

Debunking Distribution Pricing A White Paper on Effective Pricing Management

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Introduction

During the past five years, there has been renewed interest in pricing for greater profits. Our book, Pricing Management: Capturing Value for Distributors,¹ while going into its fifth year, ranks as one of the earlier works on distribution pricing. There are, today, numerous publications and pricing consultants courting the distribution market.

The interest in pricing is well understood when one views the profits of merchant distribution where 1% to 2% pretax operating profits on sales are common. A one percent pricing gain on top line sales has the potential to increase profits thirty to fifty percent. Because of the profit power of pricing, numerous distributors have spent precious time and money on the function. The purpose of this paper is to give empirical and experiential evidence, from our consulting practice, on what works in pricing and what does not. The distribution landscape is full of new materials and often, the “guaranteed” improvements never materialize and leave distributors apprehensive about the viability of funding the discipline.

This paper is taken from our consulting work in distribution pricing over the past five years. The data has been analyzed from individual distributors representing over a dozen vertical industries in durable goods wholesaling. The trends derived from our research are highly likely to be found in most wholesaler vertical markets. The major trends to be discussed in this paper are:

- The more sales controls pricing, the higher the probability that the firm has less earnings as a percent of sales
- Elasticity pricing or target pricing is labor intensive and does not appreciably fix pricing issues in the areas of segmented velocity pricing, non-standard item pricing, and cost recovery pricing. Elasticity or target pricing is useful **only** for A item or top velocity item pricing.
- Pricing must be accompanied by robust pricing modules that are part of the ERP system. Inspection pricing does not work, for any appreciable amount of time, and most ERP software has dismally weak pricing capabilities.
- Pricing managers must be given authority to challenge sales pricing and should not report to sales managers and sales compensation on margin dollars exacerbates and can impede pricing gain

The research for these statements and our analyses are included in the following article. In addition, we warn the interested reader that pricing is a complex discipline that is only beginning to be explored. Mastery of the discipline can take years with the average

pricing implementation taking 18 months. Significant change in pricing software and practice needs to be undertaken before pricing gain can be maximized. Those distributors who are not willing to invest long hours and much change management will be disappointed in the results.

Negative Correlation of Profits with Sales Control of Pricing

Seller control of pricing is defined as the ability of the outside and inside seller to change price based on their estimation of the market price needed to secure the order. Over the past five years, we have conducted dozens of audits, assessments, seminars and implementations in the pricing discipline. We measure sales control of pricing on a five point scale that includes the ease of a seller to override an established price, the amount and quality of pricing controls imposed by the organization, and the existing quality of pricing software. Each of the three variables are scored on a scale, equally weighted, and then averaged to give a composite score for the company. A high composite score is 5 which typifies low seller control/highly centralized pricing and a low score is 1 which represents high seller control/highly decentralized pricing. We then engage a statistical tool, linear regression, of the composite score to the pretax earnings as a percent of sales. In the five-year period, there is a positive correlation of less sales control/high centralization of pricing with increased earnings. Technically, the regression score (r square = .57) means that fifty seven percent of the variation in earnings can be explained by the composite score of sales control of pricing. This finding is in sync with another study, of 108 health industry distributors, that found a "...negative correlation between profit and the degrees of (pricing) delegation to the sales force."² In essence, from both studies, the more sales controlled pricing, the lower the profits.

Sales control of pricing is typified by price matching of commodity items and cost plus pricing subject to behavioral constraints of prospect theory and the upper limit theorem. Prospect theory, in layman's terms, is the reticence to charge a higher price for fear of losing the order and the associated embarrassment of interfacing with the customer. The upper limit theorem simply states that cost plus margins are learned early in the work experience, become the upper limit of pricing policy and are difficult to overcome. In essence, a cost plus twenty percent margin learned early in the job, becomes the upper limit of all margins and is difficult to change. The solution to high sales control of pricing is a properly designed pricing system based on markets, transaction types, errant costs, and elasticity experiments. We have found sales controlled pricing is valid in contested pricing situations including reverse auctions, job bids, government bids, high sales commodity items and large dollar contract pricing. Succinctly, when the potential order is large and contested, then sales control of pricing is effective. In other situations, it has a high probability of yielding low earnings.

There have been recent papers and studies that encourage greater sales control of pricing. They are big on hyperbole and sales language that is part of the distribution culture. They appeal to the established cultural norms of the distribution marketplace which is largely sales driven. The empirical data, however, suggests that entreaties to give sellers more control of pricing, outside of large quotes and commodity sales items, is a potentially wrongheaded and profit limiting strategy.

The Limitations of Elasticity Pricing

Elasticity pricing is defined as the change in quantity demanded versus the change in price. The ratio of 1 is used as the arithmetic benchmark for elasticity of an item. An elasticity ratio less than 1 means the item is relatively inelastic or price can be changed upward without a corresponding decrease in volume. An elasticity index of greater than 1 means that an upward change in price receives a higher than expected decrease in volume.

There are several software programs available in the marketplace that perform elasticity experiments and that typically range from \$25,000 to \$75,000 for purchase and installation. Their terminology includes target pricing, pricing waterfalls, and pricing strike points. The software is simply a repository for a history of sku prices and associated volumes. The resulting analyses are simply elasticity ratios or their equivalent of where to raise and lower a price on an item to yield a greater return. If the sku elasticity ratio is less than 1, the impetus is to raise the price. If it is greater than 1, the impetus is to decrease the price. Our investigation of a handful of elasticity programs, however, has found severe limitations including:

- Elasticity pricing does not typically include segmentation, transaction type, or activity profit history of customers. Without this level of detail, many of the elasticity analyses yield one dimensional or even errant information for decision-making.
- Elasticity pricing is labor intensive as it reviews individual sku pricing, by customers over time. Since most distributors sell thousands of line items to thousands of customers, using the software to manage and direct the pricing decision-making of tens of thousands of transactions is a labor intensive and never-ending struggle.
- Elasticity pricing is pitched to sales representatives as a tool for their use to increase margins. Given our research on sales control of pricing and the limitations of behavioral pricing, we have found there is a significant likelihood that sellers will not use elasticity software. Prospect theory and the upper limit theorem are a greater impediment to keep prices artificially low than the elasticity ratio's influence to raise prices. In short, sellers don't believe elasticity ratios and are unduly influenced by prospect theory or have margins suppressed by the upper limit theorem. The underlying behaviors have to be dealt with before Elasticity Pricing software can be effective. For all intents and purposes, this is best accomplished by removing the seller from the pricing decision or reframing the pricing decision using a list and discount logic.
- Elasticity pricing software is expensive for its ability to change prices. Often, simple spreadsheet analyses and data queries offer usable elasticity information at a much lower cost.

- Finally, elasticity software is a bolt-on application with the current ERP system. Once new ERP versions are available, the bolt-on applications have to be reprogrammed to “hook” on to the new ERP version. In essence, the initial price of the Elasticity program is often small compared to the ongoing cost of reprogramming the software for use with new ERP versions.

Given its limitations, however, elasticity pricing and software can be used for pricing gain in sales of high volume commodities of stock items. So-called A items can be successfully benchmarked and their pricing gain maximized using elasticity software. Stock sales of A items can represent 20% or more of overall sales of the firm.

Finally, we discourage the use of the elasticity terminology of “target price” and encourage the concept of target margins. Target pricing is often confused with fixed point pricing where a seller places a fixed price in the pricing field. Unless the ERP pricing module has a time limit to the fixed price, it can remain in the pricing file for years despite repeated purchase cost increases. Instead, we encourage target margins where the firm strives for a target gross margin percentage on the replacement cost of the item.

In conclusion, elasticity pricing, and the associated concepts have value in distribution pricing but the cost to value, software functionality, and yield is typically overrated. Wholesalers are encouraged to carefully review the claims of elasticity software providers with the points raised in this paper.

System Pricing, the impossibility of sales pricing, and need for robust ERP pricing software

Pricing is a complex and multi-faceted discipline. In high volume, multiple market businesses, the need for a comprehensive software aid for pricing is great. Consider that pricing can vary by customer type or segment, geographical competition, transaction type (stock, non-stock or direct), and services provided including freight type and service need. If a distributor has five segments, ten geographies, three transaction types, and six service prices, the number of pricing permutations ($5 \times 10 \times 3 \times 6$) times 15,000 line items yields 13.5 million viable pricing permutations. Of course, only the exceptional seller can approximate and anticipate a sliver of these permutations and most don't even try. This is why **product cost and cost plus pricing is typically used in distribution as product cost is the most consistent variable in ERP pricing modules**. The complexity of pricing parameters is also why many distributors try inspecting pricing of stock items, special orders and service fees. Inspection efforts, however, eventually wear down and fail as the “inspector” leaves or switches positions or the pricer grows less mindful of the inspector.

ERP systems can be designed to consider segments, geographies, transaction types and services in their pricing logic. The amount of reprogramming needed to accommodate these variables is significant and can take individual wholesalers months to several years to design and implement.

Our work with over a half dozen of the more popular ERP systems and their pricing capabilities finds that most fall short of having a modern day design to drive pricing gain. Their conventions of matrices and unsegmented velocity pricing are thirty-year old

design features that don't, typically, help in today's business environment. Benfield Consulting has designed pricing systems for individual wholesaler companies for the past five years, our design parameters include the following features:

- Segmented velocity pricing capabilities
- Transactional pricing capabilities of non-stock and direct ship items
- Geographic templates to stock pricing
- Service fee pricing with control loops and default standards for different services including freight charges, handling charges, and other services
- Documented pricing decision hierarchy for all transactions
- Pricing control logic with standards and statistics on individual pricing overrides
- Embedded pricing elasticity analyses
- Ability to develop and manage proprietary list prices

We advise simply giving this list to your pricing manager or your software vendor and asking them if they have these system capabilities. In most instances, we find ERP providers have 40% or less of the needed features to maximize pricing gain. Why is it that well financed software companies that sell and service "enterprise" software have such limited functionality in their pricing modules? Our answer is threefold. First, pricing is just beginning to be studied, in earnest, in distribution so there has not been a general agreement on the correct standards for pricing in distribution firms. Second, most pricing software is developed from user group input. User groups are composed of sellers whose needs are tactical and are who are subject to the pitfalls of seller driven pricing. And lastly, ERP providers have not gotten a consensus opinion of pricing improvement from their user base. In a recent incident, we found where the larger users of an ERP provider petitioned the company to improve their pricing module. At this juncture, however, the request has not been driven to tangible software improvement.

Our view is that forward looking ERP providers with progressive clients will need to invest in and develop pricing software with features that maximize pricing gain. The ERP provider who does this and can demonstrate tangible results will be at a competitive advantage.

The Corporate Pricing Manager and Compensation Incongruence

The Corporate Pricing Manager is a requisite position for larger wholesale firms. The qualities of the pricing manager include above average tenure with the firm, advanced mathematic and analytical skills, understanding of the firm's sales process, understanding of marketing basics, and basic familiarity of activity costing.³ Too often, however, the Corporate Pricing Manager reports to sales management who are not trained in advanced pricing practice. Also, many sales managers are compensated on margin dollars and have little interest in maximizing operating profits through better pricing. The situation of sales managers controlling pricing is, to quote a popular cliché, putting the fox in charge of guarding the hen house.

In our work, we find that placing the Corporate Pricing Manager in a direct report relationship with sales management leads to a low or negligible pricing gain. It is much better to place the pricing management function under marketing (not to be confused with

sales) or operations management. We reiterate our finding that sales controlled pricing has a low correlation with greater earnings. Compromising the objectivity and power of the Corporate Pricing Manager by letting them report to sales is largely a waste of their time and talent.

Finally, we appeal for a change in compensation systems to drive more pricing gain. Compensation on margin dollars is a poor means to control pricing and drive profit. Weak sellers have been found to cut price to drive up margin dollars which often causes the firm to increase transactions whose costs rise faster than their margin dollars. In our client pricing research, we have found that **margin percent of sales** has a two to three times greater strength of correlation to activity profits or operating profits than total margin dollars.⁴ This is the result of higher margin percentages covering low transaction size/high cost to serve orders. We seldom see margin percent as an equally weighted variable in sales compensation. Most sales managers are not cognizant of activity costs and the correlation strength between margin percent and higher activity or operating profits. Fixes to the compensation malaise include rewarding equally on margin dollars and margin percent, targeting low margin percent customers for pricing increases, and reducing service variations for low margin percent customers with small transactions.

Recommendations and Caveats

Pricing as a discipline is complex and belongs in the marketing and operations functions. Given the sales driven nature of distribution, pricing gain and solid pricing practice will need to be driven by sellers who have advanced knowledge of pricing or those outside of the selling discipline. The popular appeal to educate sellers on better pricing practice or inspect pricing gain probably won't work unless it is supported by proper ERP systems, Corporate Pricing Managers with power and objectivity and compensation alignment. To move the field forward and away from the body of conflicting opinion, we suggest the following:

- Association led research efforts or consortiums, on **best pricing practice** with input from larger members, trusted experts, and progressive software providers.
- Groups of distributors who share a common ERP platform who petition their ERP providers for better pricing modules that accommodate market, geographic, transaction and service pricing dynamics
- Careful review of claims by elasticity software providers
- Placing of the Corporate Pricing Manager in a direct report relationship to marketing, operations or finance and **not reporting to sales management**
- Adding margin percent to sales compensation along with margin dollars and using activity profits to guide pricing decision-making.

While the increased interest in distribution pricing is laudable, the flooding of the field with narrow research, simplistic hyperbole driven practice, and “bolt-on” software is likely to hinder the positive adoption of professionally accepted and researched pricing practice. Distributors who band together to explore the field, separate fact from fiction, and drive ERP software providers to greater capability will be rewarded.

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¹ See Pricing Management: Capturing Value for Distributors, Benfield and Baynard, LNC Press, 2001. Available at Nawpubs.org.

² See Power Pricing, Simon and Schuster, Dolan and Simon, page 314, 1997.

³ See the Corporate Pricing Manager, Pricing Management, Capturing Value for Distributors, Benfield and Baynard, LNC Press, 2001.

⁴ See, Restructuring the Distribution Sales Effort, Benfield and Vurva, book to be released by Brown Books in Fall 2005, Chapter 12 “Contrarian Compensation.”