The 20th publication in a series of subject presentations in the field of administrative management for use by educators and businessmen who teach management courses is presented. These presentations are intended to be particularly useful to Distributive Education in the smaller community where library research facilities are limited and equipment for the production of visual aids is not readily available. The lecture is designed to be presented to the businessman in nontechnical language. The Lesson Plan is an outline of the material covered which may be used as a teaching guide. The Presentation may be used as written or modified to meet local needs and conditions. The Visual Aids are photographic copies of the set of visual aids which are available for this topic. These visuals are 8- by 10-inch colored transparencies prepared for use on overhead projectors. The Supply Department contains materials which may be reproduced locally for distribution to course participants. Cases in Points are short actual small-business management cases which may be used to augment the presentation and to develop discussion. The Incubator contains ideas for stimulating further thought and discussion by the participants. A bibliography and list of Small Business Administration field offices are included.
MERCHANTISE

PRICING

INSTRUCTOR'S MANUAL
MANAGEMENT DEVELOPMENT PROGRAM
SMALL BUSINESS ADMINISTRATION

TOPIC TWENTY

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in the
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PROGRAM
Small Business Administration

Packaged presentations on a variety of business management subjects are available on loan, from SBA field offices, to cosponsors of management training for small business owner-managers. A set of overhead transparencies, a Focal Points brochure, and a training film (for most of the topics) form parts of each package. The topic number and title of Instructor's Manuals now available in each of two series, with the price of each and sources for purchase, are listed below.

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19 Pricing In a Services Business 1.25
20 Merchandise Pricing

(Additional titles are in process.)

These manuals are for sale from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402; or from the U.S. Department of Commerce field offices. Catalog No. SBA 1.24
MERCHANDISE

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Jackpot
This Instructor's Manual on a major management subject is intended to help preserve and enhance the competitive position of small business through our Small Business Management Development Program. The program was developed by the Small Business Administration to bring sound management principles and modern techniques to owners and managers of small businesses.

The cooperation of educational institutions and business associations throughout the Nation has made possible the rapid progress of this management education undertaking. From the beginning of the program when two courses were cosponsored by SBA in 1954, the program has grown to the point where more than 2500 courses, conferences, problem clinics, and pre-business workshops are now cosponsored by SBA annually. Approximately 14,000 present and prospective small business owners and managers attend. Cosponsors include universities, colleges, distributive education units, trade and professional associations, and local business and civic organizations. The number of cosponsors, training programs, and attendants is increasing each year.

"Merchandise Pricing" is the twentieth instructor's manual in two series of subject presentations designed to strengthen and improve the management capabilities of small businessmen through management education and training. These manuals are prepared for coordinators and instructors of SBA cosponsored management training sessions, but may find application in a wide range of training situations.

This manual presents, for educators and businessmen who teach management to small business owners and managers, a complete subject presentation for one or more training sessions. The package includes a lesson plan, text, visual aids, handout materials, problem cases, study assignments, and a bibliography.

A packaged form of this kind of material has proved valuable in establishing new and in maintaining existing management programs. It emphasizes the importance of continuing education for the small business owner-manager, and offers methods and tools for speedier, more successful endeavors. It also assists the busy instructor in his preparation.

The author of this instructor's manual, Paul A. Litecky, is founder and president of an audiovisual firm and is a recognized specialist in business communications. Art work and visuals were designed by SBA's James W. Truett, Jr.

This publication was prepared with the supervision of Dr. Weston R. Clark, Training Specialist, and the administrative direction of Wendell O. Metcalf, Chief, Education Division, Office of Management Assistance.

May 1970

Small Business Administration
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*A set of the transparencies and the film are available from the nearest SBA field office (see inside back cover for listing). The 11-by-11-inch colored transparencies are for use with overhead projectors.

**Among the materials selected as "handouts" to participants are several SBA free publications. Current information on the availability of suggested and new SBA publications may be obtained from an SBA office.
A Word About This Manual

This instructor's manual was prepared for use by instructors and discussion leaders in conducting one or more sessions of SBA cosponsored small business management training on merchandising pricing. It has wide-range applicability in management education and training situations. Use can be made of it in management courses, conferences, problem clinics, and in supplementing the SBA package of materials provided workshops for prospective small business owners.

Sufficient lecture material is contained in the manual for a 45- to 60-minute presentation interspersed with 16 transparencies. When combined with the SBA film "Purchasing, Pricing, Inventory Control," adequate discussion, and possibly the Case Study, a comfortable 2- to 2½-hour session is feasible. Should multiple sessions be desired for more extensive and in-depth treatment of the subject, the Suggested Incubator Assignments, selected items from the Supply Section and information drawn from the bibliographic sources could be beneficially utilized.

However, should time limitations necessitate shortening the presentation, selected changes are feasible, such as condensing Sections IV and V, and possibly Section III. Such modifications could be made without destroying an effective treatment.

It is expected that instructors may wish to revise the lecture material according to their background and experience in the subject area. They may also find it desirable to supplement or modify the treatment to meet more effectively the training or special needs of their participants.

This subject can best be handled by one who has specialist knowledge in merchandise pricing, is familiar with small business, and is experienced in conducting training sessions for small business owner-managers.

Persons or organizations interested in sponsoring management education and training for small business owner-managers will find that much of the work involved in subject preparation has already been done. This is found in the packaged subject presentations, designed for instructors. For those who cosponsor training with the SBA a selection of needed instructor's manuals may be provided on loan from the nearest Small Business Administration field office. Available with each manual are a set of 11"x11" transparencies in color for overhead projection, and a Focal Points leaflet for distribution to potential and actual participants. Also available from SBA offices are a management training film for most of the topics and a guidebook for coordinators of management training for small business.

SBA field offices are listed on the inside back cover of this publication. Titles of available Manuals appear on the inside front cover. Single manuals or complete sets may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

The various sections of this manual are separated by divider sheets of different colors. These colors are given here and the contents of the sections are briefly described.

Gray—The Lesson Plan. An outline of the material covered which may be used as a teaching guide or as a framework for developing an individualized presentation. The lesson plan
contains two columns: the left-hand column is an outline of the presentation; the right is a step-by-step guide to the visual and audiovisual aids supplied.

Rust—*The Presentation.* A carefully prepared lecture presentation which may be used as written or modified to meet local needs and conditions. It may also be used as a source of information by a person preparing his own lecture.

Buff—*The Visual Aids.* Photographic copies of the set of visual aids which are available for this topic. These visuals are 11" x 11" colored transparencies prepared for use on overhead projectors. The lecture presentation and lesson plan are keyed to the visuals. A brief description of the SBA training film titled, "Purchasing, Pricing, Inventory Control" appears in this section. The film and a set of transparencies may be borrowed from the nearest SBA field office.

Green—*The Supply Department.* Materials which may be obtained from SBA field offices or reproduced locally for distribution to training participants. The Focal Points leaflet is usually available in quantity and may be useful in promoting attendance for a scheduled session and as a handout item. Your nearest SBA office can furnish information on current availability of SBA free publications, including titles published subsequent to this volume.

Yellow—*Cases in Point.* Short actual small business management cases which may be used to augment the presentation and to develop discussion, or as the basis for a second session on the same topic. One such case is presented.

Blue—*The Incubator.* Ideas for stimulating further thought and discussion by the participants. This material may be reproduced locally for distribution to training participants. "Assignments" are designed to aid in retention of the subject matter of the session.

Note: See back cover for index reference to the divider sheets.
INSTRUCTIONAL SUGGESTIONS

FORMAT SHOULD BE STIMULATING

Use The Three B’s

- Base instruction on problems of learners level.
- Blend instruction with job experience.
- Brighten instructions with variety of illustrations, investigations and group participation.

FOUR BASIC STEPS OF INSTRUCTION

Instructing is like selling --

Instructing

1. Prepare the group
   - Start on schedule
   - Put group at ease
   - Awaken interest

2. Present information
   - Gauge material to needs
   - Present one point at a time
   - Show, illustrate, question

3. Have group participate
   - Get members to discuss
   - Have members demonstrate or use ideas
   - Answer questions and correct errors

4. Bring meeting to a close
   - Check on understanding; ask: “why”, “how”, “when”, “what”, “where”, “who”
   - Be sure group now can use information
   - Summarize “take away” ideas
   - Make a definite conclusion
   - Pave way for next session

Instructing

1. Approach customer
   - Promptness
   - Put at ease
   - Awaken interest

2. Present merchandise or service
   - Select merchandise to fit need
   - Show one item at a time
   - Demonstrate selling points

3. Have customer take part
   - Get merchandise into customer’s hands
   - Let customer “try on” merchandise
   - Answer questions and meet objections

4. Bring sale to close
   - Help customers decide; ask: “which”, “for whom”, “when”
   - Be sure merchandise fits need
   - Summarize points of care and use
   - Handle mechanics of sale
   - Pave way for return visit
How To Deal With "Difficult Customers"

THE "MOUTH"—wants to do all the talking.

What To Do

Take the play away from him by asking others to comment on his remarks.
Deliberately turn to others and ask for their opinions.
Avoid looking at him.
Tactfully ask him to give someone else a chance, or talk to him in private.

THE "ARGUER"—continuously tries to catch you up.

Keep cool. You can never "win" an argument.
Always make him back it up. Ask for evidence.
Avoid getting personal.
Refer the question to the group and then to him.

THE "MOUSE"—is in every group.

Call him by name and ask him for an opinion. Ask him an easy question he is sure to answer well, then praise him. This person is worthy of your attention.

THE "SO-WHATER"—is disinterested.

Point up something he has done as a good example of the point being stressed. Ask direct questions affecting his work.
LESSON PLAN

Topic: MERCHANDISE PRICING

Objectives: To identify and evaluate factors involved in making correct pricing decisions.
To identify and examine common methods used by successful retailers in setting correct prices.
To establish guidelines to aid in correct pricing.

Outline of Session Content

I. Importance of Merchandise Pricing
   A. How much is enough?
   B. Pricing as a key factor in business success

II. Basic Approaches to Pricing
   A. Full-cost approach to pricing
   B. Flexible approach to pricing

III. Popular Methods Used in Pricing
   A. Full-cost pricing
   B. Flexible markup pricing
   C. Going rate pricing
   D. Gross margin pricing
   E. Suggested pricing

IV. Some Fundamentals of Effective Pricing
   A. The markon goal
   B. Item pricing
   C. Multiple pricing
   D. Price lines
   E. Price zones
   F. Repricing
V. Factors That Influence Pricing Policy

A. Individual flexibility
B. Changing economic conditions
C. Longrun welfare of the store
D. Complementary sales
E. Market research information
F. Product's life cycle

VI. Longrun Pricing Policy

A. Long-range goals
B. Shortrun pricing sequences

Show SBA film, "Purchasing, Pricing, Inventory Control"

VII. A Reasoned Approach to Pricing

A. Price-volume relationships
B. Contribution to overhead and profits

VIII. Importance of Adequate Records

IX. Summary
IMPORTANCE OF MERCHANDISE PRICING

Not too long ago a harried young businessman came into a field office of the Small Business Administration with a problem. He was looking for advice on pricing the merchandise in a small variety store he was opening.

**How Much Is Enough?**

"The major trouble with pricing starts right at the beginning," he lamented. "There you sit, pen in hand, invoices in the other, and you don't know quite how to start. So you study the blank price tickets in front of you, and you try to figure it out. How much is enough?"

*(Show Visual #1.)*

![Visual No. 1](image)

And he should have been concerned, for the answer to his question literally can mean the difference between success and failure in his business venture.

**Pricing as a Key Factor in Business Success**

In fact, for any businessman, one of the most important factors in the continued success of his business is an effective approach to pricing. The merchant must be sensitive to changes in purchasing habits, and the acceptance by his customers of his pricing methods. He must be careful, for example, not to overprice an item, for this limits the number of units of this merchandise he will sell. At the same time, he must be aware that if he underprices his merchandise, he is losing important dollars that should be adding to his profit. What is the "magic" formula that will keep the merchant from making either of these mistakes? There isn't one. But there is a good measure of protection in understanding something about pricing methods, and adapting some of them to the specific requirements of the individual business enterprise.
BASIC APPROACHES TO PRICING

Before we examine a cross-section of popular pricing methods, let's take a look at the two fundamental approaches any merchant can take in developing a pricing policy.

(Find Visual #2.)

FULL COST APPROACH

Visual No. 2

FULL-COST APPROACH

APPROACHES TO PRICING

Visual No. 2

Full-Cost Approach to Pricing

One way to determine price is to first take into consideration every single item of running cost, such as rent, utilities, salaries, delivery costs, and returns. Next, add the cost of the merchandise under consideration. And to this total, add a percentage high enough to provide a "reasonable" profit.

(Find Visual #3.)

Visual No. 3
This is a rather mechanical approach and does have a certain appeal, since it simplifies the decision-making process with different lines of merchandise. Simply add up the costs, add on the percentage, and there is the price. And the boosters of this pricing approach point to the "protection" that is built into the system. If all costs are taken into consideration and a profit is put on top of it, the merchant must make money whenever he sells any of the merchandise. But there, in a nutshell, is the key to making a profit— the merchandise must be sold. Quite often, using such a rigid, inflexible method leads to prices that are somewhat higher than the competition is charging for similar merchandise. And sales that are expected don't really occur.

A recent study of the pricing practices of a number of businesses indicated that even those merchants who claimed to always use this rigid approach to pricing made a number of compromises when business was slow. It became apparent that a flexible approach was more acceptable to the firms under study. And a flexible approach seems to be the preferred solution to most pricing problems.

**Flexible Approach to Pricing**

Many merchants consider a wide range of possible influences when setting their prices.

*Show Visual #4.*

**Observes Customers' Choices**

For instance, they observe their customers, and try to figure how many more bars of soap they can sell at 21 cents than they usually sell at 24 cents. If the increase in sales is enough to offset the price reduction, they act accordingly.

At the same time, they consider the other side of the coin— perhaps raising the price of a particularly good piece of merchandise will not influence the number of sales very greatly— but the unit profit will be much higher, and total profit for the month for that merchandise will show a significant increase.

Or perhaps the "other" store carrying similar merchandise is selling one or two items at a considerably lower price. The merchant who is following a flexible pricing system can move
to match the low prices on this merchandise, while adjusting the prices on other lines of goods to compensate for the lowered profit.

A flexible approach provides an ideal basis for price determination, permitting rapid changes as may be necessary.

As we examine specific pricing methods, look for features of any of them that seem particularly suited to your own business venture. And remember that, with a flexible approach to pricing, any or many of them in combination may be adapted for your own requirements.

POPULAR METHODS USED IN PRICING

Over the years, retail merchants have developed a number of popular methods of determining prices of their merchandise.

(Show Visual #5.)

MY MISTAKE, I THOUGHT THIS WAS A COURSE IN PRICE-FIXING.

Let's examine five of the most common methods, one at a time:

- Full cost pricing
- Flexible markup pricing
- Going rate pricing
- Gross margin pricing
- Suggested pricing

Full Cost Pricing

Many businessmen take the view that the price on each product sold in their store must cover all the costs of that particular product. This means that the price set will include labor, materials, overhead costs—including procurement expenses—and a predetermined percentage for profit. For example, a furniture manufacturing company determines its direct labor and material costs, and adds a fixed percentage to arrive at a price figure. A grocery store manager may apply the same formula. He calculates his actual costs to purchase an item, the pro-rate
share of fixed expenses for the space that the article will occupy on his shelves, and adds his "standard" markup to the article, thus arriving at the sale price.

However, rigid adherence to this method of pricing is the exception, rather than the rule. Many small businessmen profess a liking for the full cost pricing policy, but when it comes down to really establishing their prices, their decisions are influenced by a variety of factors, not the least of which is consumer demand.

Flexible Markup Pricing

A more common practice is to use these same full costs as a guide to establishing a "floor," below which average prices are not allowed to fall. It becomes a reference point, and the merchant works from it with flexible markups. Thus, the merchant who follows this method of price setting can adjust to the changes in consumer demand (or competition) while still protecting himself from errors in pricing his merchandise too low.

Going Rate Pricing

For some types of business, there are other circumstances under which pricing does not involve reference to cost estimates. While these firms do not ignore costs in their pricing, considerable emphasis is placed instead on competition, and the prices people are willing to pay. A good example of this would be a nursery. Costs are rather difficult to determine because of the time it takes for plants to mature, and the variable effects of weather on crop yield. Consumer demand, as well as competitive conditions, appear to be the key influence in pricing this merchandise. Management must pay considerable attention to what competitors in their own locale are charging. Markup has relatively little meaning because of uncertain costs.

In another example, a radio and television repair shop, the owner charges a standard price on every service call and each shop job, without regard to time put on the job. Naturally, this practice does not involve the use of a markup on each job.

It becomes obvious, therefore, that when it is difficult to determine either full cost or wholesale cost of an item, markups cannot be used effectively in price determination. Analysis of the firm's profit and loss statement may indicate the necessity for price changes, but one cannot readily say that a specific percentage of margin figure can be applied in the pricing.

Gross Margin Pricing

Many retail firms determine their prices on the basis of wholesale costs rather than full cost. They add a markup—sometimes referred to as gross margin—either as a percentage of wholesale cost or as a percentage of the retail price.

While these markups reflect costs, demand influences, regional purchasing habits, etc., the point is that estimates of these various costs do not normally enter into the pricing decision.

For example: A variety store may classify certain items as "competitive" and add a 50% markup over the wholesale price. On other non-competitive items, a 100% markup may be applied to the wholesale price.

Firms using the gross margin method of pricing usually do not apply the same margin on all items and do not use the same margin at all times. It is more profitable to the store management to take into account the effect of different prices on sales volume. Careful analysis reveals which items will bear high markups and which require low markups for desired sales volume.
Suggested Pricing

Another simplified approach to pricing that is often adopted by small firms is to follow external guides. One example of this pricing practice can be seen where retailers accept price suggestions by manufacturers or their wholesale suppliers. In these cases, there are, of course, management attempts to keep overall costs in line with profits from normal sales volume.

SOME FUNDAMENTALS OF EFFECTIVE PRICING

Any of the common methods of pricing may be the logical and effective method to use under a specific set of circumstances. But it is much more important to develop a way of reasoning about prices than to adopt a specific set of inflexible rules. Rules, once set up, tend to become stagnant, and often remain in effect as a "habit," even when they no longer apply rationally. Sound reasoning, on the other hand, adjusts to differing or changing circumstances.

(Show Visual #6.)

Merchandise is expensive. Space to store and display this merchandise is also expensive. This means that any merchandise not moving off your shelves costs you money instead of making you profits. So let's consider some of the fundamentals of effective pricing. We can begin by setting a few prices on merchandise in your store, and see what happens.

The Markon Goal

Markon goals should be set for each line of merchandise a store will handle. What is markon? The two terms markon and markup are used interchangeably, and are usually taken to mean the same thing. To clarify the terms: Markon—or markup—is the difference between the cost price and the retail price at which a merchant plans to sell an item of merchandise.

A proper markon will achieve the following desired results:

- Cover operating expenses.
- Cover transportation costs of merchandise to store.
- Provide for expected markdowns.
- Provide net profit for store.
- Inspire good turnover.

To set a markon goal for any of the lines of merchandise you may handle, you can make use of a simple formula:

\[
\text{Markon} = \frac{\text{Expenses} + \text{Operating profit} + \text{Reductions}}{\text{Sales} + \text{Reductions}}
\]
Let's set up a projected Sales volume of $10,000. We'll assume that careful forecasting indicates that Expenses for the time period under discussion should amount to $3,000. The Operating profit we desire for this merchandise is $400. Reductions will include both markdowns of seasonal merchandise and inventory shortages. The estimate for Reductions is $500. The formula then becomes:

\[
\frac{3,000 + 400 + 500}{10,000 + 500} = \frac{3,900}{10,500} = 37.1\%
\]

Thus, using this simple formula, we can determine that a markon of 37.1% of retail or selling price will be required to achieve the desired goals. For other merchandise in the store, substitute appropriate figures and the calculation can easily be made.

**Item Pricing**

Markon can never be considered to be automatic. The store owner or manager cannot follow blindly any mathematical calculation.

(Show Visual #8.)
For instance, if an item costs $6.30, with our "standard" markon of 58.98% (of which is equivalent to 37.1% markon based on the retail or selling price) * the item should sell for $10.01. But if it is a particularly good item, it may readily bring $10.95. In another case, perhaps it will be a slow mover at even $10.01, but at $8.95 it may move in tremendous quantities, and bring in enough sales volume to justify its price reduction.

So you see, setting a markon goal doesn't end your pricing problem. It simply gives you a general guide to use in establishing your initial markon. Pricing has often been referred to as an art, and you must develop the skill to weigh volume possibilities against customer resistance, variable expenses and reductions.

One effective way to approach the pricing of individual items is to take the planned merchandise line markon and apply it to the article under consideration. Let's take a $4.85 item at cost, and apply our 58.98% markon. The "normal" price of the item would be $7.71. Now, let's examine the item a bit more. Is it a highly speculative item? Does it carry the risk of a large seasonal markdown? Will it move slowly? Then, to assume a reasonable profit, you will have to set a higher markon.

If you have past experience with this particular type of merchandise, you can base your reasoning on past performance. If this is your initial venture with the product, adroit questioning of your suppliers, or your merchant's association, or even shopping of your competition will aid you in setting the price. Careful analysis of the sales performance of the item will aid you in pricing for the following season.

Of course, the reverse could be true—if the item is a fast mover, the risk is low, and perhaps even expenses will be lower with the increased rate of turnover. So you may wish to price the item below your "normal" retail.

Many merchants establish a range of markon within which they try to operate—often 5% above and below their calculated "standard." Analysis of their cost and sales records then indicates any tendency to price too high or too low, and adjustments then can be made accordingly. While at first glance this may seem to be a "sit and miss" approach, in reality it is a very workable system, based on sound judgment factors, and then checked by the merchant's own comprehensive records.

**Multiple Pricing**

When pricing items that are commonly bought in multiples or sets, it is very desirable to develop multiple prices, to offer the customer the opportunity of paying less for a "set" or specific common quantity than for the same merchandise purchased individually. Typically, this would include the "57 cents, 2 for $1" type of pricing, or "$1.70 each, 3 for $5".

---

*Conversion from markon at retail to markon at cost is as follows:

\[
\text{Cost} + \text{Markon} = \text{Retail} \\
62.9\% + 37.1\% = 100\% \\
\frac{37.1}{62.9} = 58.98\% \text{ (Markon based on cost)}
\]
The slight loss of markup is more than made up by the increased value of the sale. Quite often the handling expenses for the multiple sale will be no more than for the individual sale, with resulting increased profits.

A wise merchant will carefully review all of his regular merchandise to determine where multiple pricing could stimulate his sales volume.

**Price Lines**

When a shopper has not decided in advance exactly what she wants, the merchant can help stimulate sales by presenting an assortment of types, styles and colors for her perusal, all at the same price. Thus, she can pick and choose, uninfluenced by small differences in price.
This substitution of single price, like $1.95 instead of a variety of prices—$1.98, $2.05, $2.00, or $2.09—is called setting up a *price line*. Using price lines proves invaluable to the merchant, because it enables him to offer complete assortments of merchandise at a limited number of prices rather than to invest in many incomplete stocks of merchandise at a wide variety of prices. Price lines offer the additional advantages of simplifying merchandise buying, and making easier the determination of correct retail prices for individual items.

How many price lines to carry depends upon the individual store, its customers' purchasing habits, and competition. Studies have determined that the largest volume of sales in any merchandise line is usually realized in relatively few price lines. Fewer price lines usually means increased volume, more store goodwill, better stock control, faster turnover, decreased markdowns and an increased net profit.

*Price Zones*

Sometimes the merchant is faced with maintaining a number of price lines, each one representing only a small proportion of store sales, but in their combined total representing a volume or clientele that the store does not wish to lose. In such a case, it may be possible to treat this group of price lines as if it were one, and thus substitute a *price zone* for the represented merchandise. The assortment of sizes, colors, styles and types is then calculated for the zone instead of for each price line.

Very often, these *price zones* can be seen in the purchasing pattern of the store's customers. And in any store, there are usually three zones where purchasing volume is concentrated.

*(Show Visual #11.)*

Zone "A" is the high volume zone, normally in the middle of the store's pricing range, and often accounts for half to three-quarters of the store's sales volume.

![Visual No. 11](Image)

Zone "B" is the promotion zone, generally centered around the lower cost items in the store. Depending upon the clientele of the store, this zone may account for any amount of volume, even up to 50%.

Zone "C" is the prestige zone, normally the highest priced merchandise, and accounting for a relatively small volume of sales.

So, pricing of merchandise then begins to fall into certain proven patterns. If the merchant
studies his store's clientele, and analyzes their purchases in terms of price lines and price zones, he can build an effective pricing system that conforms to his marketing requirement.

Repricing

The wise merchant keeps a close eye on swiftly changing consumer demands—not only from year to year, but from season to season, and even within a season. An item that is "hot" at the beginning of the season may be almost impossible to move by the end of the season. Fashion goods point to this problem—delays in taking markdowns often lead to heavy end-of-season losses. Repricing—taking a small markdown—early in the season in this case can stimulate buying interest when many customers are still in the market. Late in the season only very drastic price reductions attract shoppers.

Another instance where repricing is important is when replacement costs of merchandise increase. Some merchants neglect to mark up the merchandise on their shelves when replacement costs rise. Thus, they are often retailing merchandise at a price equal to or even below what it will cost them to replace it.

An effective way to keep track of the efficiency of your repricing is to list all of your intended price changes on a small chart that becomes part of your permanent records. Then, make a monthly comparison of the markdowns you actually take. This comparison will show up any tendency to wait too long before you take your markdowns. It will also help prevent taking markdowns too early in a slow season.

FACTORS THAT INFLUENCE PRICING POLICY

Thus far, we have described a variety of ways to approach the problem of pricing merchandise. And we have seen specific application of many of the common pricing policies. Now let us review an individual merchant's pricing practices. Depending upon the type of business, some of the factors we shall list may not be applicable, or may vary in importance.

Individual Flexibility

Three of the six factors, we should consider, that influence pricing policy are: individual flexibility, changing economic conditions, and longrun store welfare.

(Show Visual #12.)
Certainly one basic fact must be apparent—the pricing problem of any business depends upon its own individual set of problems. What will work for firm "A" will not always be practical for firm "B," and so on. And yet, there are many firms that attempt to follow rigid pricing formulas, tending toward a simplified mechanical approach, struggling to reshape its other business activities to fit into the cost pattern that its sales volume demands.

The merchant should adopt a flexible policy of pricing, designed to accurately reflect consumer demand, and modified to compensate for competition.

**Changing Economic Conditions**

The successful business firm must develop a willingness to vary its prices with changing economic conditions. A trend toward credit buying, for example, may reflect a willingness to purchase higher-priced merchandise. The consumer's willingness to sign a charge slip where he would not make a cash purchase for even a substantially lesser amount can be considered in pricing the volume merchandise in a typical retail store.

**Longrun Welfare of the Store**

Among the most effective ways of minimizing price influences on your sales efforts is providing such services as delivery, installment and repair work, and liberal policies of exchange and returns. Customer goodwill is important, and exerts a great influence on total sales volume. This in turn permits the merchant greater flexibility in his pricing.

The choice of store location, quality of goods handled, and the services to be offered all combine to influence the merchant's basic pricing policy. The basic policy will determine if the store is to cater to people buying in the low, medium or high-price range. Consistency in pricing, once the basic policy has been determined, will contribute to the long-range appeal of the store to its customers.

**Complementary Sales**

The additional three factors that influence pricing policy are: complementary sales, market research, and product's life cycle.

*(Show Visual #13)*
In addition to the longrun effect of pricing of specific items, the merchant should carefully examine the effect of price of one item on the sale of others in his store. The classic example, of course, is the practice of loss leader pricing. Pricing a popular item below the market average to generate store traffic is a common practice.

The merchant may carry some items that are not profitable—merely break-even—just because they regularly bring customers into the store. On the other hand, some “controlled brand” items which the merchant has obtained as an exclusive will not be subject to price competition and can afford him greater markup. Sales resulting from practices of balancing prices of various items are sometimes referred to as complementary sales.

**Market Research Information**

The merchant must cast about for information of value in setting his pricing. Much information is available to him from trade organizations. In addition, careful analysis of his own records and attention to area marketing trends can supply important data.

If investigation reveals that the consumer has an opportunity to compare prices in a number of stores, more care must be taken in determining markon—the consumer demand in his store will be strongly influenced by current pricing.

Simple trial and error, augmented by sensitive attention to changes in purchasing patterns by his consumers during the course of the experiment can be of considerable value to a merchant willing to experiment.

**Product’s Life Cycle**

With a new product just entering the marketplace, the merchant must consider the distinction between a “skimming” price and a “penetration” price.

A “skimming” price would be a high price that would last for a short time, taking advantage of an early demand for the item. This practice is often followed when the merchant is unsure of the demand life of the product, and assures a quick profit before the market is saturated with similar merchandise from other manufacturers. A good example of this was the Hula Hoop craze of several years ago. The original product carried a “skimming” price of $3.98. In a short time, competitive versions of the hoop were being marketed as low as $1.00.

A “penetration” price would be a lower price, to build sales volume up rapidly, and depend on repeat business for a continuing high sales volume at a modest profit. This practice would often apply to merchandise that is consumable. Special sale merchandise in chain grocery stores fits this category quite well. The attractive lower price lures the customer to try it, and if the product is good enough, a large percentage of the original purchasers become repeat customers.

In some cases, the pricing decision has been made for the merchant by the manufacturer. In other cases, where the merchant has an exclusive, he must make the determination himself.

**LONGRUN PRICING POLICY**

Pricing decisions made by the individual merchant have more than a passing impact on both immediate and longrun profits. A pricing decision that increases immediate profits may not be consistent with the longrun profit picture.

For example: A shipment of merchandise is obtained that is a regional “exclusive.” The item cost of the merchandise is $5.00. The calculated “average” store markon is 35% of retail.
The article can be profitably retailed at $7.69. However, it is "exclusive", and no other store in the area has it. An educated guess determines that the item will be saleable at $9.50, so the higher price is set, and several hundred of the items are sold, to the profit advantage of the store.

But the fabulous sales record of the item nationally causes the manufacturer to intensify his distribution. Now two other stores in town are able to obtain the item at the same wholesale cost, and they market the item at $8.00.

The original seller has several hundred in stock. He must either reduce his price to $8.00 and compete with the other stores for buyers, reduce his price below his competition and risk the loss of goodwill of previous purchasers, or take the merchandise off the market in his store and suffer the loss quietly. The prestige of the store’s pricing policies could, in any case, suffer a serious blow.

**Long-Range Goals**

A primary determinant of any store's pricing policies should be its long-range goals. The store's basic pricing should reflect the "image" it is trying to create.

*(Show Visual #14.)*

*Visual No. 14*

For example, a store may have an opportunity to sell an item at a huge profit, because it is the last stock of its kind to exist in a community. But instead, it sells the item at a well-advertised low price as a goodwill gesture. Thus, the store shows more concern with its future sales and resultant total long-run profit picture than the relatively small immediate profit to be realized on the sale of a limited quantity of merchandise.

In another case, where a store is trying to create an image of being a low-cost "family" shopping center, high markon merchandise may be avoided, and the "sale" item may become a staple in the price line.

Another store, after an image of conservative good taste and "quality," may avoid setting
“odd” prices (such as 99¢ or $1.98), establishing conservative price zones, and will be very careful in its repricing practices to avoid extreme markdowns.

However, these goals need not interfere with good pricing practices during seasonal or other shortrun pricing sequences.

**Shortrun Pricing Sequences**

Where a store is flexible in its buying and stocking, and can order new and exciting merchandise items when they are leading the market, it is possible to reap high profits before competition can switch gears and stock similar goods for sale. In this way, a local reputation for style leadership has enabled many merchants to consistently maintain higher-than-average markups on exclusive lines of merchandise. The same rationale applies to variety stores, hardware stores and others. Careful merchandise selection, perceptive promotional efforts and wise merchandising all contribute to pricing decision.

Shortrun pricing sequences can be as short as a one-day sale, or as long as several months, depending upon the purpose of the marketing plan. But careful reflection will reveal that even with the flexibility that can be built into the shortrun sequences, they should still conform to the longrun policy of the store.

(Note to instructor: It is suggested that this may be a suitable time-spot for showing SBA’s management training film entitled "Purchasing, Pricing, Inventory Control" (black and white, 28½ minutes). The film includes a treatment of formulas for pricing services and merchandise.)
A REASONED APPROACH TO PRICING

As we suggested earlier in this discussion, it is more important to develop a system of reasoning than to learn specific rules. Sound reasoning can be adapted by any set of circumstances, and will enable a more correct determination than an inflexible set of rules.

(Show Visual #16.)

Visual No. 16

Sound reasoning applied to pricing means the careful examination of the impact of various decisions on changes in both costs and income. More specifically, this means:

A. A study of the price-volume relationships to understand what will happen to total income at all reasonable prices, and a comparison of those relationships with cost figures to find the most profitable price on any individual item.

B. A study of the contribution to profit and overhead on each product that is sold in the store, and the selection of individual items for emphasis in sales at prices that will bring in the maximum contribution to overhead and profits.

Price-Volume Relationships

It is important to examine the relationships of price and volume to really see what occurs in total revenue during various price experiments.

For example, an item is purchased for $2.62½ net. By pricing it at $4.50, the sales volume is 300 units in a specific time period. This generates an income of $1,350, with a cost of goods of $787.50 and a gross profit of $562.50 for the period.

Taking the same item and repricing it to $3.95 now generates a sales volume of 600 units, with a gross income of $2,370. The cost of goods (still at $2.62½ net) is $1,575, with a gross profit of $795 for the same time period.

In a further attempt to stimulate a bigger sales volume, the price is lowered to $3.79. Sales do increase, but only to 675 units in an identical time period. Gross income rises to $2,558.25
and cost of goods is $1,771.88 for this volume. Gross profit in this case was $786.37. The price reduction did result in a greater sales volume, but it lowered the gross profit.

The price-volume relationship that produces the best profit picture for this product in this marketing area results from a sale price on the item of $3.95.

While it is not practical to actually perform this price experiment with every single item in a retail store, careful attention to sales and cost/pricing records can indicate potential trends. The store owner can experiment with several items widely separated in type, each representing a classification of goods. Results of the limited pricing experiment can then be applied to other merchandise as a check on the accuracy of his findings. In this way, the optimum price-volume relationship can be approximated for the majority of the products in the store.

Does this seem like a great deal of trouble? Perhaps it will take more time than arbitrary pricing, but the price that results in the most effective sale of merchandise is reflected in the final profit that is surely every businessman's goal.

**Contribution to Overhead and Profits**

Pricing of merchandise affects merchandise turnover. Stock that remains on store shelves is not doing a merchant's profit picture any good. Every item must carry within its price its own share of overhead and deliver its fair share of profits. To illustrate the point:

Springfield Hardware Company carries two brands of electric toasters in stock. Brand "A" sells for $15 and offers a gross profit per unit of $5. During a typical sales period, the store sells 15 of them for a profit of $75.

Brand "B" sells for $17.50, but is priced to deliver a unit profit of $7. In the identical sales period, however, the store normally only sells 6 of them. Both toasters must be purchased in increments of one dozen.

Thus, for a stock of 24 toasters Brand "A," Springfield Hardware must invest $240 and can expect a return of $75 with $90 still tied up in remaining inventory. With Brand "B," the investment is $252, with a return of $42 and an inventory investment remaining of $189. The higher unit profit of toaster Brand "B" becomes insignificant with the total picture held up for study.

Effective pricing methods can aid the development of a good turnover rate.

**IMPORTANCE OF ADEQUATE RECORDS**

Studies of businesses which have been in danger of failing show that a principal reason for difficulty can often be traced to inadequate records. Absence of records is not in itself the cause of difficulties, but it accounts for the merchant's inability to see in advance the direction in which he is going.

The merchant who desires to increase the effectiveness of his pricing methods must have comprehensive data to analyze such things as:

- **Business Volume**
- **Running expenses and expense ratios**
- **Gross profit margins**
- **Sales progress, according to merchandise line and individual item**
Customer preference in merchandise
Consumer reaction to price lines
Inventory turnover rates
Net profit

With up-to-date records, he may foresee impending problems and take adequate steps to correct them before the situation becomes irreversible.
And of course, merchants also need good records to substantiate:
Returns under Federal and State tax laws, including income tax and social security.
Requests for credit from equipment manufacturers or loans from a bank or other lending institution.
Claims about the business in preparation for its sale.

SUMMARY

Effective merchandise pricing requires a great deal of concentration on the part of the merchant. Of course, skill in pricing doesn't come on the first try. Like almost all other worthwhile achievements, it comes with planning, hard work and patience. To succeed, the merchant must examine and understand all of the factors that can influence his business objectives.

Let us review the principal steps to effective merchandise pricing. First, establish a set of long-range goals. Second, analyze price-volume relationships in your business, and compare them with costs to find the most profitable price on each item. Third, examine the contribution to profit and overhead of each product that is sold in the store, and select those items that will provide the best contribution to overhead and profits. Fifth, review all records to determine sales trends, and reprice according to your findings.

Unfortunately, there is no "magic" formula that will work on every line of merchandise all of the time. But a sound, flexible approach will enable the judgment of the merchant to come to bear in the development of personal skill in pricing.
USE OF VISUAL AIDS

WHAT TO USE

Chalkboard

Study and plan before a meeting what to put on the board and where to put it. Use it to present sketches, diagrams, outlines, definitions, key words, directions, record of class contributions, and summaries.

Suit material to board space.

Write plainly and quickly.

Keep wording simple.

Stand at one side of board while referring to material.

Talk to the group, not to the board.

Erase material no longer needed.

To arouse interest and attract attention; to show relationships and trends; to inspire group.

Use device large enough to be seen.

Post where everyone can see.

Present at right time.

Discuss information illustrated.

Poster, Charts, and Diagrams

To present information uniform in character and as a guide to material covered; emphasize key points; arouse interest and discussion; review or summarize discussions; and serve as permanent reference.

Select to serve a definite purpose.

Introduce at right time.

Distribute in manner to convey its importance.

Direct members how to use.

Hand-Out Materials

Present an overall view; introduce a new subject; emphasize specific aspects of a subject; arouse interest; summarize.

Select carefully to relate to the discussion and plan presentation. Arrange room and equipment for showing. Alert the audience for the showing or what will be seen. Run the film.

Discuss the subject matter and summarize.

Films and Film Strips

Keep subject matter practical; show development of a process; increase understanding.

Select only enough to illustrate, not confuse.

Pass around if necessary.

Take time to present clearly.

Comment when presenting.

Samples, Forms, and Exhibits

A pad of newsprint sheets or similar paper may be used for the same purposes as the chalkboard. Material recorded with chalk or crayon may be saved for future reference by the group or by the instructor.

Pedestal Chart

A pad of newsprint sheets or similar paper may be used for the same purposes as the chalkboard. Material recorded with chalk or crayon may be saved for future reference by the group or by the instructor.
SBA'S MANAGEMENT TRAINING FILM

"Purchasing, Pricing, Inventory Control"

This film tells how to find suppliers offering right goods at right prices for a given market; provides formulas for pricing services as well as merchandise offered for sale; gives methods of maintaining inventory that's complete without being overlarge and overcostly; stresses need for keeping and using records to maintain balanced inventory and shows how to stimulate stock turnover toward profit goals.

This black and white 28½-minute film is one in a series of 10 business management training films. The overall story plan is that a young man who, having inherited some money and wanting to go into business for himself, seeks advice and guidance from businessmen or educators in his community about various aspects of business management. The film drama shows him in such interaction situations. Location shots of actual business operations are used to emphasize important points.

OVERHEAD TRANSPARENCIES

Facsimiles of 16 transparencies intended for use with this instructor's manual appear on the following three pages.

A set of the 11 by 11-inch transparencies in color, as well as the film described above, may be provided on loan to SBA cosponsors of management training from the nearest office of the Small Business Administration listed on the inside back cover of this manual.
How Much Is Enough?

FLEXIBLE APPROACH

FULL COST APPROACH

APPROACHES TO PRICING

POPULAR METHODS USED IN PRICING

FULL COST PRICING
FLEXIBLE MARKUP PRICING
GOING RATE PRICING
GROSS MARGIN PRICING
SUGGESTED PRICING

FORMULA:
OPERATING MARKUP: \( \frac{\text{Expense + Profit} + \text{Reductions}}{\text{Sales} + \text{Reductions}} \)
PRICING MACHINE

FORMULA

$3900 + $100 + $500 = $4400

$10,000 + $500 = $10,500

$3900

$10,500

= 37.1%

ARE YOU SURE THAT'S ALL THE INFLUENCES?

FACTORS THAT INFLUENCE PRICING POLICY

ZONE A
HIGH VOLUME ZONE

ZONE B
PROMOTION ZONE

ZONE C
PRESTIGE ZONE

$1.70 each
3 for $5.00

$3.40 each
3 for $10.00

26¢ each
4 for $1.00

PRICE ZONES

$10.01

GOOD PRICE

$10.95

NUT PRICE

$6.30

MARGIN

$8.95

COST

1.95

$2.89

$2.00

$2.00

$2.85

ARE YOU SURE THAT'S ALL THE INFLUENCES?
Factors That Influence Pricing Policy

- Complementary Sales
- Market Research
- Product's Life Cycle

SHORT RUN PRICING SEQUENCES

LONG RANGE GOALS

Oversight - Profit
Price - Volume
LIST OF HANDOUT MATERIAL

1. Focal Points on Merchandise Pricing
2. SMA No. 105, A Pricing Checklist for Managers
3. SMA No. 21, Pricing and Profits in Small Stores
4. MA No. 193, What is the Best Selling Price?
5. MA No. 37, Figuring and Using Break-Even Points

Also See the Bibliography on page 55, which is intended primarily for use by the instructor but may also be duplicated and used as a helpful handout item.
THIS PAGE illustrates a one-fold leaflet which summarizes the subject presentation. This leaflet is available in quantity from the nearest Small Business Administration office for distribution to potential and actual participants in SBA-cosponsored management education and training sessions.
A PRICING CHECKLIST FOR MANAGERS

By Joseph D. O'Brien
Associate Professor of Marketing, College of Business Administration
Boston College, Boston, Massachusetts

SUMMARY

Pricing is a basic factor in insuring the profitable operations of small retailers. Pricing plans, objectives, and policies are important phases of management, and to set effective prices the owner-manager must: (1) know his costs and (2) understand buyer motivation, timing, and competitors. Nonpricing practices can also be used to attract customers. The questions in this Aid are designed to help small marketers in evaluating their pricing policies and practices.

EXAMINING COSTS, SALES VOLUME, AND PROFITS

The questions in this part should be helpful when you look at prices from the viewpoint of costs, sales volume, and profits.

Costs and Prices

The small retailer who sets the price for an item by applying a standard markup may be overlooking certain cost factors which are connected with that item. The following questions are designed to help you gather information which should be helpful when you are determining prices on specific types of items.

1. Do you know which of your operating costs remain the same regardless of sales volume?
2. Do you know which of your operating costs decrease percentage-wise as your sales volume increases?
3. Have you ever figured out the breakeven point for your items selling at varying price levels?
4. Do you look behind high gross margin percentages? (For example, a product with a high gross margin, may also be a slow turnover item with high handling costs. Thus it may be less profitable than lower margin items which turn over fast.)
5. When you select items for price reductions, do you project the effects on profits? (For example, if a food marketer considers whether to run canned ham or rump steak on sale, an important cost factor is labor. Practically none is involved in featuring canned ham; however, a rump steak sale requires the skill of a meat-cutter and this labor cost might mean little or no profits.)

Pricing and Sales Volume

An effective pricing program should also consider sales volume. For example, high prices might limit your sales volume while low prices might result in a large, but unprofitable volume. The following questions should be helpful in determining what is right for your situation.

6. Have you considered setting a sales volume goal and then studying to see if your prices will help you reach it?
7. Have you set a target of a certain number of new customers for next year? (If so, how can pricing help you to get them?)
8. Should you limit the quantities of low-margin items which any one customer can buy when they are on sale? (If so, will you advertise this policy?)

9. What is your policy when a sale item is sold out before the end of the advertised period? Do you allow disappointed customers to buy the item later at the sale price?

Pricing and Profits

Prices should help bring in sales which are profitable over the long pull. The following questions are designed to help you think about pricing policies and their effect on your annual profits.

10. Do you have all the facts on costs, sales, and competitive behavior?

11. Do you set prices with the hope of accomplishing definite objectives, such as a 1-percent profit increase over last year?

12. Have you set a given level of profits in dollars and in percent of sales?

13. Do you keep records which will give you the needed facts on profits, losses, and prices?

14. Do you review your pricing practices periodically to make sure that they are helping to achieve your profit goals?

JUDGING THE BUYER, TIMING, AND COMPETITORS

The questions in this part are designed to help you check your practices for judging the buyer (your customers), your timing, and your competitors.

The Buyer and Pricing Strategy

After you have your facts on costs, the next point must be the CUSTOMER—whether you are changing a price, putting in a new item, or checking out your present price practices. Knowledge of your customers helps you to determine how to vary prices in order to get the average gross margin you need for making a profit. (For example, to get an average gross margin of 35 percent, some retailers put a low markup—10 percent, for instance—on items which they promote as traffic builders and use high markup—sometimes as much as 60 percent—on slow-moving items.) The following questions should be helpful in checking your knowledge about your customers.

15. Do you know whether your customers shop around and for what items?

16. Do you know how your customers make their comparisons? By reading newspaper ads? Store shopping? Hearsay?

17. Are you trying to appeal to customers who buy on price alone? To those who buy on quality alone? To those who combine the two?

18. Do any of your customers tell you that your prices are in line with those of your competitors? Higher? Lower?

19. Do you know which item (or types of items) your customers call for even though you raise the price?

20. Do you know which items (or types of items) your customers leave on your shelves when you raise the price?

21. Do certain items seem to appeal to customers more than others when you run weekend, clearance, or special-days sales?

22. Have you used your individual sales records to classify your present customers according to the volume of their purchases?

23. Will your customers buy more if you use multiple pricing? (For example, 3 for 39 cents for products with rapid turnover.)

24. Do your customers respond to odd prices more readily than even prices, for example, 99 cents rather than $1?

25. Have you decided on a pricing strategy to create a favorable price image with your customers? (For example, a retailer with 8,000 different items might decide to make a full margin on all medium or slow-moving items while featuring—at low price levels—the remaining fast movers.)

26. If you are trying to build a quality price image, do your individual customer records, such as charge account statements, show that you are selling a larger number of higher priced items than you were 12 months ago?

27. Do your records of individual customer accounts and your observations of customer behavior in the store show price as the important
factor in their buying? Service? Assortments? Some other consideration?

Time and Pricing

Effective merchandising means that you have the right product, at the right place, at the right price, and at the right time. All are important, but timing is the critical element for the small retailer. The following questions should be helpful in determining what is the right time for you to adjust prices.

28. Are you a "leader" or a "follower" in announcing your price reductions? (The follower, even though he matches his competitors, creates a negative impression on his customers.)

29. Have you studied your competitors to see whether they follow any sort of pattern when making price changes? (For example, do some of them run clearance sales earlier than others?)

30. Is there a pattern to the kinds of items which competitors promote at lowest prices at certain times of the month or year?

31. Have you decided whether it is better to take early markdowns on seasonal or style goods or to run a clearance sale at the end of the season?

32. Have you made regular annual sales, such as Anniversary Sales, Fall Clearance, or Holiday Cleanup, so popular that many customers wait for them rather than buying in season?

33. When you change a price, do you make sure that all customers know about it through price tags and so on?

34. Do you try to time price reductions so they can be promoted in your advertising?

Competition and Pricing

When you set prices, you have to consider how your competitors might react to your prices. The starting place is learning as much as you can about their price structures. The following questions are designed to help you check out this phase of pricing.

35. Do you use all the available channels of information to keep you up to date on your competitors' price policies? (Some useful sources of information are: things your customers tell you; the competitor's price list and catalogs, if he uses them; his advertising; reports from your suppliers; trade paper studies; and shoppers employed by you.)

36. Should your policy be to try always to sell above or below competition? Only to meet it?

37. Is there a pattern to the way your competitors respond to your price cuts?

38. Have you lost certain customers because competitors match your price cuts?

39. Is the leader pricing of your competitors affecting your sales volume to such an extent that you must alter your pricing policy on individual items (or types of items) of merchandise?

40. Do you realize that no two competitors have identical cost curves? (This difference in costs means that certain price levels may be profitable for you but unprofitable for your competitor or vice versa.)

PRACTICES WHICH CAN HELP OFFSET PRICE

Some small retailers take advantage of the fact that price is not always the determining factor in making a sale. They supply customer services and offer other inducements to offset the effect of competitors' lower prices. Delivery service is an example. Comfortable shopper's meeting place is another. The following questions are designed to help you take a look at some of these practices.

41. Do the items or services which you sell have advantages for which customers are willing to pay a little more?

42. From personal observation of customer behavior in your store can you tell about how much more customers will pay for such advantages?

43. Should you change your services so as to create an advantage for which your customers will be willing to pay?

44. Does your advertising emphasize customer benefits rather than price?
45. Are you using the most common nonprice competitive tools? (For example, have you tried to alter your product or service to the existing market? Have you tried stamps, bonus purchase gifts, or other plans for building repeat business?)

46. Should policies on returned goods be changed so as to impress your customers better?

47. If you sell repair services, have you checked out your guarantee policy?

48. Should you alter assortments of merchandise to increase sales?

FOR FURTHER INFORMATION

Businessmen who wish to explore further the subject of pricing may be interested in the references indicated below. This list is necessarily brief and selective. However, no slight is intended toward authors whose works are not mentioned.


These *Guides* are designed to highlight certain problems in the field of price advertising which experience has demonstrated to be especially troublesome to businessmen who in good faith desire to avoid deception of the consuming public. The *Guides* are not intended to serve as comprehensive or precise statements of law, but rather as practical aids to the honest businessman who seeks to conform his conduct to the requirements of fair and legitimate merchandising.

The *Guides* deal with the following: I--Former Price Comparisons; II--Retail Price Comparisons; Comparable Value Comparisons; III--Advertising Retail Prices Which Have Been Established or Suggested by Manufacturers; IV--Bargain Offers Based Upon the Purchase of Other Merchandise; and V--Miscellaneous Price Comparisons.


According to one popular theory, the key to success in a small retailing business is **volume**. "Yes," say some, "when you get your volume up, everything works out all right!" Another common idea, however, holds that the vital factor is **margin**. "Remember," say supporters of this view, "price to hold up your margins on each item and the whole line will be in good shape."

**PRICE-VOLUME-PROFIT RELATIONSHIPS**

Actually, there is no single success-producing factor. It is a combination of price and volume which tells the profit story. A few typical situations with illustrative figures will support that statement.

**Three Cases in Point.** -- Suppose, first, that you buy an item at $2.624 net. You price it at $4.50 and sell 300 in the course of a given period of time. This gives you an income of $1,350 with cost of goods of $787.50 and a gross profit of $562.50 for the period.

Next, suppose you think that the item might move better with a lower ticket. Accordingly, you cut the price to $3.95. Volume over an equal period expands to 600 units and income rises to $2,370. Cost of goods still at $2.624 net per unit, jumps to $1,515 and you earn a gross profit of $795 for the period. This is better than before, just as you had hoped.

Then finally, suppose you decide to push for the still greater volume and, therefore, cut your price to $3.79. Sales during a like period rise, but only to 675 units. Income goes up to $2,558.25 and cost of goods increases to $1,771.88. In this situation you end the period with a gross profit of $786.37. You did get an increase in volume, but you're worse off. In the second case your gross profit was the largest in terms of total dollars.

The conclusion to be drawn from these cases is that the best price was in the $3.95 range. Theprice-volume-profit relationship at that point yielded the most dollars at the end of the period. It isn't a question of price alone or volume alone; you have to consider both at once.

**A Word About Expenses.** -- "That's a good line of reasoning," some businessmen will say, "but what about expenses?" The answer to that question is that, here, they were left out of the calculations. In relation to any individual item in a store, most big retailing expenses are "fixed" in the short run. "Variable" expenses, like wrapping paper and string, are usually insignificant. But major expenses like rent, wages, and advertising would, in most cases, hardly be changed if a single item were added or dropped from stock. The exceptions are the situations where rent is based on a percentage of revenue, where salespeople get a percentage commission, or where both techniques are used together.

Unless you operate with such percentage arrangements, it is a highly complex job to estimate what expenses per item really add up to as its volume changes. Therefore, when expenses are largely fixed in relation to a single item, it is usually good sense, in determining its price, to consider the effect of a price change on dollar gross margin. That's what was done above.

**Watch the Overall Effects.** -- Along this line, in making price decisions try to cultivate a broad and long-range concept. For instance, some retailers plan to enlarge their clientele by pricing one of their items so low that they only cover their costs. Therefore, when expenses are largely fixed in relation to a single item, it is usually good sense, in determining its price, to consider the effect of a price change on dollar gross margin. That's what was done above.

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policies may not yield the biggest profits at the moment, they are designed to do so over the long pull by the effect they have on the store's total trade.

There is wisdom in watching the profits for your business as a whole. This means that some items you carry may not necessarily make a given profit percentage—or even a profit at all. But they will tend to build business. The principle of "leaders" rests on the fact that one of the best ways of attracting customers is to offer certain articles at exceptionally low prices. Shoppers coming in for the leaders are encouraged to purchase other merchandise in sufficient quantity to more than make up for the leaders' lack of margin. Salespeople, of course, must concentrate on moving other goods besides just the leaders.

Unquestionably it is not always easy to apply the reasoning outlined by the price-volume-profit examples. In practice it is hard to "look ahead," as it were, to try to determine how many units of a given item would be sold at various prices. To find out, you have to experiment. But most small retailers, having hit on a price which produces a reasonable volume and profit, are hesitant to risk any further experimenting. Moreover, in many cases the typical merchant is pretty much forced to keep his prices in line with those of competitors.

By and large, the nature of the item you are trying to price is the most important consideration. For example, a housewife normally will buy only as much salt as she needs whether the price is high or low. But as the price of electrical appliances drops off, more and more housewives tend to buy them. However, with standard, nationally advertised, widely used items, reductions by one seller will usually be met with similar price cuts by others. In those cases, the important question becomes, "Which way would we be better off—as things stand, or at a lower price level?" Many retailers will remember the answer when that question was posed some years ago in regard to phonograph records: when a general price reduction was tried it brought dramatically increased sales and profits to all. Obviously, of course, every situation can't be expected to follow that pattern.

"That's all very interesting," you may say, "but what does it mean to me as a small retailer?"

The answer is this: Your best bet for experimentation with price-volume-profit relationships is usually in the field of distinctive, or specialty and shopping goods, where you are the only seller of an item, or at least one of a very few.

THE ONE-PRICE POLICY

If you follow a one-price policy, you offer each item at a single fixed price to everybody who buys in the same quantity. You give no "special" prices to "special" people. To many merchants, single fixed prices are customary and logical. They are evidence of fair and equal treatment for all. Besides, haggling is time-consuming both for the salespeople and for the customer. However, conditions today make it necessary to consider carefully just where you stand on the one-price policy. Most small retailers believe in one price to all comers for a given article. But sometimes it is hard to "stick to your guns" when a customer says: "Your prices are out of line. I can go over to the 'PDQ Sales Company' right now and for $12.95 get the very same item you're trying to sell me for $15. I'm ready to give you $12.95, cash on the barrelhead. I want the article and I'd like to do business with you. How about it?"

Many small retailers under this kind of pressure would find it hard to refuse to "shade" their prices. Hence, it is essential to make up your mind in advance what kind of a store you want to have. You can't have both a fixed and a flexible policy. You have to decide before you get into a bargaining situation whether or not you will mark down an item just on the basis of what a customer says. Some stores do. Others refuse to consider price changes until they have checked up on what competition is really doing. Many feel that over the years they would be better off if they were to compete on a broader basis than just price. They believe that continuous price cutting would not yield an adequate return on the capital invested in the business. They claim that merchants who "shade" prices, even on only a few items, soon find that customers regard all prices merely as starting points for haggling.

THE MARKUP PROBLEM

The markup problem is an old story to small retailers. It is always important to pricing and profits, but it can be handled in different ways.

Most small merchants find it preferable to handle markup and pricing largely on an individual basis. The reason is the many factors which influence the decision—to factors which vary according to the goods involved. For example, some of these influences are what your competition is doing, how the item fits into your pricing-lining setup, the promotional or "leader" value...
of the item, the season of the year, and whether resale-price maintenance is exercised by the manufacturer.

However, even though most items are marked up individually, it is useful to obtain some average markup as the result of your overall operations. This means that you should try to balance slim margins on some items with wider margins on others so that the combined volume produced will maximize your total profit. You may need to carry some unprofitable items just because they regularly bring into your store customers who buy other things, too. With goods for which you are the exclusive dealer, or where you don't have much direct price competition, you may find that you can take a longer markup, still maintain volume, and thus add to profits.

**PRICE LINING**

The term "price lining" has come up earlier in connection with markup. Essentially, it means setting prices on given classes or lines of merchandise and marking all items at one of these established prices - with nothing priced at points in between. It works because most customers have narrow ranges of prices which are acceptable to them. It offers both opportunities and problems.

**Price Lining Opportunities.** - For example, there is a large group of men (and women buying gifts for men) who are willing to pay from $1.50 to $5 for a necktie. Within these limits, of course, the demands of this group vary. But if you set prices for an assortment of ties at $1.50, $2.50, $3.50, and $5 only, most members of the group would accept these four price lines as satisfactory. Other groups, of course might look for higher or lower lines.

Price lining is best suited to "shopping goods"; that is, merchandise of which customers want to look at style, color, size, weight, material, and the like before they buy. It can work well with inexpensive gift items, clothing, and home furnishings in the popular price ranges.

There are various advantages to recommend price lining. For one thing, it helps avoid confusion both on the part of the salesperson and on the part of the customer. Prices are simplified. There are seldom more than two or three prices to choose from. Often only a single price is feasible. For another thing, increased sales can result because of (1) bigger assortment in each price line, and (2) greater ease in getting customers to make decisions and buy.

In addition, the planning of stock levels can be made easier by the demand groupings which develop at the relatively few selling prices. Similarly, price lining can lead to reduced expenses because of smaller stock requirements, greater turnover rates, fewer markdowns, quicker sales, and simplified buying and marking procedures.

**Price Lining Problems.** - One drawback is the unsuitability of setting price lines on prestige items and high-style goods where price is a minor consideration. Thus, in the "real" jewelry market -- as distinguished from novelty and "costume" jewelry -- most customers are not looking for assortments in certain price brackets. Typically, they want one-of-a-kind items with particular characteristics. Likewise, with costly antiques, price lines seldom fit the usual buying psychology. Customers don't generally think in terms of: "What can I get for $50?" They start instead from an inquiry like: "Do you have any English sterling silver of the Queen Anne period?"

Another question is the difficulty of "trading up" because of the relatively big jumps between lines. For instance, you might set $9.95, $13.50, and $16.85 as prices. There may be some customers who would pay more than $9.95 but not so much as $13.50, or more than $13.50 but not up to $16.85. With only the three lines, you might lose chances to make, say, a $15 sale.

Another problem is inflexibility in a rising or falling market. For example, you might set one price line at $9.95 and a higher one at $13.50. Goods retailed in the first line might cost around $5.89 and those in the second around $8. A 10 percent rise in wholesale prices would bring the cost of your first line up to $6.48. To price it at $13.50 would be too high, competitively. But if the goods are marked at your lower price line (9.95), your margin is only $3.47 compared with $4.06 previously obtained.

**MEETING PRICE COMPETITION**

The question which numerous small retailers are asking today is: "How am I going to meet competition from the price cutters when I can't go down to their levels without losing money?"

One answer is: Do things better than the other fellow. What things? Here are ten plus values which help in reducing the effect of price competition:
Specialization. -- In some cases, distinctive merchandise and private brands will help to offset price competition. To many shoppers the most significant feature of any price is the way it compares with other prices quoted for the same article. But if the article you sell has different features and is, in fact, not identical with what your competitors sell -- the significance of price comparisons can be reduced.

Personal Salesmanship. -- The human element is important, too. This means doing a more effective job than your competition on personnel selection, training, and motivation (see Small Marketers Aids No. 16 "Improving Personal Selling in Small Business").

Timing. -- Doing the right thing at the right time often isn't easy, but it is nevertheless important in meeting price competition. For instance, you can gain an advantage by following weather conditions and coordinating your advertising with them. Likewise, skillful timing of special sales can be a big asset. Good timing helps you avoid overstocking goods which were once popular but which are now meeting increasing sales resistance. It also helps you capitalize on new merchandise coming into the market for which strong price competition has not yet developed.

Sensitivity to Trends. -- Recent trends have had great influences on retailing; for example, interest in do-it-yourself activities, hi-fi radio and phonograph equipment, gardening and amateur photography. Watching these trends and adapting operations to them has paid off in many small stores.

Prestige. -- Here again your objective is to do something the other fellow can't do. Partly it is a matter of always seeking to improve the quality and appearance of the merchandise you stock; partly it is a matter of working steadily to improve the impression your store makes on customers. Attractive display, topnotch maintenance, good lighting, and quiet selling conditions are also involved. And don't overlook the effect of your storefront and the "personality" of your advertising. (See also Small Marketers Aids No. 3 "Attracting Customers to Your Small Store.")

Services. -- Among the most effective means of combating price competition are such services as delivery, installment and repair work, and permitting returns and allowances.

Convenience. -- People are often willing to pay a little more when it is easy for them to shop. Nowadays this often means parking facilities more than anything else. A handy place to leave the car is extremely important to most customers. In addition, you should not ignore the possible value of night openings.

Selling Conditions. -- Worthwhile improvements can often be made in this area. Consider, for instance, extra emphasis on impulse selling, better point-of-sale displays, face lifting and streamlining of stores and shopping districts, and appropriate simplified selling techniques such as self-service and automatic merchandising.

Expense Control. -- You may be able to find ways of managing your costs and expenses more skillfully so as to provide larger margins. Among the techniques to investigate are machine operations for record-keeping, better control of inventories, and new techniques for reducing losses from pilferage and damage.

Consumer and Community Relations. -- This is a combination of goodwill and customer loyalty, effective public relations, and the acceptance by the business of its proper responsibilities to the community in which it operates. The concept of rendering a useful service rather than simply making a profit is fundamental to improving consumer and community relations.
SMALL BUSINESS ADMINISTRATION
MANAGEMENT AIDS No. 193
for small manufacturers
SUMMARY

In setting prices, the goal should be to maximize profit. Although some owner-managers feel that an increased sales volume is needed for increased profits, volume alone does not mean more profit. The ingredients of profit are costs, selling price, and the unit sales volume. As in baking a cake, they must be in the proper proportions if the desired profit is to be obtained.

No one pricing formula will produce the greatest profit under all conditions. To price for maximum profit, the owner-manager must understand the different types of costs and how they behave. He also needs up-to-date knowledge of market conditions because the “right” selling price for a product under one set of market conditions may be the wrong price at another time.

The “best” price for a product is not necessarily the price that will sell the most units. Nor is it always the price that will bring in the greatest number of sales dollars. Rather the “best” price is one that will maximize the profits of the company.

The “best” selling price should be cost oriented and market oriented. It should be high enough to cover your costs and help you make a profit. It should also be low enough to attract customers and build sales volume.

A FOUR LAYER CAKE

In determining the best selling price, think of price as being like a four layer cake. The four elements in your price are: (1) direct costs, (2) manufacturing overhead, (3) nonmanufacturing overhead, and (4) profit.

Direct costs are fairly easy to keep in mind. They are the cost of the material and the direct labor required to make a new product. You have these costs for the new product only when you make it.

On the other hand, even if you don’t make the new product, you have manufacturing overhead such as janitor service, depreciation of machinery, and building repairs, which must be charged to old products. Similarly, nonmanufacturing overhead such as selling and administrative expenses (including your salary) must be charged to your old products.

DIRECT COSTING

The direct costing approach to pricing enables you to start with known figures when you determine the price for a new product. For example, suppose that you are considering a price for a new product whose direct costs—material and direct labor—are $3. Suppose further that you set the price at $5. The difference ($5 minus $3 — $2) is “contribution.” For each unit sold, $2 will be available to help absorb your manufacturing overhead and your non-manufacturing overhead and to contribute toward profit.
PRICE-VOLUME RELATIONSHIP

Any price above $3 will make some contribution toward your overhead costs which are already there whether or not you bring the new product to market. The amount of contribution will depend on the selling price which you select and on the number of units that you sell at that price. Look for a few moments at some figures which illustrate this price-volume-contribution relationship:

<table>
<thead>
<tr>
<th>Selling price</th>
<th>$5</th>
<th>$4</th>
<th>$4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected sales in units</td>
<td>10,000</td>
<td>30,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Projected dollar sales</td>
<td>$50,000</td>
<td>$120,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Direct costs ($3 per unit)</td>
<td>$30,000</td>
<td>$90,000</td>
<td>$45,000</td>
</tr>
<tr>
<td>Contribution</td>
<td>$20,000</td>
<td>$30,000</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

In this example, the $4 selling price, assuming that you can sell 30,000 units, would be the “best price” for your product. However, if you could sell only 15,000 units at $4, the best price would be $5. The $5 selling price would bring in a $20,000 contribution against the $15,000 contribution from 15,000 units at $4.

With these facts in mind, you can use a market-oriented approach to set your selling price. Your aim is to determine the combination of selling price and unit volume which will provide the greatest contribution toward your manufacturing overhead, nonmanufacturing overhead, and profit.

COMPLICATIONS

If you ran a nonmanufacturing company and could get as much of a product as you could sell, using the direct costing technique to determine your selling price would be fairly easy. Your success would depend on how well you could project unit sales volume at varying selling prices.

However, in a manufacturing company, various factors complicate the setting of a price. Usually, the quantity of a product that you can manufacture in a given time is limited. Also whether you ship directly to customers or manufacture for inventory has a bearing on your production and financial operation. Sometimes your production may be limited by manpower. Sometimes by equipment. Sometimes by the availability of raw materials. And sometimes by practices of your competition. You have to recognize such factors in order to maximize your profits.

The direct costing concept enables you to key your pricing formula to that particular resource—manpower, equipment, or material—which is in the shortest supply. The Gail Manufacturing Company* provides an example of doing it.

*All names in Aids are disguised.
ESTABLISH CONTRIBUTION PERCENTAGE

In order to use the direct costing approach, Mr. Gail had to establish a contribution percentage. He set it at 40 percent. From his past records, he determined that, over a 12-month period, a 40-percent contribution from each price would take care of his manufacturing overhead, his nonmanufacturing overhead, and profit. In arriving at this figure, he considered sales volume as well as his overhead costs.

Determining the contribution percentage is a vital step in using the direct costing approach to pricing. You should review your contribution percentage periodically to be sure that it covers all your overhead (including interest on money you may have borrowed for new machines or for building an inventory of finished products) and to be sure it provides for profit.

Mr. Gail's 40-percent contribution meant that his direct costs—material and indirect labor—would be 60 percent of the selling price (100—40 = 60). Here is an example of how he computed his minimum selling price:

| Material | $0.27 |
| Direct labor | $0.10 |
| **Total** | **$0.37** |

The 37 cents was 60 percent of the selling price which worked out to 62 cents (37 cents divided by 60 percent). The contribution was 25 cents (40 percent of selling price):

| Selling price | $0.62 |
| Direct costs | $0.37 |
| **Contribution** | **$0.25** |

In this approach, raw material is given the same importance as direct labor in determining the selling price.

VALUE OF MATERIAL

The value of the material used in manufacturing the product has a bearing on the contribution dollars that will accrue from each unit sold. Suppose, in the example above, that the material costs are only 15 cents instead of 27 cents while the direct labor costs remain the same—10 cents. Total direct costs would be 25 cents.

In order to get a maximum contribution of 40 percent—as Mr. Gail did—the direct costs must not exceed 60 percent of the selling price. To arrive at the selling price, divide the total direct cost by 60 percent (25 cents divided by .60). The selling price is 42 cents. With this new selling price, the contribution is 17 cents (42 cents minus 25 cents for direct costs).
The point to remember is that when the material costs are less, the contribution will be less. This is true even though the same amount of direct labor and the same amount of machine use is required to convert the raw material into the finished product.

**CONTRIBUTION - PER - LABOR - HOUR**

What happens if Mr. Gail is unable to man his equipment fully at all times? In order to maximize profits, he must realize the same dollar contribution per direct labor dollar, regardless of the cost of materials. To do this, Mr. Gail could use the "Contribution per Labor Hour" Formula for setting his selling prices.

In this formula, you determine a mark-on percentage to use on your direct labor costs. This mark-on will provide the required contribution as a percentage of selling price. For example, if direct labor is 10 cents and contribution is 25 cents, then contribution as a percentage of direct labor will be:

\[
\frac{.25}{.10} = 250\%
\]

The mark-on factor to use on direct labor costs is 250 percent of direct labor costs.

Now suppose that material cost is 15 cents and direct labor cost is 10 cents. The selling price would be 50 cents, figured as follows:

<table>
<thead>
<tr>
<th>Material costs</th>
<th>15¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct labor</td>
<td>+10¢</td>
</tr>
<tr>
<td>Contribution</td>
<td>+25¢</td>
</tr>
<tr>
<td>Selling Price</td>
<td>=50¢</td>
</tr>
</tbody>
</table>

The "Contribution per Labor Hour" approach assures Mr. Gail a 25-cent contribution for each 10 cents of labor (250 percent) used to make a product regardless of the value of the raw material used.

**CONTRIBUTION - PER - POUND**

If, and when, raw materials are in short supply and are the limiting factor, then the base to use is the dollar contribution-per-pound of material. This formula is similar to the one for contribution per labor hour. The difference is that you establish the contribution as a percentage of material cost rather than as a percentage of direct labor cost.

**CONTRIBUTION - PER - MACHINE - HOUR**

Determining the contribution-per-machine-hour can be a more involved task than figuring the contribution-per-pound. If different
products are made on the same machine, each may use a different amount of machine time. This fact means that the total output of a certain machine in a given time period may vary. As a consequence, the dollar contribution-per-machine-hour, which a company realizes, may vary from product to product. For example, products A, B, and C are made on the same machine and their contribution-per-machine-hour is:

- $28.80 for product A
- $26.00 for product B
- $20.00 for product C

When machine capacity is the limiting factor, you can maximize profit by using dollar contribution-per-machine-hour when setting prices. When selling to customers, you should give priority to products which give the greatest dollar contribution-per-machine-hour. In the above example, your salesmen would push product A over products B and C.

To use this pricing approach means that you have to establish a base dollar contribution-per-machine-hour for each machine group. You do it by determining the total number of machine hours available in a given time period. You then relate these machine hours to the manufacturing and nonmanufacturing overhead to be absorbed in that period. For example:

- Total machine hours available in 12 months = 5,000
- Total manufacturing and nonmanufacturing overhead = $100,000
- Contribution required per machine hour to cover manufacturing and nonmanufacturing overhead = $20*

* $100,000 divided by 5,000 hours

In this example, during periods when the company can sell the output of all of its available machine hours, it must realize a return of $20 per machine hour in order to cover its manufacturing and nonmanufacturing overhead. When the full 5,000 hours are used, the $20 per-hour return will bring the company to its break-even point. When all of the company’s available machine hours cannot be sold, its return per-machine-hour must be more than $20.

Notice that in the above example, only the breakeven point is considered. There is no provision for profit. How do you build profit into this pricing formula?

Return-on-investment is a good approach. If the Gail Manufacturing Company, for example, has $300,000 invested and wants a 10-percent return, its profit before taxes would have to be $30,000. Mr. Gail can relate this profit goal to the machine-hour approach by dividing the $30,000 by 5,000 (the available machine hours). This means that he needs $6 per machine hour as a mark-up for profit.
SELLING PRICE FOR PRODUCT C

Now suppose that Mr. Gail wants to use the contribution-per-machine-hour and profit-per-machine-hour approach to set a price for product C. For product C, the direct labor cost per unit is $1.80. Machine output (or units per hour) is 1.25, required contribution per machine hour is $20, and desired profit per machine hour is $6. The formula to set the unit selling price is:

\[
\begin{align*}
\text{Material cost} & \quad 21.37 \\
\text{Direct labor} & \quad 1.80 \\
\text{Contribution per Unit} & \quad 16.00^* \\
\text{Price before profit} & \quad 39.17 \\
\text{Desired profit} & \quad 4.80 \quad ($6 \times .80^*) \\
\text{Desired selling price} & \quad 43.97 \\
\end{align*}
\]

*Calculated as follows: With a machine output of 1.25 units per hour, .80 of a machine hour is needed to produce 1 unit; the required contribution per-machine-hour is $20; therefore, $20 \times .80 = $16.

If Mr. Gail is to get a 10-percent return on his investment before taxes, the selling price must be $43.97.

But suppose competitive factors mean that Mr. Gail cannot sell product C at $43.97. In such case, he might:

1. Not make product C if he can use the machine time to manufacture another product which will give his company its profit of 10 percent—provided, of course, that he has orders for the second product.

2. Reduce the selling price, if refusing orders for product C means that the machines will be idle. Any price greater than $39.17 will generate some profit which is better than no profit.

But suppose that $39.17 is also too high. Should Mr. Gail turn down all orders for product C at less than $39.17? Not necessarily. If he has no orders to run on the machines, he should accept orders for product C at less than $39.17 because $16 of that price are a contribution to his manufacturing and nonmanufacturing overhead. He has to pay these costs even when the machines are idle.

Keep in mind that the direct costing method of setting a price gives you flexibility. For example, Mr. Gail has to get $43.97 for product C in order to make his desired profit. But his price for that product can range from $23.17 to $43.97 (or higher, depending on market conditions).

Any price above $39.17 brings in some contribution toward profit. Mr. Gail can break even at $39.17. Any price between $39.17 and $23.17 brings in some contribution toward his overhead. And in a pinch, he can sell as low as $23.17 and recover his direct costs—material and direct labor.

However, Mr. Gail must use his flexibility with care. It takes only a few transactions at $23.17 (recovering only his direct costs) to keep him from maximizing his profits over a 12-months period.
FOR FURTHER INFORMATION

Readers interested in exploring further the subject of pricing may wish to consult the references indicated below. This list is necessarily brief and selective. However, no slight is intended toward authors whose works are not mentioned.


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Planning based on reliable information is management's most effective method for obtaining the best possible profit results in whatever sets of conditions may exist. And answering questions which begin, "What would happen to our profits if..." is one of the main planning jobs of forward-looking business executives. The problem of sound planning is particularly important in small concerns.

To develop realistic, successful planning you must understand clearly what influence any increases or decreases in certain operating factors—sales volume, selling prices, the various operating expenses, and plant and equipment facilities—will have on the profit of your enterprise. Some important effects of these several factors can be demonstrated by establishing "break-even points" for varying situations. A "break-even point" may be defined as the level of operations at which you have neither a net profit nor a net loss.

Analyzing Cost Data

In order to figure your break-even point you need to establish the relationships between costs, income, and output. In doing this either projected or historical data may be used. Your first step should be to determine your costs or expenses at various levels of output. The most frequently used measures of output are:

1. Dollar sales
2. Percent of plant capacity that the company may reasonably be expected to sell.

The dollar sales measurement is used most frequently when more than one type of product is made and sold, while the percent of plant capacity is generally more adaptable to operations where only one product is produced.

The development of cost data should include the segregation of costs. This requires a method of accounting which will break down the costs of doing business into various categories—sorting out the different kinds of expense. These categories will vary somewhat with the type of business, but practically every business has some break-down by type of expense. In the factory, costs will be direct labor, indirect labor, maintenance, depreciation, supplies and the like. Sales and administrative expenses should be broken down in a similar fashion.

In order to assemble data for figuring your break-even point, a good place to start is to analyze each of the various costs to determine the factors or influences that create and regulate them. While accounting terminology and definitions are not fully standardized, you can break down costs into generally accepted categories of expense as follows:

1. Variable expenses
2. Semi-variable expenses
3. Fixed expenses

Variable expenses are those which vary directly with the sales volume. Common examples are direct labor and direct materials.

Semi-variable expenses are those which tend to fluctuate, but which do not vary in direct proportion to the sales volume. Typical expenses of this kind are supervision of labor; machine and plant maintenance; executive, general and administrative salaries; and promotional and research expenses. Semi-variable expenses cannot be used, as such, in finding a break-even point. They must each be broken down into "fixed" and "variable" segments. Usually you have to do this on the basis of experience and judgment.

Fixed expenses are those which can be expected to remain constant at virtually any sales volume. Examples of this type of expense are certain kinds of taxes, depreciation charges on buildings and equipment, interest, many types of insurance, and in some cases certain expenses that are determined arbitrarily—as, for instance, product development expense.

Do you know how to use break-even points?

These simple calculations can make it possible to predict future profits or losses for even the smallest business.
Historical Records

While it is desirable to forecast your sales volume and cost of sales for the coming year, you will also find it prudent to check your forecasts with the actual operational results of the preceding years, taking into consideration any factors that are known to have changed. For example, the selling prices, wages, or costs of materials may be considered different for the projected period from what they were in former times.

The most useful and practical approach to figuring the break-even point is through your past Profit and Loss Statements. While this approach is not always the most accurate, it is ordinarily precise enough for planning purposes in most companies. It will spotlight the danger points so that corrective action can be initiated promptly. The break-even point established by the Profit and Loss Statement method can be used both as a guide in setting policies relating to changes in pricing and production, and as a guide for planning future expansion of plant or facilities.

Getting the Figures

Let's take a look now at an "arm chair" illustration of a financial statement, simplified for illustrative purposes. Below the Profit and Loss Statement you will see a break-down of the information extracted from the statement and later to be used in preparing the break-even chart. The information for the break-even chart assumes, for this illustration, that 33 percent of the factory overhead and GO percent of the general and administrative expenses of $1500,000, with variable expenses of $12,000,000. Next the total expense figure of $2,500,000 is plotted through point "A" which represents the fixed expense of $2,500,000. Then the total expense line can be drawn from the zero point on the left margin through point "C" which is $10,000,000 volume at 70 percent of capacity. Where these two lines—the total expense line and the income or sales volume line—cross is the break-even point, when income just covers costs and you have neither profit nor loss.

Of course, the information on this chart will not apply for all volumes, for it is based on current operations. If, for instance, the volume were to decline to 5 percent of capacity, the relationships between fixed and variable expenses might change substantially. However, this chart is reasonably reliable for sales volumes from 50 percent to 90 percent of capacity, with declining accuracy outside those limits.

From Figure 1, you can see that Company "A" would have to have a sales volume of about $7,200,000 in order to break even. Also, the break-even point is at approximately 30 percent of capacity. To make any money at all they would have to produce and sell more.

Effects of Changing Conditions

Once the break-even point is established, the chart can be used for many purposes, such as plotting the effects on profits if there is a change in variable expenses, fixed expenses, or selling prices.

Figure 2 shows the effect of a 10 percent reduction in variable costs ($650,000) at the $10,000,000 sales volume, with fixed expenses remaining unchanged. In these new conditions, the break-even point would be at around 42 percent of capacity, with a required sales volume of approximately $6,000,000, or about 37 percent less than the sales needed to break even at the original variable expense level. To see the practical results of an expense control program.

Figure 3 shows the effect on the break-even point and on profits of a reduction in fixed expenses of $500,000, with variable expenses remaining unchanged.
You will note that the break-even point is now at a volume of about $5,700,000. This is 40.0 percent of capacity as compared to the $7,200,000 break-even point in the conditions which existed for Figure 1, or the $6,000,000 break-even point which was found in Figure 2.

In a similar way, you could construct another chart to portray the effect of a price change. And finally, still others, can be prepared to illustrate any combinations of expenses and selling prices.

Using Break-Even Information

While the savings which can be obtained by installing new, larger, or more mechanized equipment can be readily figured at a given sales and manufacturing volume, it is essential that the future also be considered. Break-even charts can assist you in making the future clearer and the decision easier. New equipment will, of course, add a certain amount of fixed expense (amortization and maintenance costs), but presumably the equipment will also reduce the operating costs. If the savings in variable expense deriving from the purchase of such new equipment are not substantially more than the current increase in fixed charges, your break-even point will be raised.

You can also figure the size of profit margins and losses from break-even charts by measuring the vertical distance between the expense line and the sales line at any given capacity. To the right of the break-even point, you find profits, and to the left, losses. For example, in Figure 3, at 60 percent capacity, sales are $8,600,000 while expenses are $7,600,000, yielding a profit of $1,000,000. Conversely, at 20 percent of capacity, sales are $2,800,000 while expenses are $3,800,000 producing a loss of $1,000,000.
FIGURING AND USING BREAK-EVEN POINTS

FIGURE 2 - EFFECT OF REDUCTION IN VARIABLE EXPENSE ON COMPANY "A"'S BREAK-EVEN POINT

FIGURE 3 - EFFECT OF REDUCTION IN FIXED EXPENSE ON COMPANY "A"'S BREAK-EVEN POINT
CASES IN POINT

Case Studies for Depth Penetration

Section

The case method has proven stimulating and effective in many administrative management courses. The following case material is suggested as a means of introducing alternative solutions.

It is suggested that case material be oriented to the presentation of the topic. As well, student involvement in cases may sometimes be used to stimulate or augment the discussion that follows the presentation. This collection is one of expanding the basic material into an advanced function.
THE CASE METHOD OF STUDY

The case method is a teaching device that helps the student learn through the processes of reasoning and decision making. Other popular teaching techniques stress learning or memorizing other people's knowledge on a given subject. The case method stresses thinking abilities rather than memory; it is dynamic, not passive.

What is a case? It is a description of an actual or true-to-life business situation. It is a statement of facts, opinions, judgments—in short, a problem having no pat answer but lending itself to discussion and analysis.

The case method is particularly helpful in teaching businessmen because it uses real, practical problems rather than abstract situations. Properly used, it involves the participant in a way that will hold their interest and stimulate their thinking. It is particularly useful in developing in the individual (1) the ability to make decisions on administrative tasks (without incurring the penalties of a wrong decision on the job; and (2) the habit of thinking analytically and constructively.

The case method also highlights the value of group discussion and analysis. Each member of the group contributes from his unique experience, and each participant gains from the others. The group's knowledge and experience will exceed that of any one participant—including the instructor.

The following checklist can serve as a procedure for conducting case study and analysis.

Suggestions for Case Study

1. Read the case carefully for general content.
2. Arrange the facts of the case in order of importance.
3. Recognize and define the major problem(s) needing solution.
4. Analyze the problems and their relative importance.
5. Search for and establish alternative solutions.
6. Select the most desirable of the appropriate solutions.
7. Analyze your probable solutions; set up the pros and cons, giving value to each.
8. State your choice, decision, or final conclusion—and be prepared to defend it.
9. Set forth the plan or plans you would follow to implement the decision.

AN ABBREVIATED CASE STUDY

The Springfield Hardware Company is located in Springfield, a town of approximately 25,000 people. The store is in a neighborhood shopping area, and is located about 2 miles from the major shopping center newly built in the town. The owners feel that this is an advantage, because the store parking space is near to their front door, while the shopping center is in a huge mall, and requires a considerable amount of walking to reach any particular store.
Competition in the retail hardware trade is severe in Springfield. There are four other hardware stores in the community, three hardware departments in major department stores in town, and two auto supply stores.

The Springfield Hardware Company is departmentalized for sales, expense and buying purposes. The store is divided into the following departments: hardware; paint, sporting goods; lawn and garden; housewares; and toys. Toys were added last year when space was made available with the discontinuance of major appliances in the store.

Departmentalization was responsible for the decision to discontinue major appliances. For two successive years, the department had shown a loss, although the store as a whole made a good profit. If the store had not been departmentalized, Springfield Hardware would probably still be carrying major appliances, because they accounted for nearly one fourth of the total sales volume. But close study of the records indicated that the poor performance of the department was eroding the profits of the rest of the store. After analyzing the merchandising trend of two new discount stores in the area, and knowing its own operating costs, the owner made the decision to eliminate major appliances. As there was not a complete toy department in any other store in the community, the space was allotted to the new line.

The Springfield Hardware Company uses a variable pricing policy based on two factors—competitors' prices and rate of turnover. Competitive items have a smaller markup than non-competitive merchandise, and service items are given a high markup to compensate for the low turnover rate. Between these two extremes falls most of the store's merchandise. This takes a normal markup since such items are generally non-competitive and their turnover rate is reasonable. This procedure is applied to all departments.

The store's policy concerning markdowns is to reduce the prices on all seasonal items as the end of the season approaches. In this way, the markdowns are not as great as they would be after the season is over. The firm also cuts prices on all merchandise that has been in stock for at least 1 year, providing that replacement costs for the merchandise have not advanced.

The store controls cost of goods sold by comparing gross margin performance on a yearly basis. For example, in 1965, gross margin represented 34.31% of sales. In 1966, this percentage decreased to 32.31%. After studying all records, it was determined that the principal reason for this loss of margin was the store's advertising program—promoting loss leaders which have a very low margin. The plan was to draw customers into the store with the lower priced sale merchandise in the hopes that they would purchase other items at regular prices. Sales did increase for the year, but not sufficiently to overcome the low margins on the leaders. As a result, the firm suffered a net loss for the year.

Questions

1. Can you suggest something that the owner of Springfield Hardware could have done to prevent the decline in gross margin for the year?

    ANSWER: By comparing margin performance on a monthly, rather than a yearly basis, he could have corrected the situation early in the year, possibly reversing the trend, but at least preventing it from going so far.
2. How could the owner have made an early determination of the effectiveness of his loss leader promotion?
   \textbf{Answer:} By conducting a "before the sale" and an "after the sale" inventory, and calculating the gross profit on the number sold.

3. Can you suggest any improvement in the store's markdown practices?
   \textbf{Answer:} By maintaining a closer check on sales records and inventory of merchandise, it may be possible to time markdowns better and, thus, reduce them.

4. Give three reasons why you agree with the pricing practices of Springfield Hardware Company.
   \textbf{Answer:} Discuss the variety of answers that will result from group discussion.

5. Give three reasons why you disagree with the pricing practices of the store.
   \textbf{Answer:} Discussion provoking question.
1. **SUGGESTED INCUBATOR ASSIGNMENTS**

1. Explain the difference between full-cost pricing and marginal pricing.

2. For an item with a wholesale cost of $3.65, calculate the selling price for a markon in percentage of retail price of: 35.3%; 40.2%; 37.5%.

3. In examining the figures for a retail store, you discover the following:
   - Net Sales: $200,199.00
   - Cost of goods sold: 65% of net sales
   - Average inventory: $43,367.00 at cost

   From this data, calculate:
   a. The Gross Margin.
   b. The Stock Turn.

4. Given a Gross Sales Volume of $64,000.00; Expenses of $19,200.00; and an Operating Profit of $2,560.00, calculate the markon.

5. It costs a retail hardware store $200.00 per year to carry each $1,000.00 of inventory. These inventory charges consist of taxes, insurance, interest, cost of space occupied, obsolescence of stock, breakage and damage.

   For a particular store, you determine the following:
   - Net Sales: $130,000.00
   - Cost of goods sold: $89,700.00
   - Gross profit on sales: $40,300.00
   - Expenses (carrying charges): $28,730.00
   - Inventory carrying charges: (average inventory x 20%) $8,970.00
   - Total expenses: $37,700.00
   - Earnings on sales: $2,600.00
   - Stock turnover: 2
   - Average inventory at cost: $44,850.00

   With Net Sales, Cost of goods sold, and Expenses (less inventory) remaining the same, but with a Stock turn of 3, calculate the increase in Earnings on sales.

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