

Price Optimization

A Comprehensive Guide for Data-Driven
Grocery Retailers

CLEAR DEMAND

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The Power of Pricing

Retailers aim to strike a balance between profitability, perception, and competitiveness.



PROFITABILITY

Price directly impacts profit margins. Low prices might bring customers in, but you could struggle to cover costs and turn a profit. Priced too high, and you risk losing sales to competitors.



MARKET POSITION

Price is a purchase trigger. Premium pricing implies high quality and exclusivity. Value pricing attracts budget-conscious buyers. Align price with your desired perception. Your customers want value.



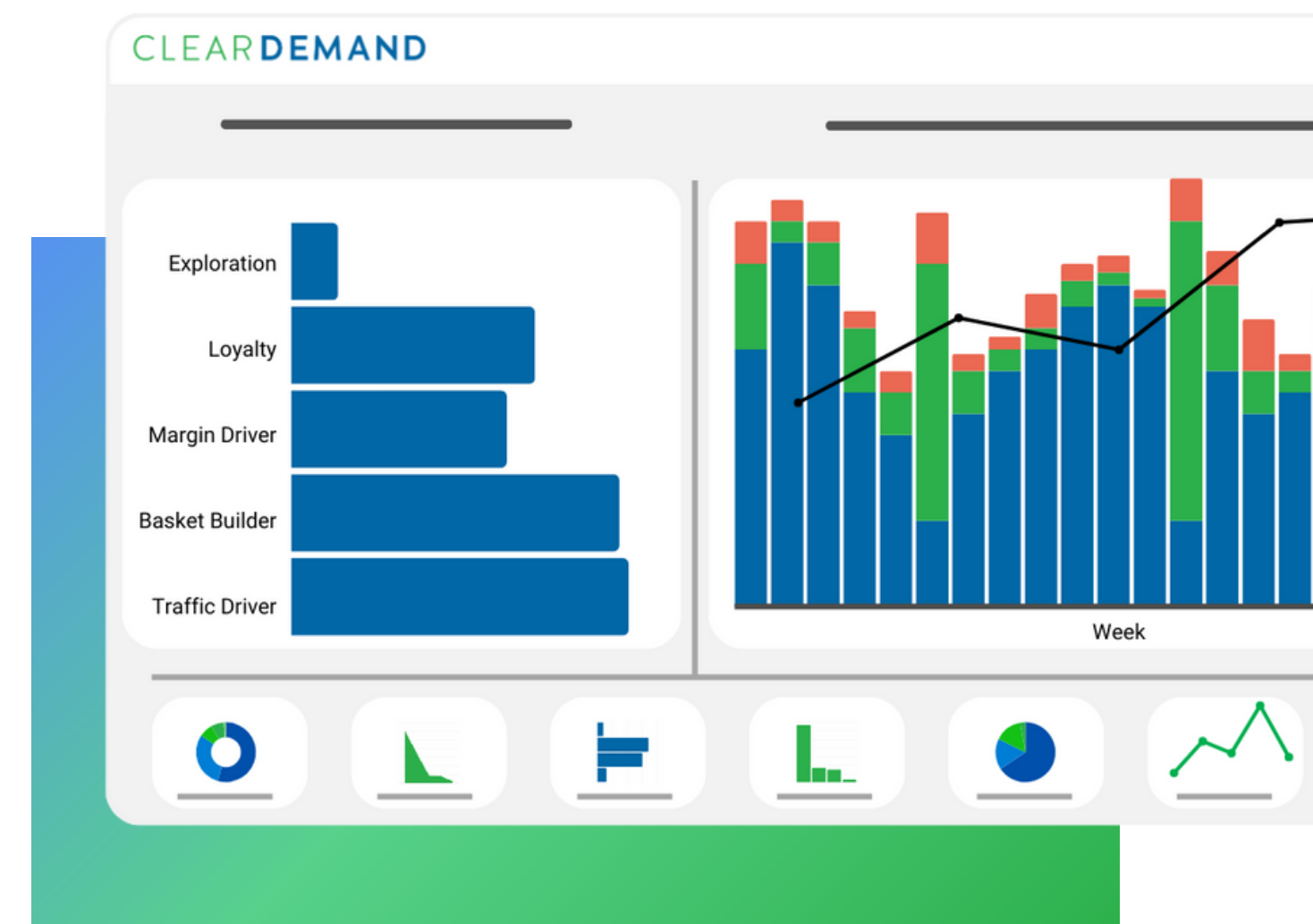
COMPETITIVENESS

Price informs competitive strategies. Identify price adjustment opportunities. Tailor your promotional strategies. Set up effective price rules to ensure you're profitable while adapting to market changes.

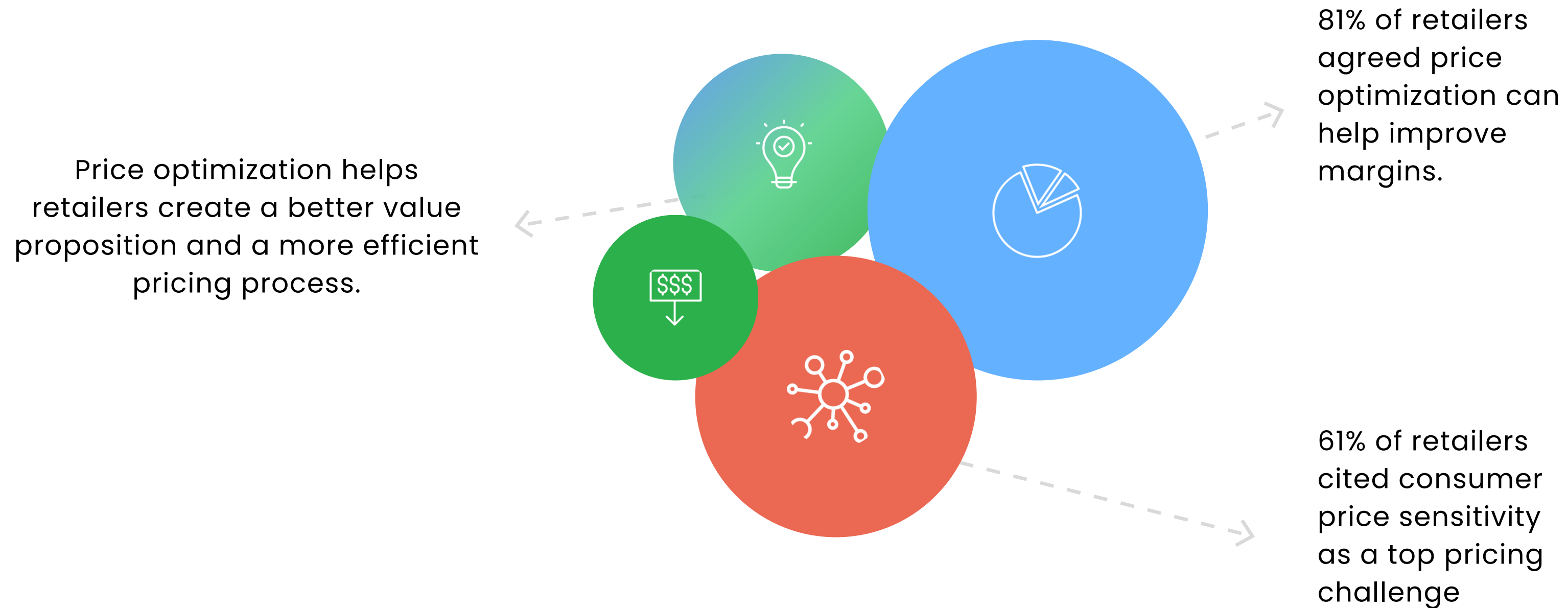
In today's economy, consumers are looking for ways to stretch their dollars. They're buying items because of a perceived value. As a retailer, your challenge is to serve competitive pricing without sacrificing margin, experience, or jeopardizing value. You can achieve that with AI-powered price optimization software.

I'M A HI-LOW RETAILER... HOW DOES PRICE OPTIMIZATION APPLY?

Despite your established pricing strategy, hi-low retailers can't ignore pricing analytics and optimization. When you operate with planned price fluctuations, you should monitor competitors to clearly understand how similar stores charge. Then, you can strategically adjust "low" price points to benchmark against the market. Plus, by feeding competitive intelligence into a price optimization tool you're able to increase profits by setting the optimal "high" price on specific products.



Pricing becomes complex because of nuances like assortment gaps, private labels, perishables, and category hierarchies that make it multifaceted. Keep reading to learn how pricing automation will help you understand, execute and measure your pricing operations.

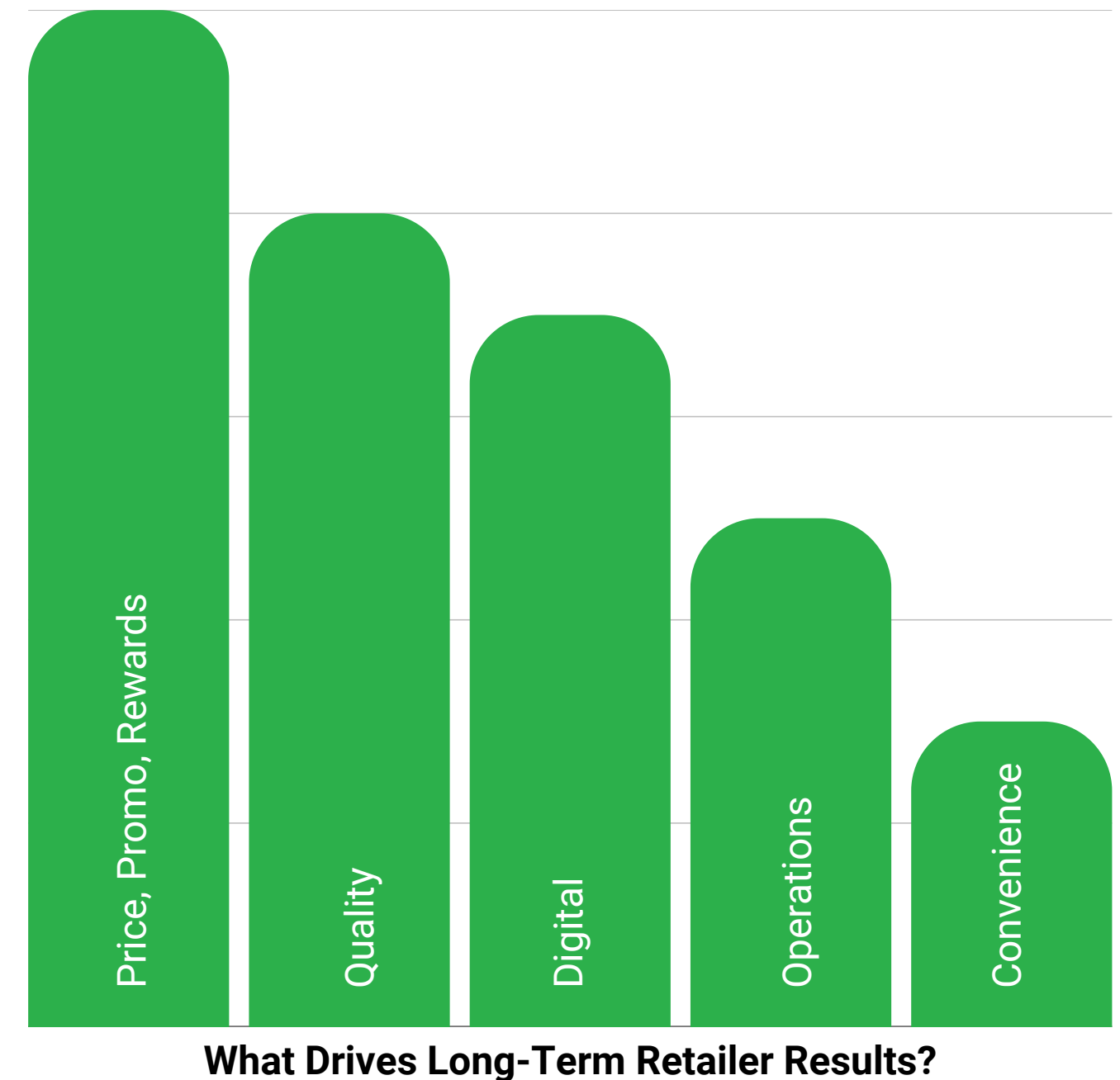


Beyond the Dollar Sign

Saving customers money matters most to drive better long-term retail results.

Customers are extremely value-conscious and want price transparency. You should consider key value items, perception, and value when building and executing your price strategy.

Key value items (KVIs) refer to the products customers most often compare prices for. Customers use KVIs to judge your overall value proposition. Value is how your customers perceive what they receive compared to what they pay. Price perception refers to how customers perceive the prices of products or services offered by a retailer. It's influenced by various factors such as the actual price, the perceived value of the product, the pricing strategies used by the retailer, and the prices of competing products.



Formatting and presenting the price can also influence customer behavior.

Studies suggest that prices ending in “.99” are perceived as a lower price compared to rounding up to the nearest whole number. For example: \$9.99 vs. \$10.

Bundled pricing, or offering multiple products together, designates value. For example: 2 for \$4 versus 1 for \$3.

MAP

Minimum Advertised Price (MAP) refers to the practice of retailers adhering to the manufacturer's guidelines for the lowest price at which a product can be advertised. Manufacturers set MAP policies to maintain brand integrity, prevent price wars, and ensure a fair competitive market. In addition to MAP, it's ideal for retailers to have a minimum compliant price for every product at a price zone level. This helps avoid arbitrage from malicious distributors who can buy products at a quantity discount or bundle-based discount, add a markup, and resell the constituent products via competing retail channels.

MSRP

The Manufacturer Suggested Retail Price (MSRP) plays a significant role in determining a product's selling price. MSRP provides a benchmark for retailers to establish consistent pricing across different locations and channels. The uniformity in pricing ensures that customers aren't confused by drastically different prices for the same product.

Set Your Foundation

Quality competitive intelligence helps grocers create growth.

With competitive intelligence, retailers move beyond guesswork and gut feelings to make data-driven decisions about price, promotion, and availability.

Monitor competitive prices with automation for real-time insights into the market. Now, you can optimize your own pricing to be competitive without leaving money on the table.

Competitive intelligence data is a foundational piece of a successful retailer's puzzle. With reliable competitive intelligence data, you'll stay competitive, drive growth, and maximize profitability.



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With data-driven insights, retailers can make smarter pricing decisions, driving profitability and customer satisfaction. Price isn't a standalone factor but **a function** within a larger ecosystem that includes the competitor landscape, community demographics, store sales data, inventory levels, and labor costs. We've created a solution that empowers grocers to make informed decisions within this dynamic environment, showing that your pricing strategies aren't just effective but also **tailored to your unique audience and market conditions.**



RAJAT NIGAM
CHIEF PRODUCT OFFICER
CLEAR DEMAND

Competitive Price Position Analysis

The CPI (competitive price index) is the ratio of your price compared to competitor price.

CPI measures how competitive you are against competitors at key dimensions like store location, price zone, category, subcategory, brand, priority level/key value item, and more. For example, a CPI of 1.2 indicates you're 20% more expensive than your competitors.

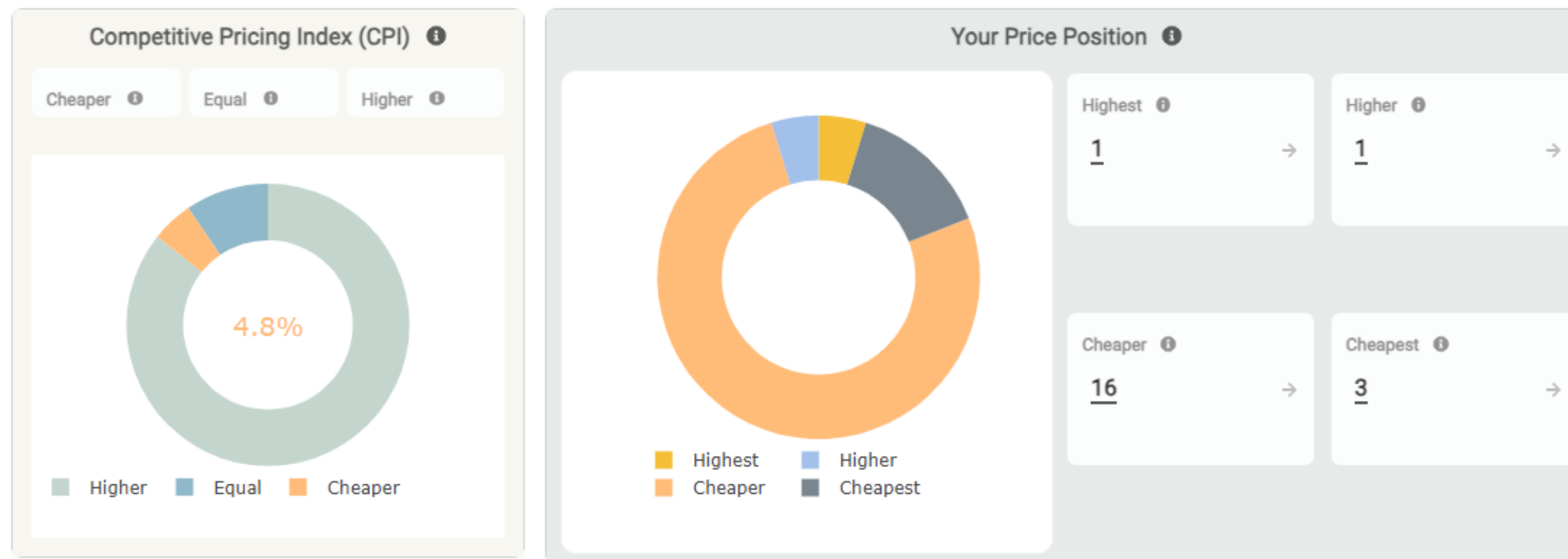
It's calculated as a ratio of a retailer's price to the price of its competitors. Establish a process to collect competitor prices and compute the CPIs as KPIs that can be measured continuously. Then, drill down into those slices of price zone, product categories, and competitors where the CPI is high or low to identify potential inefficiencies and opportunities.

Through price optimization, the competitive strategy determined in the form of CPI goals and product-location level rules forms some of the constraints for the overall optimization. Some examples of this include:

- Maintain a CPI index below .90 against Competitor A for KVI items in low income price zones.
- The overall CPI for the category should be below 1.20 for all image competitors.

All variations of CPI metrics can be calculated along the following dimensions:

- By product group such as KVs (profit drivers, sales drivers, market share drivers), category, private labels, brand/vendors.
- By competitor (image competitors, all competitors, custom group of competitors)
- By price zones & store locations (zip codes, region, income level)
- By type of seller such as 1P, 3P, all (when Amazon or Walmart are involved)
- Over time dimension, usually a trend (daily, weekly, monthly, quarterly, yearly, and period over period)





YOUR COMPETITOR'S LEMONS MATTER

Despite your established pricing strategy, no retailer can ignore analytics and optimization. If you operate with planned price fluctuations, monitoring competitors clearly shows you how similar stores charge. You can strategically adjust “low” price points. Plus, by feeding competitive intelligence into a price optimization tool you’re able to increase profits by setting the optimal “high” price on specific products. You continue to offer customers your core value while getting a full picture of the competitive landscape.



Grocery Price Optimization Software

Data-driven retailers benefit from price engines to optimize their retail operations.

While nearly half of retailers still lack price optimization technology, it's a pivotal tool for visibility and growth. Price optimization software gives you functionality beyond price monitoring. This is a tool that empowers you to execute your pricing strategy with exceptional insights and efficiency.

Imagine this:

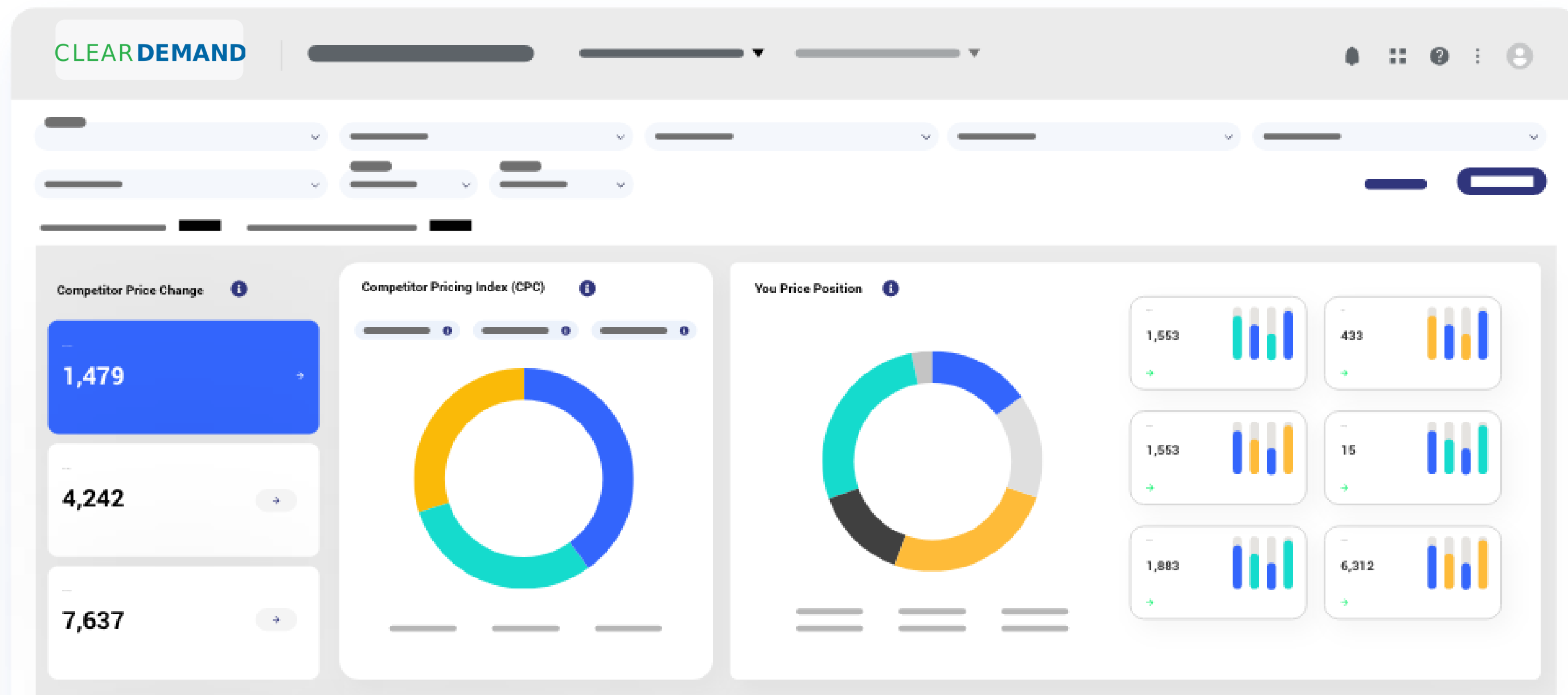
A single dashboard centralizes all of your price information. You can track your competitive position via CPI at category, KVI, competitor, price zone, or store location. Then, drill down as far as the product level.

You can do a diagnostic analysis based on past price changes to measure price elasticity, cannibalization, and loss of margin. Based on the diagnosis made, you can set price policies and rules to get optimized price suggestions. Then, with a single click, you can execute those price adjustments. The changes are instantly made to your ESLs, POS, and ecommerce site.

Results can be measured using the sales, profit, and conversion uplift analysis.

Chart your results in the tracking dashboard.

Price optimization utilizes machine learning and advanced analytics, so retailers receive data-driven insights for product-specific or category pricing strategies. You can execute any price adjustments with a single click.



The Result?



INCREASED PROFITS

Optimize pricing to capture the most value without compromising customer perception.



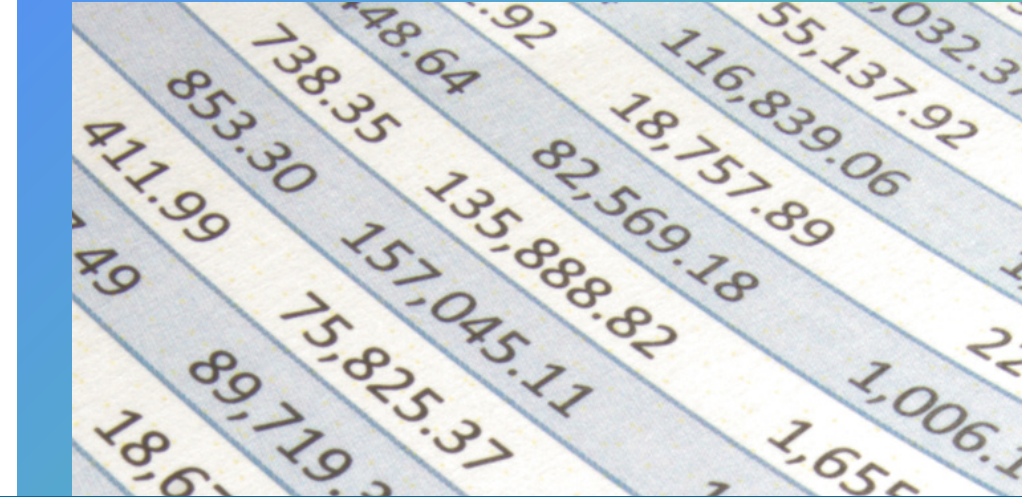
BETTER CONVERSION RATES

Attract and convert customers with competitive, data-backed pricing.



ENHANCED LOYALTY

Deliver the right value at the right price, fostering trust and repeat business.



738.35	135,888.82	18,757.89	55,137.92
853.30	157,045.11	82,569.18	116,839.06
411.99	75,825.37	1,006.1	1,655
49	89,719.3		
18,6			

IS PRICE OPTIMIZATION RIGHT FOR ME?

Using spreadsheets or disjointed systems to set and manage prices might work if your business only has a handful of SKUs. If you're operating with thousands of SKUs across multiple regions, it's time for a scalable solution to optimize pricing. Price optimization software lets you manage your operations under one roof.

Retail is competitive. Digital players like Amazon are optimizing prices in real-time. It's time to move away from manual or disjointed approaches and embrace automated operational change.



1,4	613.5	2.58
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Over time, price optimization has evolved and stands as one of the most intricate retail fields to manage and optimize.

The key dimensions of evolution have always been the same but the magnitude of change in the last few years have been huge:

- Extensive use of data & insights - Data used to arrive at pricing decisions evolved from nothing to a place where most of the winning grocery retailers use an abundance of data for insights around products, customers, markets, competitors, weather, inflation, inventory, and supply chain.
- Use of the latest technology - Retail pricing has always leveraged technology; it started with the use of ABACUS 4000 years before. Then, something you're more familiar with -calculators and excel sheets. Today, it's common for retailers to price with analytics solutions powered by AI.
- Excel driven pricing - Excel is the undisputed king of tech in Pricing teams for the past couple of decades. Based on what we see in the industry, 85% of retailer's pricing operations depend on Excel. 10% of the retailers use a rule based pricing execution and around 5% depend on AI based systems.

Pricing is a critical component to a retailer's success.

A catalog houses tens of thousands of SKUs across several categories. Each item needs to be managed for the right price, without breaking the value/image perception, and without breaching the margins - meaning you monitor and take action on a lot of SKUs. In addition to this, the best pricing teams know how competitors are pricing these products across locations.

Without price optimization automation, you probably are familiar with these inefficiencies:

- Lack of seamless integration & limited consolidation of data
- Lack of real-time decision making
- Inability to scale to the current volume of business at product, channel and customer dimensions
- Inability to exploit the latest innovations in practical and applied AI
- Lack of integration of new pricing decisions to POS or ecommerce systems
- Inability to manage compliance for thousands of SKUs, location combination.
- Inability to measure the impact of key initiatives from the pricing organization to revenue, units, profit, GV goals of the executive team and recalibrate the execution for the future

Manage the Full Pricing Lifecycle

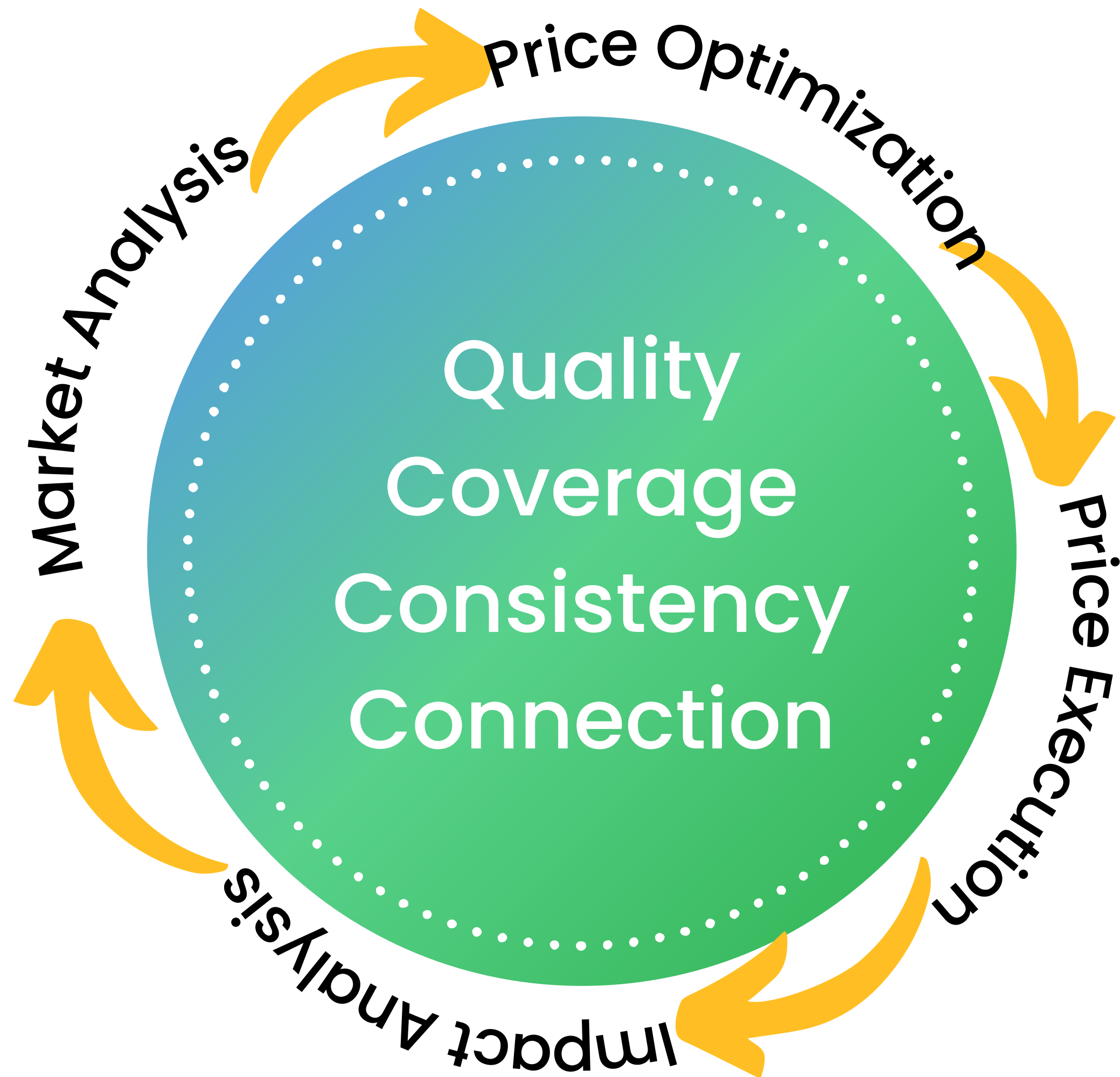
Data-driven retailers benefit from price engines to optimize their retail operations.

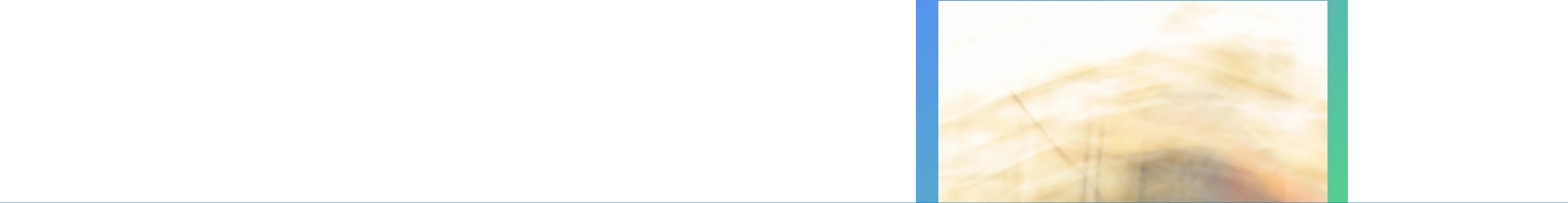
With SaaS pricing optimization tools, you earn the potential to improve profitability in a predictable, consistent, and efficient manner.

Having different solutions to manage different parts of the pricing lifecycle adds more complexity for the teams making decisions: Without the ability to execute pricing decisions across the entire product lifecycle, finding the balance between revenues, margins and price image will be difficult at best. With Bungee Tech's price optimization, you can manage the full pricing lifecycle from one system.

While it's a considerable change to make, the results are worth it:

- **Increase margins**
- **Beat competitors**
- **Automate workflows**
- **See market impact**





HOW TO MAKE EDLP PRICING STRATEGY WORK & IMPACT PROFITABILITY

EDLP retailers aren't always low priced for all its products. An EDLP pricing strategy is executed based on the fact that customers look at a specific products that are highly visible and create a price perception of the retailer. Successful EDLP retailers make sure the influencing products are priced low with respect to the market's perception. EDLP retailers also spend on promotions to increase the visibility around the specific products to reinforce their favorable image. Along with it, the difference in price between them and their competitor could just be a few cents! A combination of all these streamlined actions via a pricing optimization tool makes the EDLP strategy work successful for these retailers.

How Grocers Use Price Optimization

Price can drive your inventory investments while maintaining or increasing velocity.

Grocery retailers are turning to automation to price inventory across the product lifecycle so that it's a win-win for both the business and the customer. To increase sales across categories, you need a centralized pricing strategy that can adjust prices at the store level as needed.

In our omnichannel world, you can't ignore the power of pricing.

- Omnichannel buyers spend 1.5x more than those who buy online only or in-store only.
- In 2023, 69% of all grocery sales were digitally influenced.
- 87% of grocers say omnichannel shoppers are their #1 target segment.

These stats highlight the connection between digital and loyalty. Customers use digital for convenience, but still care about their in-store experiences. As a grocer, it's your job to keep these channels unified.

A DAY IN THE LIFE OF A CATEGORY MANAGER

Let us introduce you to Mike, a category manager at Grocery Store A.

As Mike's category is growing and as the stores expand, Mike has to do more with less. Enter: price optimization. Price optimization technology ensures that Mike has visibility into competitor price changes, and he can automate most of the decisions. Before any price adjustment is made, it must be approved by Mike. And because the system houses each price adjustment, it creates an audit trail so that Mike can go back to any point in time to figure out what was changed. Then, he can measure and report on those changes. Mike knows that his category is under control.

Now, Mike is dealing with the fresh produce category. Mike still has the automation, control, and history from his price engine.

Strategic Use Cases

GUARDRAILS

Say you want to execute price optimizations on a weekly basis, but you want to adhere to rules and guardrails defined at the category and location level. Use price optimization to create guardrails that prevent pricing decisions you don't want to make.

MAX. UNITS

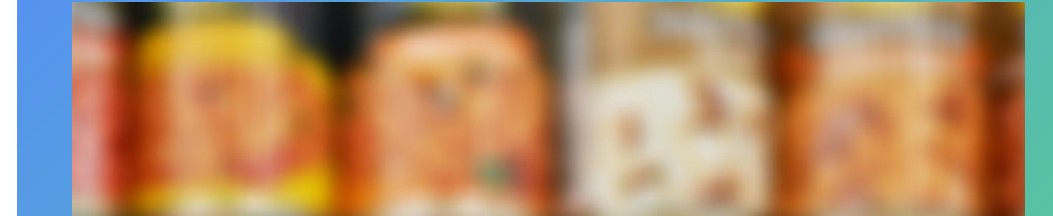
Overstocked shelves lead to waste and understocked shelves result in lost sales and frustrated customers. With the right data in place, you can better manage your inventory and track assortment gaps to maximize units sold.

PRIVATE LABELS

Retailers may not want to be the sharpest on private label pricing because it could reduce funding from national brands, which detracts from overall category profitability. Instead, you want private label prices near the national price.

AUDITS

Retailers can ensure accuracy and compliance by making pricing decisions within a specific system. Audit trails lead to better reconciliation. You're able to get better support and resolution if things go wrong. Plus, you have a record of past pricing decisions to review.

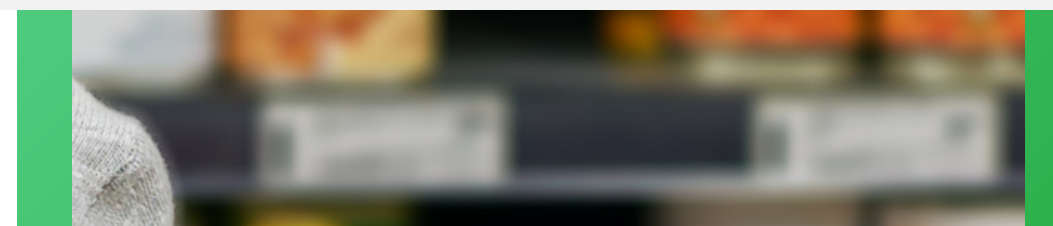


HOW TO DRIVE A PRIVATE LABEL STRATEGY

As an important part of your assortment, private labels should have specific goals in each market. A definitive private label strategy might include:

- Grow private label market share to 25% in dairy.
- Match price of private label products to equivalent national brand products in my own catalog.
- Beat the price of an equivalent private label product at a competitor by at least 10%.

Price optimization centralizes pricing of private label products. You can configure brand relationships between your owned brand and equivalent national brands. Then create a rule to track margin &/or price of PL products to equivalent national brand products. The system automatically has the rule defined and maintained for all the private label products in your catalog with no need for an expensive manual intervention.



Benefits of Optimization

5 reasons grocery retailers love price optimization:



CLOSED LOOP WORKFLOWS

Guaranteed multi-level approvals and serious time savings.



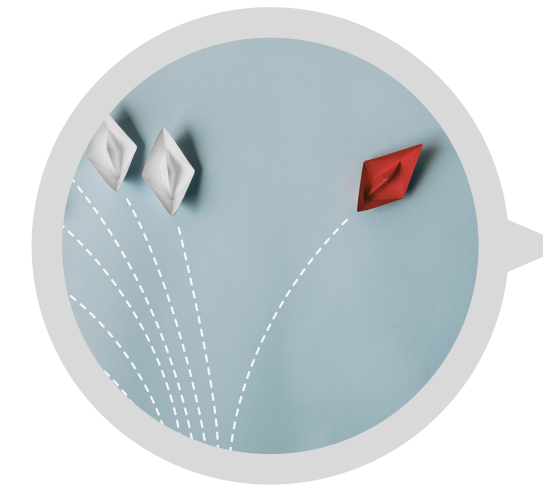
COMPETITIVE MONITORING

Adjust your competitive pricing strategies and stay ahead in the market.



PROFIT MARGIN IMPROVEMENT

Identify opportunities to increase profit margins by optimizing prices based on historical sales data and competitor analysis.



MAKE BETTER DECISIONS

Gain access to real-time pricing data to build on your core values.



BUILD CUSTOMER COMMUNITY

Attract more customers and build loyalty by creating a unified shopping experience.



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Many customers come from disjointed systems to drive the final pricing execution. If you're using one system to get information, a second system to process it, and a third system to extract that information into a usable format that can be sent down stream, **that's too much**. There's room for error. With our solution, you can find **everything under one roof**. In our case, retailers get an end-to-end solution with competitive intelligence, analytics, and pricing rules that generate recommendations. Our system integrates downstream to your ESLs and your website. **It's the foundation of driving growth.**



MATT SHACHTER
HEAD OF REVENUE GROWTH
CLEAR DEMAND

Measure Your Price's Impact



THE HALO AFFECT

Adjusting the price of one product influences the sale of other products. Tracking units sold across categories before and after price changes helps you evaluate the impact of your pricing.



COMPETITIVE REACTIONS

Changing prices on non-competitive products gives you an opportunity to see your influence in the market. If your peers are monitoring what you're doing, will they adjust their prices?



INVENTORY TURNS

Indicating how often your business sells and replaces its stock of goods within a specific time. Optimizing prices can help you improve your overall inventory management.



THE HALO AFFECT – EXPLAINED

Let's say you lower the price of a popular brand of cereal. This attracts customers who might not usually buy that specific brand but are drawn in by the lower price. While in the cereal aisle, these customers might also pick up other items, like milk, fruit, or bowls, which they wouldn't have bought otherwise. This scenario demonstrates how the discounted cereal triggered the purchase of additional products.



Price Elasticity

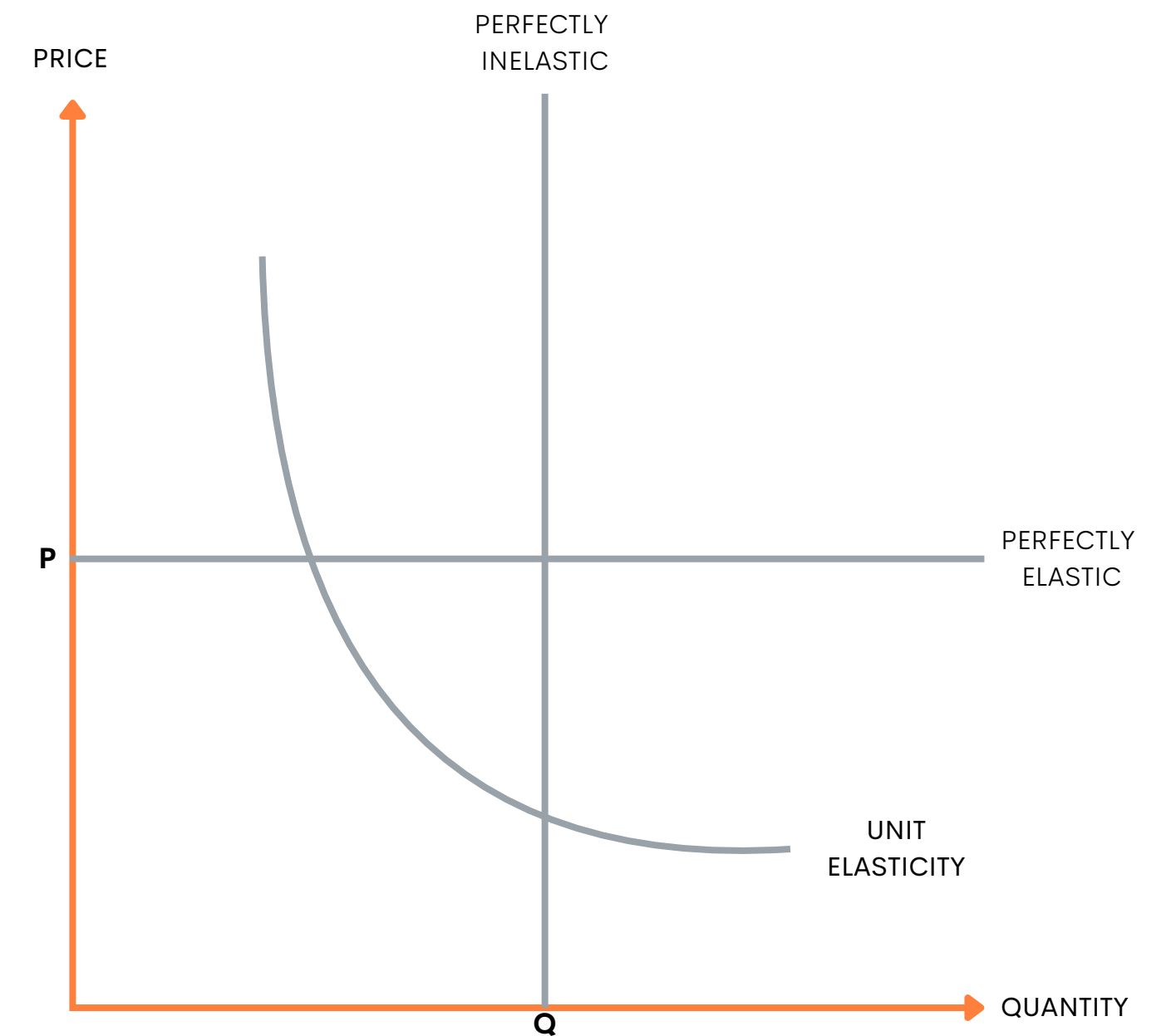
Price elasticity measures demand changes against price changes.

The price elasticity formula helps you see if a product is price sensitive. It's used to identify how a change in price affects the supply/demand of a commodity.

This concept is central to effective retail operations – from forecasting to pricing.

ELASTIC: Consumer demand for a product changes proportionately when the price of the good or service changes.. (Example: brand name cereal)

INELASTIC: consumer demand for a product does not change proportionately with a fall or rise in its price. (Example: cigarettes, prescriptions)



The Price Elasticity Graph

Build or Buy?

Grocery retailers need a pricing platform that empowers the pricing and merchandising teams to execute on strategies that increase margin, profit, and growth.

Whether you buy or build a pricing solution, AI will play big role in its success. While "AI" can be ambiguous, working with an established provider gives you advantages when it comes to executing your pricing strategy.

The success of AI hinges on one crucial factor: adoption. Simply having AI tools isn't the key. Actively using and integrating them is what unlocks true growth potential.



**IS IT STRATEGICALLY
DIFFERENTIATING?**

**CAN WE ATTRACT,
RETAIN, AND AFFORD THE
AI TEAM TO BUILD THIS?
CAN WE CONTINUE TO
FUND & IMPROVE IT OVER
TIME?**

**ARE THERE NO
AFFORDABLE, HIGH-
PERFORMANCE
SOLUTIONS ON THE
MARKET?**

**CAN WE BUILD IT FOR
LOWER COST &
BETTER QUALITY?**

BUILD

**IS THIS THE BEST USE
OF OUR ATTENTION &
RESOURCES?**

BUY IT!

NO

NO

NO

NO

NO

YES

SOURCE: AI for Retail

Pricing optimization involves building and operationalizing a bunch of complex data and AI-based systems. These are the key price optimizer tasks, systems, and capabilities:

1. COLLECT DATA

- catalog
- sales
- competitive
- cost
- weather
- inflation

2. LINK PRODUCTS

- AI-backed product matching

3. DIAGNOSTIC INSIGHTS

- statistical analysis of competitive landscape, sales, conversion
- predicative analysis of sale, cost, price

4. PRICE POLICIES & CHANGES

- SaaS application that streamlines policy creation
- price change suggestions
- approve and reject
- pass change to POS, ESL, ecommerce site

5. MEASURE

- sale, profit, conversion uplift analysis
- tweak pricing policies as needed

The Future of Price Optimization

As grocery retailers implement more technologies like electronic shelf labels and new app technologies, the next logical step is to systematically apply price adjustments via price optimization. There's a huge opportunity for retailers to enhance their operations and drive profitability through grocery-specific price engines.

ESLs will become incredibly common to drive pricing automation in store. This technology is creating huge efficiencies in price changes. The initial investment on ESLs will continue to drop with retail adoption. Cameras could attach to ESL tags to double as a data provide to enable AI-based planogram planning, footfall/glance views measurement, and efficient out of stock identification and replenishment operations. ESLs will bring cost efficiencies to your store's floor.

The future includes more shop floor data for better pricing decisions. Ideally price should match the value a customer is willing to pay. Such data will become common inputs for pricing decisions. With proliferation of secure data sharing methods governed by local laws, privacy and regulations, via customers mobile, shops camera, and other IOT devices in store, more pertinent data are going to feed the AI algorithms in the future of pricing. This will greatly reduce shrink of fresh produce & perishables, improve customer satisfaction.

Retailers can use AI-powered pricing algorithms to optimize prices based on factors such as demand, competitor prices, and inventory levels.

The influence of omnichannel means retailers will develop pricing strategies that are consistent across all channels. This includes ensuring that prices are the same whether a customer is shopping online, in-store, or via a mobile app.

The future of price optimization promises increased sophistication and integration, leveraging advancements in technology and data analysis to further enhance retail profitability and customer experience.



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The pricing engines of the future would not be correlation based but would start to employ advanced, simple but effective **causation principles of AI**. These causal AI pricing systems would be as powerful and efficient as the industry's best pricing subject matter expert AND operate at machine scale. A combination of LLM, GNNs, and causal inference will bring in the next level of AI revolution to retail. As artificial general intelligence replaces the copilot based AI systems, pricing optimizer would be one of the initial retail business functions that would be disrupted by it.



VENKAT PK
CHIEF TECHNOLOGY OFFICER
CLEAR DEMAND

Clear Demand: Price Optimization

We have the pricing framework. You know your customer. The power of this collaboration is unmatched.

Our application can be deployed within your environment using your data. It pipes back into all of your existing systems without you having to do a lot except for providing the necessary information.

Your workflows will be automated! You can be more efficient in your work. Our price optimization gets adopted by grocery retailers because the tool reflects YOUR business; it's not dictating business.

Finally, this platform is for a retailer's entire pricing organization - category managers, pricing directors, pricing analysts. Do it all: Review price analytics, see where things are at a high level, drill down into different categories, modify prices to build loyalty.

There's a lot of technology out there. Bungee Tech's price optimization brings your work together to create a foundation of effective price execution.



About

CLEAR DEMAND

Who We Are

We're revolutionizing retail operations through efficient automation, improving our customers ability to compete and win in the market.

Mission

Clear Demand empowers profitable retail growth through data, machine learning, and automation. Take control of your product, category, and organizational profitability with our end-to-end retail pricing, promotion, and assortment solutions.