REVENUE MANAGEMENT

Understanding and Applying an Effective Strategy for the Retail Industry

JANUARY 2001

Introduction

Revenue Management Comes of Age

What you don't know about Revenue Management could kill you!

--- Donald Burr, Chairman and CEO
PEOPLExpress Airlines

In 1985, PEOPLExpress, an everyday low price airline charging fares that were 50 percent to 70 percent lower than those offered by major airlines, was named the fastest-growing company in America. Its low fares were made possible by a cost structure that was 50 percent lower than that of major competitors, like American Airlines, who were losing market share to PEOPLExpress. By September 1986, however, PEOPLExpress was dead. What changed? For one thing, American Airlines implemented a version of revenue management.

In cases like this, revenue management systems made it possible and common for companies to experience recurring revenue improvements of 3 percent to 7 percent and net profit improvements of 50 percent to 100 percent.

It has been said that, some day, revenue management (RM) concepts will be applied to almost everything that is sold, and will prove to be such a powerful competitive weapon that major firms will be living, and in many cases dying, according to RM algorithms.

The firms with the best revenue management will prosper and grow; the remainder will struggle to survive by restricting themselves to local or niche markets.

--- Professor Peter Bell, President
International Federation Operational Research Societies

For retailers, "some day" is here. Revenue management for retail, a disciplined process of optimizing pricing decisions to achieve enterprise goals for revenue, profit and price image, is available now. By giving executives visibility to the tradeoff between profit and price image, RM enables retailers to develop and implement attainable pricing strategies so they can answer strategic questions such as:

- What is my overall price image relative to the competition?
- What is my revenue and profit potential given current demand and market dynamics?
- What is my optimal pricing strategy given current enterprise objectives for profit, revenue and price image?

This white paper lays the foundation for the adoption of revenue management in the retail industry by:

- Building a case for revenue management based on proven experience across different industries;
- Constructing a revenue management model unique to the retail industry;
- Clarifying the strategic considerations and benefits of retail revenue management;
- Creating a framework for evaluating revenue management systems; and
- Articulating the organizational considerations for implementing retail revenue management.

The Case for Revenue Management

Why Revenue Management is Needed

Consumers are able to purchase products at an ever-widening range of retail outlets. Where companies previously had a small handful of competitors per market, they must now contend with numerous competitors per category, many of whom have complex offerings that include loyalty pricing, promotions, rebates, first-time shopper discounts and even auctions.

Finding the right price has never been more complex. Confronted with volumes of information about changing market conditions, retailers must continually differentiate their offerings, making hundreds of thousands, and in some cases millions, of strategic product-level decisions. The number and complexity of product-level decisions is growing exponentially as companies increase product selection and move from mass-market strategies to customer-centric strategies.

Until now, retail pricing systems have been characterized by soft return on investment (ROI) or no ROI and generally served an intellectual, rather than business, purpose. They would help identify trends but left the user to make the more complex pricing decisions. In the absence of more sophisticated decision tools, users would typically only manage a small fraction of price changes, and even then, only manually. The remaining products were automatically priced using static rules, often based on cost or competition.

Then as now, the state of retail pricing relied on human intuition where it was least valuable – maintaining SKU-level pricing decisions – as opposed to where it is most valuable – managing category and market strategies – to achieve enterprise goals.

Today more than ever, it is critical for retailers to strategically respond to changes in cost and competition, as well as changes in product availability and demand – and not just on a limited selection of highly visible items, but across their entire product offerings. The opportunity for competitive advantage has never been greater. The means to the opportunity lies in revenue management.

The Proof is in the Math

Today, annual retail industry revenues are estimated at $3 trillion in the US alone.[1] While that's a staggering sum in and of itself, there's something else to consider: properly implemented revenue management systems have proven they can provide revenue uplifts of between 3 percent and 7 percent for retailers. That equates to a minimal uplift in industry revenues of approximately $90 billion.

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[1] *1999 US Census, Total Retail Sales.*

Quite literally, then, revenue management can unlock billions in hidden retail revenue. With so much at stake, and so much potential benefit, retailers should give serious consideration to implementing a revenue management system.

Price: The Ultimate Profit Driver

The management of pricing has been viewed historically as one component of merchandising, due to the complexity of modifying prices across the enterprise and the lack of technologies available to provide an enterprise view of the pricing function.

In fact, pricing is the most important component of the merchandising mix because it has the greatest single impact on profitability. Numerous industry studies have proven that a 1 percent increase in price can drive in excess of a 10 percent improvement in operating profitability. Changes in fixed costs or variable costs are understood to not be able to deliver the same magnitude of impact to the bottom line.

Furthermore, when you consider that generally fewer than 10 percent of the prices across an enterprise are actively managed, retailers should ask themselves:

- *What is the foregone opportunity with the remaining 90 percent of my product prices?*
- *What is the impact on long-term competitive position and price image in managing only a small subset of the total prices?*
- *Are customer retention and loyalty affected by competitive exposure on item prices that are not being managed?*

Retailers should consider the differences between what are often referred to as blind and sensitive items. Items that consumers are familiar with – to the extent that they react to a change in price – are referred to as "price-sensitive." All other items, that consumers are less familiar with, and for which price is not readily understood or known, can be categorized as "blind items."

The importance of this distinction is that sensitive items are typically managed tightly from a pricing perspective in reaction to competition – producing slender margins. Conversely, blind items receive less pricing attention and yet represent a greater opportunity for maximizing margins. This scenario has been the result of not having the systems capable of distinguishing sensitive and blind items and their corresponding potential contribution towards category and enterprise financial performance.

For the most part, consumer price perceptions are formed in reference to sensitive items. However, there is always a risk that some customers will attach brand attributes to an enterprise based on blind items.

Examples of brand attributes that consumers can formulate include "inconsistent," "unpredictable," "high price," or "low price." Retailers should have control over these consumer brand decisions, using price as the lever. In managing a small percentage of prices, retailers have ceded control of their price image to the consumer. Relinquishing such control can lead to an unanticipated impact on customer retention.

Revenue management restores control to retailers over price and, ultimately, brand image, therefore allowing them to manage "blind" and "sensitive" items while simultaneously managing the long-term price image of the enterprise.

Three Steps to Achieving Revenue Management

Revenue management is an answer to the complex problem of optimizing prices to maximize revenue and profits. To be effective, it requires three basic steps.

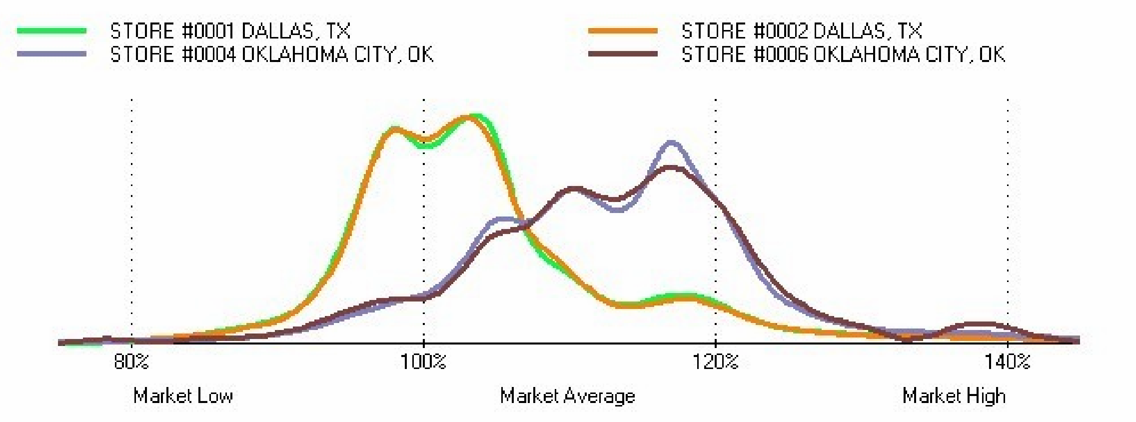
Step 1: Analyze Competition

Carefully evaluate competitive strengths and weaknesses.

In step one, competitive data is analyzed to illuminate pricing strengths and weaknesses. A revenue management system prepares competitive data, such as: in-store pricing, Internet pricing, market share, trade areas, etc., for business analysis. Because this information is not 100 percent available[2], the revenue management system must provide a means for making educated assumptions about areas where little or no competitive data is available. It must also provide a means for helping the user qualify sales data for accuracy before using it as a metric in business decisions.

Not all competitive prices have the same "weight" in the market, and not all competitors price each store alike, even within the same market. Each competitor has a distinct trading area, client base and cost structure that overlap with competitor trading areas, including the Internet. The mix of competitors and their respective differing strategies complicates the process of understanding competitive strengths and weaknesses. The revenue management system allows complexity to be managed by the computer, helping the user to visualize competitor's pricing strategies and enabling the user to focus on strategy, goals and exceptions instead of the details.

Price Comparison of Top 200 HBC/OTC Items



This graph compares pricing for a market basket of 200 items across four stores within the same national drug chain. On average, this retailer is pricing products in Oklahoma City about 15 percent higher than its Dallas stores. With this competitive information, it is possible to understand and capitalize on region-specific profit opportunities.

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[2] Some companies, such as KhiMetrics, with their retail revenue management solution, offer an online price shopping service, which enables retailers to monitor a competitor's entire online price offering.

Step 2: Understand Consumer Demand

Accurately measure how customers value products; in so doing, quantify the relationship between price and unit sales movement.

In step two, historical sales data, the purest form of communication a retailer has with its customers, is analyzed to measure consumer trade-off decisions. When properly analyzed, this data can reveal how customers actually respond to price changes, promotions and other aspects of a retailer's value proposition.

Revenue Management: More than Just Price Elasticity

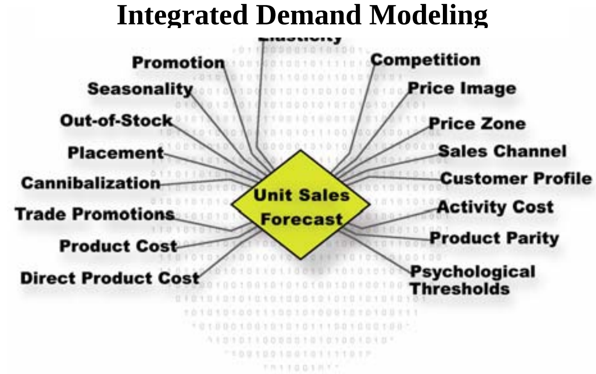
Price elasticity is defined as the relationship between price and unit movement for a single product. Each time a customer makes a purchase, that purchase constitutes one data point. With multiple data points, it becomes possible to predict the unit movement for a product at a given price.

The problem for retailers is that when price changes do occur, they are typically very small and accompanied by a promotion or some other event. Analyzing the impact of a price change without the knowledge of other factors that influence unit sales movement is likely to lead to erroneous predictions.

Integrated Demand Modeling: Analyzing Price, Promotion and More…

Revenue management expands the definition of price elasticity by integrating the major factors that influence unit sales movement (i.e., price elasticity, promotion elasticity, seasonal trends, competition, cannibalism, etc.) into one analysis, creating one sales forecast. By integrating multiple factors into one analysis, the revenue management system enables a retailer to understand demand in the absence of frequent or large price changes. It also stabilizes the analysis so it can be performed at the lowest levels of demand (i.e., store, SKU, customer profile or day of week).

Integrated Demand Modeling



Integrated demand modeling enables retailers to understand demand at the store/SKU level based on a comprehensive approach to incorporating relevant factors.

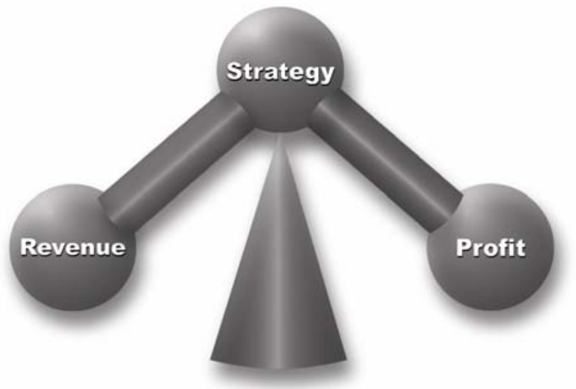
Quantifying a Retailer's Competitive Price Image

Once the revenue management system has performed a rigorous analysis of a retailer's sales history and competitive data, it then combines variables such as item elasticity, competition, movement velocity, contribution and promotional lift with sophisticated algorithms to measure a retailer's price image. The resulting analysis and graphs provide a retailer with a visual representation of how it is positioned in the market relative to its competition. This understanding is used to refine a retailer's price image (if desired), which is then used in the revenue management system as a parameter for guiding the price optimization process.

Step 3: Align Pricing with Enterprise Objectives:

Continually align pricing with enterprise goals for profit, revenue and competitive price image.

In step three, executives are given visibility to the trade-off between enterprise revenue and profit goals, based on customer demand and market dynamics. Strategic decisions are made and prices are optimized to meet the enterprise objectives, generating specific SKU-level pricing instructions for an assortment of selected products. Whereas traditional pricing systems perform price elasticity analysis, leaving it to the user to handcraft the final pricing decision, revenue management is a strategic platform that looks at the category as a whole, generates specific instructions and is driven by enterprise and category-level financial goals.



Revenue Management provides visibility to the trade-off between enterprise revenue and profit, based on customer demand and market dynamics.

Revenue Management: More Than Just Price Optimization

Price optimization has primarily been associated with two possible connotations in the retail industry: markdown optimization, where a fixed inventory of perishable products (e.g., apparel) is subject to a declining series of prices to zero-out inventory by a certain date; or, charging the highest price possible for a product. The former defines a narrow application for perishable inventories. The latter is neither appropriate to, nor implemented within, revenue management systems.

Price optimization as a component of revenue management is expanded to reflect desired long-term price image, revenue and profit objectives and inherent SKU-level price elasticity – enabling retailers to produce a win-win relationship for themselves and customers. It reflects interaction between SKUs across the category and the interaction between distribution channels.

Goal Management: Making Prices Work Together

At the heart of revenue management lies the ability to manage multiple, and sometimes conflicting, objectives. For example, senior management may set an objective to increase profitability by 5 percent. Simultaneously, a store in a competitive region may have an objective to maintain category market share against an aggressive competitor, and a product manager may have a vendor sales objective to win trade incentive dollars. Goal management balances these objectives and more with demand and market dynamics to pinpoint prices that work together to achieve company objectives. It does this while respecting item-level pricing policies.

Revenue Management Benefits

Revenue management solutions fundamentally reshape the value proposition that pricing analysis software has traditionally offered. This new class of software closes the loop between analysis systems and transaction systems, taking pricing out of the “black box” and delivering a powerful strategic solution. It enables companies to:

- Align pricing with enterprise goals for revenue, profit and price image;
- Maintain a consistent long-term price image;
- Develop and implement consistent pricing strategies;
- Simplify and accelerate pricing decisions; and
- Capitalize on hidden revenue and demand opportunities to create recurring double-digit net profit improvements.

Benefits For Key Decision-Makers

Revenue management can provide more than the data needed by pricing analysts to set strategic prices. A properly implemented RM solution will also help key decision-makers throughout the organization:

CEO

- Support business strategy and financial objectives
- Enable visualization of the trade-off between revenue and profit
- Help increase shareholder value

VP Merchandising

- Enable better decisions on GMROI performance
- Help to develop, refine and implement consistent pricing strategies
- Increase responsiveness to changing market dynamics and consumer demand
- Facilitate competitive assessment and development of long-term price image

CFO

- Synchronize financial planning and the pricing strategy’s return on investment
- Leverage existing IT investments
- Help clarify the value proposition for key technologies (e.g., enterprise resource planning)

Pricing Director

- Extend pricing strategies to all products, not just the top 10 percent
- Help target and achieve corporate and category revenue and profit goals
- Enable pricing management, using criteria unique to a client’s organization

Product Manager

- Improve vendor collaboration by striving to reach mutual goals
- Help illuminate the impact of price and promotion on store-level sales

Pricing Analyst or System User

- Provide deeper insight into competitor pricing strategies and product demand
- Help set and monitor higher-level issues (e.g., how to become the price leader)
- Facilitate management of unit sales to achieve profitable vendor incentives

Components of a Complete RM Solution

In evaluating revenue management systems, certain components should be present to provide a complete and effective solution. Generally, six primary components make up its foundation. Each component makes an important contribution to unlocking hidden revenue and profit opportunities for retailers. Combined, they create a comprehensive solution to optimizing the full revenue and profit potential of the enterprise.

1. *Long-Term Competitive Price Image*
   Revenue management systems should carefully plot out price image relative to competition and generate pricing recommendations that maintain a specific image. These systems will actually provide graphical distributions for pricing professionals to inspect SKU-level data. Variability in how customers perceive price image can impact customer trust and repeat business, and can also send confusing signals concerning enterprise pricing strategies.

2. *Multiple Products*
   Revenue management systems should combine the major variables that influence unit sales movement into one analysis so that multiple products can be managed uniquely and simultaneously within the revenue management strategy. Every product, from fashionable to commodity, demonstrates different demand characteristics and may require different pricing treatment. These products are affected by a number of variables including promotion, reach, substitutability and purchase frequency.

3. *SKU-Level Demand*
   Revenue management systems should provide visibility to demand at the lowest levels (SKU) while allowing flexibility to implement prices at any level including zone, customer profile or market. Accurately projecting unit sales requires views of elasticity at a variety of levels such as product, store, customer type, and time (day, week, or month). At these levels, product relationships become visible, seasonality becomes apparent and promotional lift is assessed.

4. *Goals and Strategies, Not Prices*
   Revenue management systems should simplify the pricing process, enabling companies to manage strategies and goals, not just prices. A retailer's financial goals may vary by channel, location, category, customer segment, reporting period and other criteria. Intuitive processes are prone to biased decisions and consequently, management objectives are not always taken into account. Revenue management provides a framework for retailers to understand the trade-off between different objectives and to step above item-level pricing decisions when implementing strategies. This ability enables retailers to improve customer loyalty and profits by penetrating consistent pricing strategies deeper into item, location and customer hierarchies.

5. *Cross-Channel Pricing*
   Revenue management systems should enable retailers to understand where online shoppers' price sensitivities are different than offline shoppers. It also enables a retailer to analyze cross-channel competition to understand a competitor's online strategies and tactics. Complete RM solutions give retailers visibility to the financial and long-term loyalty trade-off between different online strategies and enable them to dynamically implement new strategies as dictated by online and offline market dynamics and consumer demand.

6. *Comprehensive Optimization*
   Revenue management systems should enable strategies to penetrate deeper into item and location hierarchies**.** To maximize revenue and profit, all prices must be optimized, not just the promotional or price-sensitive items which often make up less than 10 percent of the total. Revenue management systems provide price optimization that can be phased in for 100 percent of the product prices.

Validation of Concept

Revenue management has contributed millions to the bottom line, and it has educated our people to manage their business more effectively. When you focus on the bottom line, your company grows.

--- Bill Marriott Jr., Chairman and CEO
Marriott International

Until recently, revenue management was confined, almost exclusively, to industries that manage perishable inventories, such as airlines, hotels and car rentals. Airlines dedicate more money to their RM systems than any other development efforts and typically receive payback in less than 12 months. One such example is National Car Rental Systems, Inc.

In 1992, National was going to be liquidated by GM, its parent company. National cut costs, re-engineered and downsized, but nothing turned the company around. In an act of desperation, National tried RM, investing millions. The result? National improved rates and turned away fewer customers who showed up without reservations. In 1994, National turned itself around and became one of the fastest-growing car rental companies in the U.S.A.

Each industry's RM solution will be different due to the complex set of relationships that influence profitability. For example, an airline's supply is limited to the seats on an airplane, and forecasting is performed to estimate how many people will miss the flight. This allows the airline to overbook flights and increase revenue. For a retailer, the dynamics are much different. Forecasting is performed to understand how sensitive consumers are to price, and then prices are optimized to achieve price image and profitability objectives.

What Are Analysts and Experts Saying?

The concept and application of revenue management has been validated not only by practitioners in the airline and hotel industries, but by analysts and other experts who study such systems and industries where the solution can be applied.

Revenue management is going to be one of the most important facilitators to managing an institution with vigor.

--- Robert Moran
Research Vice President and Managing Director
Decision Support Research, Aberdeen Group, Inc.

Revenue Management has proven to be a devastatingly effective competitive device.

--- Dr. Alfred Kahn
Economist and Former Senior Staff Member,
President's Council of Economic Advisors

By 2001, we expect annual spending on Revenue Management tools and services to exceed $300 million.

--- National Association of Business Economics

Organizational Implications

How does Revenue Management fit into Retail Strategy?

Top-level executives in any organization are concerned with one primary objective: increasing shareholder value. In most cases, value is derived from maximized profitability. The difficulty in reaching profitability goals lies in determining the most appropriate tactical methods to increase profits. Fundamentally, a retailer has two ways to increase profits: reduce costs or increase revenues.

Price Drives Profit Like No Other Factor

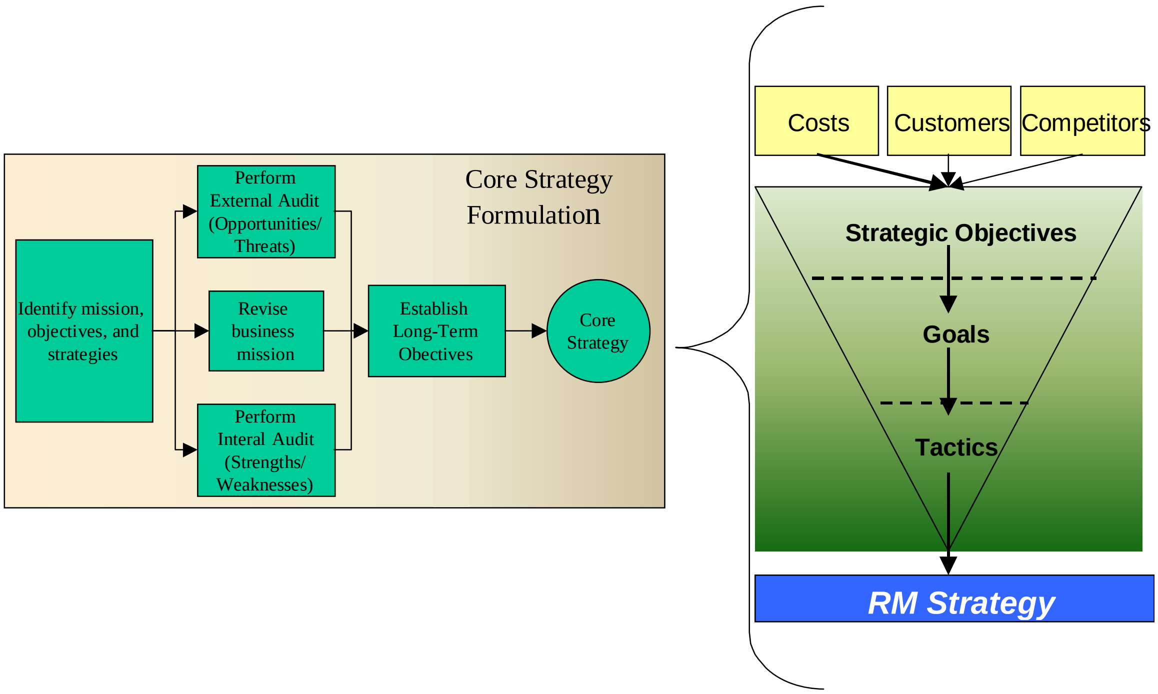
On the revenue front, two price-related methods for increasing profits exist: 1) price in tighter alignment with market response (i.e., provide the right price, on the right product, at the right time); or 2) segment the market better (i.e., group stores into different competitive price zones).

With both of these methods, the number and complexity of pricing decisions increase exponentially and quickly overload retailers' intuitive decision-making processes. With RM in place, however, shareholder value increases because companies align their value proposition, competitive strengths and supply chain efficiencies with consumer demand, and the decision-making process is simplified through the application of technology.

RM is fundamentally a disciplined process specifically designed to manage a retailer's revenues and profits; it should also become a part of an organization's core strategy. In support of the primary organizational strategy, RM considers customers and competitors along with internal goals and objectives. To be most effective, RM should be embedded into the business processes that exist throughout an organization.

The figure below illustrates the key steps required to develop an RM strategy and demonstrates how it fits within the core strategy of a retailer.

Defining the Organizational RM Strategy



Sources: "The Strategy and Tactics of Pricing by T. Nagle and R. Holden, 1995 and "Concepts of Strategic Management, by F. David, 1993

How does RM Integrate with Existing Pricing Strategy?

Three primary pricing strategies are in place at most retail organizations today:

1. Customer-driven pricing, which attempts to align the pricing of a product with the amount buyers are willing to pay;
2. Competitive-driven pricing, which lets the competition dictate what pricing will be; and
3. Value-based pricing, which maximizes the difference between the perceived value created for the customer and the cost incurred by an organization.

The overwhelming majority of retailers subscribe to customer- or competitive-driven pricing strategies because they are relatively simple to implement, and require minimal amounts of data. These strategies are often limited to 10 percent or less of product assortments due to the manual nature of existing decision processes.

In contrast, an RM solution fits in with organizational strategies by mirroring a retailer's pricing philosophy in terms of competitive positioning, price image and size and volume of price changes. It then evaluates pricing across an entire product category or product group, not just the top 10 percent, making more informed, lower-level value-based pricing decisions possible. RM also provides executives with the decision support necessary to understand the revenue, profit and price image trade-off between different optimized pricing strategies.

What Impact will RM Have on the Organization?

RM Synchronizes Departmental Objectives

Management objectives can vary by channel, location, category, vendor, customer segments, reporting periods, etc., and are not always considered in the pricing equation. Biased decisions are inevitable with manual decision processes. RM provides a technology-driven framework that serves as a foundation for managers, analysts, senior executives and trading partners to collaboratively understand the financial impact associated with different strategic objectives, incentives and tactical offerings.

RM Simplifies Channel Management

Each channel has its own strengths and weaknesses. Strengths allow flexibility in pricing, while weaknesses constrain flexibility or relinquish advantage to other channels. RM works consistently across all retail formats and pricing strategies, from brick-and-mortar to e-commerce, and from high-low pricing to everyday low price.

RM Improves Promotions Management

The success of a promotion can be affected by many factors, including timing and depth of a discount and the price of substitute items. RM forecasts store-level demand and targets specified objectives for promotions, such as to build image, move inventory and win trade funds from vendors.

RM Supports CRM and Loyalty Initiatives

RM focuses on creating win-win relationships. It’s about helping retailers use price to align competitive strengths and supply chain efficiencies with consumer demand to drive profit and loyalty. Trading partner relationships also are included in the RM mix. Properly implemented, RM gives targeted customer segments better prices on the items they want most while generating dramatic net profit improvements.

Over time, RM can have a positive impact on all high-value decision processes that are influenced by store-level unit sales movement.

Implementing RM Collaboratively

Partnering for Success

In the most successful revenue management implementations, a formal partnership is created that underscores the strong sense of shared mission between solution vendor(s) and retailers. The partnership begins with an understanding of the retailer’s objectives and continues through the modeling, implementation and fine-tuning process, and ultimately concludes with delivery of a measurable ROI. How might this work? Ideally, by establishing up-front, quantifiable success metrics. For example, measurable financial objectives are set, along with milestone activities. Setting milestones not only increases the likelihood that pre-implementation objectives will be met; milestones also help identify alternative opportunities that might prove more lucrative than the initial objectives.

One software company, KhiMetrics, takes the collaboration process a step further, tying its fees to a financial success guarantee. This value-based philosophy ensures that customers receive the most benefit possible out of the collaboration process.

Building Trust through Collaboration

Building confidence in the new RM pricing system is the first step in the collaboration process after goals have been established. During this phase of implementation, current pricing philosophies are mirrored. Over time, as users gain confidence in the system, pricing policies are refined to fully capitalize on the incremental value that the RM system can generate.

Here's a real-world example of how a retailer might implement a collaboratively based RM system within a category: Based on a new financial objective, a retailer decides to increase margins by 3 percent across an entire category. With current pricing systems, price changes must be taken all at once, even though consumer perception might dictate a different course of action. The retailer decides he doesn't want to make the price change all at once, but questions which prices should be changed first, and by how much?

The retailer turns to his collaborative RM system, where category-level objectives can be set that control how quickly a category is repositioned while incorporating customer feedback into a closed-loop process, leaving users free to manage from exception. The problem is solved to the benefit of consumers and retailers alike.

Proven Implementation Methodology

Installing a new software application can be disruptive to an organization unless implementation is carefully planned. The ideal RM application implementation process follows a project methodology consistent with other proven methods used to install new applications. That way, there is a rapid learning curve for project team members, and the fundamental process will follow the standard steps of planning, execution, evaluation, adjusting, planning, executing, and so on until implementation is complete. Following a standard process also means it becomes easy to leverage existing relationships with third-party or in-house project management experts who can add qualitative review to the retailer's pricing strategy.

Conclusion

The development, implementation and maintenance of a cohesive and consistent pricing strategy has never been more difficult, yet it has become increasingly more critical to the long-term financial success and brand image of all retailers. As companies expand channels and markets, share markets with a broadening array of competitors, grow categories and become customer-centered in their merchandising practices, the volume and complexity of product-level pricing decisions increases dramatically. Revenue management for retail resolves these challenges.

Revenue management for retail first helps a retailer understand the revenue, profit and price image implications of implementing different strategies. Then, based on a retailer's objectives, it recommends price points that will differentiate a retailer's product offering. This simplification enables a retailer to extend pricing decisions to all products, not only price-sensitive products, and ultimately unlock hidden revenue and profit opportunities. The result elevates pricing to a strategic level that permits the achievement of long-term category and enterprise objectives while still allowing pricing implementation to occur at the SKU level.

Retailers today require a dynamic pricing capability that respects customer and product differences (as revealed by SKU-level elasticity) and the corresponding competitive and strategic implications of different pricing implementations. Revenue management has proven itself across multiple industries to be a significant weapon for defending and increasing market share and profitability. As witnessed time and again, the industry leaders who educate themselves on this new breed of software will gain handsomely.

Background

LakeWest Group is the leading management consulting firm dedicated to the retail and consumer products industries (including the entire B2B and B2C value chain). With deep retail business knowledge and cross-functional skills, the firm delivers superior design and implementation of strategy, technology and process solutions.

The unique combination of industry focus, knowledge-based consulting approach and rapid, end-to-end solution deployment helps clients achieve their business potential. Founded in 1990, **LakeWest Group** serves all retail segments and channels from its Cleveland (headquarters), New York and Atlanta offices.

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Based in Scottsdale, Ariz., **KhiMetrics** is the first software company to deliver a comprehensive revenue management solution for the retail industry. This solution provides a new generation of patented model-based pricing solutions that enable Web- and land-based retailers to create incremental revenue streams plus double-digit net profit improvements. Called KhiMetrics' Retail Revenue Management Application Suite, it is designed to maximize revenue and profitability through a dynamic modeling of enterprise variables including price, promotion, customer demand, profit revenue and price image.

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