



# How to Automate Your Pricing Infrastructure

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Is your pricing reactive and undisciplined? Do your customers and sales teams struggle to understand your pricing rules? Is it challenging to determine whether your pricing is effective, even though you have put tools and measurements in place to capture pricing-related data?

If so, you're not alone.

In 1992, the article 'Managing Price, Gaining Profit,' appeared in the *Harvard Business Review*. The article put pricing front and center, arguing that "pricing is the most important driver of company profitability."<sup>1</sup> In fact, according to Paul Hunt and Jim Saunders, authors of *World Class Pricing: The Journey*, "this relationship has been shown many times in numerous publications and conference presentations."<sup>2</sup>

Despite evidence that pricing is *the* most critical predictor of profitability, the science of pricing is still relatively underdeveloped for most businesses, and few have optimized their pricing to maximize profits.

But is pricing automation the answer?

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1. Hunt, Paul and Jim Saunders. *World Class Pricing: The Journey*. iUniverse, Bloomington, IN. 2013. pp 7-8

2. Hunt, Paul and Jim Saunders. *World Class Pricing: The Journey*. iUniverse, Bloomington, IN. 2013. pp 7-8

## The Foundation of Pricing Automation

First, let's define pricing automation. With it, prices are determined automatically using a software system based on a pre-determined set of rules or constraints, as opposed to manually by a pricing manager. There is very little, if any, human intervention once the system is set up.

Most pricing automation systems use a simple process flow:

The “automation” part is the easier step: you simply need to connect various systems together so they can exchange data. While this step can be technically challenging, there's often a solution (which usually requires coordination with your company's IT department)



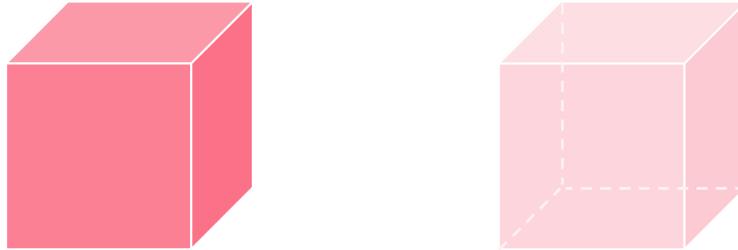
The more difficult element to pricing automation is defining the pricing strategy behind the automation. Using the right strategy in the form of pricing logic is critical, and to create it takes a mix of science and art.

When it comes to the software itself, there are generally two main types – glass box and black box.

A **glass box** software is transparent, meaning that your company understands and can see how the pricing engine uses the data that's been input to determine pricing.

In a **black box** system, the pricing strategies and algorithms that determine your pricing are often developed around the software vendors “pricing

science,” and your company may not know, understand, or see the pricing automation process flow. Under the black box approach, algorithms are often proprietary to the software vendor and henceforth inaccessible to the user.



*Graph 1: a Black Box vs. a Glass Box approach*

The airline industry is an example of one that comfortably uses black box pricing automation, while those industries involved in manufacturing and distribution, as well as some B2B companies tend to lean more towards a glass box approach.

One of the main reasons some companies prefer a glass box system is because their sales team needs to have understanding and trust around how their pricing is determined. For example, one of our clients is a four billion-dollar global multinational B2B company whose sales team needs to know that similar customers are paying similar prices for similar products and services. They need to know that prices are value based and “fair.”

Ultimately, whether you choose a glass or black box pricing automation software will depend on your industry, your pricing philosophy, and your need for pricing transparency.

While important considerations, these factors don’t determine whether pricing automation is an appropriate solution for your company. Nor do they help you determine which pricing automation software is best for your company.

You might be surprised to learn that nine out of ten businesses have the wrong pricing automation system in place . Why buy a Cadillac when you need a pick-up truck?

## The Number One Pitfall of Pricing Automation – Believing Automating Your Pricing Will Solve All Your Problems

Many organizations – including B2B and B2C companies – want to migrate from an ad hoc, manual approach to pricing to automated pricing, but don't have all elements in place or don't know how to leverage them.

It's very easy to find yourself entrapped in one of the most common pitfalls surrounding pricing automation —believing that automating your pricing processes will solve a myriad of pricing related challenges like a lack of pricing efficiency, consistency, or control within your organization.

The truth, however, is that **automation will not solve strategic issues**. Pricing automation is a means to an end, not the end itself. No matter your industry, your end goal is a pricing strategy that supports your business goals by optimizing revenues and profits, and it starts with having the right pricing strategy and infrastructure.

To establish pricing automation (and to manage pricing), it is vital for your organization to have these four elements securely in place:



Only once your pricing strategy and infrastructure are well-established should your pricing be automated.

## Establishing Your Pricing Strategy and Infrastructure

When it comes to establishing your pricing strategy and infrastructure, the order in which you address each element matters. All four pricing elements are needed because they're interrelated, but you'll always need to start by addressing your pricing strategy and once you've got that, look at your data and people so that you can set up the right system for your company. Linking your pricing infrastructure to these four elements allows your company to take a long-term, holistic approach to your pricing strategy.

Many companies make the mistake of thinking that implementing a pricing automation system will make them more efficient, consistent, or place greater controls on their pricing (especially if their pricing is decentralized), but the reality is that it's inefficient to invest in a system without having the four core elements in place. After all, automating a bad process just makes bad pricing faster! Instead of jumping to automation, first ensure your pricing strategy and infrastructure are sound:

### 1. Put the Right Strategy in Place

Define your pricing strategy and align it with your business strategy – automation doesn't solve any problems if you don't have the right strategy in place.

It can even make things worse because if you don't have a strategy (or if you have the wrong one), automation now makes you very efficient at implementing bad pricing.

Many organizations know they have a problem with pricing, but they want to jump to the end result. For example, the company may instinctually believe they need to address efficiency, when in fact their problems lie with lax pricing controls. The real benefit of pricing comes when you have a sound strategy in place. For most companies today, this typically involves establishing a value-based pricing strategy built on segmenting customers and products – a task that automation can certainly help execute.

## 2. Capture Quality Data

It's important to collect high-quality data as part of your process. High quality data is complete, consistent, and accurate. When we say data is **complete**, we mean that all relevant records are collected (not just subsets). **Consistent** data means that all records come from the same system, and are collected through the same process. **Accurate** data reflects the financial and operational reality of the business.

High-quality data is critical, but don't let a lack of data get in the way of developing a sound pricing strategy. This is a journey. You can start with incomplete data, and even a fairly simple pricing model, and then build upon your model as your data improves in quality or becomes more sophisticated.

However, be careful not to trust your data at all costs. Sometimes, data is too bad to be useable. This is where your strategy, business rules and processes become important. Many businesses struggle to determine whether they have data that is high-quality or unusable.

The answer is often industry (and even company) specific. Here are some **common red flags** that tell us a company's data may not be useable:

### *Incomplete Data*

Many B2B clients want to know their win rate (how often they close a deal relative to all the deals they bid for). Data on deals they've won is easy to collect because they eventually become their transactions. However, data on the deals they lost is often non-existent, anecdotal, or even worse, biased (i.e. only the sales rep losing very few deals will report them).

### *Inconsistent Data*

We once had a client who was selling products by the weight. The only issue was that, under "unit of measure," they were using every possible spelling of a pound (e.g. lb, Lb, lbs, Lbs, LBS, etc.) This inconsistency made the data difficult to use.

Another case of inconsistency that we find very often around "unit of measure" is that some items are priced individually, while others are priced by the dozen, the hundred, the thousand, etc... and these differences are typically not documented, which can make the entire data set unusable.

### *Inaccurate Data*

We once worked with a client with whom we simply could not reconcile our numbers and theirs on total sales! No matter how we would calculate it, our numbers were always twice what they knew about their business. They finally realized that there was an error in the query that they used to pull the data they sent us.

## **3. Ensure Having the Right People and Processes In Place**

It's important to have the right people (who are properly trained) in strategic positions across your organization. Since pricing is interrelated with all aspects of your company, it will impact roles across your business, not just within the pricing team itself. Other key players usually include sales, production, operations, marketing, etc... All these people need to be in place and buy into the pricing processes that you implement.

#### **4. Choose the Right Processes to Support Your Pricing Strategy**

It's important to have the processes in place to support your pricing strategy. Your pricing system isn't always automated. The system itself can take a variety of forms and the processes (like pricing controls) will vary from one company to another. For example, ensuring extra discounting isn't done on an ad hoc basis, or that price matching isn't done on premium products.

No matter what your system looks like, your team needs to trust in it and check it periodically to ensure that your pricing is working to your advantage.

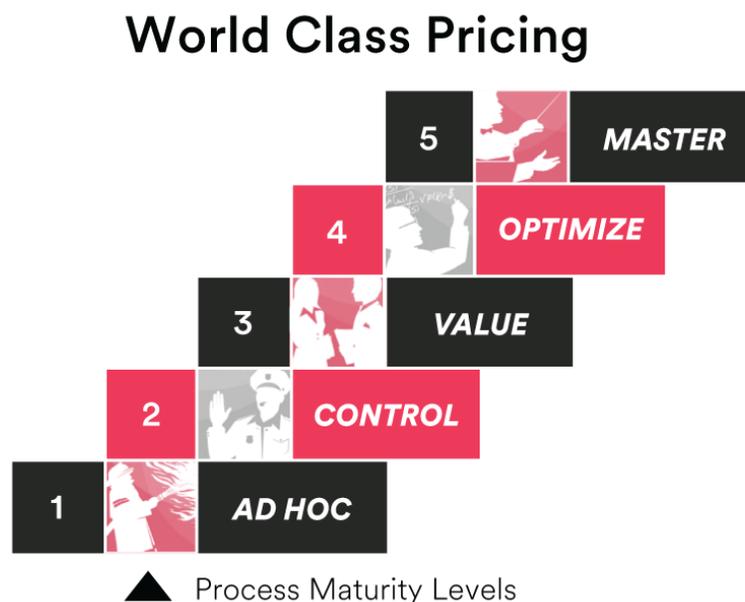
These four pricing elements: strategy, data, people, and the right system work together and build upon each other. As you plan to improve your pricing process ensure you maintain balance and cohesion across these four elements.

## How to Know if Your Business Is Ready to Invest in Pricing Automation

Every industry has a different take on pricing optimization, yet there are some key elements to optimization that are consistent across industries:

- Measuring value
- Understanding the impact of market segments over time
- Adjusting prices to respond to changes.

That's why, when our team meets with a client we first look at their existing pricing strategy and infrastructure and where they fall on the pricing maturity scale. The scale, which Hunt and Saunders delve into in detail in *World Class Pricing: The Journey*, has five levels:



Graph 2: Pricing Solutions' World Class Pricing Framework™

In the *first level* the pricing manager is like a firefighter – spending most of his/her time putting out fires caused by ad hoc pricing behaviour. In the *second level* more controls are put in place, and the finance department is often involved in pricing decisions. In this level the pricing manager acts more like a police officer, ensuring that the organizations' pricing rules are followed. **It's here, in level two, where pricing automation software often adds the most value to an organization.**

In *level three*, customer-centric, value-based pricing is put in place. In this level the pricing manager acts more like a partner with customers, marketing and sales teams, making decisions based on extensive customer research. Customer segmentation often plays a role in pricing strategy at this level.

At *level four*, the pricing manager is focused on optimizing pricing. He/she works like a data scientist, and his/her decisions are usually data-driven and algorithm-driven. There's often little human intervention when determining pricing at this level.

In the *fifth level*, we often see a chief pricing officer (CPO). He/she works as a conductor to ensure that everyone in the company is in alignment regarding the pricing strategy and that pricing, which is now embedded in the organization, is aligned with the company's overall strategy. Very few organizations operate at this fifth level, and those that do have usually operated as a level four company for at least three years before moving into this pricing mastery level.<sup>3</sup>

## Diagnosing Your Pricing Woes

Your pricing structure should be derived from a pricing diagnostic.

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3. Hunt, Paul and Jim Saunders. *World Class Pricing: The Journey*. iUniverse, Bloomington, IN. 2013 pp 12 - 17

Pricing automation for a level two organization will look quite different from pricing automation for a level three organization, but we work with clients no matter their level to help advance them along the scale so they can use pricing automation to its full potential.

In our experience, a company operating at a level two on the pricing maturity scale will experience the full benefits of pricing automation. Level two looks at automating controls and embedding pricing rules in a system rather than relying solely on human judgment. Here, using automation for control is necessary and valuable for the organization.

Where do you think your company is on the pricing maturity scale? Many organizations feel they are operating at different levels in different parts of their business. Indeed, this is a common issue facing our clients.

Since every industry and business is different, to determine where on the pricing maturity scale a client falls we use standardized tools to assess their existing pricing infrastructure and processes. These tools include conducting transactional data analysis and workshops to help our team determine where the client is at. At the high level, we're looking for:

### *1. Leakage Opportunities*

What we call “leakage opportunities” are organizational inconsistencies. For example, we have had a client whose pricing philosophy was that similar customers should pay similar prices for similar products, but in fact the data showed us that this pricing philosophy wasn't being followed.

Other examples of leakage opportunities include transaction and cost data which isn't being collected, or high **cost to serve** that isn't being capitalized on.

An example of cost to serve is when a customer orders next day delivery without paying a premium, when in fact it costs your team more to fill their order.

Another common leakage opportunity comes with **change orders**. Customers who change their order without being charged an additional fee often cause inefficiencies that hurt the bottom line.

## *2. Value-based pricing*

If any product delivers more value than a competitor's alternative then your company has a premium pricing opportunity, which means you can charge a premium and capture more market share. In our experience, many businesses miss out on value-based pricing opportunities.

## *3. Organizational Efficiency*

Adding automation allows your product, pricing, sales and financial resources to operate more efficiently. Our team examines the efficiency within and across the various departments of your organization, identifying areas of strength and weakness. Common organizational inefficiencies often exist around resources, reporting, and communication within and between departments. These challenges are often corrected as part of the pricing strategy.

## **Pricing Automation is Usually a Long-Term Process**

Many of our clients who want to implement pricing automation find there's some leg-work that must be done before it makes sense to automate.

That's because pricing is connected to many areas of the organization, and it will take time to change the behaviours that will make these processes successful.

Change-management is a huge factor to pricing automation. We often use the 7x rule<sup>4</sup>, which follows the general belief that people must experience a new process at least seven times before they can completely adopt it and it is considered part of the organization's overall pricing strategy. It's important to fully integrate changes to a company's pricing strategy before automating pricing, which is why automation is often a long-term endeavour.

### **Mini B2B Case Study: Global Distributors**

When our client, a nine billion-dollar global distributor of electrical products came to us they wanted to buy a new pricing automation system. After conducting our pricing audit, we found there were many other issues that needed to be addressed before it made sense to look at automation.

First, we focused on refining their pricing strategy. Then, their team needed to get comfortable with this strategy and implement it across their organization. Finally, their company took time to ensure that their new pricing strategy truly solved their pricing challenges and worked well.

That was three years ago, and now that they've filled the gaps in their pricing infrastructure they are ready to invest in a pricing automation system. This three-year timeline is quite normal. We find that most companies are not ready to jump into pricing automation. First, they need to take the time to fill gaps in their pricing infrastructure.

### **Mini B2C Case Study: The Restaurant Industry**

Sometimes, businesses come to us because they've moved forward with a pricing automation system, but aren't getting the results they expected.

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4. Hunt, Paul and Jim Saunders. *World Class Pricing: The Journey*. iUniverse, Bloomington, IN. 2013. p 26

This was the case with our client, a one billion-dollar restaurant chain operating throughout the United States. This company wanted to update their menu, and had tried a pricing software but it was giving them prices that they didn't trust (typical with black box solutions). They initially came to us asking for our recommendation on a different pricing automation system. We started with an audit that showed there were gaps in their pricing strategy.

That was two years ago and now that they've filled the gaps in their pricing strategy and infrastructure they are ready to take their pricing to the next level with a pricing automation system that generates trusted results.

## The Process Involved in Pricing Automation

When your company has the pricing infrastructure in place, including strategy, data, people and systems, then you're ready to move towards a pricing automation system. Here's how:

### Get Everyone on Board

This move needs to be a cross-functional exercise: everyone in your organization must be on board with the new price generation system for it to be successful. Departments that should be involved include pricing, finance, sales, marketing, product management, etc. Remember that you'll need to involve your IT department and any teams involved with your organization's systems throughout the entire automation process.

## Check Your Data

We help clients take a thorough inventory of the internal and external data that's available and the quality of this data. We also look at the level of trust associated with prices that are generated using this data. If some critical information is missing, then the business should put a plan in place to start tracking that data consistently (examples of missing data often include win/loss data, customer industry, etc.)

## Build Your Pricing Algorithm

The term "algorithm" sounds daunting, but we're really looking at how prices are going to be generated. Ultimately, the algorithm is the manifestation of the pricing strategy, which, as we've already discussed, is an extension of the business strategy. With that being said, algorithms can be as simple or as complex as the company needs or desires.

Some companies are very successful with simple algorithms. For example, increase discount by 1 point for every increase of volume by 100 units. Part of the algorithm should also include a set of business rules. For example, don't increase price by more than X% for a given customer.

The algorithm will also depend on the industry. Airlines, hotels and ecommerce often use very advanced algorithms driven by revenue management theories; B2B typically uses simpler algorithms.

## Test, Test, Test!

It's critical to test your pricing algorithm and automation system before full implementation. The accuracy of the algorithm and the reliability of the prices it generates needs to be tested thoroughly:

- *During the development phase:* Keep some of the data for testing (called a holdout sample)
- *During small scale implementation:* Test the pricing that's generated on a single market or single product in real life, to see how the model performs
- *Full scale implementation:* Only when the tests are successful and the team is confident with the prices should you move forward with a full-scale implementation.

## Benefits of Pricing Automation

When an organization has their pricing infrastructure in place and strategically implements a pricing automation system the benefits are tangible and often include increased profits, improved efficiency, better pricing controls, and pricing consistency throughout the organization.

Pricing automation can't solve all your organization's pricing challenges, but when your pricing systems are working well automation will help your organization move from level two or three of the pricing maturity scale to level four, where you're able to focus on the data; and eventually to level five where you achieve pricing mastery.

Contact our team today to benefit from specialist pricing advice and get the support you need to optimize your company's pricing infrastructure so you can master pricing and maximize your profits.

## About Iris Pricing Solutions

At Pricing Solutions, it is our mission to dramatically improve client's profitability and market share through improved pricing. We have grown to become one of the world's leading pricing consultancies with offices in North America, Europe, the United Kingdom, Asia Pacific and Latin America.

We focus on all of pricing, and only pricing!

### Pricing Solutions specializes in four core

#### services:

Pricing Strategy

Pricing Analytics

Pricing Research

Pricing Training

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