant often plays up a special deal from the manufacturer or some other circumstance which seems designed more to ease his own mind than that of his customers.

The most attractive specials are on those branded items frequently purchased. On such items there tends to be both price awareness and sensitivity but the temptation to continually special certain key items can and often does lead to a high price image for those items as well as for the store. In the food field meat is often the key special item and consequently has a high price image in the consumer mind. In a very real sense it may be said that the continued specialing of meat has in itself built the price image for this product that makes the specialing of this product effective. Original variations in quality and supply may have been the force to set the practice in motion. The point I want to make is that it is wide variations in price over time that create price sensitivity and establishe a high price image. Retailers constantly run the risk of seriously endangering their overall price image with excessive specialing. To a large extent this depends on the competitive environment in which one operates.

Price, of course, is only one of the components of specialing. Closely allied to price are the merchandising functions of advertising and special display. It is not realistic to look at one out of context of the others. A number of years ago I undertook an elaborate and comprehensive study of the interaction of these forces. It was done for a manufacturer of five different nationally branded consumer products. As variables in our test, we used a 10 percent discount in price, special end-aisle displays and newspaper ads illustrating the product. We tried all eight possible combinations of these on all five products over a period of a year. Although these household products all had different consumer end-uses, they all yielded remarkably similar results. We found that the sales' effectiveness of display, price and advertising occurred in the ratio of 5:3:1 in all cases. Independently, display was most effective and advertising the least. In terms of interaction special display contributed three times more impact than advertising to the effectiveness of price specialing. Used together advertising and display contributed 20 percent more impact than the sum of their independent influences. In other words the simultaneous use of any mix of those three factors always yielded sales that were greater than their sums when employed independently.

This same study also yielded an unexpected result which subsequently has been used in the measurement of brand loyalty. We found that the promotion of one national brand instead of cutting into the sales of a competing national brand often had a positive effect on the sales of the unpromoted brand though not nearly to the extent of the promoted brand. In other words when Brand A was promoted, the sales of Brand B also increased though to a much lesser extent. Thus by alternately promoting the two brands and measuring the sales' effect on both brands an index of brand loyalty is identified. Since then we have done this with 18 different items in the food field and find the index yields positive sales of the competing brand in 15 of the 18 cases. The best known brands tend to be the major beneficiaries of their competitors' promotional activity. While I have only skimmed the surface of this research the implications to the merchandiser in selecting promotable items should be apparent.

Another kind of price merchandising which you all recognize is that of pricing products in multiple-units. While very common today it is relatively new on the pricing scene. Extensive use of it has taken place in the past thirty years. As a general principle, it can be said that shoppers tend to buy the number of units for which price is quoted. Of course, this varies widely with different products depending on appropriateness and custom. If you price eggs at 3¢, each shopper will still buy a dozen eggs. Custom dominates the suggestion of price in this instance but in many instances the suggestion of price is so strong that shoppers will shift their purchase to alternative products rather than depart from the size of purchase suggested by the way the product is priced.

Some years ago I had 28,000 shoppers observed buying apples. We systematically rotated different sizes of pricing units over a set of stores at different times. We offered apples in combination bulk and package displays so the shopper could conveniently buy any quantity. We priced the product in units ranging from 2 to 10 pounds. When we priced apples in 2-pound units, 77 percent of all apple purchases were in 2-pound units. At 4 pounds for a price, 91 percent of all purchases were 4 pounds. At 5 pounds, 89 percent; at 6 pounds, 81 percent; at 8 pounds, 64 percent; and at 10 pounds, 47 percent of all shoppers who bought apples bought 10 pounds even though this was far in excess of normal pricing practice. Beyond the six pound unit there was an increase in the proportion of shoppers who shifted to the purchase of bananas. It was apparent that some shoppers shifted their buying to a competing product rather than break away from the size of purchase suggested by price. The optimum size unit for merchandising in this case depends on who you are talking about -- the retailer, the shopper or the supplier. If the retailer wants to satisfy the maximum number of shoppers, his optimum is 2 pounds but most shoppers' wants are maximized at 4 pounds. The supplier who wants the maximum tonnage realized is best served by pricing in 6-pound units. The trouble is that most merchants do not know what they want to accomplish with their multiple pricing. Is it to satisfy the maximum number of people or to optimize the satisfaction of the greatest number of shoppers or to sell the maximum volume of a given product. The answer is to be found in whatever objective might be chosen and the margins that may be realized from a particular item as well as the impact on store image.

A precise study of psychological pricing requires attention to meticulous detail. It requires not only organized observation of shopper behavior but also a perceptive interpretation of that bevavior. If one is to take full advantage of psychological pricing, he must guard against being influenced by personal biases resulting from: (1) strong indoctrination with economic theory, (2) the natural tendency to be impressed and influenced by observation of the unusual, (3) the vocally expressed rationalizations of shoppers and (4) a thing called experience which in reality is but a reaffirmation of personal bias giving shoppers no viable alternatives to which they may respond.

Management commonly wants simple answers to complex problems. Psychological pricing must be recognized as a competitive weapon and the appropriate use of it depends on business aims, product characteristics and the particular segment of the trade served. Any generalized or universal application alters the competitive environment which in turn alters the opportunities in psychological pricing. That is why such pricing never can be reduced to simple formulae -- the very antithesis of good merchandising.

I began this background paper with reference to prices in theory and in practice. Over the years economists have developed an elaborate body of pricing theory. But the concepts of supply and demand and their elasticities, utility, marginal and average costs, break-even analysis, diminishing returns and the like have little practical meaning to the businessman other than to give him a general idea of the forces at work in price making. On top of this the assumptions, implicit in theory, are far removed from the real world. Even if the conditions imposed by theory were applicable the information needed in price making according to theory are seldom available. Even so economic theory has had a profound effect on the actions of the businessman.