

Parts Pricing 101

Improving Gross Margins

The Basic Truths About Pricing

- Lower prices **DO NOT** automatically equate to increased sales
- Lower prices and the resulting per sale lower profits **DO** require you to sell more in order to maintain the same level of profitability for the company

Example

- You normally sell 100 premium brake shoes per month at a price of \$25 each. The shoes cost you \$15 each, so your gross profit per shoe is \$10 with a gross profit percentage of 40% ($10 / 25$). Your total sales per month are \$2,500 and total profits are \$1,000.

If you lower the price by 10% or \$2.50 making the selling price \$22.50, your profit per sale becomes \$7.50 or 33.33% GP ($7.5 / 22.5$).

How many more shoes will need to be sold to make the same total gross profit as prior to the price reduction?

$\$1,000 / \$7.50 = 133.3333$ or 134 shoes.

The 10% reduction in price will require a 34% increase in sales to achieve the same total gross profit as before the price reduction.

Formula for calculating the increase in sales needed after price cut

$$\frac{\text{Beginning GP}\%}{\text{Beginning GP}\% - \% \text{ Lowered}} - 1 = \% \text{ of Sales Increase Required}$$

The Basic Truths About Pricing

- Customers who buy from you because of price are not YOUR customers. They belong to whoever has the lowest price in the marketplace.
- A price increase may actually be the best choice.
- If business is bad, cutting prices could make matters worse because of the increased sales volume required just to maintain existing profits.
- A small price increase can significantly increase overall profits.

Example

- Using the previous brake shoe scenario. If you raise the price of the shoes by 3% making the selling price \$25.75, your gross profit is now \$10.75 per shoe or 41.75% ($10.75 / 25.75$). Your total gross profit on 100 shoes would be \$1,075, a 7.5% increase.

Even if sales declined slightly, you could still maintain the original \$1,000 gross profit.

Beginning GP%

$$\frac{\text{Beginning GP\%}}{\text{Beginning GP\%} + \% \text{ Raised}} - 1 = \% \text{ of Sales Decrease Absorbed}$$

40%

$$\frac{40\%}{40\% + 3\%} - 1 = .0697 \text{ (6.97\% drop in sales=Same profit \$)}$$

$$100 * 93.03\% = 93 * 10.75 = \$999.75$$

Definitions

- **Mark-up Percent** is the percent applied to Cost to determine Selling Price
- **Gross Margin Percent** is the percent of the Selling Price that is Profit
- **Gross Margin Dollars** is the difference between Selling Price and Cost

Calculating Margin

- An item's cost is \$100. You sell it for \$125. To calculate the margin on this sale use the following formula:

$$\text{(SELLING PRICE - COST) / SELLING PRICE = MARGIN\%}$$

$$(125 - 100) / 125 = .20 (20\%)$$

Again, margin is the percentage of the selling price represented by gross profit. In the example above, the \$25 gross profit is 20% of the selling price.

Calculating Selling Prices

- If you know the cost and the desired margin you can use this information to calculate the selling price.

Divide the cost by the reciprocal of the margin you want:

$$\text{COST} / (100\% - \text{GM}\%) = \text{SELLING PRICE}$$

If the cost for an item is \$200 and you want a 30% margin:

$$\$200 / (100\% - 30\%)$$

$$\$200 / (70\%)$$

$$\$200 / .70 = \$285.71$$

Using Markup

- Markup, defined as the percentage added to cost to arrive at a selling price, is commonly used to price materials.

If you want to mark up an item 20%, you add 20% of the item's cost to the cost.

For example - if an item cost \$100 and you want to add a 20% markup:

$$100 \times 20\% = \$20$$
$$\$100 + \$20 = \$120 \text{ SELLING PRICE}$$

Note: The actual margin on this item is less than 20%.

$$(\$120 - 100) / \$120 = 16.67\%$$
$$(\text{SELLING PRICE} - \text{COST}) / \text{SELLING PRICE}$$

A 20% markup does not yield a 20% margin! It is important that you utilize margin and markup properly.

Using Markup

➤ “New Math”

- Another way of looking at markup and gross margin.

Mark-Up (Measured on Cost)			Gross Margin (Measured on Sales)	
Fraction	%		Fraction	%
1/1	100.0%	=	1/2	50.0%
1/2	50.0%	=	1/3	33.3%
1/3	33.3%	=	1/4	25.0%
1/4	25.0%	=	1/5	20.0%
1/5	20.0%	=	1/6	16.7%
1/6	16.7%	=	1/7	14.3%
1/7	14.3%	=	1/8	12.5%
1/8	12.5%	=	1/9	11.1%

Using Markup

- You can use the following Markup/Margin Table as a guide for achieving the proper margin.

Use the multiplier on cost to achieve the desired margin.

e.g. To achieve a 22% margin use a 129% (1.29) multiplier.

Profit Percent Desired**Multiply Cost By****Profit Percent Desired****Multiply Cost By**

10%

1.1111111

46%

1.8518519

12%

1.1363636

48%

1.9230769

14%

1.1627907

50%

2.0000000

16%

1.1904762

52%

2.0833333

18%

1.2195122

54%

2.1739130

20%

1.2500000

56%

2.2727273

22%

1.2820513

58%

2.3809524

24%

1.3157895

60%

2.5000000

26%

1.3513514

62%

2.6315789

28%

1.3888889

64%

2.7777778

30%

1.4285714

66%

2.9411765

32%

1.4705882

68%

3.1250000

34%

1.5151515

70%

3.3333333

36%

1.5625000

72%

3.5714286

38%

1.6129032

74%

3.8461538

40%

1.6666667

76%

4.1666667

42%

1.7241379

78%

4.5454545

44%

1.7857143

80%

5.0000000

Pricing for Profit: Value-Based Pricing

- How high can a price be before the product or service is priced out of the market?
- To understand the customer's perception of the value of your product or service, look at more subjective criteria such as customer preferences, product benefits, convenience, product quality, company image and alternative products offered by the competition.
- How do your customers describe what they get for their money?
- Do they save a great deal of money or time by purchasing your product or service?
- Do they gain a competitive advantage from using your service?
- Is it more convenient to use your service rather than try to do it themselves?
- What are the customer's choices?
- What does the competition charge?

Value Based Pricing Strategies

Fair – Good – Better – Best

- Fair – Establish a low price (compared to the competition) on a product in order to capture a large number of customers in that market. This strategy may also be used to achieve non-financial objectives such as product awareness, meeting the competition or establishing an image of being low-cost. It works only if you are able to maintain profitability at the low price, or if you're able to maintain an acceptable level of sales should you later raise prices.

Value Based Pricing Strategies

Fair – Good – Better – Best

- Good – Price the same as competitors. This strategy is used when offering a commodity product, when prices are relatively well established (such as with professional services) or when you have no other means to set prices. Your challenge then becomes to determine how to lower your costs so you can produce a higher profit than your competitors.

Value Based Pricing Strategies

Fair – Good – Better – Best

- Better – If your product is unique or is of high value to customers, you might have the ability to charge a very high price relative to your cost. Also, if your target market is affluent and you are positioning your product as a "prestige" product, an especially high price could be in order.

(For example, do Rolex watches cost that much more to make than other brands? The high cost, however, brings a "status" benefit to Rolex's affluent market.) This strategy of charging "what customers are willing to pay"—even though it's high—requires alertness and a willingness to change on your part because customers (and competitors) might decide that you're making too much of a profit!

Value Based Pricing Strategies

Fair – Good – Better – Best

- Best – Use all of the above to establish an overall pricing structure that does the following.
- Set low prices to attract customers to your dealership. Best used for seasonal specials or flyer specials where you can make special buys to keep profits at an acceptable level.
- Set prices equal to competition for those 100-150 part numbers that can be considered commodity items in the marketplace and all customers know the local market prices.
- Set all remaining prices (90+% of the parts you sell) at levels that represent the “value” of the product as well as the “value” of the service you provide in delivering the product.

Intelligent Pricing Strategies

- The good news about pricing your products or services is that you don't have to learn complicated pricing formulas to do it right. Just understand this basic principle: The more your customers perceive your business as being different from the competition, the less chance there is of your discounting — or trying to compete solely on price.
- Price – Quality – Service --- Pick any two!
- Example – Starbucks Coffee

Karmak Business System Pricing Strategies

Legend & INFO 5



Sub-grouping a Vendor

➤ Legend System

- Three fields available for sub-grouping:
 - Price class
 - Code 2
 - Code 3

➤ INFO 5 System

- Stock Class



Reasons for Sub-grouping a Vendor

- Set resale prices by subgroup.
 - Be price competitive by subgroup rather than setting one resale price for the entire vendor.
- Load customer special pricing by subgroup.
 - Discount the fewest part numbers possible.
 - Mark-up pricing for selective subgroups.



Update Price Class, Code 2, Code 3 or Stock Class

- From vendor product code on price tape.
- Manually in an inventory maintenance program.

Special Price Multipliers

➤ Legend System

- Load special price multipliers by:
 - Price class
 - Vendor and price class
 - Vendor
 - Vendor and code 3
 - Vendor and code 2
 - Vendor, code 2, and code 3
 - Part number

➤ INFO 5 System

- Load special price multipliers by:
 - Stock class
 - Part number

Contract Prices

- Use for contract or bid.
- Not affected by price updates.
- Review frequently.
- Load expiration date.
- Use special price multipliers if possible.
- Central parameter or Message member setting required to allow contract prices below cost.

Formula to Calculate Contract Prices

Special Price Multiplier =

Desired Price / Normal Price

Core Pricing

- 10 - 15% of cores not returned.
- Markup good cores to make a profit.
- Damaged cores should not be marked up.
- Update core pricing from price tape.

Special Pricing for Cores

- Special price multipliers applied to inherent and dirty core charges.
- Steps to override:
 - Give all cores a price class of **CORE**.
 - Create special price multiplier for price class **CORE**, multiplier = 1.00000.

Parts Pricing in the Service Department

- Additional overhead in shop.
- Warranty both the part and the labor to install it.
- Add markup to regular parts price.
- Legend System
 - Price levels A, B, and C add markup to counter price.
 - Use cost matrix pricing to markup counter price by vendor.
- INFO 5 System
 - Control via Discount Master Record

Price Discount Vs. Markups From Cost

- Markup from cost eliminates pricing flexibility.
- Discount from a resale price instead.

Price Display Options in Part Number Display

- Display customer's price only.
- Display customer's price and higher prices.
 - Also available in order entry.
- Force user to enter a customer.
 - Quote customer's price.

Cost Matrix Pricing

- Used to add markup to the price of low cost items.



Step 1: Review Inventory

- Print and review inventory listing of parts costing less than \$2.00.
- Determine vendors that should be excluded from cost matrix pricing.

Step 2: Determine Markups

- System checks on cost to determine markup.
- Markup multiplied against cost and all selling prices.

Cost Matrix Example

	Price	Markup	Matrix
List	0.99	x 2.0	= 1.98
Price 1	0.83	x 2.0	= 1.66
Price 2	0.74	x 2.0	= 1.48
Price 3	0.66	x 2.0	= 1.32
Cost	0.472	x 2.0	= 0.944

Cost Matrix Tables

➤ Legend System

- You may have up to 35 cost matrix tables.
- You may create cost matrix tables by vendor, or for all vendors by entering “***”.

➤ INFO 5 System

- Cost matrix tables are created by Stock Class

Step 3: Load Cost Matrix Code

➤ Legend System

- Load in program **Customer Price Level Maintenance (AR910)**.
- Cost matrix code values:
 - 0 through 9: Cost matrix pricing only
 - A through Z: Cost matrix and velocity pricing
 - N: No additional markup

➤ INFO 5 System

- Control via Discount Master Record

Be Sure to Add Cost Matrix Code to

- Miscellaneous cash customers
- Miscellaneous COD customers
- Default pricing account

Cost Matrix Pricing for Service Pricing

- Add markup to parts counter price by vendor.
- Customer must have a cost matrix code.

Velocity Pricing

- Add markup to the price of slow moving items.



Velocity Pricing Markups Example

Class	Code	Markup
01	A	No change
02	B	+ 1%
03	C	+ 2%
04	D	+ 3%
05	E	+ 4%
06	F	+ 5%

Velocity Pricing for INFO 5

- **IMPORTANT NOTE:** Matrix pricing can be affected by not only the range of prices, but also the velocity code (level of demand).



Velocity Pricing for INFO 5

➤ **ABC Code** — This field identifies an optional code that identifies the demand level or velocity of the part. (This code is assigned to parts based on user-defined order and velocity parameters explained in Book 4 of the Parts Manual.) Valid entries in this field include the following:

- **A** = Fast moving part
- **B** = Average moving part
- **C** = Slow moving part
- **D** = Dormant part
- **E** = New part

Velocity Pricing for INFO 5

- If you choose to make an entry in the **ABC Code** field, then the Markup/Discount percentages you enter will apply only to parts with the entered *ABC Code*.
- If you want the entered Markup/Discounts to apply to ALL parts, leave this field blank.
- Using a combination of these settings will allow you to implement Matrix Pricing only, Velocity Pricing only, or both.

Velocity Pricing for Legend

- Classify inventory to determine fast and slow moving parts.
- Use picks to classify inventory.
- Use **Inventory Class Percentage Maintenance (PU900)** to load:
 - Classification method
 - Minimum
 - Percentages
- Request inventory class batch run.

Velocity Pricing for Legend

- **Request Headquarters Combined Class (PU700A)**
- Use if you wish to combine picks to do velocity pricing:
 - of all branches
 - of a group of branches (new to V5.6)
- Runs only on demand.
- Delete file ***OPTION:PU700H.DAT*** if you wish to classify main branch independently of other branches picks.

Velocity Pricing for Legend

- Code inventory records
- Velocity pricing driven from code 4 or 5, not inventory class. Determined in branch option line 85.
- Use program **Change Fields in a Range of Parts (IN996)** to update code 4 or 5 from inventory class.
- Perform every three to six months or as price changes are received.
- Keep pricing consistent as class changes from month to month.
- Identify commodity items by manually coding parts.

Velocity Pricing for Legend

Inventory Code Example

Class	Code
01	A
02	B
03	C
04	D
05	E
06	F

Velocity Pricing for Legend

- Code update for multiple branches
- Keep pricing consistent at all or a group of branches.
 - Use headquarters combined class to code main branch.
 - Copy this code to the branches.
 - Repeat process for the next group of branches.
- Set unique velocity pricing markups by branch.
 - Update code from inventory class independently at each branch.

Velocity Pricing Multipliers

- Can be loaded by vendor or for all vendors.
- One set of multipliers.
- Created in program **Cost Matrix/Velocity Pricing Maintenance (SD933)**.
- Does not apply to customers with a cost matrix code of 0-9 or N.

Velocity Pricing Example

	Matrix	Markup	Velocity
List	1.98	x 1.03	2.04
Price 1	1.66	x 1.03	1.71
Price 2	1.48	x 1.03	1.52
Price 3	1.32	x 1.03	1.36
Cost	0.944	x 1.03	0.972

for code 4 = "D"

Customer Special Pricing

Price 3	Cost Matrix	Velocity Pricing	Discount	Price
.66	* 2.0	* 1.03	* .95 =	1.29

Cost Matrix/Velocity & Feature Pricing

- The customer will always pay a contract price.
- The customer will pay the lower of a feature price and his regular price.
- The regular price includes:
 - Cost matrix markup
 - Velocity pricing markup
 - Special price multipliers

Cost Display

- The system adds the cost matrix and velocity pricing markups to all prices, including cost.
- Central parameters or Message members to control display of true cost.
- Accounting and sales analysis is done at true cost.

Price Rounding - Legend

- Rounds cents portion of a price.
- Changes prices in inventory.
- Must be rerun after each price change.
- Occurs before cost matrix and velocity pricing.
- Loaded in program **Inventory Price Rounding (IN922A)**.

The Bottom Line

- It is easier to increase net profit by raising prices than by raising sales.
- Monthly sales are \$300,000 and GP is 25%
GP\$ = \$75,000
- An increase in GP of 1% = Additional \$3,000 in GP\$ per month (\$36,000 annually).
- Sales would have to increase 4% to generate this much additional profit.

Ways to Improve the Bottom Line

- Using price class to set resale prices by subgroup rather than vendor.
- Loading special price multipliers for the smallest group of parts possible.
- Always loading an expiration date on contract prices.

Ways to Improve the Bottom Line

- Marking up core prices.
- Marking up parts sold in the shop.
- Discounting from a resale price rather than marking up from cost.
- Controlling the prices displayed at the parts counter.

Ways to Improve the Bottom Line

- Marking up low cost items (cost matrix pricing).
- Marking up slow moving parts (velocity pricing).
- Rounding up prices (inventory price rounding).

Do your own math!

- **Increasing gross margin by 1% will increase annual net profits by \$10,000 for each \$1M in parts sales per year.**

Follow-up Checklist

- Use of price class to set resale prices by subgroup rather than vendor.
- Special price multipliers loaded for the smallest group of parts possible.
- Expiration date loaded for all contract prices.
- Marking up core prices.
- Marking up parts sold in the shop.
- Discounting from a resale price rather than marking up from cost.
- Controlling prices displayed at the parts counter.
- Marking up low cost items (cost matrix pricing).
- Marking up slow moving parts (velocity pricing).
- Rounding up prices (inventory price rounding). Legend only

Karmak Training Opportunities

- Karmak Training Center
 - 1 & 2 day classes
 - In Carlinville, IL & Springfield, MO
- Regional Training
 - 1 & 2 day classes regionally
- www.karmak.com
 - Click *Training*
- Karmak On-Site Training/Consulting

Any questions?

