

AI-BASED PRICING: EVERYTHING YOU NEED TO KNOW



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ABSTRACT

A brief summary of how Artificial Intelligence, one of the most sophisticated approaches in Pricing and Revenue Growth Management, can improve the performance of your business and how to implement it in your company.



AI-BASED PRICING: EVERYTHING YOU NEED TO KNOW

Artificial Intelligence and Machine Learning have become increasingly relevant in the business world — that's what one [PwC study states](#). This is due to several factors, such as the continuous evolution of existing technologies, which generate greater processing power and data storage, and the proliferation of information and data availability in general. The same study presents a survey in which 85% of CEOs interviewed believe that artificial intelligence will significantly change the way of doing business in the coming years.

[In another study](#), carried out by the consulting company Bain & Company with 1,700 leaders from B2B companies, coincidentally, 85% of management teams stated that they believe that their pricing decisions need improvement, and only 15% of these leaders stated that they have the necessary tools to define and monitor prices. These are just some of the studies that highlight the importance of combining pricing strategies with artificial intelligence, known as AI-Based Pricing. This union is already seen more clearly in some traditional markets, such as aviation and hotels, where Dynamic Pricing and Revenue Management techniques have been the standard for a long time.

According to the Boston Consulting Group, the automation of pricing decisions in Revenue Management systems through artificial intelligence can lead to a total revenue increase of 5% in up to nine months. Furthermore, according to an [IBM study](#), AI-Based Pricing models can generate significant reductions in the time needed to define new prices, and the time to market for new projects can be condensed from months to weeks.

Since rational pricing decisions are based on data, the use of Artificial Intelligence technologies allows companies to analyze various data points that were previously ignored due to the high complexity of monitoring and processing, enabling them to solve problems more effectively. Machine Learning, in particular, is an application that can be used in various business models, aiding in finding patterns and extracting knowledge from a given series of observations. Machine Learning applications also have the potential to process data and learn from it without the need for human supervision, a process called unsupervised learning.

HOW TO APPLY AI-BASED PRICING IN YOUR COMPANY

In practice, AI-Based Pricing can be applied in various ways. One of the most common applications is monitoring purchasing patterns, segmenting customers or products, and optimizing discounts. One of the main objectives of Pricing departments in companies is to “avoid leaving money on the table.” In this sense, identifying which discounts are truly necessary is a competitive advantage and a lever for increasing revenue.

According to a [Bain & Company study](#), correctly optimizing discounts can lead to a 50% increase in the return on investment (ROI) of promotions. Another common application is combining AI-Based Pricing with Dynamic Pricing, which is prevalent in the hospitality and aviation industries. This combination is often a powerful tool, capable of monitoring competitors' actions, consumer behavior



based on their location, time of day, and seasonality, and estimating a specific customer's willingness to pay in a very granular way. With this information, it is possible to offer a “customized” price for each customer, according to individual characteristics and needs, leading to a considerable increase in the conversion rate.

AI-Based Pricing can also be used in combination with other techniques, such as A/B testing, in which customers are divided into groups, and products are offered at different price levels. This approach allows for real-time monitoring of the reactions of these customer groups to different price points and generates a more accurate calculation of price elasticity and/or cross-price elasticity. As a result, optimization algorithms, which commonly use statistical regression techniques, will yield more effective results. These applications have been proven beneficial across diverse sectors and markets and are increasingly widespread.

AI-BASED PRICING VERSUS RULE-BASED PRICING

It's important to understand the difference between AI-Based Pricing and Rule-Based Pricing. When Artificial Intelligence is applied, algorithms create and analyze all possible scenarios and, through statistical calculations, define the optimal solution to the problem — in this case, what price should be offered. In simpler business models or companies, this complexity may not be necessary, and a simple system of rules can suffice. For example, if the quantity exceeds “x”, apply a 10% discount. Although not very sophisticated, this solution meets the needs of many small businesses.

AI-Based Pricing is a strategy with proven results and is here to stay, but it is important to keep in mind that, despite the various benefits and diverse application possibilities, its adoption should be heavily discussed in companies before defining it as a path to pursue. To realize its full potential, significant amounts of relevant and high-quality data are necessary, along with a willingness to invest in technology and seek professionals familiar with its applications and development. Implementing AI-Based Pricing projects may take time, and results may not always be immediate, as algorithms generally require time to learn and improve their outcomes. However, if these considerations are not obstacles for your company, adopting AI-Based Pricing will certainly generate a significant competitive advantage in the coming years.

Fun Fact: *The pricing consultancy Profitwell conducted a study in which a fictitious product - a sales management software promising to generate increased revenue - was presented to 10,000 software buyers, who were asked about their willingness to pay for this product. The product description was exactly the same, except that for a portion of buyers, the phrase “with artificial intelligence and machine learning” was added to the product description. The study concluded that people, on average, have a 12.09% higher willingness to pay when these terms are added to the description of a product or software.*



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EPP Pulse offers another valuable platform for the Pricing and RGM community by bringing to light successful practices and strategies, enabling expertise exchange, fostering connections among pricing professionals, and engaging the community in dialogue and content sharing. Furthermore, EPP Pulse serves as a tool to identify market needs and interests for topics that could be developed in future EPP forums and events.”

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