DemandTec
by acoustic

2022 Buyer's Guide to Autonomous Commerce

The road to winning a greater share of wallet begins with mastering pricing, promotions, markdowns, and retailer-supplier collaboration.

Executive Summary

Remember the days when you could set a premium price for in-store items? That age isn't entirely over, thanks to worldwide supply-chain issues. But smart phone-carrying consumers can and will check prices on the items they value most. In its March 2022 report, Retail Systems Research (RSR) states that "pricing is more important than ever for both sides of the retail transaction." Retailers know that pricing pressure leads to tighter margins — and a lower margin of error with customers. RSR concluded that retailers require agile pricing tools that can help them to optimize prices, even proactively, to anticipate evolving consumer preferences.

1 Perpetual change is what's on today's, tomorrow's, and next year's menu. Retailers who fail to adapt to rapidly changing customer needs face steep losses, missed growth opportunities, or even more severe outcomes.

2 Product lifecycle pricing optimization is a discipline that entails an organizational learning curve. You can't get there in a day.

3 Pricing optimization is about tapping data science to produce actionable intelligence. There's no workaround for data-driven decision-making.

4 AI and machine-learning technologies enable retailers to scale their pricing decisions and efforts, but they cannot be opaque. Without transparency, no retailer will fully trust autonomous pricing.

5 Autonomous commerce must behave in a proactive rather than a reactive manner to seize market opportunities. That's where it proves its mettle.
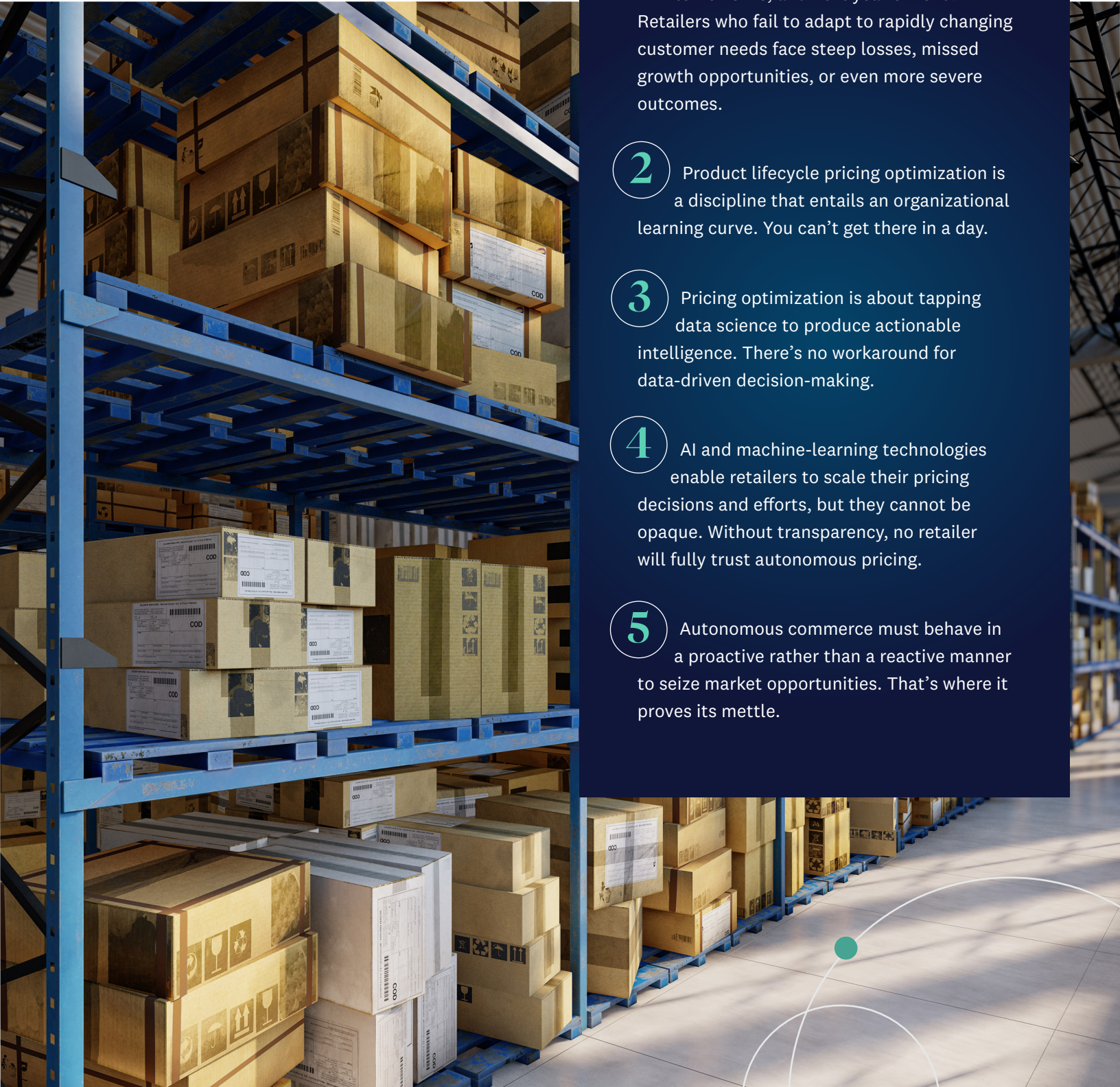
The Situation

Faced with unparalleled volatility and complexity marked by rising inflation, talent shortages, and supply chain disruption, retailers aim to enhance their pricing agility and competitive positioning. But when their legacy processes cannot scale, retailers fail to either implement time-sensitive pricing decisions or maximize their margins.

Data science is illuminating new customer insights and opportunities, both in-store and online, despite ongoing uncertainty. Retailers that excel at applying data science and AI to pricing optimization can successfully counterbalance consumer price sensitivity with rapidly changing margin and supply pressures.

Getting to this level of mastery is a journey that this guide can help you complete. We know you can't simply click on a URL, punch in a credit card, and instantly become a black belt in pricing optimization. Pricing optimization is a discipline, not an equation, which entails an organizational learning curve. Yet, no matter your previous experience with pricing tools, your organization can take giant steps toward achieving key business objectives from the outset of this process.

Today's volatility and pace of change challenge all retailers, even those with decades of experience and sterling Wall Street reputations.

How is your organization managing these five current issues?

1 Inflation

Most retailers just pass 100% of the cost change to their customers. The reality is this behavior irritates shopper who won't pay more for a particular item but would accept other price increases.

Can you build a model to manage this?

2 Supply chain disruption

Three in four companies have experienced negative or strongly negative supply-related business impacts during the pandemic, reports Accenture.

Are you receiving real-time updates from your suppliers — and are you able to update them about evolving customer patterns?

3 Labor shortages

Staffing shortages force retailers to prioritize the scope and frequency of in-store SKU price adjustments.

What's the cost of inaction?

4 Aggressive pricing

Competitors may make extreme markdowns to pursue your market share.

Can you make corresponding moves without hurting your margins and inventory?

5 Digital transformation

Many retailers deal with disparate merchandising systems and fragmented data that keep them from seeing a holistic view of the customer or assessing lifetime customer value. Some retailers would like to embrace digital but worry that AI-informed pricing is too much to chew.
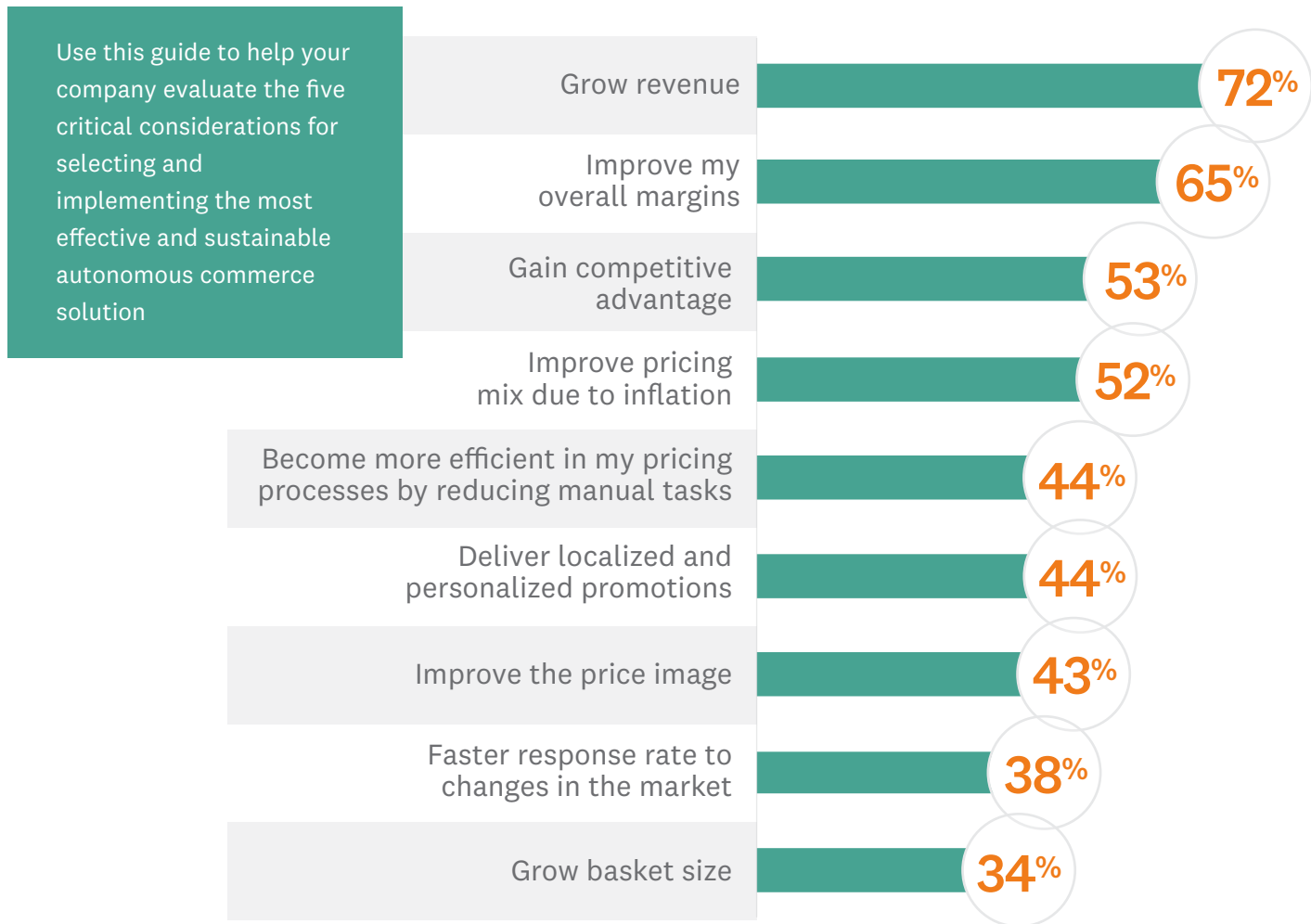
Is there a gradual path to autonomous commerce?

Rapidly evolving business conditions have inspired many retailers to consider new, more agile approaches to pricing optimization. For instance, a recent report from Retail Systems Research (RSR) found that many retailers rely too heavily on discounts and may set "prices based on a gross margin expectation rather than as a lever to drive traffic, sales and profits." Retailers that excel at pricing optimization can "model price changes and promotions before implementing them."[1]

There are significant benefits to adopting both the discipline of pricing optimization and a platform that scales it quickly. "Within 18 months, we delivered a positive return on investment, including improving our competitive position by 3 points while at the same time increasing gross margin by about 1.5%," said a Director of Innovation and Systems at Conad Nord Ovest, a retailer with over 600 stores in Italy.

What opportunities do you hope to address with pricing optimization?

Use this guide to help your company evaluate the five critical considerations for selecting and implementing the most effective and sustainable autonomous commerce solution

Opportunity	Percentage
Grow revenue	72%
Improve my overall margins	65%
Gain competitive advantage	53%
Improve pricing mix due to inflation	52%
Become more efficient in my pricing processes by reducing manual tasks	44%
Deliver localized and personalized promotions	44%
Improve the price image	43%
Faster response rate to changes in the market	38%
Grow basket size	34%

Source: RSR Research, March 2022

What is autonomous commerce?

Autonomous commerce empowers retail decision-makers through AI-powered pricing technologies that automate decisions no longer requiring human intervention. Retailers can scale and improve everyday pricing operations while merchandisers focus on strategy and high-value choices.

How does autonomy improve pricing?

No matter what role you play in retail pricing and merchandising, the more you know — and the sooner you know it — the more insightful you become. You're better off understanding the total picture of what's selling, what's on promotion, and how the business is performing today. Imagine knowing if your business is on track for the day, the week, and the entire quarter.

Pricing optimization isn't about theory — it's about tapping data science to produce actionable intelligence. The latest data science uses scientific methods, processes, algorithms, and artificial intelligence to extract knowledge and insights from structured and unstructured data and transform that knowledge into predictive and prescriptive actionable insights. Advanced demand models recommend the best approach for each pricing situation.

Of course, not every company is there yet. Retailers who have yet to transform their merchandising approach from manually intensive to autonomous encounter challenges such as:

1 Silos

Many retailers have disparate merchandising systems and fragmented data. Silos exist between data sources, merchandising strategies, and retail teams. These retailers cannot holistically assess shopper demand to maximize profitable revenue growth.

2 Change management

Pricing and promotions are governed by gut instinct rather than data science in some organizations. These organizations ask whether the AI-powered system will recommend a price or promotion that doesn't make sense.

Do autonomous systems exist to eliminate jobs?

3 Scalability

Optimizing pricing without intelligent tools can quickly spin out of control. Without automation or price optimization tools, many retailers lack the scale to process and analyze billions of permutations using scenario planning, demand analytics, or rules-based pricing.

"Garbage in, garbage out" as the saying goes about the particular importance of data quality. Accurate and comprehensive data sources are the foundation of a successful autonomous system. A platform must ingest and process the entire spectrum of data inputs from transactions, products, vendors, competitors, shoppers, and third parties — and funnel this information into a scalable data layer to fuel comprehensive analytics.

How does autonomy improve pricing?

There are many ways to judge the success of a promotions initiative. For instance, a merchandising team may track whether a promotion increased basket size, drove more traffic, improved profitability, and achieved category-level objectives? Yet, an autonomous commerce solution goes poses another important question, too: did the system empower retailers to enact more innovative and timelier promotions? Here's what to look for:

1 Pricing

How do you prioritize your most impactful opportunities? Simple formulas aren't always the answer. A pricing application should combine the best of demand analytics, s cenario planning, rules-based pricing, price optimization, price automation, and of course, price execution. It must be able to measure and learn on the fly.

2 Promotions

An end-to-end promotions application can accurately analyze, predict, and recommend promotions based on shopper behavior and advanced data science. It employs prescriptive analytics to meet defined business goals, proactive recommendations, and autonomous capabilities. Can it make the best promotional recommendations considering all the types of promotion, vehicles, duration, target, and business constraints?
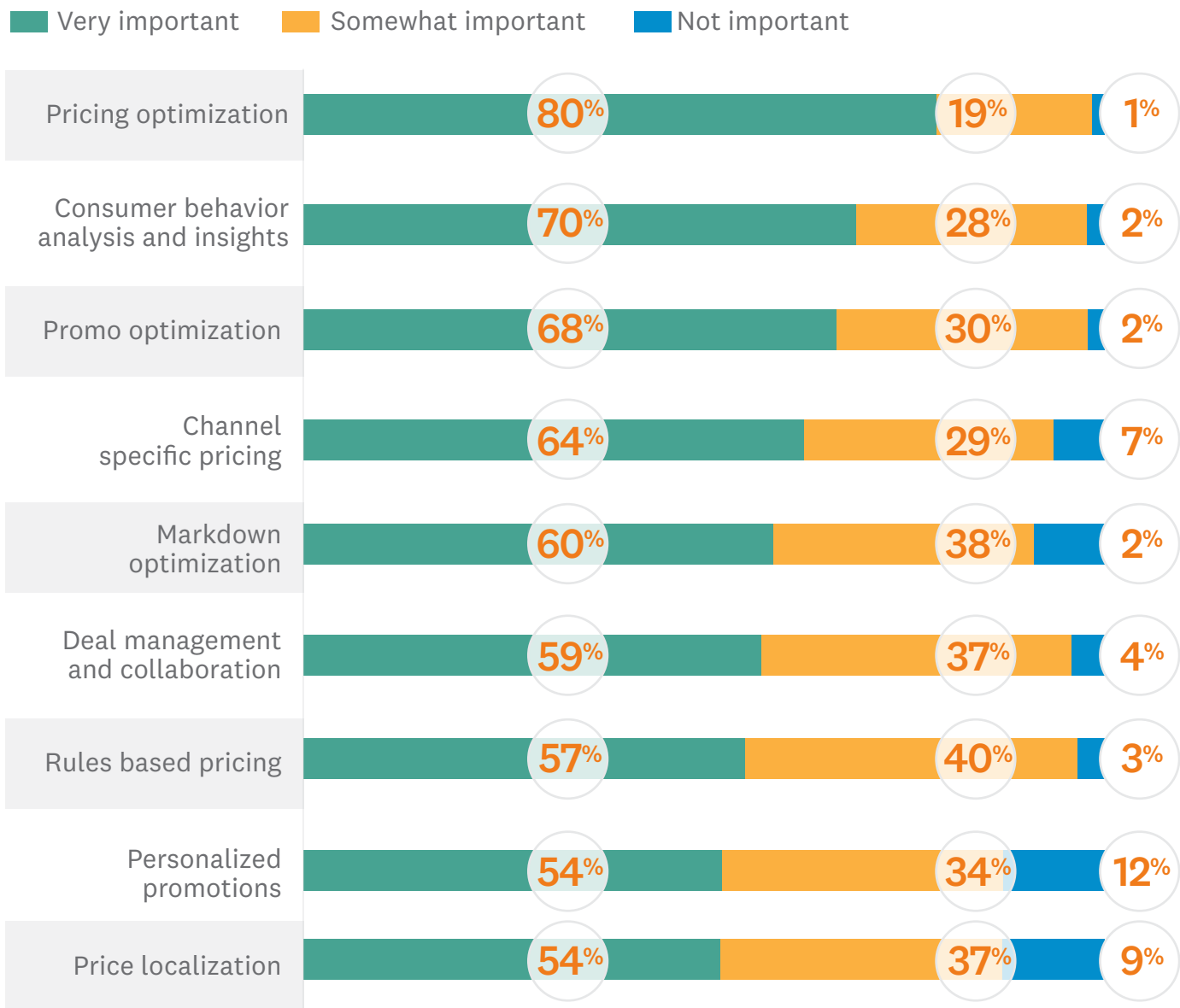
3 Markdowns

A solution can recommend the optimal price reduction, including a cadence for all products that need a markdown. Daily modeling considers all inventory across store locations and employs rules to constrain optimization as it formulates and executes markdown plans, including the most intelligent clearance strategy.

4 Collaboration

The past two years have taught both shoppers and retailers that while you can find nearly anything you want online, you can't always get when you want on a timely basis. Stories about cargo piled up in American ports made a strong impression on consumers, and hoarding of consumer staples was widespread, particularly in the early days of the pandemic. Retailers who share customer demand information and enable real-time deal negotiation with their suppliers to power more relevant promotions, and use supply-side information to inform their pricing and inventory systems earn consumer trust and competitive pricing advantage.

Rate the importance of the following capabilities in achieving your strategic pricing and promotion initiatives

Legend: ■ Very important ■ Somewhat important ■ Not important

Capability	Very important	Somewhat important	Not important
Pricing optimization	80%	19%	1%
Consumer behavior analysis and insights	70%	28%	2%
Promo optimization	68%	30%	2%
Channel specific pricing	64%	29%	7%
Markdown optimization	60%	38%	2%
Deal management and collaboration	59%	37%	4%
Rules based pricing	57%	40%	3%
Personalized promotions	54%	34%	12%
Price localization	54%	37%	9%

Five top-of-mind buyer's consideration

What are the essential attributes of an autonomous commerce solution? They're the ones that enable your team to elevate your company's growth and profitability through AI-powered pricing, promotions, and markdowns. Here's a list of five must-have strengths that every solution must bring.

1 Accuracy in AI/ML Models and Forecasting

Today, some combination of artificial intelligence and machine learning is a given in pricing systems. Without them, a product would neither be intelligent nor achieve the desired scale and efficiency. Obtaining fresh, accurate, and comprehensive data provides the foundation for delivering a precise understanding of consumer demand. Accurate predictive forecasting, vital for successful campaigns, cannot flourish without this data.

AI-powered algorithms appear opaque as they process complex data at ultra-fast speed. Yet, pricing specialists need to know whether they can trust the results. That's why transparency is so crucial to the entire process of pricing optimization. What's the reasoning behind an application's autonomous recommendations? Your solution must be able to explain its logic and verify its accuracy.

Shopper demand models must stay optimized amid changing market conditions. A good solution will recalibrate them to improve forecast accuracy over time. For example, elasticity and price sensitivity transparency prove critical to price and promotion response analysis. Trust is everything.

2 Autonomy

Autonomous pricing is a system that behaves in a proactive rather than reactive manner to seize market opportunities. You can gain market share and improve margins by attaining a first-mover advantage.

An autonomous commerce platform makes recommendations for pricing, promotions, and markdowns based on data-driven insights and a holistic view of shopper behavior. Pricing recommendations are prioritized based on models that evaluate effectiveness and business impact.

In a time of rapid market changes and uncertainty, a system must manage complexity, such as evolving or sudden changes in consumer behavior. Price optimization should occur in real-time, not quarterly or semi-annually. This practice, in turn, increases your team's productivity, improves efficiency, and ensures optimal pricing recommendations that, ultimately, meet the needs of your customers.

3 KVI Optimization

Customers can generally remember what they've paid for recognizable value items in any retail context. That makes pricing them very tricky when your costs rise. The same thing holds for your known or key-value items (KVIs). While KVIs don't frequently change, when they do, it's often because of evolving consumer behaviors, and retailers need to adjust their pricing strategy for these items.

Though many retailers formulate pricing strategies around KVI lists, they may lack the capacity to check their accuracy in each store location routinely. If an item changes roles and falls off the list, they may implement the right strategy for the wrong thing.

An AI-powered autonomous pricing solution can regularly conduct KVI analysis and make prescriptive recommendations aligned to current customer preferences. AI-powered capabilities, such as competitive analysis and demand prediction, are critical to ensuring razor-thin margins don't cause unnecessary pain.

4 | Deeper Customer Understanding

Regardless of how you obtain the knowledge, customer intelligence is essential to successful merchandising. But customer understanding is not carved in stone — it's a snapshot in time. Combining real-time demand information with customer insights gives you dynamic customer intelligence and the agility to successfully plan, segment, and scale promotions.

Most legacy (or manual) pricing systems cannot handle the complexity caused by rapid changes in consumer demand. What's the impact of this week's volatility in inflation, your supply chain, and public health? How will this fluctuation impact customer demand in one store location versus another? It's axiomatic — the more deeply you understand your customers, the better your predictions.

5 | Realize Your Strategy

Every retailer begins this journey with a unique mix of resources and challenges in the realm of people, processes, and technology. As you evaluate pricing optimization solutions, look for a platform that can solve immediate issues and help you scale and grow your operations down the line. For example, if your highest priority is markdowns, start there before expanding into other areas.

Flexible solutions are essential to realizing your strategy. Here's a practical example. Find the most complicated pricing rule you want to follow. Can the pricing solution you're evaluating already contain that rule? If the pricing platform requires more than minor customization to add your rule, that's a red flag. Likewise, can the system estimate the cost of enforcing your rule? For example, what will it cost to make the price of every SKU end in a nine (e.g., $2.99)?

Autonomous pricing needs much more than a cloud-based platform — it requires strategic organizational support. That's because it's not just a technology you implement. It's a business discipline. Your organization may start with markdowns, while another may prefer to optimize promotions. Look for a partner who not only understands your organization's journey but who has guided top retailers around the world to achieve their pricing optimization objectives.

Choose your starting point!

Autonomous pricing needs much more than a cloud-based platform — it requires strategic organizational support.

That's because it's not just a technology you implement. It's a business discipline. Rather than pricing, your organization may start with markdowns, while another may prefer to optimize promotions. Depending on your organization's capabilities and resources, you may decide an "optimization on demand service that delivers rapid time-to-value with minimal IT and team requirements is best for your business, rather than a traditional solution. Look for a partner who not only understands your organization's journey but who has guided retailers – both large and small - around the world to achieve their pricing optimization objectives.

Unify™

Autonomous Pricing

Autonomous Promotions

Autonomous Markdowns

Autonomous Collaboration

About DemandTec

A pioneering leader in retail pricing, promotion, and markdown technology for decades, DemandTec is ushering in the new era of unified autonomous commerce. With Unify by DemandTec™ — the industry's first — retailers can unite their data, systems, internal teams, and collaborate with suppliers to generate profitable revenue growth with the power of AI.

Unify by DemandTec is available in individual applications – Autonomous Pricing, Autonomous Promotions, Autonomous Markdowns, Autonomous Collaboration - or as an entire platform. The cloud-native platform provides a holistic view of shopper demand. AI-powered autonomous decision-making increases efficiency and effectiveness across categories, channels, and geographies.

From food to fashion, DemandTec partners with more than 700 customers around the globe.

Want to learn more about what DemandTec can do for your business today?

Let's talk

www.demandtec.com