PRICING INTELLIGENCE 2.0

The Essential Guide to Price Intelligence and Dynamic Pricing

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POWERING ANALYTICS INTO ACTION

Table of Contents

Table of Contents (Continued)

Preface

With today's chaotic buying climate, we're all very aware of how much retailers are vying for consumers' limited attention span and the overabundance of choices available to them. Knowing this climate, we're thankful that you picked this book and arrived at this page. We promise your company will only benefit from the information in the pages that lie ahead.

The mobile, technology and social revolution have led to the rise of the super shopper who is armed, informed and vocal. Most consumers today begin their shopping journeys online and are looking for the best prices. They're also acclimatized to dynamically changing prices. Price wars occur in real time now, but some retailers and brands aren't ready for this new reality.

Price intelligence and Dynamic Pricing are emerging as must-have capabilities that retailers need in order to stay relevant to their consumers and remain competitive and have an edge. We clearly saw the need to share our knowledge on this subject and have compiled this comprehensive book as an accessible, easy-to-read ongoing reference.

We're excited, as we hope you are, with the end result: a complete guide to everything related to pricing intelligence, from how to handle a price war to the psychology of free shipping to tips on avoiding the price matching trap. We even devoted an entire chapter to the ins and outs of Dynamic Pricing, including how to predict the right time to adjust pricing and how Dynamic Pricing can help you stay nimble in a constantly changing digital world.

As the world of pricing evolves, we hope that this book will help you make sense of it all and stay on top of current trends and in touch with the needs and wants of your customers.

Still on this page? Thanks! We hope you find this book a useful read, and welcome your comments and feedback at ebookfeedback@ugamsolutions.com or (415) 320-8426.

Mihir Kittur
Co-founder and Chief Innovation Officer, Ugam

CHAPTER 1
Welcome to the New World of Pricing

CHAPTER 1

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Executive Summary

Your customers are more empowered now than ever before. Armed with smartphones and comparison-shopping engines, even the most loyal ones will go elsewhere if you're not offering the "right price."

But that doesn't mean your prices should always go down.

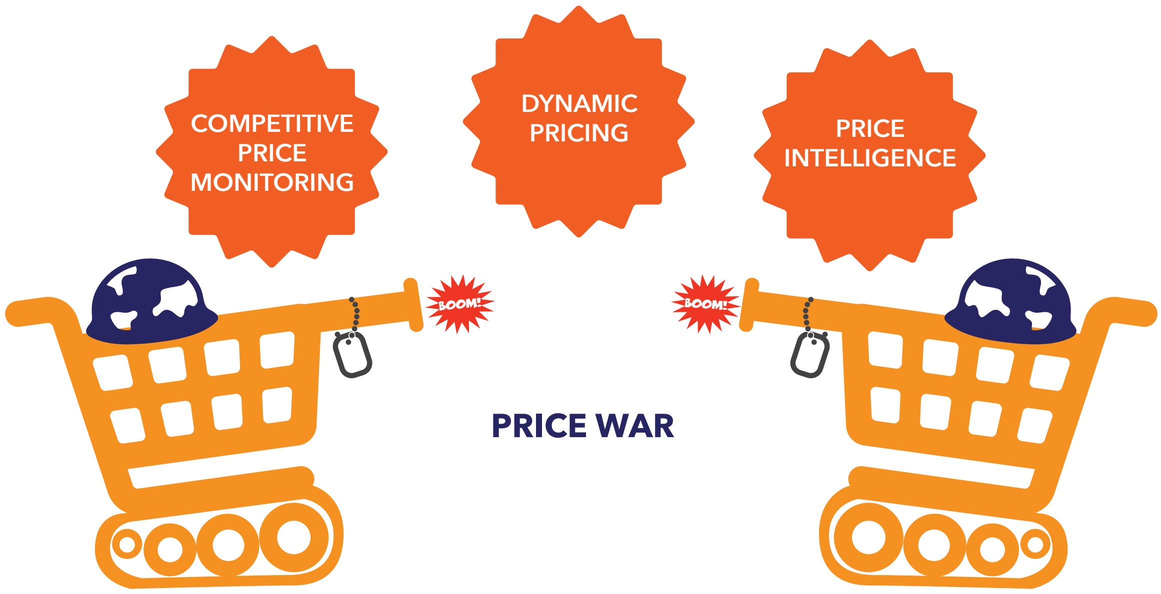
In Chapter 1, we will explore:

- Why price wars ultimately end with two losers.
- Who your most "relentless" competitor is, and why you can't afford to sit still.
- How much price factors into purchase decisions compared to brand loyalty and free shipping.
- When you can and should increase prices on some items to offset the lower margins of price matching.
- How you can use Dynamic Pricing strategies to combat showrooming.

If you're just getting started, we have some great news. Most of the retail world is still playing catch-up with the next generation of Pricing Intelligence.

Are You in the Middle of a Price War?

Retailers, as well as the analysts and journalists who cover them, are extremely fond of combat metaphors.



Describing an early 2014 discounting frenzy on high-end shampoo brands, *The Wall Street Journal* declared there was a **"Big Hair War"** between Procter & Gamble and Unilever over follicles in the United States and Western Europe.[1] *The Journal* also reported that P&G is now in Target's **"cross hairs"** for making it cheaper for mega-rival Amazon.com to ship Pampers diapers and Bounty paper towels. Insiders say that the giant retailer has retaliated by devoting less endcap space to P&G brands.[2]

Is all this battleground talk a bit melodramatic? Perhaps. But the fight for market share is endless and relentless – and it pays to fully understand whom you are fighting for and against in order to build and protect your competitive edge.

WHO'S THE MOST RELENTLESS RETAILER?

FIND OUT NOW

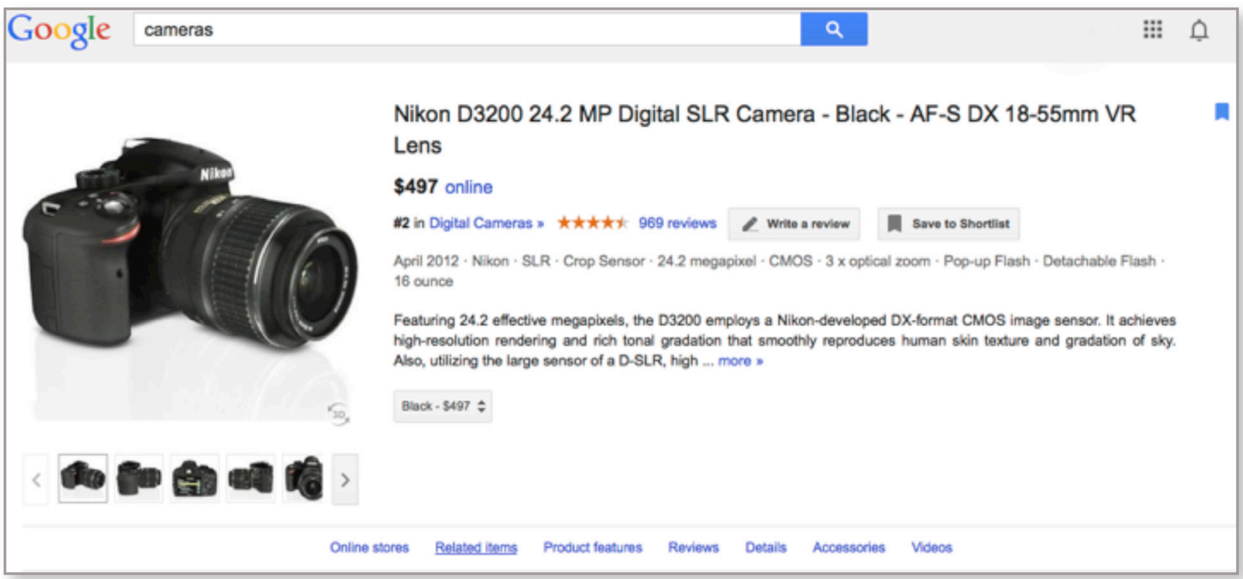
Do you think "Relentless" is a good name for a retailer or brand? Tweet us your thoughts @Ugam! **#Relentless**

Take a look at the question in the blue box on the right. Did you guess the right answer? Turns out that our mystery company had originally considered naming itself Relentless.com, but the founding CEO's friends advised that it "sounded a bit sinister."[3] Yet, there was something about this word that deeply appealed to him – enough to convince him to keep the URL for pure nostalgia. It's understandable why. The world of retail is not for the meek. In the Age of More Choice, you can't afford to sit on the sidelines while your competitors play the price-changing game.

But you can play it smarter.

In this eBook, we'll introduce you to the latest Pricing Intelligence strategies, tactics, tools and technologies for retailers and brands. We'll share best practices and why you can't afford the most expensive price of all – the price of standing still.

What Your Customers Care About Most: Price



It's no secret that your customers are more empowered now than ever before. The boom in smartphone adoption and popularity of comparison-shopping engines and apps such as Google Shopping, PriceGrabber, NexTag and Shopzilla means that the days of scurrying from parking lot to parking lot looking for the best prices are long gone.

Searching for a Nikon D3200 SLR Camera on Google Shopping, for example, instantly turns up 72 stores and ranks them by total price (including shipping and taxes). Unless the consumer needs that camera right now for a birthday present or to capture once-in-a-lifetime memories, they can afford to wait for the best pricing. They can watch digital SLR prices go up and down like the stock market and pull the trigger when they see their magic number.

Online prices for consumer goods are bouncing around like the stock market. According to

RIS News, Best Buy and Walmart have each been changing their prices more than 50,000 times a month – and Amazon alone made more than 3 million price changes during the 2013 holiday season.[4]

Here's the math: There were 36 days between Thanksgiving and January 2nd. That's 864 hours or 51,840 minutes. Amazon made an average of at least 57 price changes per minute, or nearly one per second. That's a dizzying statistic no matter what you're buying or selling.

"Pricing is the biggest lever any retailer has and it is at the heart of what they do," says Howard Langer, Global Capability Managing Director-Pricing and Promotions at dunnhumby, one of the world's leading customer science companies. "It is important to recognize pricing as a management discipline."[5]

Increasingly, there's also a consumer expectation that shipping should be built into the cost of doing business.

The Psychology of Free Shipping

Study after study confirms that free shipping is a major factor in motivating online shopping decisions:

- 39% of customers will increase their spending to qualify for free shipping, according to Forrester and UPS.[6]
- 56% of customers will abandon their shopping cart when presented with "unexpected costs" like shipping or taxes at checkout, according to WorldPay.[7]
- Zappos CEO Tony Hsieh devotes a large chunk of his marketing budget to surprising customers with free overnight shipping. "A lot of our customers order at midnight Eastern time and it's on their doorstep eight hours later. That creates a 'wow' experience and causes word-of-mouth and repeat customer behavior," he says.[8]

Customer Pressure to Keep Prices Low

According to Deloitte's 2013 American Pantry Study – an annual snapshot of how the economy impacts consumer spending – shoppers are reporting that the recession has made a lasting impression.[9] For three consecutive years, at least 93% of survey respondents agreed with the statement, "Even if the economy improves, I will remain cautious and keep my spending at its current level."

In addition, the annual Deloitte study is consistently finding that consumers have been shrinking their circle of "must have" brands and are more willing to use generic or private label products to save money. In the study, a "must have" brand is defined as a brand a shopper will buy whether it's on sale or not. Deloitte concluded that only 29% of brands have this coveted status, and that during the recession (specifically, from 2011-2013), consumers downgraded one out of six of their favorite brands and replaced it with a private label brand.[10]

> **Pricing Pressure:** Consumers are becoming less brand loyal and more price sensitive. During the recession, they replaced **one out of six** of their favorite "must have brands" with a cheaper store brand.

Source: Deloitte's 2013 American Pantry Study

Moreover, 38% of respondents reported buying store brands in categories they never have purchased before and only 27% said they would purchase more national brands instead of store brands as the economy improves.

You read that correctly: Even when there is more money in their wallets, the average consumer expects to remain in permanent bargain-hunting mode.

Are Price Wars Winnable?

The American obsession with shopping for deals can easily tempt retailers to chase customers at any cost, launching price wars that ultimately might not be in their best long-term interest.

As the *MIT Sloan Management Review* has noted, there are usually no winners in a price war: "The losers are often forced out of business, and the survivors have been known to suffer a long-term squeeze in profitability."

"Price wars begin when competitors aggressively and repeatedly set prices below established levels. In some cases, companies that initiate price wars engage in self-destructive behavior, which leads to downward pricing spirals that alter industry structures," wrote Patrick Reinmoeller.

"In studying price wars that took place between 1980 and 2013 in industries including airlines, telecoms and financial services, I saw that price wars were invariably linked with serious drops in financial performance. Indeed, when price wars erupted, most companies found themselves in commodity traps: Profits narrowed considerably, and weak competitors had difficulty staying in business.”[11]

In a war of attrition, both sides come out badly beaten and worse off than when they started.

There’s another way for prices to go, of course. And that’s up.

Selectively raising prices, if handled the right way, will not lead to customer insurrection.

We promise.

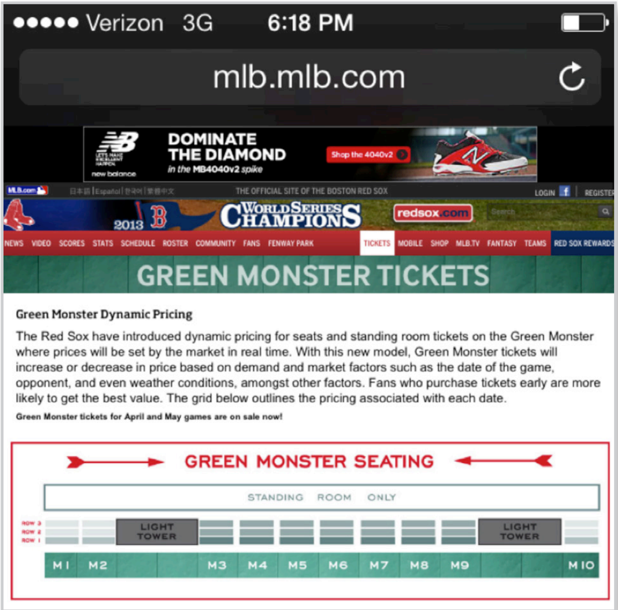
Think about your own consumer experience. When you are cruising down the supermarket aisles, you’ll likely find either Coke or Pepsi products on sale for 99 cents for a 2-liter bottle. Stop at a convenience store at midnight and you’ll have no issues forking over $1.50 for a 16-ounce bottle. Want that same bottle at a ballgame or concert? It’s now $4. At the movies, your 32-ounce fountain drink is $6 in a souvenir plastic cup.

If you’re a devoted soda drinker, you know the price of thirst varies based on where you are, the availability (or lack) of competition, and whether you are willing to wait for either of those factors to change. You won’t stop drinking soda (in between your quiet grumblings) because those are the accepted and universal rules of the game.

Consumer Acceptance of Variable Pricing

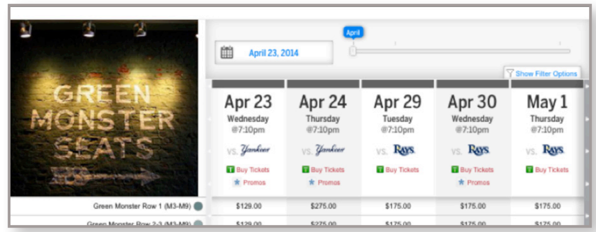
It’s all about supply and demand.

For the first time in its history, the World Series Champion Boston Red Sox are now charging fans different prices based on the quality of their opponent, the day of the week and even the weather.



Called “Green Monster Dynamic Pricing,” the sales strategy only applies to a limited number of seats on top of Fenway Park’s storied left field wall. Nicknamed the “Green Monster” because of its color and 37-foot height, the wall is several times taller than most ballpark fences and can alter the outcome of a game by turning would-be home runs into doubles or routine fly outs into hits.

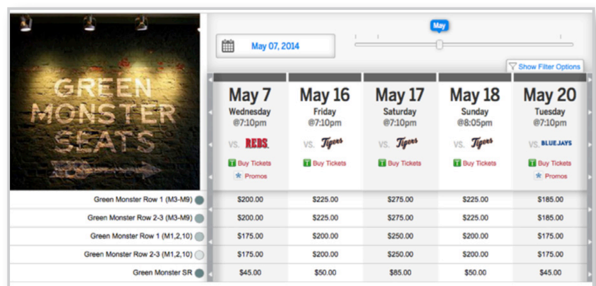
Forbes estimates that Dynamic Pricing will add another $2-$3 million in ticket revenues to the Red Sox coffers in the 2014 season, enough to pay for an extra middle relief pitcher or utility infielder.[12]



Looking at the mobile screenshot above, a few last-minute New York Yankees tickets, released an hour before game time, were fetching only $129 each compared to the next night's asking price of $275. The same exact seat against the less popular Tampa Bay Rays goes for $175.

On Saturday, the price to see last year's playoff rival, the Detroit Tigers, shoots right back up to $275. (Those "cheap" $50 seats are for Standing Room, a bargain if you don't have a fear of heights.)

Whether you're selling goods at the ballpark, a brick-and-mortar store or an e-commerce site, the same principles of Dynamic Pricing apply.

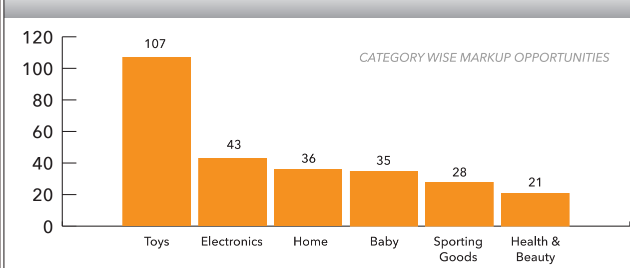


To maximize revenues, sometimes you need to raise prices, sometimes you need to lower prices and sometimes you're better off not making any change at all.

Here's an example of how a retailer can adjust prices on multiple product categories depending on what their most important competitors are charging:

Opportunities for Price Markups

For which items can you markup prices and still win?



CATEGORY	COUNT
Toys	107
Electronics	43
Home	36
Baby	35
Sporting Goods	28
Health & Beauty	21

PRODUCT TITLE	PRODUCT CATEGORY	AMAZON PRICE	TARGET PRICE	WALMART PRICE	CATEGORY KILLER PRICE	MARKUP OPPORTUNITY	# OF COMPETITORS
Connect 4 Grid	Toys		$ 7.00	$ 19.86		184%	1
Classic Jenga Game	Toys		$ 7.00		$ 16.99	143%	1
Furby Party Rocket - Twittby	Toys		$ 8.74	$ 18.89		116%	1
Barbie Collector The Twilight Saga: Breaking Dawn Part II Rosalie Doll	Toys	$ 17.11	$ 7.99	$ 21.39		114%	2
Igloo Family 52 Quart Cooler	Sporting Goods	$ 44.07	$ 20.99			110%	1
Ball 12ct Regular Mouth Quart Jars (32 oz)	Home	$ 20.92	$ 9.99			109%	1
ClosetMaidCubeicals Fabric Drawers - 1-pack	Home	$ 12.36	$ 5.99			106%	1
Fanny Wang Premium Luxury On-Ear Headphones with Apple	Electronics	$ 121.98	$ 59.99			102%	1

Source: Ugam

These decisions should be based on Competitive Price Monitoring and Price Intelligence tools, which gather millions of price points and consumer demand signals (product searches, consumer reviews and social media mentions) in real time and give you an instant snapshot of your customers' other choices in the marketplace.

Using a rules-based Dynamic Pricing system, you can automatically or manually change prices by the minute based on what your competition is doing. We'll give you the detailed scoop on all these tools – and how you can get started – in upcoming chapters. But first, let's define a few Pricing Intelligence terms that we'll be fully exploring in this book.

Pricing Intelligence Definitions

Competitive Price Monitoring is a method of tracking competitor prices to gain a better understanding of retailers' price positions in the market. Price Intelligence and Competitive Price Monitoring are often used interchangeably.

Competitive Price Elasticity is the measure of how your sales of a product responds to a change in a competitor's price.

Dynamic Pricing is the concept of pricing items based on variable market conditions. It's the practice of determining prices dynamically (in a fluid manner) based on supply, demand, type of customers and/or other factors, such as weather.

Price Intelligence is the practice of getting a better understanding of your price position in the market compared to your competition. It allows retailers to be aware of market-level pricing intricacies and have insight into and awareness of their impact on the business.

Price Optimization is the application of analytics that predict consumer behavior at the micro-market level and establish product availability and price to maximize revenue growth. The primary aim is selling the right product to the right customer at the right time for the right price.

Rules-Based Pricing is the method of assigning product prices based on rules/formulas. The system helps to instantly implement price changes at any scale and significantly reduces pricing maintenance. Dynamic Pricing is implemented through Rules-Based Pricing (*i.e., "If competitor's price drops to X, our price goes to Y," "If a product is low on inventory, raise the price to Z."*)

Smart Dynamic Pricing is Dynamic Pricing with an additional level of customer intelligence that factors in Social Signals (e.g., product reviews, Facebook likes, Twitter mentions, etc.)

What is the most important thing you need to know about any of these different approaches to Pricing Intelligence? When you immediately act on your data, it can work wonders.

Below is the summary of an average 2013 holiday shopping day at a national toy and juvenile products retailer that has been hit hard by "showrooming," the practice of customers walking into a store to see and touch products, but ordering them online – usually at a cheaper price.

Impact of Dynamic Pricing on Holiday Toy Sales

How daily recommendations affect SKVIs without factoring in increased sales due to competitive pricing

PRICE RECOMMENDATION	ITEM COUNT %	AVG. PRICE CHANGE	SALES $ IMPACT	MARGIN $ IMPACT
Increase Price	40.48%	$12.26	$563,732	$2,294
Decrease Price	46.10%	($7.71)	($358,291)	($1,631)
No Change	13.42%	$0.00	$0	$0
	100.00%	$4.56	$205,441	$662

Source: Ugam

Using Dynamic Pricing, the retailer only considered changing the prices on Special Key Value Items (SKVIs), those hot items that seemingly every child had on her or his wish list.

Selectively lowering prices on the most heavily discounted items was more than counterbalanced by raising prices where the market allowed. The difference between tweaking only a few items versus standing still: more than $200,000 a day.

The practice of Dynamic Pricing is not new. Think about when you go to the bakery at the end of the day and score a deal on blueberry muffins that are about to go stale. What is new is the unprecedented access to massive amounts of customer and competitor data – and the ability to instantly act on it.

CHAPTER 2
The Price Match Trap

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Executive Summary

Amazon is making millions of price changes each day. Trying to match their every move is a fruitless (and impossible) exercise. You need to play your own game.

In Chapter 2, we will explore:

- Why price matching may be a victory for consumers, but is potentially disastrous for you.
- Why retailers who try to compete with Amazon on price alone are "showing up to a gun fight with a pixie stick."
- Why retail analyst Kevin Sterneckert, a former VP of research for Gartner, says Pricing Intelligence *strategy* needs to come before *technology*.
- How overly depending on price matching contributed to Kmart's bankruptcy.
- Why it's foolish to expect brick-and-mortar retailers to change prices at the same frequency as their online siblings.

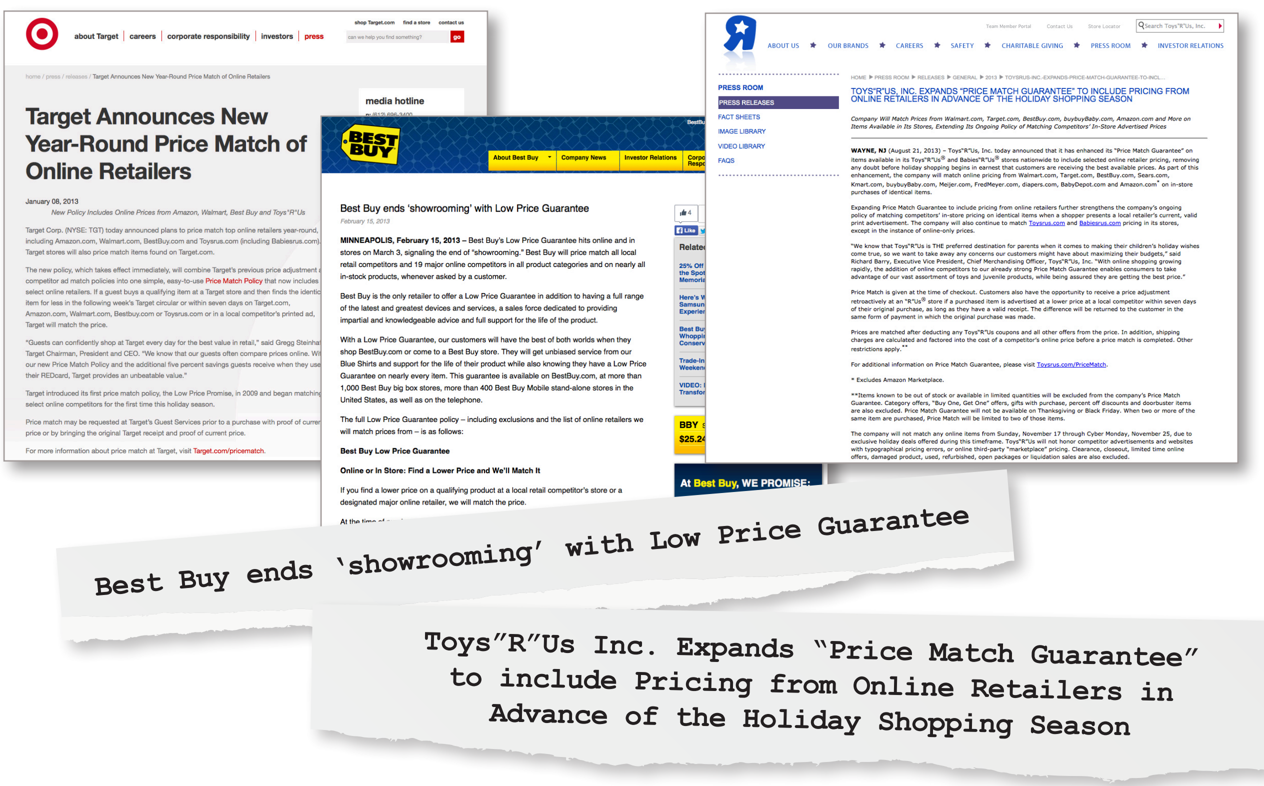
If you take the price-matching trend to its logical conclusion – every retailer's prices eventually being the same – you need to give your customers a more compelling reason to keep buying from you and only you.

Is your head spinning yet?

As we revealed in Chapter 1, prices on Amazon.com are changing by the second. It's not an exaggeration to say that Amazon has made more than a dozen price changes since you first began reading this sentence.

Trying to keep track of which prices are changing and why they're changing is a dizzying exercise.

In this hyperactive pricing environment, many top retailers have adopted price matching guarantees as their first line of defense. Customers in brick-and-mortar stores who find cheaper online prices can often get those prices honored by a store manager. Some retailers will even offer a price match after the fact – if a customer shows up within a week with proof of a better deal. Wanting to avoid being undercut by even a few pennies, many major retailers continue to expand their price match policies and proudly announce each new revision with a press release.

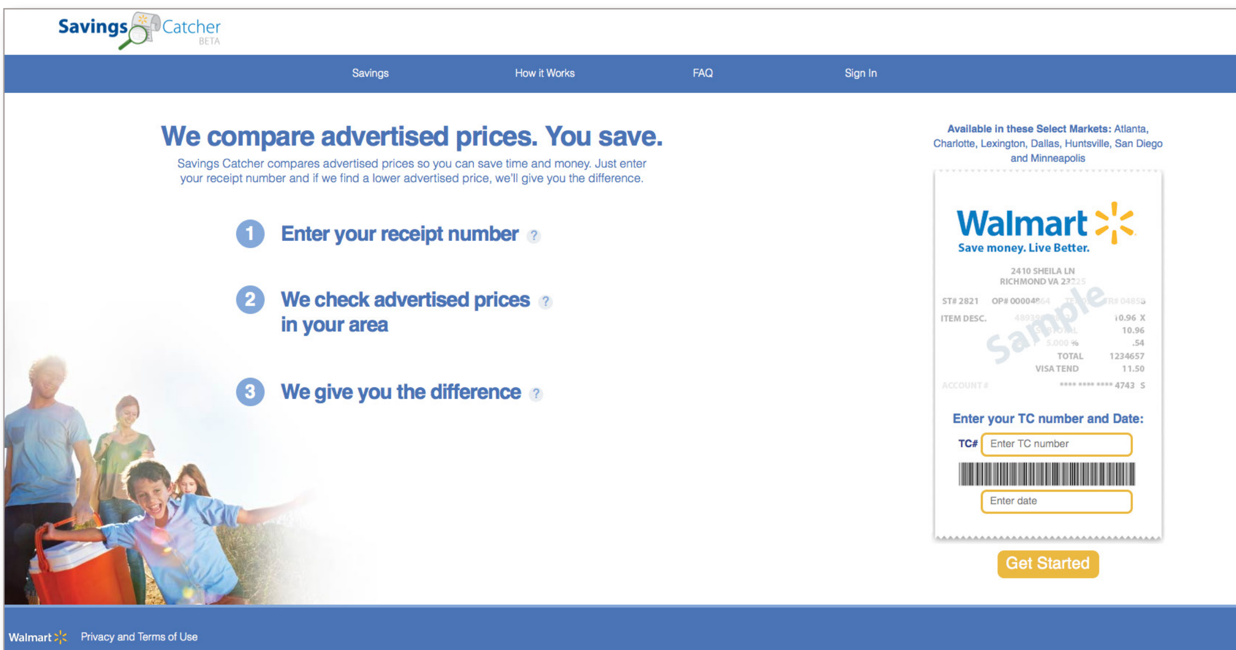


Price matching policies have traditionally only benefited the most motivated comparison shoppers. The key to always getting the best in-store price has been the customer's willingness to scramble for a better deal and the gumption to ask for the retailer's match. Passive customers who never question the sticker price have been out of luck.

Until now.

In February 2014, Walmart announced it was testing its new "Savings Catcher" tool for shoppers in Atlanta, Charlotte, Lexington, Dallas, Huntsville, San Diego and Minneapolis. If the customer response in those cities is positive, the tool will be later rolled out nationwide. Savings Catcher is an automatic price-matching tool that asks customers to type in the identification numbers on their receipts within seven days of purchase. The system will scan a database of advertised prices of brick-and-mortar competitors in the area – and issue refunds in the form of online gift cards if lower prices are found.

Anne Jurchak, a 41-year-old North Carolina mom who was part of a Walmart focus group, told the Associated Press that Walmart "is doing the work for me. The only thing they're not doing is putting the groceries away."[13]



Price matching in any form is universally viewed as a victory for the consumer. But for retailers, it is, at best, a cosmetic bandage that ignores deep wounds below the surface. To explore why, we sat down with retail analyst Kevin Sterneckert, a former vice president of research for Gartner and a nationally renowned expert on Pricing Intelligence.

According to Sterneckert, retailers who try to compete with Amazon on price "are showing up to a gun fight with a pixie stick."

The Price Match Trap:
A Conversation With Kevin Sterneckert

Q: How far ahead is Amazon in the area of Pricing Intelligence?
KS: Let's put technology aside for a minute. I would say that they are six to nine months ahead in strategic thinking. It's going to take education and pain for another six to nine months before leading retailers begin to say, "We've got to do something different." Then it's going to take another six to 12 months to install the technology that's going to lead to a more competitive set of capabilities. I'm not talking about matching Amazon. I'm talking about going to a gunfight with a gun – and today, people are showing up to a gunfight with a pixie stick.

Q: Which retailers are aggressively trying to catch up?
KS: The largest companies with the most direct competitive impact are certainly working aggressively. Walmart, Staples, Target, Macy's and Tesco are among those working aggressively. They recognize the threat, but today they are taking more of a reactionary position than they are taking a strategic proactive position. Most of these companies are still in very early stages. They are thinking rules-based, they are thinking looking at the competitor, looking at their volume, understanding elasticity and then matching prices on the elastic items. Instead of being a price leader – and that really is what Amazon has done.

Q: Which retailers are far behind?
KS: The bulk of other retailers are far behind. And it's not a technology race. It's a strategic-thinking race. Many retailers get and understand optimizing prices for brick and mortar, yet they have for some reason decided that the right strategy is to match their online price with their in-store price. If that's your strategy, it is a very flawed strategy.

Q: How so?
KS: If their strategy is that their online and offline price is the same, that means they are issuing hundreds or thousands of price changes in the store every day. And there is no retailer on the planet that has labor enough to manage hundreds or thousands of price changes every day. So there will always be a difference between online and offline pricing.

> "If you have a thousand units that move a month on an item, and your competition lowers the price, but you are still selling a thousand units, why do you need to lower the price? You don't."

Retail analyst Kevin Sterneckert

What really needs to be done is people need to clearly understand where their competition is and set clear strategies for Dynamic Pricing. It's okay if somebody is beating you on price if your customers don't care. If you have a thousand units that move a month on an item, and your competition lowers the price, but you are still selling a thousand units, why do you need to lower the price? You don't. Retail history has demonstrated that a competitive price strategy that is based simply on matching is not going to lead to success.

Q: Please give us an example of an infamous price match failure.
KS: In the early 2000s, Kmart decided to lower the price on 30,000 items and match Walmart. It was one of several strategies that led to the demise of Kmart – the closing of hundreds of stores, going into bankruptcy, and creating the opportunity for Sears to ultimately buy Kmart. At the end of the day, Kmart employed a price optimization vendor to take a look at their items and their elasticities. The study showed that out of the 30,000 items that were selected to match price, only 3,000 were really elastic for which the customer would give credit to Kmart for those price changes.

Effectively, 27,000 items were lowered in price and the customer did not give Kmart any credit for those price matches against Walmart. They lowered the price – which meant they lowered the profit – and they also accelerated the potential for out-of-stocks because they didn't have the supply chain to manage the demand. So they actually exposed challenges that they had in the marketplace. Even if they could sell more, they weren't going to because their supply chain wasn't prepared to do so.

Q: So why do so many stores swear by price matching?
KS: It makes them feel good that they are doing something aggressive.

The Folly of Trying to Match Offline and Online Prices

As Sterneckert points out, it is ludicrous to expect that brick-and-mortar stores should change prices at the same frequency as their online siblings. Digital shelf price tags or electronic shelf labels (ESLs) are now popular in France,[14] but have yet to catch on with U.S. retailers. Kohl's is the first major national chain to adopt them.

Digital shelf price tags certainly make it convenient for a retailer to more efficiently change signage for weekly or daily advertised sales. Although the capability exists to implement far more frequent updates, customers expect pricing stability when they are physically wheeling their shopping carts down the aisles.

Imagine shopping for sneakers at a sporting goods store and seeing the price change before your eyes as you are tightening the laces to see if they are comfortable. Consumers do not appreciate feeling like they are being manipulated.

The GEICO insurance company recently created a clever TV commercial featuring a supermarket where prices were constantly changing – in the wrong direction. A befuddled shopper unloads her grocery cart at checkout and is surprised to see the cashier act like an auctioneer. Her milk, eggs and produce are all suddenly offered to the highest bidder. The commercial highlights how consumers don't like unpredictability when it comes to their wallets.

Customers already expect that shopping online involves widely fluctuating prices over a short period of time. **But changing prices too frequently in a brick-and-mortar store is a recipe for resentment.**

Physical stores retain one advantage that will always remain elusive for the Internet – instant gratification. Does a customer need that ink cartridge to print up their child's book report due the next morning? Do they need a snow shovel because of an expected blizzard? No matter how promising the talk of Amazon using drones for delivery, customers will be willing to pay a convenience premium when they need something now.

The Solution: How Retailers Can Survive and Thrive

The trick, according to Sterneckert, is understanding and influencing the customer through his or her shopping behavior.

"The customer cares about certain items [in terms of price sensitivity] and they don't care about others. You truly can tap into what the customer expects and you can steer the customer in very predictable ways to buy certain items – and to not buy other items," he says.

"Let's say you have two different sizes of laundry detergent, the 128-ounce and the 96-ounce. If you have more profit on the 128-ounce, you can influence the customer to buy that item just by making the per-unit pricing more favorable. You can also reverse that and make the customer want to buy the 96-ounce item if that's where all your profit is. This elasticity methodology truly is the way that retailers can win."

Sterneckert used to be in charge of price optimization for H-E-B Grocery Stores, a regional supermarket chain in Texas and Northern Mexico that has achieved greater sales per square foot than Walmart.

"It's because H-E-B has said we're going to take price off the table," the analyst reveals. "We're going to understand our customers. We're going to study them. We're going to make sure they don't go to our competition because of price. We're not going to say that we're going to match, but we are going to be right on the items that the customer cares about. And we're going to offer the customer things they can't get anywhere else."

"In my mind, the best quote of the century about being competitive comes from Sam Walton himself. And he said, 'If you want to compete with me, do what I *don't* do.'"

If you take the price-matching trend to its logical conclusion – every retailer's prices eventually being the same – you need to give your customers a more compelling reason to keep buying from you and only you.

Toys"R"Us and Target both offer store-exclusive Lego sets. Kmart lets you dress like former Charlie's Angel actress Jaclyn Smith. Macy's and Nordstrom have deals with Madonna on "Truth or Dare" shoes. When your store is the only place to buy an item, you are no longer competing just on price.

Differentiation does not have to be based on product choice or assortment. It can also involve a unique approach to customer service. Zappos CEO Tony Hsieh has adopted the unorthodox policy of having his call center representatives direct disappointed customers to three different competitor websites if Zappos is out of stock on a certain size or style of shoe.

"Yes, we lose that transaction," he explained to an audience at a South by Southwest Interactive conference. "But we're not trying to maximize every single transaction. We're trying to build a lifelong relationship with each of our customers – one call at a time."[15]

When you are offering items that can be bought from several other competitors, using Dynamic Pricing can ensure that customers perceive your brand as being fair. With the right Pricing Intelligence, you'll know which highly price-sensitive items need to be discounted, which ones can remain unchanged and which ones are ripe for increasing profits.

Yes, Amazon is far ahead of the retail pack. But there's good news: According to a January 2014 study by *RIS News*, most of that pack is sitting on the couch.[16]

Consider these findings about the current use of Retail Price Intelligence:

- Only 23% of surveyed retailers are using Price Intelligence software right now.
- An additional 29% of retailers plan to deploy Price Intelligence tools in 2014.
- A stunning 42% have no plans to use Price Intelligence software at all this year.

As mentioned earlier, even the most sophisticated technology is useless without the right strategic thinking. But if you want to stop being reactive and start being proactive with your pricing, there's still time to get on board.

Acting on the right Pricing Intelligence will help you avoid the Price Match Trap.

CHAPTER 3
An Introduction to Pricing Intelligence

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Executive Summary

Your intelligence is only as good as your underlying data.

In Chapter 3, we will explore:

- How to more efficiently monitor your competitors' prices.
- How to make sure you're accurately comparing them with your own.
- How your raw pricing data should be enriched for your retail analysts.
- How analysts turn the numbers into actionable insights.

The numbers are already telling you what to do – all you need to do is start listening.

As strange as it might seem in the computer age, the pencil-and-paper approach to intelligence gathering is hardly extinct.

Competitor Price Monitoring has been around in various forms almost as long as retail itself. This is primarily because whether you are running a consumer electronics store or a neighborhood lemonade stand, your customers will likely flock elsewhere if they can conveniently get the same products at a lower price.

Traditionally, brick-and-mortar retailers have sent employees into competing stores with a list of key products for price comparison and then decided if their pricing needed to be adjusted accordingly. Retailers can now outsource this cumbersome task to mystery shoppers or retail data collection companies; however, they still can't avoid putting people "on the ground" since not all stores put all their prices online.

Paying close attention to competitors' prices on an ongoing basis is essential for three reasons:

1. **It Gives Retailers a Regular Reality Check** – No matter how much time you devote to planning, sudden adjustments in the marketplace will surprise you. With regular, accurate monitoring, you'll know your competitors' price changes almost as soon as they make them – allowing you to quickly respond. In addition, comparing your product page traffic to your competitors' traffic for the same products will let you know who truly poses a threat to your sales.

2. **Managers Can Better Plan for Promotions** – Knowing the frequency, depth and length of typical competitor promotions can help you plan your pricing adjustments in advance. Finding out what percentage of each competitor's inventory is regularly priced, discounted or on clearance at any given time helps you time your own promotion plans. For example, as summer vacation approaches, how far in advance are area retailers pushing beach towels and sunscreen? How early have they declared summer to be over by deeply discounting those same items?

3. **Historical Data Helps Forecast Future Pricing** – Gathering pricing intelligence on competitors enables you to compile a historical archive of data that tracks seasonal patterns and trends over time. At the beginning of the back-to-school season, for example, it's helpful to understand how a competing retailer discounted backpacks or school supplies the previous year. Armed with this type of knowledge, you can forecast your rivals' pricing strategies months in advance for a given category.

As effective as manual audits have been for brick-and-mortar stores over the years, they are no longer adequate to keep up with the frenzied pace of competitor pricing changes.

The Myth: Store-Based Retailers Only Need Store-Based Intelligence

Conventional wisdom among store-based retailers has been that only physical visits to competing stores will produce the most meaningful competitive data. Indeed, that method is still important, but brick-and-mortar retailers also need to include online price monitoring on their radar. With very few exceptions, online retail prices now reflect in-store prices.

Only caring about pricing data from physical stores is like pretending your customers don't know about the Internet. You need to be thinking about pricing the way your customers and competitors think about pricing. You need to be looking at the same numbers they are.

Amazon is making price changes more than a million times a day. Walmart and Target evaluate the pricing on their Key Value Items (KVIs) every two hours.

By gathering online prices, retailers can regularly and accurately monitor all targeted competitive products instead of focusing on a select few. Without the limitations of physical store price-checks, there is virtually no limit to the number of SKUs that can be monitored online across any number of relevant competitors. Online price monitoring gives retailers a holistic view of the marketplace – including comparisons of the original product price, the MSRP, the promotional price and the price with and without shipping.

> "56% of customers will abandon their shopping carts when presented with "unexpected costs" like shipping or taxes at checkout."

WorldPay[17]

It is critical to make sure you always monitor competitor prices with shipping included. There is a wide variety of shipping policies online:

What Does "FREE" Shipping Mean?

Minimum Purchases Required By Retailers

amazon	$35	JCPenney	$99	TARGET	$50*
belk	$99*	L.L.Bean	FREE ON ALL ORDERS	Toys R Us	$49
GAP	$50	LOWE'S	$49	Walgreens	$25**
THE HOME DEPOT	$45	macy's	$99	Walmart	$50
IKEA	NO FREE SHIPPING	NORDSTROM	FREE ON ALL ORDERS	Zappos.com	FREE ON ALL ORDERS

** Both Belk and Target offer free shipping for store-branded credit card holders*
*** Order must be under 20 lbs.*

Source: Retailer websites

There are many other shipping factors to consider when trying to understand the psychology of your customers. Most free shipping policies do not include large or bulky items, such as furniture or lumber. Many retailers will also offer free delivery to any of their stores for customer pickup. Lastly, Amazon Prime offers "free" two-day shipping for $99 per year.

For smaller purchases, a discount of a few dollars will be neutralized if the shopper needs to "give the money back" at checkout. Most people are even willing to absorb a minimal convenience fee – paying a small amount more – if it means getting their purchases now.

Customers who showroom in physical stores pay close attention to how shipping affects their bottom lines for online purchases. Make sure you're paying close attention, too.

The Four Stages of Pricing Intelligence: Turning Numbers into Action

Gathering the prices and shipping charges of your competitors is only the first step of Pricing Intelligence. You also need to refine your raw data so it's ready for your analysts to turn it into *real intelligence* – that is, making pricing recommendations for every competitive scenario.

Here are the steps that are needed to turn numbers into action:

1. **Gathering Prices** – Web crawlers continuously scrape competitor sites for products, model numbers, prices and other characteristics.

2. **Enriching the Data** – Using automated tools and retail category manager expertise, your products are matched or "mapped" to the same or similar products sold by competitors. Price comparisons are only valid if you are making apples-to-apples comparisons.

3. **Analysis & Recommendations** – Using historical sales data, retail analysts build pricing models that explain past performance and predict future trends. The pricing formulas determine the optimal price where sales and profits will be highest.

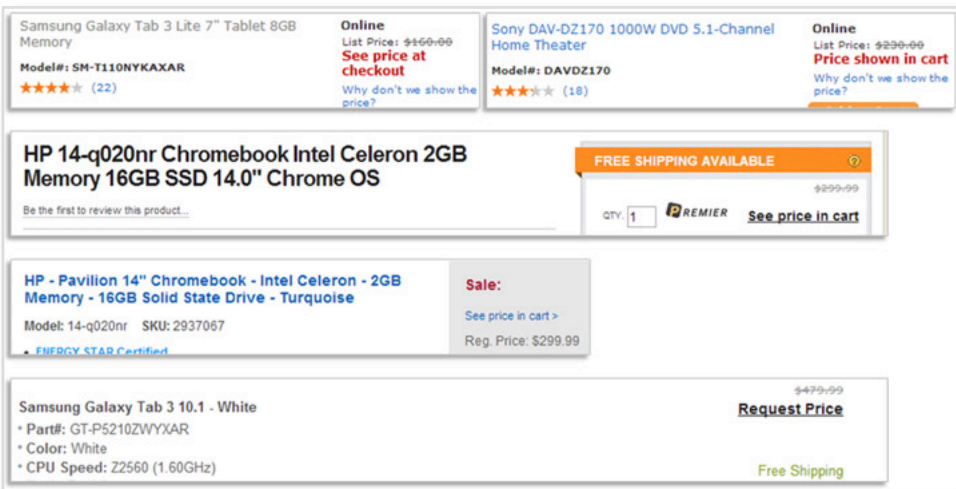
4. **Taking Action** - Analysts recommend that prices be raised, lowered or kept the same based on competitor price changes and your own consumer demand and expectations.

Unfortunately, most pricing data is not ready to use when it's first delivered by web crawlers. For example, computers can instantly compare the prices of every iPod in the universe as long as the UPC codes are listed. But given that Apple seldom discounts its products, the more significant question is: Which competing MP3 players are most comparable – which ones will most likely be attached to your customers' earbuds if they go with Plan B?

Making matters even more complicated is that shopping for consumer electronics (and many other categories) often involves three sets of prices: Manufacturer's Suggested Retail Price (MSRP), sale price and the secret "click here" price.

Gathering Prices is Getting More Complex

Are you a hunter or a gatherer? If you're a price-conscious consumer, you now have to be both. Gathering prices used to be easier for automated web crawlers. The spiders would scoop up the posted prices and mission accomplished. But hidden prices are becoming more commonplace.



Many product pages on e-commerce sites have a "List Price" or "Regular Price" and then invite you to move your mouse over the item or click on a shopping cart to "See Price at Checkout." It might feel like you are at a used car dealership, but the reason retailers do this is to avoid Minimum Advertised Price (MAP) violations. Premium brands like Nike and Under Armour forbid retailers to advertise prices for their products beneath a certain threshold to protect their market position as high-value items. However, many retailers circumvent the rules by not "publishing" the lower price in the open and making you search for it.

Many retailers have been happily using automated webcrawlers to gather competitor prices, but most of these tools are rapidly becoming antiques. Your technology now needs to be both a hunter and a gatherer to capture this "deep data" – it has to mimic the behavior of the online shopper to collect real prices. (We'll be sharing tips on how to compare Pricing Intelligence technologies in Chapter 7, "How to Get Started.")

Enriching Data: What is Product Mapping?

Not to be confused with retail MAP policies, product "mapping" is the practice of matching your products to your competitors' products for the purpose of making an accurate apples-to-apples price comparison.

Let's go back to the MP3 player example.

Looking at the full Apple iPod family – the shuffle, nano, touch and classic – it's a complex exercise to map out which competing brands and models are comparable. Some have video screens; some don't. Some have built-in cameras and radios; some don't.

Most companies initially use an automated matching system and then rely on different levels of expert oversight depending on the product category. After the automated results come up, an analyst or category manager can more accurately pinpoint which MP3 players merit being matched for competitive price comparison.

Though crawling software is effective at quickly searching through massive amounts of data, the approach has significant limitations. Retailers often create their own model numbers for products, meaning that identical products may show up differently from site to site.

In addition, marketing departments often tweak the product names and descriptions to best fit their brands. One furniture website's bedroom "dresser" might be an "armoire" on a competing site. The Web crawlers do not have advanced language processing capabilities – and they cannot always recognize when a store's private label product is nearly identical to a brand name one.

Sometimes, by design, an exact product match does not exist.

Costco sells brand name TVs and computers that are only available at Costco. Their product might be slightly modified – such as an extra HDMI cable port on a television – and if you type in the SKU numbers, no other retailer will come up in a search.

> "The accuracy of automated product mapping widely varies by category, ranging from 85-90% for consumer electronics to only 20-25% for jewelry."

Costco does this to make it more difficult for competitors (and consumers) to quickly conduct online price comparisons. The practice makes them less vulnerable to price matching pressure. In this case, a pricing analyst specializing in consumer electronics would find the brand name TV model most similar to the exclusive Costco model and declare it a match.

Product mapping is a powerful tool for fully understanding the consumer's view. He or she doesn't care about SKU numbers – they just want to get the brand name (or a quality alternative), in the size and style they want at the best price.

Your intelligence is only as good as your underlying data. Product mapping ensures that your data is more accurate – that you are comparing prices and products in the same way your customers do. (We'll be taking a deeper look at product mapping in Chapter 5, "The Human Factor.")

Analyzing the Data: What is the "Right Price?"

Based on accurately mapped products, you can use Pricing Intelligence to fully understand competitors' behavior and take advantage of their shortcomings as they arise. You can also review your own historical pricing data and determine which products are the most price sensitive for your customers.

Almost every competitive intelligence question starts with the numbers.

What Retailers Can Learn from Pricing Intelligence*

How Can I Take Advantage of Competitor Inventory?	• What percentage of stock is out of stock/unavailable for competitor X? • What percentage of a competitor's total stock has broken sizes? • Do I have stock when my competitor is out of stock?
How Competitive are My Prices?	• How does my average price compare across retailers? • What is the percentage of common stock where I am priced higher than any other retailer? What is the price differential? • What percentage of my stock is marked down? Does it differ by product category or brand? • When am I charging regular prices for products being marked down by competitors – and vice versa?

** Depending on which insights you are trying to discover, your analysts can segment their answers based on brand, product category or price range.*

When are Competitors Changing Their Prices?	• Do competitors change their prices if stock is unavailable? • Are my competitors changing prices based on product variants, colors or size? • Are competitors changing prices based on the time of day or the day of the week? • Do competitors change prices based on the availability of stock at another competitor? • Do competitors increase their prices when stock levels are low? (e.g., "Only two left at this price!") • Are my competitors changing prices of best-selling items more frequently? • Do competitors offer promotions for clusters of product categories?
How Can I Increase My Margins?	• When can I increase my margins by increasing my prices on certain products? • If my competitor drops their price, do I need to drop my price by the same amount? • How dependent am I on sales and promotions for my overall sell-through rate? • How dependent am I on markdowns for my overall sell-through rate?
Am I Marking the Price Down Too Soon or Too Much?	• When a product goes into markdown, is there a jump in sales? How are sales impacted by different markdown levels? • For apparel, are there certain sizes that are sold more often in markdown? • Do some of my customers wait for markdowns before they buy? Which customer segments are more bargain-conscious than others?

Taking Action: How Pricing Intelligence Can Maximize Profit

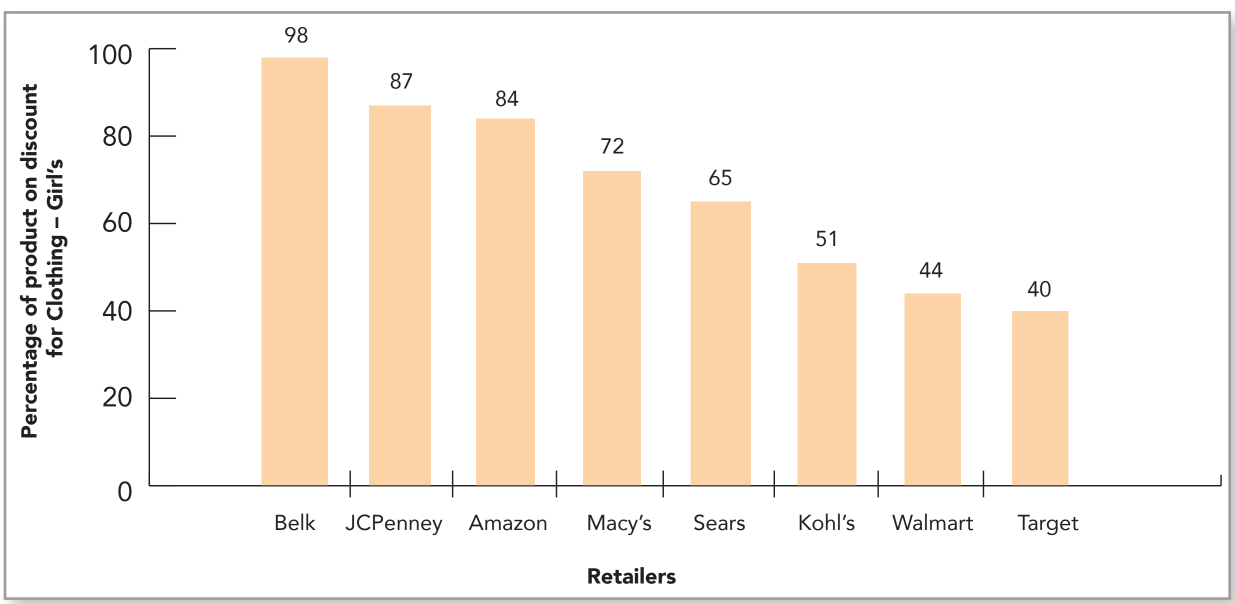
Pricing Intelligence tools identify the best opportunities for increasing margins, giving you a snapshot of which products are the most price sensitive at any given moment. During the 2013 holiday shopping season, we took an extensive look at pricing data from 15 major U.S. retailers across 13 categories, including clothing, toys, consumer electronics, fragrances, cameras, kitchen appliances and vacuum cleaners.[18]

Last November and December was a banner time to be purchasing clothes for girls.

Our seven-week pricing analysis revealed that girl's clothing was the most frequently and heavily discounted holiday product category, with Belk department stores lowering prices on a whopping 98 percent of their items. Target, on the other hand, ran sales on only 40 percent of its girl's clothing – still a sizable selection for bargain hunters.

From a brick-and-mortar perspective, the aggressive Belk strategy might seem most relevant to national retailers with locations throughout the Southern states, where the regional chain is based. However, Belk.com would have popped up for shoppers searching for clothes on the Web – and their free shipping for orders of $99 or more should be factored in by retailers planning their own apparel strategies.

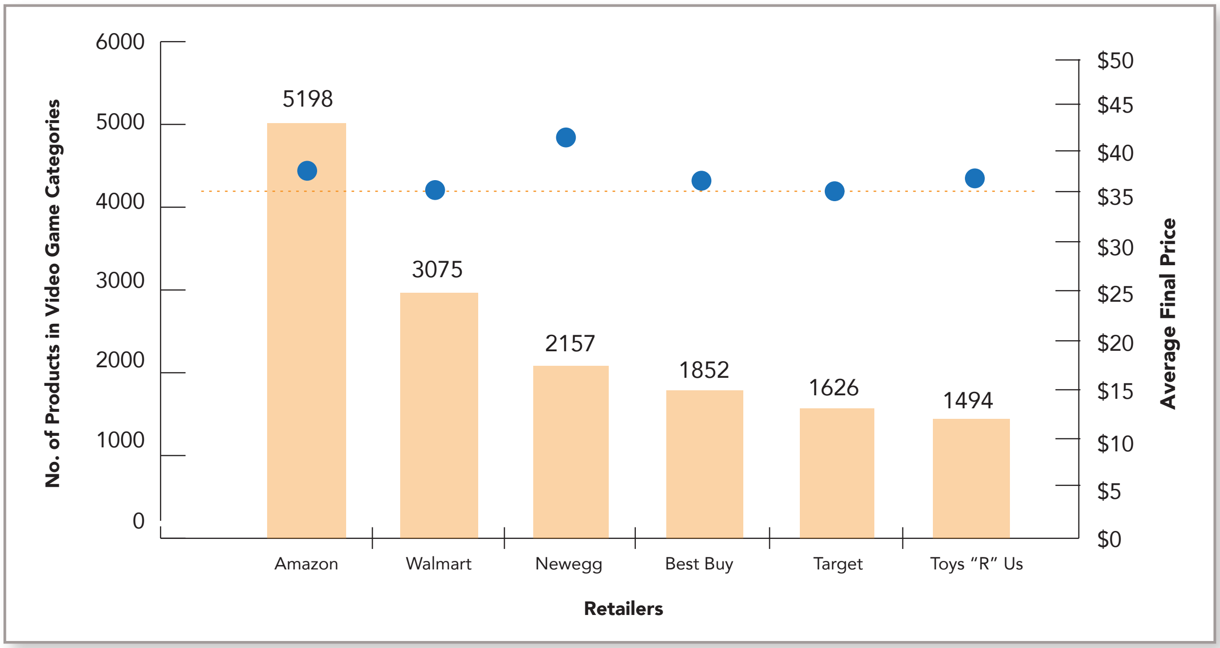
Percentage of Girl's Clothing on Sale – 2013 Holiday Season



On the stingier side of the spectrum, the product category with the least amount of price volatility was video games. Last year was an exceptionally brisk year for video game sales with the release of the next generation Xbox and PlayStation consoles.

The yellow bars in the graph below show great fluctuation in video game assortment for retailers from Amazon to Toys"R"Us. Amazon, not hindered by shelf space, boasted nearly 70% more choices than Walmart. But the blue dots say it all.

Video Game Assortment & Prices – 2013 Holiday Season



The blue dots mark the average video game title price over the busiest seven shopping weeks of the year. Note the almost negligible $5 differentiation in price between these retailers, who are usually not bashful about slugging it out over low prices.

Video game enthusiasts are not known for their patience. They put their names on waiting lists and stand in lines at midnight for the privilege of being the first to play the newest consoles and games. In general, video gamers are like iPhone fans in that they are willing to pay the "going price" for what they want – whatever that price may be.

On the flip side, strategic competitive intelligence can also help you determine when significantly lowering prices will increase profits.

A leading office supply retailer recently was mystified why its $600 document shredder had no sales and no reviews, although the same item was performing well in other markets. After Dynamic Pricing tools (see Chapter 4) recommended a 30% price drop, the shredder began to sell briskly at $420. The increased volume of sales more than made up for the lower margins.

The Next Step: Watch Lists, Alerts and Rules

In a retail world obsessed by price matching policies, it's invaluable to know when you have to lower prices and when you can and should raise them. These opportunities often arise suddenly and may not last for long. Using Pricing Intelligence tools and strategies ensure that you will seize the best opportunities to build your competitive edge.

Earlier we mentioned the plethora of competitive insights that analysts and category managers can extract from pricing data. The way to turn those insights into action is through watch lists, alerts and rules.

An alert is a notification whenever there are significant changes made by a competitor or there is a shift in consumer signals. These events may include:

- Increases or drops in price by a certain percentage.
- Being out of stock for an important product.
- Adding a new product or removing an old one.
- Introducing a new promotion or sale.
- Changes in shipping prices.
- New positive or negative customer reviews.
- New videos or images being added to a product page.
- An increase in Facebook likes, Tweets or Pinterest pins made from a product page.

Watch lists monitor these same types of events across multiple products. You could, for example, continuously compare a set of 30 products over a year, see how a product performs within a category or track the sales of only Key Value Items.

Based on your pricing strategy, you can also create customized rules that will automatically adjust your online prices in response to competitors' changes. We'll share how to set up your own Dynamic Pricing Rules Engine in Chapter 4.

Trying to keep track of all your competitor price changes as they happen is humanly impossible. Setting up watch lists, alerts and rules allows you to best leverage your expertise and take action when it matters the most.

CHAPTER 4
An Introduction to Dynamic Pricing

CHAPTER 4

ugam
POWERING ANALYTICS INTO ACTION

Executive Summary

Dynamic Pricing is NOT the same as price matching. Based on supply and demand, consumer social signals (e.g. product reviews, Facebook likes), the weather, and even the time of day, there are also opportunities to raise your prices without getting your customers upset.

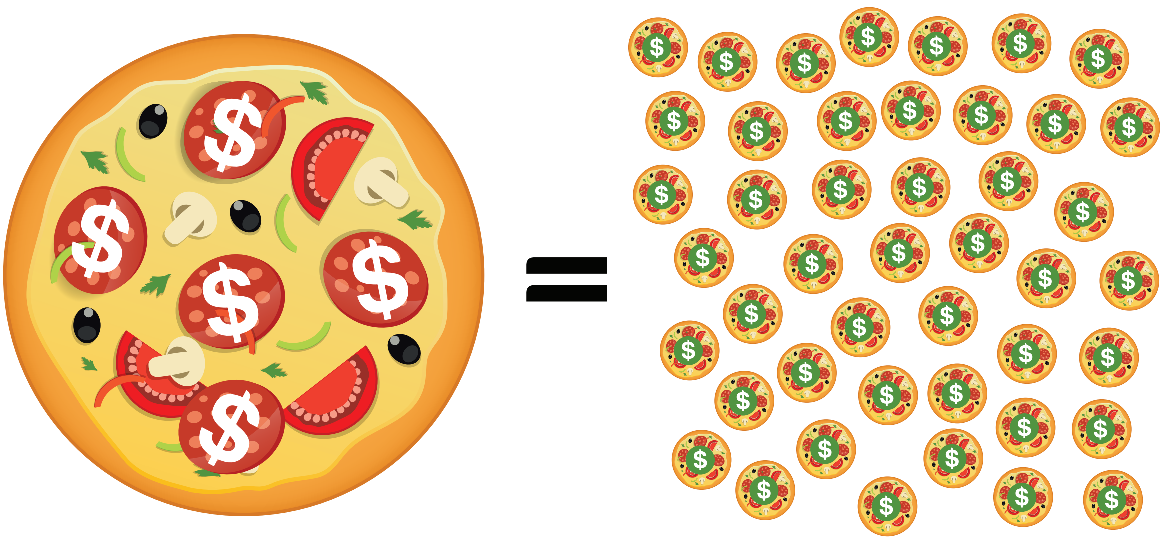
In Chapter 4, we will explore:

- How to know when to raise, lower or keep prices the same.
- Why not all competitors are created equal and some should be ignored.
- Why a customer who finds you in a Google search needs to be treated differently than one who directly visits your site.
- How Dynamic Pricing is automatically implemented through a Rules Engine.
- How to skim margins to take advantage of fluctuations in supply and demand.

Many retailers have already become extinct in this harsh competitive environment. Dynamic Pricing helps you stay nimble in a constantly changing digital world.

How many pieces of pizza do you usually eat in one sitting?

Does price impact how hungry you are?



At Steveston Pizza in Vancouver, British Columbia, the special C-6 gourmet pie costs a whopping $450 – that's $56.25 per slice – for heaping portions of lobster, black Alaskan cod and Russian Osetra caviar topping the mozzarella.[19] In contrast, Domino's Pizza recently advertised an online special for a large three-topping pizza for $10 (caviar was not a topping option). You could buy 45 Domino's pizzas for the price of one Steveston C-6.

Why can Steveston's charge so much for lunch? Because customers who order the C-6 know they can't get one anywhere else. Perhaps they have the disposable income to order $450 pizzas every day or it may be a one-time indulgence to knock off a bucket list. Either way, this price point exists because people are willing to pay it.

That's the philosophy behind Dynamic Pricing. Retailers who know their customers' preferences, spending history, tastes and desires can establish the right price for them instead of reflexively matching the price of their competitors.

Dynamic Pricing is based on supply and demand, customer expectations and even the time of day or weather conditions. In Chapter 1, we shared how even the phrase "Dynamic Pricing" has entered the conversations of consumers as numerous sports teams now fluctuate ticket prices based on the popularity of opponents, whether the home team is competitive enough to make the playoffs, and of course, whether or not it's going to be sunny and warm.

Based on gathering accurate and timely Pricing Intelligence from your own stores and competing retailers, there are constant opportunities to raise, lower or keep prices the same.

What Are Customers Willing to Pay?

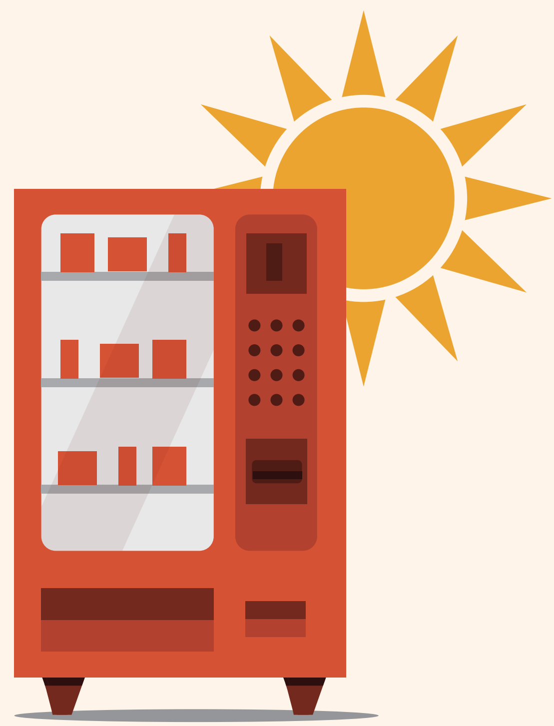
Consumers are not stingy about sharing what they like and what they don't like – and whether they think their purchases are worth the price. There's an ever-growing supply of consumer product reviews and social media sentiment to determine buying trends and what products might become tomorrow's hot sellers.

Here are some of the factors that determine customers' expectations at checkout:

- **Product Availability** – Does a competitor carry the same item, and if so, at what price? Is it out of stock?
- **Location** – Buying a pack of gum in New York City will be more expensive than the same gum in the suburbs.
- **Consumer Segment** – What is their discretionary income and spending history?
- **Instant Gratification** – Nobody cares about free shipping when they "need" the item right now.
- **Product Popularity** – Is this item flying off the shelves? Or is the size, style or color in low demand?

Fresh Cold Resentment

In 1999, the Coca-Cola Company tested vending machines that would automatically charge higher prices for cold beverages when the temperature got hotter. According to *The New York Times*, the variable pricing vending machines were outfitted with a heat-sensor and a computer chip.[20]



Coke executives told the newspaper that they were also considering machines that lowered soda prices during dips in demand, such as an empty office building at night, for example.

Even though consumers often pay more for cold beverages at the beach, there was a backlash against a "smart" vending machine doing the same thing. "What's next?" sniffed one beverage industry executive, "A machine that X-rays people's pockets to find out how much change they have and raises prices accordingly?"

Archrival PepsiCo also ripped into the plan, eager to portray their brand as fighting to keep prices low. "We believe that machines that raise prices in hot weather exploit consumers who live in warm climates," a spokesperson said. "At Pepsi, we are focused on innovations that make it easier for consumers to buy a soft drink, not harder."

Coca-Cola abandoned the program.

When Should You Raise Prices?

Unlike in the Coke story, retailers do not have to come across as the bad guy when raising (or simply not lowering) prices. The key is knowing when customers won't care.

Dynamic Pricing is not the same thing as price matching.

A common promotional tactic during back-to-school season or Thanksgiving week is to lower prices on select Key Value Items (KVIs) – usually about 10% of the items in the store – while modestly increasing prices on everything else. Shoppers are attracted by the deals on the hottest products and inevitably buy other things on impulse while they're in the store. The lower margins on those KVIs are more than balanced out by higher prices on the remaining 80-90% of products in the store.

Psychologically, a customer feels good about getting a special item at a bargain price and will likely not notice the slightly higher prices on everything else in her cart.

Here are four unconventional ways you can use Dynamic Pricing to increase your profit margins by up to 3%:

1. **Know The Sources of Your Website Traffic** – Did a customer arrive on your site after a random search or did she or he return as a repeat customer? Traffic from comparison-shopping engines is believed to be far more price-sensitive – that is, these shoppers will quickly search elsewhere if they don't immediately like what they see. Customers who click a link on a blog or act on a referral or product recommendation are more motivated to shop with you because of reputation, selection, service or other reasons.

2. **React Only to Competitors Who Impact Your Sales** – Somewhere in Kansas, someone is selling the same exact item as you out of their garage, but has only three of them. Don't worry about that guy. Only monitor and respond to the prices of retailers who pose a statistically significant competitive threat. A large company that you perceive to be a competitor may not be in a certain product category. Analyzing traffic on competitors' product pages can narrow down who you really need to keep on your radar.

3. **Learn Which Products You're Really Competing Against** – When you are comparing prices, consider looking beyond exact brand or product matches. Think about functionality. For example, a beach enthusiast looking for flip-flops may also be considering rugged sandals or water socks. It's more effective to look at best-selling items in a category as a reference.

4. **Understand the Purchase Path for Your Products** – Consumers are leaving behind plenty of clues why they visit a product page and what seals the deal for them. You may choose to reward your most loyal and profitable customers with exclusive offers only for them – increasing the likelihood they'll be back.

How is Dynamic Pricing Implemented?

The ability to automatically lower, raise or keep prices the same is made possible by using an analytics-driven Rules Engine. Analysts or category managers can create a set of conditional rules that dictate how your prices will change in response to competitor's price changes or other market conditions.

Given that your competition may be changing prices by the hour or minute (remember, Amazon does it by the second), you can let the Rules Engine handle the bulk of the work and notify you if there is an unusual scenario that requires human intervention.

Rules can be based on geography, actions of specific competitors or the relationship between any two products, categories or brands.

About 90% of commands programmed in the Rules Engine are **Strategy Rules** based on specific product goals and specific competitors. Do you want the item to be the cheapest on the market, the priciest or in the middle? What is the lowest acceptable margin?

You can set up **Strategy Rules** to keep tabs on price changes for KVIs at specific stores and have the Rules Engine instantly adjust your prices accordingly.

A **Ladder Rule** creates an algorithm permanently defining the relationship between two products or product categories. They are usually added on top of a Strategy Rule to enforce a guiding retail principle, such as:

1. Saving money by purchasing in bulk; or
2. Always paying less for a generic or private label product than a brand name product.

Let's say you are selling cases of bottled water as well as individual bottles. If the price of an individual bottle is lowered or raised, the price for a case needs to change accordingly to maintain the reward for purchasing in bulk.

Similarly, if your store is having a promotion on Pepsi or Coca-Cola, your store-brand cola needs to proportionally drop in price to maintain the practice of generic products being the cheapest.

Lastly, a **Zone Rule** recognizes that the cost of living is higher in New York City than it is in Tulsa, Oklahoma. You can set higher or lower prices on the same item depending on where it is sold. This correlates with the trend of national chains such as Home Depot and Lowe's charging different online prices based on ZIP Codes.

Zone Rules can also reward loyalty card or store-brand credit card holders with special pricing.

What if the Rules Engine Makes a Mistake?

A Dynamic Pricing Rules Engine has checks and balances in place to make sure that the software doesn't start making irrational decisions on your behalf. No technology is flawless, of course. In November 2013, a Walmart software glitch listed treadmills for $33 and computer monitors for $9 – deals that were difficult to believe even for a store that's used "Watch Out For Falling Prices" as their marketing slogan.[21] (Learn more about avoiding pricing errors in Chapter 5, "The Human Factor.")

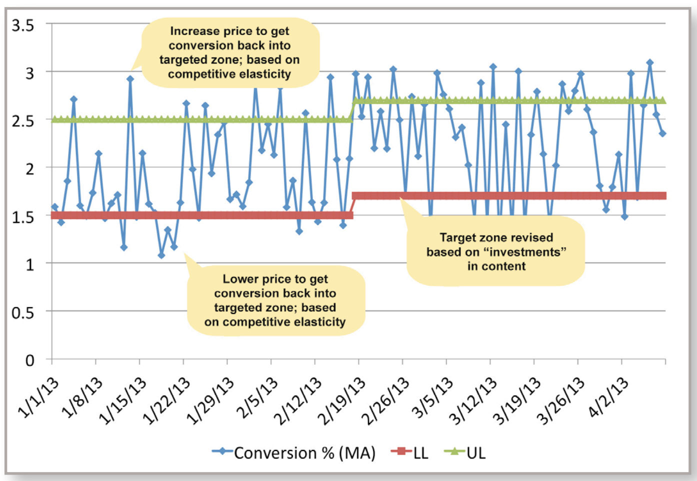
To minimize the likelihood of dealing with this kind of public relations nightmare – and the subsequent hit to your profits – setting up alerts that notify you if your price or a competitor's price has dropped or increased by a certain percentage (e.g., 50%) would trigger a call for manual intervention.

Skimming Margins With Dynamic Feedback Loops

The Rules Engine can also be used to take advantage of natural ebbs and flows in consumer demand. Imagine a street vendor selling ice cream on a corner. When his cart is crowded on a hot day, he can charge more for his product without hurting sales. But when it is raining, he needs to lower the price to lure more people to open their wallets.

The customers buying cheap ice cream in the rain are generating revenue that would not occur if the price had remained stagnant. The vendor can maximize his sales by manipulating prices based on demand in the moment.

Similarly, a Self-Learning Dynamic Pricing Loop can squeeze more profits by following a pre-programmed algorithm over time.



In the scenario above, there is a target range of a 1.5%-2.5% conversion rate on a hypothetical product. When sales dip below the 1.5% rate (the red line), the price is lowered to increase demand. When sales peak at the 2.5% rate (the green line), the price is increased to slow down demand and boost margins on the remaining limited inventory.

This Dynamic Pricing Loop strategy is also known as skimming the margins.

The Antidote to Price Matching

Remember: Price matching is a defensive and unsustainable strategy that is ultimately a race to the bottom. (See Chapter 2, "The Price Match Trap.")

Retailers should lower prices when the customer expects or demands it (based on competitive pressures), but always seize opportunities to hold steady or increase prices (and therefore, margins) when possible.

Dynamic Pricing helps you stay nimble in a constantly changing retail environment. From the most powerful big-box chains to mom-and-pop stores, no retailer can afford to sit still.

What Happened to... YOU?

Think about when your mom or dad took you shopping as a kid. Do you remember riding in a shopping cart at any of the stores listed below? Many of them positioned themselves as discount retailers, with low prices as their number one selling point:

Q: What do these stores have in common?
A: They no longer exist.

Why they disappeared is a topic for another eBook, but it's likely that one of the buildings formerly occupied by these stores in your city or town is now a Target or a Walmart.

The retail world is a lot more fast-paced now. Quickly responding to the expectations and needs of your customers – matching your prices with what they are willing to pay – may help keep you off this list.

CHAPTER 5
The Human Factor

CHAPTER 5

ugam
POWERING ANALYTICS
INTO ACTION

Executive Summary

You are not being replaced by a computer. While it is true that using a Rules Engine to automatically change prices takes human decision making out of the loop, only the no-brainer decisions have come off the table.

In Chapter 5, we will explore:

- Why Product Matching (or Mapping) is essential to comparing prices with your competition.
- Why automated Product Mapping can be as low as 20% accurate in certain product categories and how managers can address this.
- How analysts use Pricing Intelligence data to explain past performance and predict future sales and trends.
- How analysts use data to make recommendations, take action and achieve greater results.
- How setting up Alert Rules can quickly notify you of pricing mistakes and minimize potential losses and public relations fallout.

Before you invest in a Pricing Intelligence system, you need to figure out how you would use it. Only the human brain can make this technology relevant to your unique business needs and challenges.

When it comes to pricing, the human brain is still more important than any computer.

Yes, speed is critical in gathering and acting on retail Pricing Intelligence – and it's impossible to manually track the massive volume of price changes happening by the hour.

Maybe you're tired of hearing your customers rave about Amazon. Maybe you're sick of hearing about Amazon's market dominance in your product category or how they will soon fill the skies with package-delivering drones. Rolling your eyes won't make them go away, though.

We revealed in Chapter 2 that Amazon is more than a year ahead of the pack in Pricing Intelligence – noting that consumers now search there first instead of Google to establish a baseline for the best possible price.

> "It's not a technology race.
> It's a strategic-thinking race."
>
> *Kevin Sterneckert, retail analyst and former vice president of research for Gartner*

Before you invest in a Pricing Intelligence system, you need to figure out how you would use it. You need to decide which competitors pose the greatest threat in which categories and identify your most price-sensitive items. Key Value Items can vary from retailer to retailer, and even from store to store. Your customers will help you determine which products you need to focus on the most.

The smartest tools in the universe are useless if you don't know how to strategically deploy them – and if you don't recognize that even the best technologies have their limitations.

Playing the Matching Game

Once retailers recognize that monitoring competitor prices is vital for them to survive and thrive, they need to get into the consumer's mindset and ask themselves one question:

"If I'm thinking about buying a product from a store, which other stores have the same exact item, and which similar products might I consider purchasing instead?"

Let's say you're hungry and want an apple. You're craving a Red Delicious apple and are not sure if you might invest a little more in an organic one. *Then again, Granny Smith apples are also scrumptious.* You're in a parking lot and equidistant between a Whole Foods Market and a Target. Out comes your smartphone to see which store might have a sale.

Individual apples aren't commonly sold online, but if they were, a fruit store would need to compare its prices to competing retailers selling the same kind of apples. When gathering Pricing Intelligence data, the merchant would need to make sure he or she was making a true "apples-to-apples" comparison.

There are numerous varieties of apples – Honeycrisp, Gala, Fuji, Cortland, McIntosh, etc. – and they all have their enthusiasts. The challenge for the retailer is identifying exact matches and similar matches – and tossing out any "oranges" (e.g., any other fruit, artificial fruit snacks, fruit-flavored beverages, dried fruit, etc.) that sneak into the mix.

> "The smartest tools in the universe are useless if you don't know how to strategically deploy them – and if you don't recognize that even the best technologies have their limitations."

Of course, the apples-to-apples comparison mentioned above is a simplistic example used only for illustrative purposes. When it comes to enjoying a quick snack, hunger and convenience usually trump comparative shopping. But what happens when you apply the same shopping situation to home appliances, consumer electronics or shoes?

To fully understand their competitive environment, retailers need to know how many products are being sold with similar attributes, where they are being sold and at what price. This is called "product mapping."

The first step in product mapping is using spider software to continuously crawl selected websites for manufacturer product names and UPC codes. Automated crawling software is very effective at searching for and matching brand name products when the model numbers are listed (in electronics, for example), but sometimes retailers use their own numbers (deliberately making product mapping more difficult) or neglect to post them. Retailers also rename or tweak the names of products to suit their own marketing needs.

Below is an example of an exact product match of Captain America Ultra Strike action figures by Hasbro:

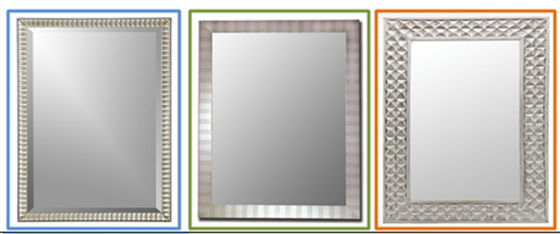
Action Figures - Matching Examples [Exact Matches]

Retailer	Amazon	Walmart	ToysRUs	Target
Name	Marvel The Avengers Ultra Strike Captain America	Marvel The Avengers Ultra Strike Captain America 12" Action Figure	Marvel The Avengers Action Figure - Ultra Strike Captain America	MarvelAvengersUltra Strike Captain America
Brand	Hasbro	Hasbro	Hasbro	Hasbro
Price	17	17	22.99	17.49
MPN	37495	37495	37495	N/A
Character/Theme	Captain America	Captain America	Captain America	Captain America
Dimensions	2.4 x 9.2 x 11.9 inches	2.44 x 9.25 x 11.89	12.0 x 9.3 x 2.5	11.89 " H x 9.33 " W x 2.44 " L
URL	http://www.amazon.com/N	http://www.walmart.com/i	http://www.babiesrus.com,	http://www.target.com/p/m

As you can see from the yellow highlighted line above, sometimes the manufacturer's product number is not properly listed even on a major retail site like Target. The solution: Asking the crawler to search for attributes like character, theme, brand or dimensions. Then a category manager can take a look at possible matches suggested by the software and confirm or reject an item on the list.

The mapping gets a little trickier when the crawler is looking for similar matches between brands and/or private label items. Captain America fans know exactly what they are looking for in an action figure tied to *The Avengers* movie, but buying a fancy mirror, for example, involves a lot more variables.

Mirrors - Matching Examples [Similar Matches]



	Attributes	Crate & Barrel	Wayfair	Wayfair
	Product Id	s641197	IY1010	CO2012
	Product name	Silver Ripple Wall Mirror	Hitchcock Butterfield Company Marquee Mirror in Parma Silver	Cooper Classics Sanford Mirror in Distressed Aged Gray
	Price	$299.00	$168.00	$348.00
Defining	Shape	Rectangle	Rectangle	Rectangle
	Material	Wood	Wood	Wood
	Dimension in Volume	1554	1512	1457
Validating	Style	Contemporary	Contemporary	Contemporary
	Material Type	Hardwood	wood	wood
	Frame Design	Beveled	Beveled	Beveled
	Mounting Hardware	Yes	n/a	n/a
	Multiple hanging option	Yes	n/a	Yes
	Finish	Silver finish	Silver	Aged Gray

Which mirror styles should be grouped together as similar products? How thick can the frame be? What materials? Should a square mirror be compared with a rectangular mirror or are there a significant number of rectangle purists?

Category managers with experience in home décor will know a lot more than a computer about how customers think when comparing similar, but not quite apples-to-apples mirrors.

Without any human intervention, the accuracy rate of automated product matching is generally low – dipping below 50% in several categories. With the applied knowledge of a category manager or category researcher, product mapping systems can deliver up to 98% accuracy.

To the right is a look at the industry averages for automated mapping accuracy before analysts fine tune the results.

AUTOMATED PRODUCT MAPPING ACCURACY	
Category	**Accuracy**
Consumer Electronics	85-90%
Health & Beauty	75-80%
Sporting Goods	60-65%
Toys & Hobbies	60-65%
Footwear	45-50%
Home Improvement	45-50%
Housewares	45-50%
Auto Parts	45-50%
Office Supplies	45-50%
Apparel	35-40%
Grocery	35-40%
Jewelry	20-25%

Source: Ugam

As a general rule, the product categories that have UPC codes – which are universal across all retailers – have much higher accuracy rates for exact product matches. Consumer electronics almost always have UPC codes. Clothing and running shoes, which offer many styles, colors and sizes for variables, do not use them. Nor do private-label or store-brand products.

A quick glance at the Escali Digital Kitchen Scale above demonstrates how tricky product mapping can be – even when there is an exact match of a UPC code. Why is the food scale sold at Wasserstrom.com 60% more expensive than the same one at Amazon? When there is a large price differential between the same item at different retailers, an automated mapping system can alert pricing analysts to investigate further.

Upon closer scrutiny, an analyst would find that the more expensive scale has a chrome surface instead of plastic and is approved by the National Sanitation Foundation (NSF), meeting the public health standards for a school or hospital. *These scales are two different* *products, despite having the same UPC code – a fact that the software could not determine on its own.*

Take another look at those mapping accuracy numbers in the chart again. In most industries and areas of life, a 45% success rate is an abysmal failure. Try baking a cake with 45% of the ingredients. If you get a 45% on a school test, you're still 20 points from earning a "D-minus."

To understand why product mapping is such a daunting challenge, we got the inside scoop from the top pricing strategist at Staples.com, which is currently the third-largest Internet retailer behind Amazon and Apple.

Alex Tempesta, director of retail pricing and systems for Staples, is helping orchestrate the company's ambitious expansion to become a B2B superstore for businesses, retail stores, facilities and restaurants. According to the Motley Fool, more than 80% of Staples.com's sales are now made to businesses – and the number of different products they offer online will jump from 100,000 at the beginning of 2013 to 1.5 million items by the end of this year.

Sharing his observations about product mapping across industries, Tempesta explained why stores that stock a lot of private-label products have an especially tough matching challenge.

The Mapping Challenge: A Conversation With Alex Tempesta of Staples.com

Q: How many products does a typical retailer try to match?
AT: Retailers try to crawl as many products as they can – often we're talking about hundreds of thousands of SKUs. Some consumer electronics categories have matching rates in the 90% range, but office supplies are trickier and can give you results as low as 30%. No matter what the category, you always strive to get those rates up.

Q: What's blocking retailers from hitting the 90% range all the time?
AT: Each retailer has a subset of competitors who make up the core of their true competitors. It's not an open universe of everyone who carries the product in the world. So when you focus only on those competitors, they're not going to carry all your SKUs. And if they're not going to carry all your SKUs, then your match rate is going to be low. If you throw into the mix that 20% of your products are private-label brands, you're going to get even less of a match rate.

Q: Can you please give me an example of a particularly tough product matching challenge?
AT: Okay, using copy paper, there are certain specs on it like 96 Bright, how many sheets in a ream,

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etc. The crawlers do a great job if you give them the model number, but when there's no model number available, they have to use attributes. And to use attributes and get things perfect is not that easy. The biggest thing is that not all retailers carry all the SKUs.

Q: Why is getting that exact match or like-to-like match so vital for retailers to understand the big picture?
AT: Simply put, knowing your price position depends on understanding the prices in the marketplace. If you do not have accurate price comparisons, you are potentially blindly estimating your products' price effectiveness.

How to Immediately Improve Your Product Matching Accuracy

As is the challenge with refining any computer search, automated product mapping includes numerous irrelevant and redundant listings that dilute the value of your Pricing Intelligence. A quick search for coffee makers on Amazon produces 31,109 listings alone. Best Buy serves up 1,185 and Walmart has 1,043.

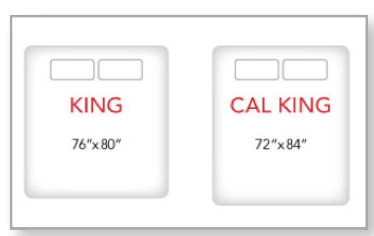
How many do you really need to care about? Before your pricing or assortment analysts determine which suggested matches are ones that matter to your bottom line, the raw data needs some human filtering.

Here are the six steps you need to take to fine tune your product mapping:

1. **Remove duplicates and irrelevant items from the results stream.** Sometimes items are inadvertently labeled with the wrong model number and are miscategorized. A rice maker, for example, may wind up with the blenders.

2. **Establish which attributes or features are most important.** Your search can be narrowed by brand, size, shape, material, color, etc.

3. **Normalize units of measurement.** A King size bed is 76" x 80" and is also known as an Eastern King bed. A California King bed, marketed toward taller people, is 72" x 84". Make sure your measurements are uniform with your descriptions.



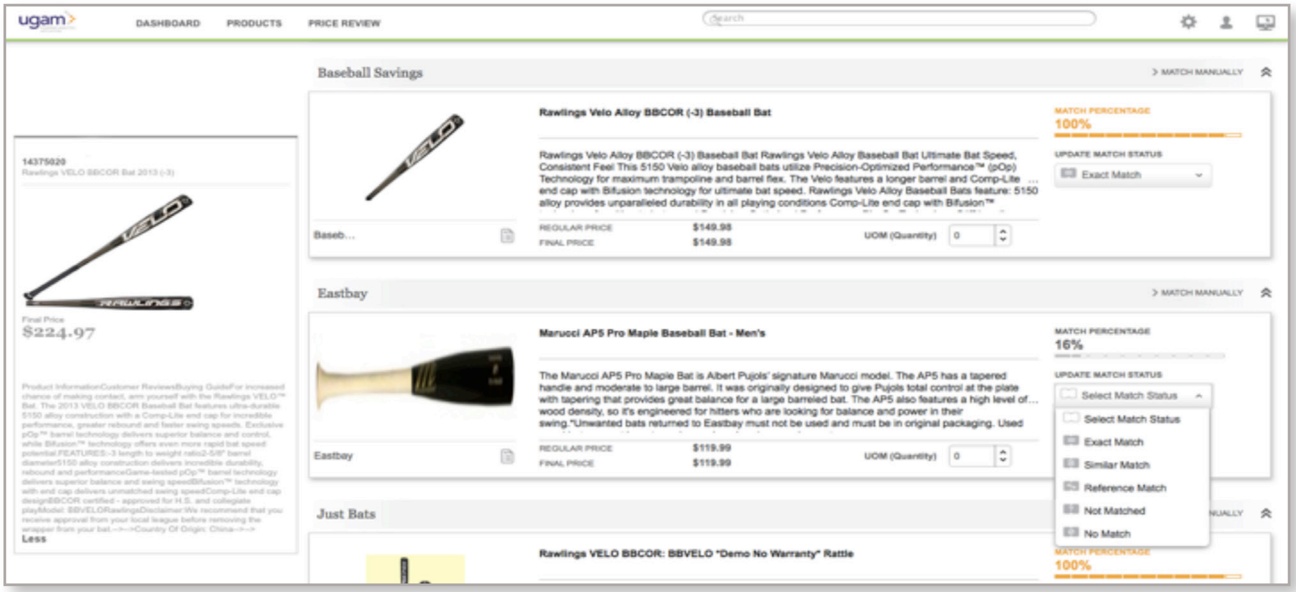
4. **Identify which private label product features matter most.** Tracking down non-branded product matches can be like herding cats. If you are selling refrigerators, choose which features your customers care about most: freezer space, ice makers, slide out shelves, etc.

5. **Knock off the accessories.** If you search for consumer electronics, your potential matches will have lots of false positives that are battery chargers, protective cases, cords, etc.

6. **Identify possible overlooked categories.** Sometimes your product may be categorized in two different areas. For example, a folding fabric chair might be listed under lawn furniture or beach furniture. A hammock might be with camping gear or with patio furniture.

Seeing is Believing: The Importance of Visual Match

Once you've done all the prep work to improve the accuracy of your product mapping, you still may have doubts if you are making a true apples-to-apples comparison between your item and a competitor's item. The quickest and most efficient way to verify the automated results is a visual check.



Let's say that you are selling the Rawlings Velo Alloy Baseball Bat pictured above for $224.97 – and you notice that your competitor is selling the very same model for only $149.98, a 33-percent discount. How can you tell if the other store is selling the exact same bat or a similar bat?

Your Pricing Intelligence provider should have the capability to provide you with visual matches in addition to matching key words and model numbers. Glancing at the three baseball bats above, it becomes instantly clear which bats are the correct match.

Comparing product pictures gives you an additional layer of confirmation that your data is accurate. (We'll be sharing more tips on the most critical things to ask your Pricing Intelligence vendor in Chapter 7, "How to Get Started.")

Safeguarding Against Computer Mistakes

You are not being replaced by technology.

While it is true that using a Rules Engine to automatically change prices takes human decision making out of the loop, only the no-brainer decisions have come off the table.

You are still calling the shots. But instead of being bogged down with the responsibility of making mundane and repetitive decisions, the Rules Engine frees you up for higher-level tasks.

What about computer mistakes? Setting up alerts in the Rules Engine can override automatic price changes whenever a price suddenly increases or drops by a certain percentage (say, 50%). It's like when your credit card company calls you if you mostly make charges at fast food restaurants and they see expensive dinners at gourmet steakhouses suddenly appear on the account.

When there is an alert, no pricing change is made until a manager makes a decision. No technology is flawless, but setting up alerts can minimize the likelihood of costly pricing errors and a customer service nightmare. Consider these major retailers who have recently dealt with high-profile mistakes online:

OOPS!

The Cost of Embarrassment

Famous Online Pricing Mistakes and How They Were Resolved

The $69 iPad (Sears.com) – In 2011, a third-party seller on Sears.com advertised an iPad 2 for $69, causing an ordering frenzy. At the time, it was listed at $499 by Apple, which notoriously does not discount. Sears refunded all orders and apologized.[22]

The $39.99 PlayStation 3 (Target.com) – Also in 2011, a misplaced decimal point marked down $399.99 video game consoles by 90%. Target canceled the bargain hunters' joy with emails expressing regret over "mismatched price and product information."[23]

Razer's Fake 90% Discount Code (Razerzone.com) – In 2013, video game company Razer accidently put a 90% off coupon code on its site while testing its shopping cart. Razer CEO

Min-Liang Tan announced on his Facebook page that he would honor the coupons because of his "customer comes first policy." He acknowledged that the publicity gesture would "likely cost us an insane amount of losses."[24]

The $33.16 Treadmill (Walmart.com) - During the 2013 holiday shopping season, Twitter was giddy over a series of Walmart pricing errors that included treadmills for $33.16 and Hewlett Packard LCD monitors for $8.85. Walmart canceled all orders but apologized with a $10 e-gift card.[25]

The $47 NY-to-LA Flight (Delta.com) – On the day after Christmas 2013, the online booking systems at Delta Airlines, Expedia.com, and Priceline.com were selling Delta roundtrip flights for a fraction of what they were supposed be listed at. A $400 New York to Los Angeles ticket was $47. Delta honored the mistake fares.[26]

Hopefully, you'll never have to experience the chaos of a disastrous pricing mistake from human or machine error. But the public excitement generated by the occasional ultra-low-price incident demonstrates how emotional customer responses to prices can be.

Dynamic Pricing strategies, which increasingly are becoming more personalized, can tap into those same emotions for your benefit.

The Analyst Factor: Once You Have Accurate Data, What Do You Do With It?

Once you are sure that your Pricing Intelligence data is accurate, you need to figure out how and when you should act on it. So how do analysts turn data into insights and pricing recommendations – and ultimately – better sales results?

There are two main approaches for turning numbers into action:

1. **Setting Up Automated Rules –** Deploying simple Strategy Rules (*e.g., If Competitor A lowers the price on Product A to X, we lower our price to Y; If Competitor B is out of stock on Product A, we increase our price to Z.*) Strategy Rules are ideal if you want to keep tabs on price changes for KVIs at specific competitors and want to always be within a certain range. (See Chapter 4, "An Introduction to Dynamic Pricing," for more details on using a Rules Engine.)

2. **Building a Pricing Model –** Developing a sophisticated mathematical model to optimize pricing enables retailers to take the many factors that contribute to the buying process beyond price into account. The equation may incorporate a range of inputs, including a retailer's historic sales data, historical competitor pricing, inventory, product page content, Web traffic and promotions data. The model may also consider customer reviews, product ratings, social likes, etc., using consumer sentiment analysis to translate ratings into pricing insights.

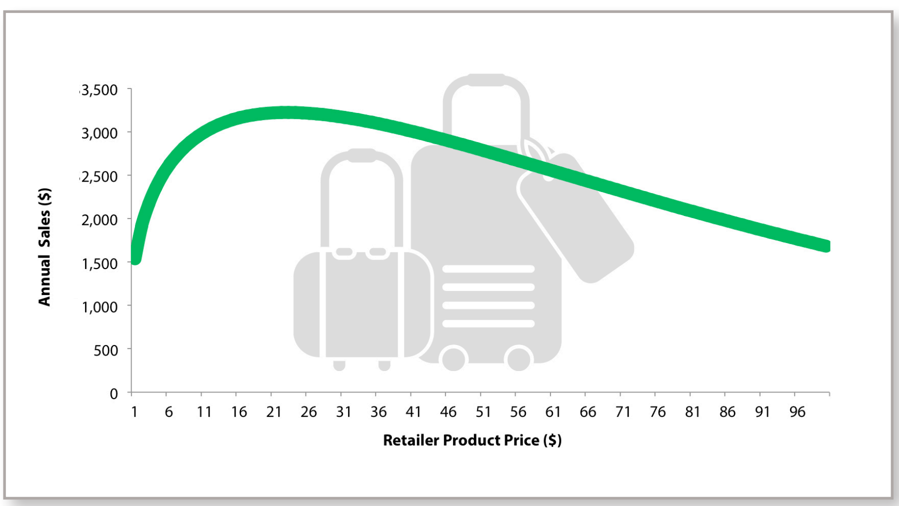
The retail experience and expertise of analysts are invaluable for pursuing the second approach. An analyst first walks through the buying process in the customer's mind and then creates a hypothesis that attempts to explain sales trends.

Let's say that you are selling luggage, for example. Here are some of the questions that may immediately come to mind:

- Do luggage sales historically peak just before summer vacation?
- Do duffle bag sales spike before college begins in the fall?
- What color suitcases are most popular with men vs. women?
- Do child-sized rolling bags fly off the shelves before February and April school vacations?
- What is the most highly rated luggage based on product reviews on travel websites or the best value listed in *Consumer Reports*?

All of these questions can be answered by creating variables (e.g., color, time, gender, age, peak demand, quality of reviews) and independently comparing those variables to prices over time. Through trial and error, the analyst can determine which variables have the greatest influence on sales and incorporate those factors into a regression equation.

Luggage Sales vs. Price



**This graph is a simulation of the Sales-Price relationship. It is a statistical model that does not reflect actual luggage prices or annual sales.*

This graph shows the output of a logarithmic equation calculating which price points result in maximum luggage revenue, based on a department store chain's most influential variables. Here is the pricing model expressed as an equation:

Log(Luggage Sales) = 0.29 - 0.66(Log)(A) + 0.01(B - A) + 0.25(C) + 0.02(D) + 0.06(E)

KEY

A = Retailer Price
B = Competitor Price
C = Number of Images on Product Page
D = Number of Amazon Reviews in Last Two Months
E = Newness of Product (Number of Weeks)

Every store is different and will have a different equation and different sets of variables.

Don't worry about the math – that's why you hire analysts!

The important thing to know is that as your Pricing Intelligence gathering and processing becomes more sophisticated, you will be able to better understand and have a greater influence over your sales results. Depending on what you want to learn, analysts can help you determine the "Why," the "What If," and the "What's Next?"

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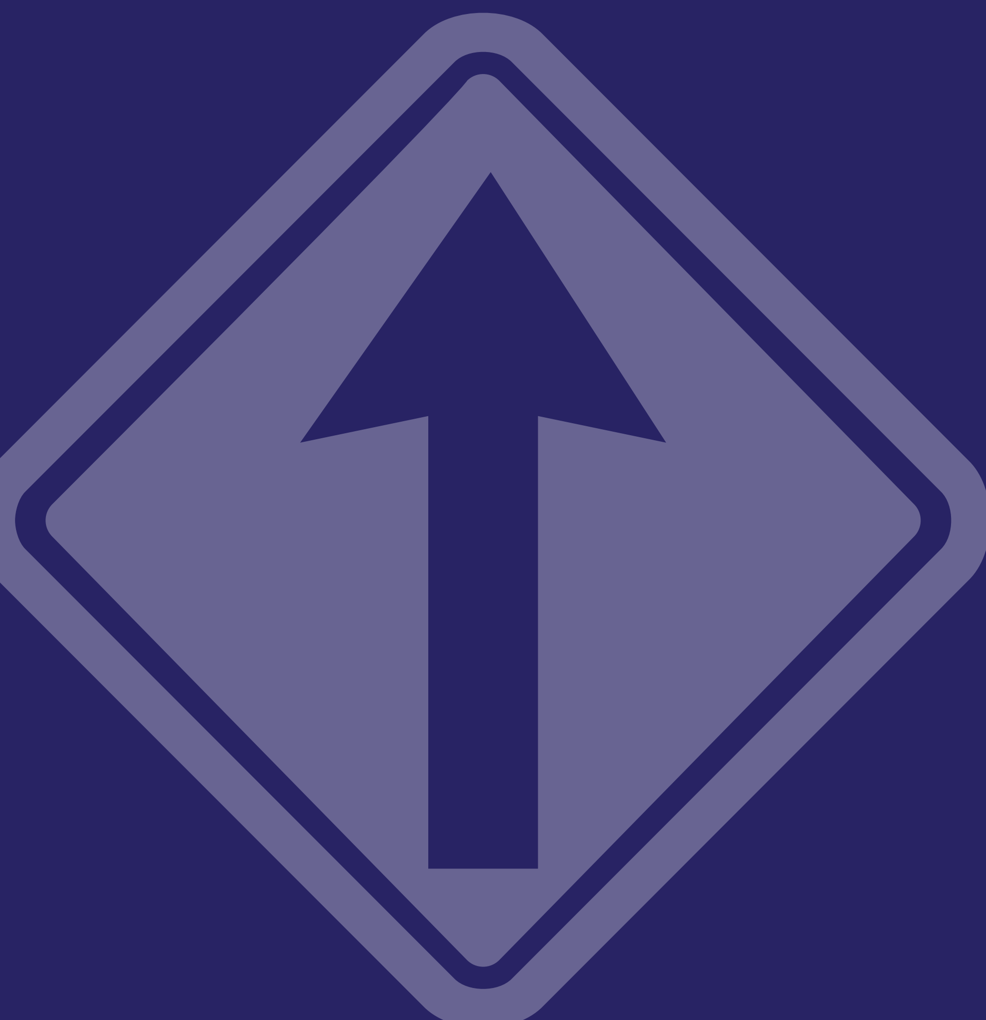
CHAPTER 6
The Future of Pricing Intelligence



CHAPTER 6

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Executive Summary

Despite the wild success of e-commerce sites, brick-and-mortar stores are not going extinct. Shopping at physical stores is social and experiential. Online shopping cannot replicate the "try and buy" experience of purchasing clothing, for example, or provide instant gratification when you absolutely need or want something now.

In the future, customers will pay a premium for the convenience of getting what they want right away. In fact, if they are not willing to pay more for instant gratification, then that product will not earn its "right" to shelf space.

In Chapter 6, we will explore:

- The introduction of digital price tags and if prices in physical stores will change as often as online prices.
- How increasing customer demand signals (product reviews, comments on social media, etc.) will impact future retailer pricing.
- How "geofencing," the technology that allows retailers to "see" what products customers are looking at in real time, will influence promotions and pricing.
- If "personalized pricing" will become the rule rather than the exception.
- The growing challenge of "stealth pricing," when competitor prices are hidden from online price crawlers.

The luxury of always knowing what your competition is charging may eventually disappear. But having the right Pricing Intelligence strategy for your customers will still set you up for long-term success.

"Video killed the radio star!"

– The Buggles

At 12:01 a.m. on Aug. 1, 1981, The Buggles became forever immortalized as a trivia question. The British new wave band's hit song, "Video Killed the Radio Star" was the first ever music video to be played on MTV. Nearly 25 years before the birth of YouTube, it was the moment that music became visual. From a marketing standpoint, radio airplay had become overshadowed by music videos on cable television – and eventually, the number of online video views.

Reports of the death of radio, however, were greatly exaggerated. The medium continues to be an important source of information and entertainment as a commuting companion, when watching videos is impractical. As long as we're stuck in cars driving to work, radio will continue to have a role in our lives – and it's a medium that is continuing to evolve as Internet-based radio competitors like Spotify and Pandora compete for mindshare.

Just like radio didn't disappear, the physical retail store isn't going anywhere either.

Brick-and-mortar stores may be consolidating, shrinking and reconsidering which inventory items deserve physical shelf space, but they are not going extinct.

The reason? Shopping at brick-and-mortar stores is social and experiential. Despite the many conveniences of online shopping, it cannot replicate the "try and buy" experience of purchasing clothing, for example. In a store, you can put on a jacket, touch the fabric, pull it down over your jeans and see how it looks in the mirror.

Zappos.com's free-shipping-both-ways policy allows you to try on multiple items in the privacy of your home, but it still cannot send you all the choices that would be available in a physical store. Sizes also typically differ from brand to brand, a frustrating variable when one manufacturer's medium shirt feels snug while another's feels loose.

Sucharita Mulpuru, a vice president and principal analyst at Forrester Research, notes that while there are many half-vacant or "dead" malls across America, there are plenty of shopping centers in desirable locations that have close to 100% occupancy. She projects that U.S. consumers will be spending an additional $300 billion at offline stores over the next four years.[27]

According to Mulpuru, malls are the beneficiaries of two ongoing developments:

1. **In-Store Pickup –** As more omnichannel mall anchors, like Macy's and Nordstrom, drive their online customers to their stores, there is a spillover effect for other retailers.

2. **Brands Selling Directly to Consumers –** Branded manufacturers that have their own stores (e.g. Apple, Microsoft, Bose, Tory Burch, etc.) are expected to occupy more mall space over the next few years.

Shopping in a physical store also allows customers to spontaneously decide on purchases based on the intangibles, which brings us to the instant gratification factor.

No matter how many tantalizing free shipping offers are dangled before the customer, sometimes she or he will want to lace up a pair of new running shoes now. Sometimes customers can wait for sales at their hardware or home improvement stores, but sometimes there are overflowing sinks or clogged toilets that need to be dealt with now.

The Value of Time and Personal Attention

Would you be surprised to learn that there is a retailer who routinely beats Amazon's prices on many items by an average of 30%?

At AliExpress.com, you can consistently get better bargains with just one catch – you might have to wait up to two months for shipping from China. The site is owned by Alibaba, China's largest e-commerce company – and has the inside edge on pricing on locally manufactured goods. [28]

But how long do you really want to wait? Take a look at some sample price comparisons and delivery times recently culled from Amazon and AliExpress:

What is the Price of Instant Gratification?

		Price		Delivery lead times (days)	
Product		Amazon	AliExpress	Amazon	AliExpress
LG Bluetooth Headset HBS-700		$44	$32	2	15-26
Salomon Speedcross 3 Running Shoes		$121	$45	2	60
Keurig B70 Platinum Brewing System		$155	$98	2	23
Bose SoundLink Mini Bluetooth Speaker		$199	$153	2	23
Big Hugs Elmo		$49	$28	2	39

In the future, customers will be paying a premium for the convenience of getting what they want right away. In fact, if the customer is not willing to pay more for instant gratification, then that product will not earn its "right" to shelf space – the retailer would be better off keeping the item online and shipping it from a centralized distribution center on demand.

Ironically, Google and Amazon have been exploring the possibility of opening their own retail stores as physical extensions of their brands.[29] Google could push Google Glass and its Nest smart thermostats, while Amazon could have high-profile real estate for the Kindle in the same way that Apple Stores generate in-person excitement for their products.

Rather than seeing showrooming as a threat, retail stores can become the most logical showrooms for their own websites if pricing is kept competitive.

Looking Ahead: Immediate Future vs. Long-Term Future

Meanwhile, efforts to grab the attention of customers during their most impulsive moments continue to take on new forms.

Imagine you're shopping for new running sneakers and the shoeboxes in front of you "know" you are looking at them. They also know you belong to a gym and that you historically prefer the New Balance and Nike brands. Suddenly, you get a text message offering you 35% off your chosen shoes if you buy them within the next 30 minutes. This same deal is not extended to your wife, who is standing right next to you.

This technology is in the early stages of testing now.

For some of the latest innovations in pricing technologies, the cart is ahead of the horse. The vast majority of retailers are not yet ready to implement advanced Pricing Intelligence tools. Their real quantum leap requires a change of course in business strategy: moving away from the reactive price-matching game to proactive Dynamic Pricing and beyond.

Here's a forecast of some Pricing Intelligence developments to come:

- **Immediate Future (0-2 years):** The evolution of Smart Dynamic Pricing (including Google searches, product reviews and sentiment analysis). Will real-time Dynamic Pricing take off in brick-and-mortar stores?
- **Short-Term Future (0-5 years):** Experimenting with personalized pricing in brick-and-mortar stores through iBeacons.
- **Long-Term Future (10 years+):** Personalized pricing becomes "stealth pricing," as retailers keep these prices secret from the competition. Will every customer eventually have their own customized price based on buying history and store loyalty?

Immediate Future: Digital Price Tags and Consumer Demand Signals

Dynamic Pricing involves lowering, raising or keeping prices the same based on your competitive threats in real time and changing consumer demand signals. If that model makes sense for online pricing, then how might that same approach be adopted by *physical stores*?

Kohl's is now experimenting with digital price tags, also known as electronic shelf labels (ESLs), in their stores, but it remains alone among major U.S. retailers.[30] If this technology catches on, what are the implications for manipulating prices in a brick-and-mortar store with the same ease as online?

As customers become conditioned to accept rapid and seemingly arbitrary price fluctuations online – like they do with the airline industry – they will come to expect the same practice in stores. As inventory levels go down for more popular items, a retailer could presumably charge more for the last remaining few. Conversely, ESLs could be used to suddenly drop prices to motivate people on the fence to buy. Prices also could be reduced during traditional low-traffic times to encourage more shoppers to make the trip into the store, maximizing revenue or at least their margins while the lights are on.

As the industry moves toward the model of personalized pricing – whether online or in physical stores – capturing a more holistic view of the customer becomes more critical. It sounds simple, but it can't be repeated often enough:

Knowing what kind of deals to offer customers requires getting to know them.

Retail managers who have people skills get to know the personalities, preferences and behaviors of their most loyal customers by intuition. Although there's no better method to build relationships, face-to-face communication is impractical at scale. Luckily for retailers, customers are already volunteering plenty of clues about their likes and dislikes – if you know where to look.

Howling Success: The Cult of Product Reviews

In 2009, an innocuous t-shirt graphic of three wolves howling at the moon attracted the attention of online shopper Brian Govern, a Rutgers University law student browsing on Amazon.

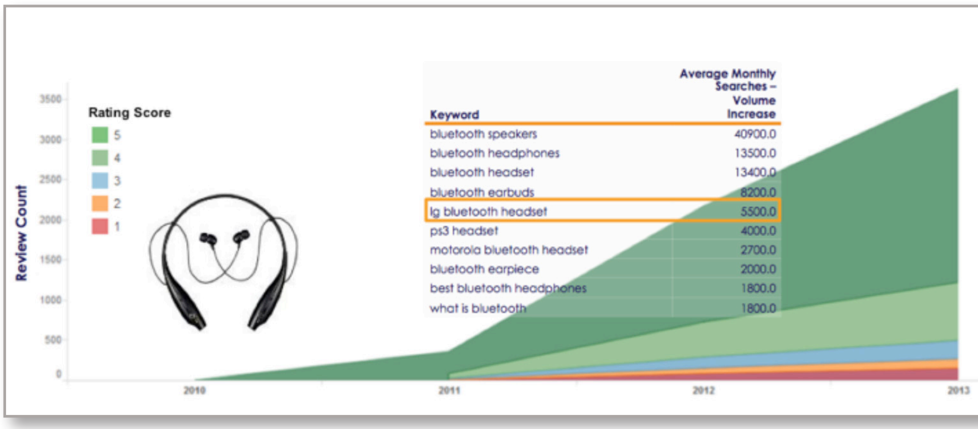
In a whimsical mood, Govern tapped out a satirical product review, claiming the "Three Wolf Moon" shirt was magic and made him irresistible to women.[31]

Other Amazon reviewers picked up on the theme and wrote their own funny reviews praising the mysterious life-changing powers of the wolves. Within days, the joke went viral – and although Govern never bought a shirt, it soon became a bestseller on Amazon.

According to *The New York Times*, the Mountain t-shirt company in Keene, NH, went from selling 2-3 shirts per day to selling 100 an hour. The wolves wound up spending nearly 200 days on Amazon.com's Top 100 list.

Not every customer review is going to launch a product into the retail stratosphere, but online comments – those of the non-facetious kind – contain valuable insights about the extremes of the shopping experience. Think about it: people only bother to share their thoughts with a company if they are either very pleased or very unhappy. Few reviewers bother to write about an average experience.

Smart Dynamic Pricing involves extracting consumer demand signals – valuable customer data from reviews as well as social media messages – and factoring them into pricing decisions for both personal offers and forecasting future purchasing trends.



But mining customer data to create tempting personalized offers is only half the equation. Knowing when to make those offers – when the customer is most primed to make a purchase – is possible thanks to the GPS devices in their mobile phones.

Short-Term Future: Retail Shelves That Talk Back

Gathering information on customers' likes and dislikes only has value to retailers if they act on the insights gained from this information. The most common way to leverage this data is to make special personalized offers to consumers. This practice has been going on for the past few years in the form of "geofencing," the texting of an alert to shoppers who come within a few hundred yards of a store's perimeter.

The North Face, the outdoor gear manufacturer, has set up geofences not only around its stores, but also at parks and ski resorts.[32] The "fence" is activated when it interacts with customers' GPS signals from their phones and requires shoppers to download a retailer's or brand's app. The technology is particularly effective to message customers when they are walking outside the store or to lure customers from one side of the store to another.

However, geofencing does not have pinpoint accuracy. It cannot tell if a customer is looking at a jar of peanut butter or a tennis racquet. To achieve short-range pinpoint shopper engagement, Apple recently introduced its iBeacon technology to give retailers the ability to share customized messages about special deals and product information.[33]

The iBeacon is currently being tested at the Apple Store in Manhattan as well as a limited number of Duane Reade drug stores in New York. The iBeacon also uses geofencing, but emits Bluetooth signals from specific shelves or promotional displays resulting in a new level of "micro-location" accuracy. At Duane Reade stores, the iBeacon can woo shoppers with impulse purchase incentives – such as 25% off new nail polish colors or offering umbrella sales on a rainy day.

When a pharmacy detects that a customer has entered the store, and "knows" from loyalty card data that she has a sweet tooth, offering her a coupon on Dove Chocolate makes sense. But sending her an alert as she is walking down the candy aisle is the optimal personalized offer.

Could retailers soon be making similar real-time offers to every customer? Will Dynamic Pricing at the individual level completely replace pricing by consumer segment? To explore this brave new world of personalized pricing, we sat down for another chat with retail analyst Kevin Sterneckert, a former vice president of research for Gartner.

(Sterneckert, a nationally renowned expert on Pricing Intelligence, told us in Chapter 2 why price matching is a self-defeating retail strategy that makes you weaker in the long run.)

Personalized Pricing: A Conversation With Retail Analyst Kevin Sterneckert

Q: How advanced are retailers now with personal pricing and where are things headed?

KS: We're seeing retailers today beginning to offer coupons or discounts to consumer classes – so for example, to my best customers who are female ages 39-45, I'm going to offer them 20% off all fragrances. Or I'm going to give 15% off all Dr. Dre Beats headphones to men ages 18-24.

Where I believe we're headed is offering specific promotions to individual consumers. We see this already beginning to occur. For example, CVS Pharmacy uses a very sophisticated CRM approach and has been sending tailored custom coupon books to households. They are beginning to eliminate the printed coupon books and beginning to directly communicate with consumers relative to the individual household.

So these profiling systems begin to understand not just that you're a college student, but you're a wealthy college student and you prefer the school supplies that are in our location, but you also don't use our over-the-counter drug section. So we're going to encourage that over-the-counter deal during appropriate times for allergy, cold and flu or pain relief medicine. We're going to probe to understand exactly what it will take to get you to buy in another category.

Q: Does a personalized pricing offer need to be done through an app or rewards card or is there another way?
KS: Retailers are using lots of ways, but there has to be some kind of engagement with the consumer to begin to learn consumer behaviors. Some are using an app, some are tying that app to a loyalty card, but it's always an opt-in proposition. When you're close to one of those stores, a message will pop up and say, "Hey, here's an offer for you right now!"

Q: Who is doing this right now?
KS: If you have the CVS app or the Starbucks app or the Walgreens app, and you happen to be close to one of those stores, you get an alert on your phone that says "Hey, there's 20% off Monster Energy drinks right now."

Q: Are customers welcoming these personalized offers on their phones?
KS: If you're not providing a personal connection with the consumer, they'll reject the opportunity to receive more alerts in the future. There will be many retailers that will ignore this and they will become spam and will be turned off. Smart retailers will understand that in return for permission to send those alerts, they need to be incredibly relevant.

Q: Do you think iBeacons will be successful at shopping malls?
KS: We're just starting to see stores experiment with the beacons. Again, the real test of this will be: "How relevant will the retailer be with the consumer?" If you're only doing generic offers, then this is not really going to be popular. But if they apply some very intelligent listening solutions and truly personalize the offers, then the iBeacon has an opportunity to really take off.

The technology of the beacon isn't what's going to make it happen – it's going to be the intelligence behind it that understands and extends relevance to the consumer in an engaging way.

Q: How big does a retailer have to be to worry about the next phase of Pricing Intelligence?
KS: I don't think you'll be in retail for long if you're not focused on price. It's such an important lever for consumers. No matter how big you are, you have to have a view of your competitors' prices and you have to be competitive. Just setting a price out there based on some arbitrarily set margin and letting it ride is not going to be successful.

Look at the retailer leaders today – Walmart, Target, Tesco and others – who have zone pricing by ZIP Code today and many are moving to individual store pricing. And as they continue, the future is individual consumer pricing. So you'll follow the consumer to wherever they are shopping for you as a brand.

Q: What does personalized pricing mean for competitiveness?
KS: Today, you can be very competitive because most of the prices are published. You can know what those prices are and you can be competitive on those prices. Where is this ultimately headed? The personalization of pricing really leads to stealth pricing strategies and practices in retail. So if I have a published price of $199 for the casual observer and an incredibly relevant and special price for individuals – and I'm directly communicating with the consumer – my competitor has no idea what I'm doing. There's no way for my competitor to know that price. It's a whole new ballgame.

Long-Term Future: Going Stealth on the Competition

As Sterneckert suggests, the luxury of always knowing what your competition is charging may eventually disappear. There will be a public price and then perhaps the *real price for you* – a customized calculation based on your demographic, spending history, brand loyalty, your competitive options on the market and a slew of other demand signals.

Right now, gathering Pricing Intelligence is relatively easy. It's like being a gas station owner at a busy intersection. All he has to do to keep tabs on the competition is look out his window at the giant sign above the pumps. But what would the gas station owner do if those prices weren't posted – if the customers were privately given the price beforehand on their smartphones?

The service station owner would need to figure out what his customers were willing to pay per gallon, based on the customer's needs, desires and resources instead of just automatically matching the price across the street. Like any retailer, he would need to develop his own pricing demand model – beyond setting up rules responding to the other guy.

How these challenges will all shake out is uncertain. What is clear is that staying ahead of the competition requires alignment with the needs of the customer. Standing still is not an option.

CHAPTER 7
How to Get Started

Executive Summary

Given the boom in e-commerce, the industry is flooded with new companies wanting a piece of the action. As with many startups, some will make wild promises that they cannot keep. Others may abandon their focus on pricing technologies for the "Next Big Thing."

In Chapter 7, we will explore what you should consider when choosing a Pricing Intelligence or Dynamic Pricing vendor, including:

- How you should consume your Pricing Intelligence data.
- What should be covered in your Service-Level Agreement (SLA).
- How to confirm your competitive intelligence data is accurate.
- What to look for in a sophisticated product matching (mapping) system.
- How long it should take to implement a new pricing system.
- Special questions to ask if you are already using Pricing Intelligence.
- How to make sure the vendor's product roadmap meets your business goals.
- Specific ways to look out for hidden costs.
- Guaranteeing that you own all your data, even if the business relationship ends.
- Evaluating the depth and transparency of your vendor's metrics.

Interested in taking a test drive? We'll also outline the steps for setting up a Pricing Intelligence or Dynamic Pricing pilot program.

Remember: A vendor who isn't willing to accommodate your needs during the "dating" phase of the relationship will certainly not become more responsive when you're "married."

Be in it for the long haul.

How many online shoppers are there in the United States?

According to a study by eMarketer, there are 196 million Americans who have at least once "browsed products, compared prices or bought merchandise online" over the past year, and that number is expected to grow to 215 million over the next four years.[34]

Are you ready to handle 215 million different prices for an individual item?

Luckily, the logistics of personalized pricing, which retail analysts project as the future, will never be that crazy. But it's already humanly impossible to keep track of Amazon's millions of price changes per day without the right technology.

If you've been reading this eBook all along, then you know that price matching – the most common defense against showrooming – is not a sustainable strategy. It is a race to the bottom.

You know that only monitoring your competitors' prices with physical store visits is not a sustainable strategy; **it's like pretending that your customers have never heard of the Internet.**

It's time to be nimble. It's time to know when you have to lower prices to meet customer expectations, when you can raise them and when you are better off keeping things the same.

If you feel like your Pricing Intelligence is far behind Amazon's, your instincts are correct. The good news is that the vast majority of retailers are in the same boat as you.

The big question is: Will you start paddling first?

Where to Begin?

The best approach to get started depends on your experience. You probably fall under one of the following categories:

- I am trying Pricing Intelligence for the first time.
- I am experienced with Pricing Intelligence, but am trying Dynamic Pricing for the first time.
- I am experienced with Pricing Intelligence and/or Dynamic Pricing, but am looking to switch vendors.

Regardless of where you fall on the spectrum, there are shared challenges and best practices for you to consider. Here are some questions for first-time users to get started:

1. **Which Categories And SKUs Should I Monitor?**
2. **Which Competitors Should Be On My Radar – And How Many?**
3. **How Frequently Should I Monitor/Change Prices?**
4. **What Are My Matching Rules To Compare My Products With My Competitors' Products?**

Which Categories And SKUs Should I Monitor?

Knowing which categories and SKUs you should focus on depends on how you define your business. When customers think of your store, which items do they instantly associate with you? In which categories are you expected to attack and in which ones should you merely play defense?

Which Competitors Should Be On My Radar – And How Many?

There is no one-size-fits-all answer to this question. The number of competitors to monitor will depend on the categories and this list will keep changing as retailers add and remove new items to and from their assortments. The only competitors you should care about, however, are the ones your customers would likely turn to for price-sensitive Key Value Items (KVIs).

> **Tip:** Low traffic on a specific competitor's website means that you should not respond to their price changes!

For a department store, the multiple lists of competitors to monitor will be different for shoes, electronics, apparel, etc. It's also important to note that there is no universal list of KVIs – this also varies by individual store and can only be determined by studying your customers.

A good rule of thumb is focusing on the six to eight competitors most similar to you.

How Frequently Should I Monitor/Change Prices?

Some major retailers using Dynamic Pricing are regularly checking competitors' prices on every single item they offer. Frequency depends on the item's importance and price sensitivity. KVIs are typically reviewed every two hours, while other products are reassessed every week or every month.

Ultimately, the decision keeps coming back to how dependent sales are on the price of a given item and how often competitors are changing their prices.

What Are My Matching Rules To Compare My Products With My Competitors' Products?

When comparing your prices to the competition, it is essential that you make sure you are comparing the same products. This is called product mapping.

Appearances can be deceiving. Take another look at the food scales below, which we examined more closely in Chapter 5, "The Human Factor."

On first glance, with the exception of the silver tray, they appear to be the same scale: Same UPC code, same size, same digital screen and same base. So why does Wasserstrom.com's version cost 60% more than the model on Amazon? When there is a large price differential between the same item at different retailers, an automated mapping system can alert pricing analysts to investigate further.

It turns out that the chrome food tray on the right is approved by the National Sanitation Foundation (NSF) for meeting the public health standards for schools and hospitals. The plastic one on the left does not share that designation.

Within your chosen category, there will be many discrepancies like this when comparing similar products. You can't always depend on UPC codes or model numbers for product mapping. Sometimes there are no universal numbers, which is the case for generic or private label products.

Regardless of the category, you need to define which product features or attributes your customers care about most. For example, if you are selling furniture – a notoriously difficult category to match – you may decide that the kind of material (fabric, wood, metal, glass, leather) is the most important attribute when comparing items. Or it may be the number of drawers or the dimensions.

Big Picture: What Do You Want to Achieve?

It can't be stated enough that gathering business intelligence is worthless if you can't act on that intelligence. Here are some of the big picture retail questions you can answer by closely keeping tabs on your competitors' prices:

- How can I take advantage of competitor inventory?
- How competitive are my prices?
- When are competitors changing their prices?
- How can I increase my margins?
- Am I marking the price down too soon or too much?

For a more detailed list of actionable insights you can glean from competitive price monitoring, see Chapter 3, "An Introduction to Pricing Intelligence."

Would learning the answers to the above questions be enough to achieve your current business goals or do you need to implement Dynamic Pricing as well?

Using a Rules Engine, Dynamic Pricing allows you to raise, lower or keep prices the same based on the constantly changing circumstances of the moment. Price recommendations can vary based on supply and demand, how customers find you (direct traffic, comparison shopping engines, organic search or search engine marketing), consumer social signals (product reviews, Facebook likes, etc.) and even the weather. You can more deeply explore whether this approach makes sense for you in Chapter 4, "An Introduction to Dynamic Pricing."

How Would You Like to Consume Your Data?

Every company has its own culture and preferred way of doing things. Regardless of which Pricing Intelligence vendor you choose, they should be able to deliver your data and insights in the most user-friendly format customized for your needs. Your options should include:

- Data feeds
- API integration into your Business Intelligence or Point of Sale systems
- Dashboards
- Excel outputs
- Alert feeds
- Price recommendation feeds

What Should Be Covered in Your Service-Level Agreement?

Your SLA for any Pricing Intelligence or Dynamic Pricing system needs to cover how to verify the accuracy of your data, what to expect from the onboarding process, and the timeline for setting up the system and deploying it.

1. Confirming the Accuracy of Your Data

When hundreds of thousands of SKUs are mapped and crawled each day, the opportunity for errors can be significant. Critical errors can creep into your data and then into your actionable insights. Your competitors' ever-changing category pages and the complex structure of marketplace websites add to this challenge.

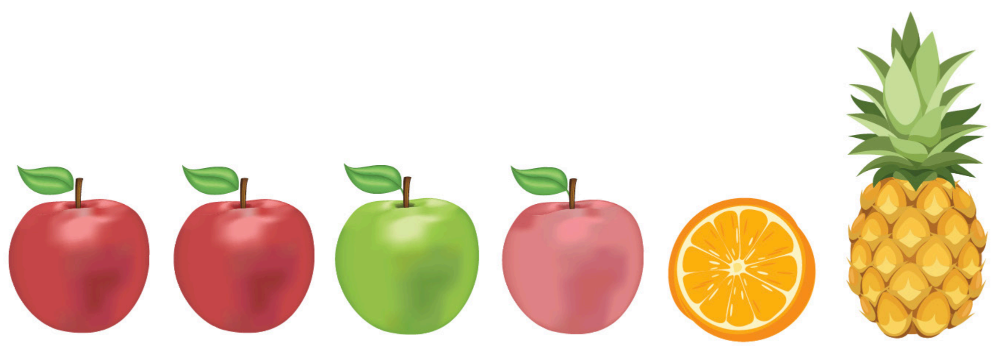
Insights and critical pricing decisions based on faulty data could expose you to great risk. When researching a solution provider, look into the strength of their Quality Assurance (QA) algorithms and processes to manage data. Often providers have a parallel process that only samples crawling and mapping accuracy, which may be grossly inadequate.

Mature providers offer a comprehensive, rule-based data integrity check system that does format, factual, timing, and logical checks on each data point. Make sure to thoroughly investigate the QA process and have your solution provider demo sample runs using their systems.

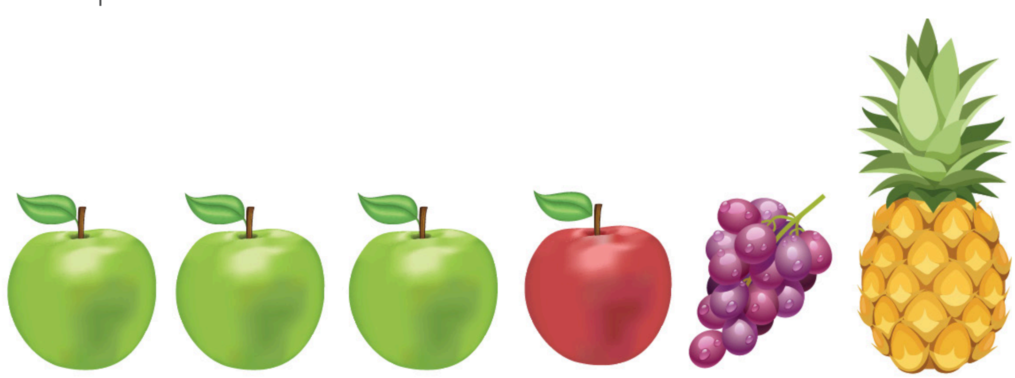
Don't forget to ask vendors how they identify and map similar competing products, and ask them to explain their ongoing process for mapping new products. You need to know your coverage, which is the percentage of your products that match a competitor's products. Unless your competitors stock a significant number of exclusive products or private label products, your coverage percentage generally should be very high.

There will be situations when a competing retailer carries the same products as you, but in different pack sizes. A sophisticated product matching system should be able to identify these cases and translate the prices per unit. Be aware that there are now several product matching systems on the market that cannot handle different pack sizes.

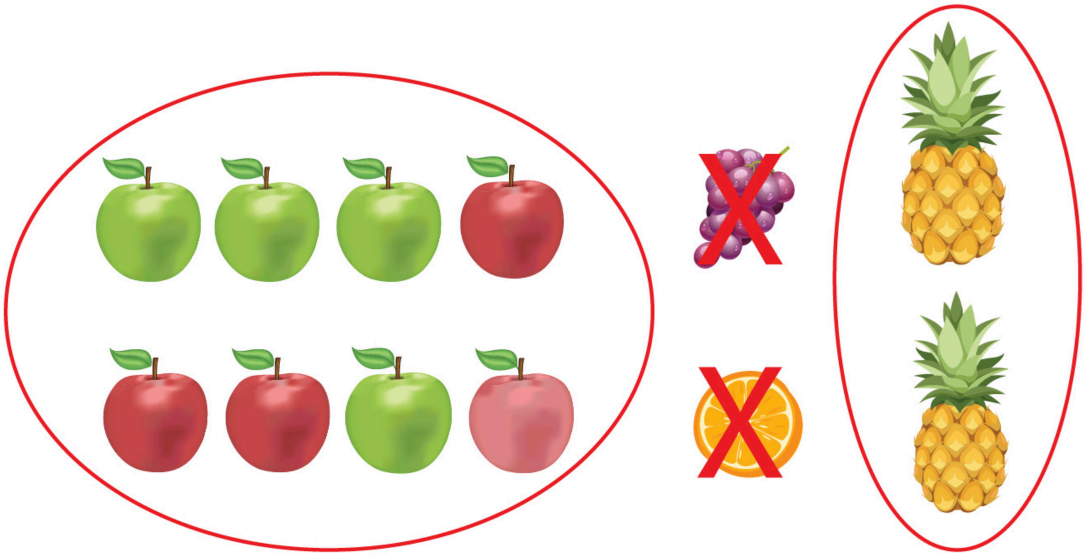
If you initially do not see high coverage for exact product matches, you should then determine your number of similar product matches. For example, let's say that your store carries the following fruit:



And your competitor carries these fruits:



On your first attempt to measure coverage, you would find only two exact matches: one red apple and one pineapple. However, if you redefine your matching rules to look for similar products, you would learn that both you and your competitor share a heavy focus on apples.



You cannot make smart data-driven decisions unless you are confident in the accuracy of your matches.

2. Assessing the Onboarding Process

A well-managed onboarding process sets you up for success while providing a standard for ongoing changes in products and competitors. Some solutions are do-it-yourself with all sorts of user configurable options, while other platforms that offer exciting features may not be helpful at all if they are not easily understood by nontechnical users.

A well-planned onboarding program offers different levels of hand holding for various user types. For example, one-to-one sessions with on-call guidance in the first few weeks can help ensure success. Make sure that the vendor's program manager understands merchandising and pricing and is not simply a high-tech tool user. Your training and onboarding need to be more application-oriented and relevant to solve your business needs.

Be sure to check:

- What is the onboarding timeline?
- What is required of you?
- What will the solution provider take care of?
- Will the solution provider be on site?
- If so, who will be on site and for how long? Will they be returning regularly?
- What happens when the retailer brings on new personnel? How will they be trained?
- Who will be heading up the onboarding process? What is their experience?

3. Timeline for Implementation

If all you need is raw data, you can be monitoring competitors' prices within a few days of choosing a Pricing Intelligence provider. However, building up the infrastructure to act on your data requires some additional set-up time:

- It should take 1-4 weeks for a retail manager or analyst to set up rules that automate pricing decisions based on competitors' prices or your business objectives; and
- 3-4 weeks to properly set up product matching to guarantee the accuracy of your data (see Chapter 5, "The Human Factor"). This is especially time-consuming for categories that contain a lot of private-label or store-brand products.

It doesn't make sense to rush through this process. You have a lot at stake and are investing significant resources to make your pricing a competitive advantage. If you don't get the product matching lined up correctly, you'll be making decisions based on inaccurate data.

Top 5 Questions to Ask if You Are Already Using Pricing Intelligence

1. **Are you getting accurate data?**
2. **Does the technology scale across categories (UPC and non-UPC)?**
3. **Are you able to leverage value or get an edge with that data for online and multi-channel use cases?**
4. **Is your Pricing Intelligence provider able to offer you pricing recommendations or predictive analytics?**
5. **Is there a roadmap beyond pricing to help power your merchandising decisions?**

Other Important Things to Consider When Hiring a Pricing Intelligence Vendor

Congratulations! You're about to make an investment in time and resources by changing your approach to Pricing Intelligence. Now it's time to find the right partner.

Work closely with your Pricing Intelligence provider so that they can understand your short-term and long-term goals and so you can understand their complete range of solutions. As always, ask your solution provider for real-life examples of how they have helped similar retailers achieve better business results and overcome shared challenges in the marketplace.

On the right is a quick checklist of the most important questions to explore when hiring a Pricing Intelligence and Dynamic Pricing company:

Let's explore each of these questions in greater depth.

What is the Cost of Dashboard Customizations? – Know the price of scope alterations. Solution providers may need a lot of changes in their reporting dashboards to suit the needs of your business. Such changes may seem trivial, but may get categorized by your solution provider as out-of-scope customizations, resulting in higher costs. This is particularly true if their platform does not allow for quick and easy adjustments.

What are the Vendor's Long-Term Product and Business Strategies? – The Pricing Intelligence industry is evolving rapidly and not all solution providers are here for the long haul. Some will go out of business, discontinue their price monitoring solutions or be acquired. Before purchasing a solution, explore the company's long-term business strategy with these questions:

- What is the platform roadmap?
- What are the features of your next release? Can I see an early version of that release?
- What new solutions or add-ons should I expect over the next two years?
- How much can we influence the next features of your product?

The product roadmap can reveal a great deal about the solution provider's understanding of the domain and the direction of their investments. Serious providers will be able to show you early versions of their next releases on some level. As a user of the platform, you have specific needs as well as insights to share. Find out how your input will be received and applied.

Is the Vendor's Client List Fact or Fiction? – It's astonishing how many companies will try to inflate their résumés by exaggerating their relationships with marquee clients. That's a nice way of saying *there are unscrupulous vendors out there who make stuff up*. Some will use a roster of corporate logos they are not authorized to use on their websites (i.e. they are no longer clients or perhaps never were). Don't fall in love with the logos. Ask to speak with current clients for references. Always ask your vendor which of their listed clients are still active and which ones have moved on.

Are There Any Hidden Costs? – Nobody wants to be told in the middle of a project that there's going to be an unexpected charge.

When hiring any new vendor, you need to protect yourself with due diligence. Make sure that your solution providers are disclosing all the details up front. Pricing Intelligence users often think they are purchasing the best value solution and find out later that there are many hidden costs and unaddressed issues.

Here are two sample contract issues to clarify with your Pricing Intelligence vendor before making a purchasing decision:

- **Have They Assumed Product Churn Rates? How Much?** – Churn is the rate of change in the total SKUs that will need to be tracked in your assortment as well as your competitors' assortment. That is, the number of your new products that need to be compared to competitors' new products. There is a great deal of variance in the way solution providers calculate annual churn in their proposals. Some provide an extra price to manage churn and some absorb this cost as an expected part of the process. If your product mix has categories where SKUs get added and replaced frequently, it's recommended that you do a like-to-like price comparison taking into account any fees associated with managing churn.

- **How Do They Handle Platform Integration and Data Exchange?** – There may be complex in-house integration and data exchange needs with the Pricing Intelligence solution depending on the degree of tactical tracking you want to do. Discuss this ahead of time. Ensure that your solution provider finalizes a comprehensive set of pricing options for these needs and that you have evaluated their impact based on your business goals. Don't let hidden costs force you to abandon business plans.

What is the Vendor's Flexibility and the System's Configurability? – Depending on your usage, you may need flexibility in the scheduling and rate of crawls against the number of competitors by category. You might also want on-demand updates for key items, especially during critical seasons. Find out if this is available and if there is an extra cost.

Do They Offer Ad Hoc Analytics? – Any vendor can sell software, but what are their in-house capabilities for professional services? The dashboard will tell you what is happening at any given moment, but it won't tell you why or predict what will happen next. If you don't already have your own trusted analysts or appropriate analytics capability, find out how the vendor can help you dig deeper for actionable insights.

Pricing Intelligence solutions gather tremendous quantities of data about the competition, including discount strategies, brand promotions and price changes. Ultimately, it isn't the data that you want, but the *actionable insights* to improve your pricing and assortment decisions.

Before purchasing a Pricing Intelligence solution, consider these questions:

- How regularly does the provider give you insights from the data they collect?
- What types of insights do they offer?
- Can they support you with a seasonal insights program?
- Can they offer appropriate analytics support to your analysts?

Be sure to ask for examples of actionable insights they have provided in the past (and the benefits they created) so you can understand the quality and scope of recommendations to expect for your company. For a closer look at how analysts can impact your pricing strategy, see Chapter 5, "The Human Factor."

What Happens to Your Data if You Exit the Contract? – Know what the exit plan is and what costs you might have to absorb. If you ever need to fire your solution provider or are at the end of your contract, it's important to avoid losing all the data you have built up during your partnership. The transfer of data in a proper format, its timeline, and process should be clearly discussed and put in legal documents at the beginning of the engagement. Clarifying them upfront will avoid unexpected expenses later.

How Transparent is the Vendor About Metrics? – Does your Pricing Intelligence provider give you enough details on the accuracy of your data? To make sure you are able to make competitive decisions in the moment and compare your results over time, you'll need weekly reports tracking your Key Performance Indicators (KPIs). Your vendor should be able to give you regular updates on such metrics as:

- Data Aggregation Accuracy
- Mapping Accuracy (Including Coverage)
- System Uptime
- Turn Around Time
- Action Point Closures
- Overall Satisfaction

Your vendor should also take the initiative to proactively report any bugs, site breakages or data quality issues that possibly may impact your experience.

Key Metrics Summary

Data Points	Weekly Trend	
	Week 04	Week 03
Input Count	28,438	12,808
Price Recommendations	26,923	8,884
No Match Data	625	2,249
Price Not Available Data	638	1,159
Match Quality	100%	99%
Recommendation Quality	99%	92%
Data Accuracy	100%	100%
Turn Around Time	100%	100%

Is the Vendor Financially Stable? – Numerous startup companies have been attracted to the Pricing Intelligence space and as is the nature of startups, not all of them will stick with the business. Think about the long haul. Ask yourself how deeply invested the vendor is in Pricing Intelligence technology and the likelihood of them delivering on their promises if there are competing internal interests and they move on to the "Next Big Thing."

The Next Step

Once you've selected a few Pricing Intelligence vendors you feel you can trust and who meet your strategic needs, it's time to put their feet to the fire!

Is their technology platform as good as advertised? Is it user-friendly and compatible with your system? Can this company deliver on what they promised in a timely manner?

Setting up a pilot program with each prospective vendor will let you test how they will respond to your changing needs and whether they are the right long-term partner to help you meet your business goals.

Taking a Pricing Intelligence Test Drive: What to Ask Vendors About Pilot Projects

Typically, when a retailer wants to set up a proof-of-concept for Pricing Intelligence, they will take about three to four weeks to test a vendor's platform. Every business has their own unique parameters, but a retailer with 50,000 total SKUs and 10 major competitors might, for example, ask for data on 1,000-3,000 SKUs across three to five competitors to get a sense of a vendor's capabilities.

The list of SKUs used in a pilot should be spread across all categories and include a mix of brand-name and private-label products if applicable.

> "Choosing the right partner will determine how fast and accurately you gather your data, how smartly you process and interpret your data, and how you ultimately take meaningful action."

Here are some key things to consider when setting up your pilot program:

1. **Data Gathering –** Ask for time-stamped data. Your prices from a daily crawl shouldn't be more than three to four hours old and for certain Key Value Items, you may want price updates every two hours – or even more often if possible. Your crawling data should include different price points (display price vs. in-cart price), shipping charges, and promotional content associated with specific deals. You also should capture product descriptions and images for later reference. This is the tip of the iceberg. Mature vendors are able to track hundreds of variables and can customize the data to your needs.

2. **Product Matching –** Make sure your vendor can handle matching for private labels, the most difficult challenge of product mapping. Also check if the system normalizes units of measurement so you can compare a 10-pack of a product with a 5-pack.

3. **Data Reporting –** The delivery of your raw data should be seamless. You should be able to put it to use immediately without worrying about converting it to a compatible format. Your vendor should be flexible enough to report the data in a way that's easily integrated with your system (e.g., databases, spreadsheets, XML files, etc.).

4. **Training & Support –** Whenever you adopt a new technology platform, there's a learning curve and support is critical, especially in the beginning. How accessible and responsive will your vendor be when you need immediate advice or help?

Consider this trial period as not only proof that the technology meets your competitive needs, but also as an indicator of your future business relationship. A vendor who isn't willing to accommodate your needs in the "dating" phase of the relationship will certainly not become more responsive when you're "married."

Taking a Dynamic Pricing Test Drive: Setting Up Your Pilot Project

As with doing a Pricing Intelligence pilot program, you'll want evidence up front that you are adopting the right approach and the right technology with the right partners. Your Dynamic Pricing pilot should follow these steps:

STEP 1: Meet With Your Vendor to Define Your Goals

- Outline problems, current practices and pain areas around pricing.
- Determine your budget and what you aim to accomplish.
- Evaluate capabilities of your current system.
- Is scalability an issue?
- Select which KVIs or competitive products are most ideal for testing.
- Determine which products might bring you more traffic.
- Determine crawling frequency. You may want to check KVIs daily or even multiple times a day during holiday season.

STEP 2: Examine Diagnostic Results (about 4-6 weeks later)

- Start crawling competitors' data and your own data to do more analysis and generate pricing recommendations.
- Also crawl the stock status of your competitors.
- Consider crawling social likes, product reviews, ratings and page ranks to measure the market demand.
- Share and review potential pricing opportunities and possible impact.
- Define what you would like to accomplish with Dynamic Pricing and how you will measure success.
- Develop pricing recommendations based on competitor price, stock status, and internal data such as weeks of supply (WOS), closeout dates, sell-through percentage and conversion rates.

STEP 3: Implement Dynamic Pricing Pilot (about 8-12 weeks)

- Launch pilot program and review performance.
- Modify approach as applicable.

- You may want to price more aggressively if more than four competitors are in stock.
- You may not want to consider competitors whose price is lower but they do not have the product in stock.
- You may want to price higher or increase your margins if less than four competitors are in stock or if Amazon is not carrying a particular product.
- Periodically assess the effectiveness of the program. Once recommendation rules are created, recommendations can be generated multiple times a day.

STEP 4: Evaluate Success or Failure and Determine Future Path

- Measure the impact of pricing recommendations based on change in sales and social signals over at least a few months.
- Determine if you'd like to move forward, end the program or expand the scope of your tests.
- If you'd like to move forward, define the scope of a full Dynamic Pricing program.
- Define the terms and finalize your contract.

Your Journey Has Just Begun

Data is democratic. Everyone has equal access to the same raw pricing and product information as you do. It is the *intelligence* part of Pricing Intelligence that will give you an immeasurable edge. Like it or not, brick-and-mortar retailers are now in the same big data environment as their online competitors.

Choosing the right partner will determine how fast and accurately you gather your data, how smartly you process and interpret your data, and how you ultimately take meaningful action.

And no matter how clever or advanced your technology may be, you're still the most important part of the equation. No one knows your customers like you do.

Why Ugam?

Ugam offers leading retailers and brands insights and analytics solutions for Pricing, Assortment and Content Intelligence to retain and grow their customers.

How is Ugam Different?

Ugam's Price Intelligence and Dynamic Pricing is a SaaS (Software as a Service) solution with three innovative components:

1. **A deep crawling engine.**
2. **Machine-learning algorithms that match exact and similar products; and**
3. **Proprietary pricing models that provide actionable insights and recommendations for retailers and brands.**

Ugam's solution is the ONLY one that:

- Collects up-to-the minute price data from Internet retailers on demand, unlike competitors who provide information from databases only updated once a day.
- Has a Smart Dynamic Pricing module with a pre-defined library of pricing rules to help you identify opportunities for pricing changes that align with your business goals.
- Includes a proprietary price-trading feature that reacts to consumer signals (both inside the firewall and out) and goes beyond simple price matching logic to allow you to automatically skim margins.
- Goes beyond just pricing. It allows you to uncover comprehensive merchandising insights including assortment and content intelligence to improve your conversion rates.
- Offers high-touch customer service with deep retail knowledge and experience that proactively shares ongoing advice on how to best leverage this technology and accomplish your objectives.
- Builds on a massive data repository of 7.5 billion records, providing years of historic data and in-depth graphs to help you predict future trends and plan strategically.

YES!

I would like to see a live demo of how Dynamic Pricing engines can work for me.

Your Opinions Are Priceless

You're on the frontlines everyday – we'd appreciate learning more about your daily successes and challenges.

What's on your mind? What did you think of this book? Are there any topics related to Price Intelligence or Dynamic Pricing that you wish we had covered more?

Please send your questions and comments to ebookfeedback@ugamsolutions.com.

Or let us know if you'd like to be among the first to receive future tips and advice on Pricing, Assortment or Content Intelligence.

Footnotes

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