

ONE VISION, ONE TEAM, ONE PRICE

THE AUTHORS



Kaushal Kishore

*Tender and
Pricing Lead*
GLOBAL COMMERCIAL
EXCELLENCE

Kaushal has 19 years of international experience across consulting and top pharma companies including Merck, Bayer, Amgen and Novartis. He has led pricing and tender excellence initiatives across portfolio stages and today works as a trainer and consultant, with a strong focus on AI applications in pharmaceutical commercial processes.



Marco Rauland

Vice President
MERCK KGAA

Marco, Executive Director at Merck, brings over 25 years of expertise in global pricing, listing and reimbursement strategy. His career spans senior leadership roles at GfK, Genactis and TNS Healthcare, where he developed and implemented market access solutions across multiple therapeutic areas and product lifecycles.



Oliver van Zon

*Vice President Market
Access Europe*
CRINETICS
PHARMACEUTICALS

Oliver is Vice President Market Access Europe at Crinetics Pharmaceuticals. With more than two decades in the biopharma industry, he has shaped global pricing and market access strategies at Amgen and Menarini-Stemline, and is recognised for his expertise in reimbursement negotiations and value-based models.

ABSTRACT

This white paper explores how companies, particularly in the consumer goods sector, can effectively respond to the growing unpredictability of tariffs and market disruptions. It argues that traditional reactive approaches are no longer sufficient in a landscape marked by sudden policy shifts, evolving consumer expectations, and economic volatility. Through historical context, case studies, and brand analyses, the paper reveals how pricing strategies, brand perception, and consumer behavior intersect to shape outcomes. It emphasizes the importance of integrated commercial planning, linking pricing, marketing, innovation, and demand forecasting to build resilience. The paper also highlights the transformative role of data intelligence and advanced analytics in enabling smarter, real-time decisions. Ultimately, it calls for businesses to shift from fragmented, siloed responses to holistic, insight-driven planning, positioning them to navigate uncertainty with greater clarity, agility, and strategic foresight.



THE YEAR GONE BY- GENAI USE CASES IN PHARMA PRICING AND MARKET ACCESS

Since the launch of ChatGPT in 2022, AI has accelerated and by becoming more mainstream, it has become one of the core priorities for companies across sectors including Bio-pharmaceuticals. No one wanted to be left behind as generative AI tools for instance showed their ability to transform how businesses engaged with end customers and their ability to optimize operations. The direction was clear. Departments and employees had to prioritize the adoption of AI and embed it into their day-to-day focusing on both immediate and long-term business value. “Experiment!” was the imperative and much heard beginner’s Best Practice. Unsurprisingly some good use cases have emerged in Life Sciences, some with tremendous business value and others with insights on how to bring AI into practice.

What follows are some of those recent use cases in the P&MA function in Bio-pharmaceuticals.

PRICE PREDICTION FOR TENDER SUBMISSIONS

According to Gartner, 25% of Pharma business is driven by tenders, a bidding process through which companies compete for government or private contracts. Tenders are mostly driven by price with winners often winning based on an offer anchored around the most competitive lowest price. Predicting competitors’ prices therefore becomes critical to winning the tender. Often companies will bid too low a price in order to maximize their chance of winning but in so doing are “leaving money of the table” from the manufacturer’s perspective. Curiously, the amount of science in this part of the process is, and depending on the companies, underwhelming considering so much money is unnecessarily left on the table.

One of the most interesting and emerging use cases is the prediction of tender bid prices that optimize the likelihood of winning and thus maximize the value for the bidding company. In a use case example by a company, a comparison of prices submitted through manual bidding versus an AI/ML-supported model was done. The ML program ran pricing scenarios using historical and competitive data and was used to predict competitive behaviors with a resulting optimal bidding price proposal. The results showed a clear benefit of the machine learning-based techniques over traditional methods with the proposed prices, and profits, being considerably higher. A word of caution though in blindly copying such an approach because the quality of the ML predictions are dependent on the consistency and availability of data. Unfortunately, the transparency of tender data varies strongly between countries as does the rigor by which companies track such data thereby making the AI/ML advantage more heterogeneous. Paradoxically, it could be argued that where tendering data is ubiquitous and transparent, ML-based pricing may lead to higher tendered prices, no doubt the opposite of what the tendering parties were aiming for. In any event, early AI/ML adapters will be more likely to get a competitive advantage.



PREPARING NEGOTIATION ARGUMENTS FOR PAYERS USING VALUE DOSSIERS

In the pharmaceutical industry, a Value Dossier is a document that provides evidence-based arguments of a pharmaceutical product that support its value proposition to the various stakeholders, such as healthcare providers, payers, and patients. The purpose is to systematically present the clinical, economic, and humanistic benefits of a drug or technology and thereby support its market access approval and reimbursement.

In another use case, the company attempted to create negotiation arguments based on typical payer questions which were prompted into the AI ChatGPT model. The model was trained by feeding content from the Value Dossier and based on prompts, negotiation arguments were prepared. Although the model was able to provide some rapid and good inputs, hallucinations however diluted the overall quality of output. Given the fact that it's a legal requirement to ensure that most accurate information is shared with respect to a medical treatment, an accuracy of 100% is needed. Hence this use case can be considered as a good attempt but not yet mature enough to be rolled-out. One approach to overcome this issue is to reinforce the time and resources available for output verification. This would seem fairly easy to bring about considering the considerable time savings from the AI-enabled argument generation phase. Another risk mitigation approach is to leverage the use of agentic AI to play the role of ML-enabled verifiers.

Another company developed an innovative solution that empowers pricing and market access professionals to rehearse complex negotiations using highly realistic avatars, that interact with the user. Conceptually close to the Mock Negotiation Workshop (MNW) approach, this tool²² leverages an immersive technology platform that simulates real-world negotiation scenarios, enabling users to practice and refine their negotiation strategies in a risk-free, interactive environment, providing feedback after each session. By learning the HTA systems specificities of the different countries, the solution also enables the realistic simulation of a negotiation in any given country, including countries that are often left out in MNW because they are too small or peculiar to be discussed in a plenary session.



DECISION SUPPORT PROMPTS

Pharmaceutical pricing and market access teams deal with vast quantities of data on a daily basis. These may include list prices, (confidential) net prices, discount details, reimbursement conditions and channel data from around 100+ countries. Furthermore, pricing business cases are evaluated on a sometimes-daily basis, launch sequences optimized, reimbursement discussions monitored, tenders submitted, contracts renewed etc. To make all this possible, teams have to coordinate, collect and review vast amounts of data and summarize the learnings for management's review and approval.

In another company, AI was used to provide insights to pricing and market access managers. This was made possible by pre-determined questions and prompts which the AI/ML model then responded to after navigating through historical data and summarizing the findings in the desired format (e.g. tables and graphs). This approach saved analytical time which in turn freed-up time to be spent on more strategic work. In addition, this approach enabled a higher level of accuracy by avoiding manual errors during calculations. However, although the accuracy and the speed by AI/ML was superior to human intervention, qualitative insights that arise have to be contextualized by experience and this is an area that still cannot be handled convincingly by AI/ML tools.

REAL TIME PRICE, VOLUME, MARKET SHARE CALCULATIONS AND RECOMMENDATIONS

In terms of treated patients, large portions of the market are increasingly commoditized as products lose patent and subsequently driven by tender dynamics. In addition, a major share of the market is driven by the out-of-pocket, retail segment where pricing decisions are primarily based on paying capacity. In such a dynamic space it is therefore key to monitor competitor price and market share movements. In this context of relative price differences, concepts like pricing elasticity are helpful to assess and predict prices and market share movements. This concept has been heavily used in the fast moving consumer goods industry and now some Pharma pricing teams have started using price-elasticities in their price determinations to optimize, through market shares and prices, their sales and margins in the retail segment.

AI/ML tools have proven more effective than traditional methods in both predicting the pricing elasticity quotient of drugs and in bringing in other variables into consideration. However, and as in the tender pricing prediction use case, the availability of consistent data is critical to its predictive success and so the opportunity to leverage AI/ML will be smaller in companies with reduced data infrastructure and/or that lack business teams that can generate quality data sets.



AI-BASED READING OF CONTRACTUAL DOCUMENTS

Contractual documents in Pharma include a wealth of data related to pricing, discounts, reimbursement etc. Fortunately, the contract documents are generally available in the country's SAP systems. However, one key challenge is their differing formats and the consistency of the information included. Another challenge is that the documents are redacted in the local language. As a result, the benefits of comparing documents between customers and countries has historically been limited. AI/ML tools can be very effective in reading these documents and extracting information in a structured way to enrich the data quality identifying outliers and improving the decision-making process.

In one company, they used AI/ML to read through contract documents available in SAP and extract pricing conditions and discount anomalies. Unfortunately, the success was limited due to technical limitations of the AI program in reading unstructured PDF documents. That said, AI/ML is continuously improving and the capability of its image recognition, content processing and contextualization will only increase and become ever more robust. This area therefore probably has the potential to be a game-changer in terms of identifying anomalies and process compliance.

PRICING GOVERNANCE

For years Pharma companies have reaped the benefits of innovation with products turning profitable positive in the growth phase and sometimes even as the early as the launch phase of the product life cycle. However, in the past 10 years the landscape has changed with ever fiercer post-patent competition by generics and biosimilars. In addition, even before patent expiry the increasingly crowded innovation space has put higher (in)direct pressure on prices and therefore the margins in the growth phases of the life cycle. Looking forward, these trends are likely to continue. In addition, legislative changes, for instance the Inflation Reduction Act in the United States, will add further price pressures.

Pricing governance has been a key lever for pharma companies to protect margins and limit unnecessary price erosion. This process is typically driven by a pricing policy which defines list and net price bands and which adapts over time. The analysis can also be based on margin impact calculations, competitive monitoring etc. and thus needs ongoing data collection, assessments and reporting. This analysis can be time-consuming for pricing teams and is further complicated if the data is collected inconsistently.

Fortunately, AI/ML techniques can ease this process and free up considerable time for pricing teams. Pricing managers spend a lot of time analyzing historical data which support their decision on approval/rejection of a business case. The use case in one company attempted to map the questions which a pricing manager would typically ask when working on a pricing business case. The AI/ML model provided prompt answers to those questions by assessing historical data. This saved significant time for the pricing manager as the answers were available promptly without having the need to comb through historical data. Such a model could be further improved by consistently feeding it with quantitative and qualitative data on price analysis/approvals. It shows the potential of improving the governance process in the future.

Use cases	What worked?	What can be improved?
Tender price prediction	AI/ML predicted tender-winning prices better than manual calculations	Consistent collection of high-quality data with better systems integration will lead to better results
Payer negotiation preparation	Faster negotiation arguments preparations but hallucinations while interpreting clinical efficacy data.	Rigorous and dedicated training for AI/ML model needed and to be complemented with human review
Decision support	Operational time savings and successful collection, analysis and reporting of data	Qualitative input assimilation and adding more variables to decision making parameters will further reduce the need for human intervention
Real time price decisions	Automated and more effective calculations of optimal price points based on market price-share movements	Consistent and robust collection of data including competitive insights will lead to better results
Machine reading of contracts	Initial AI/ML model Proof of Concept but with limited success due to technical limitations	Further accuracy in image and content reading required for game-changer potential
AI based pricing governance	AI/ML techniques can reduce the time taken for analysis and prompt pricing managers with insights to facilitate faster and more accurate approvals	Improve the consistency of internal and external data to enable more complex, contextualized decision support

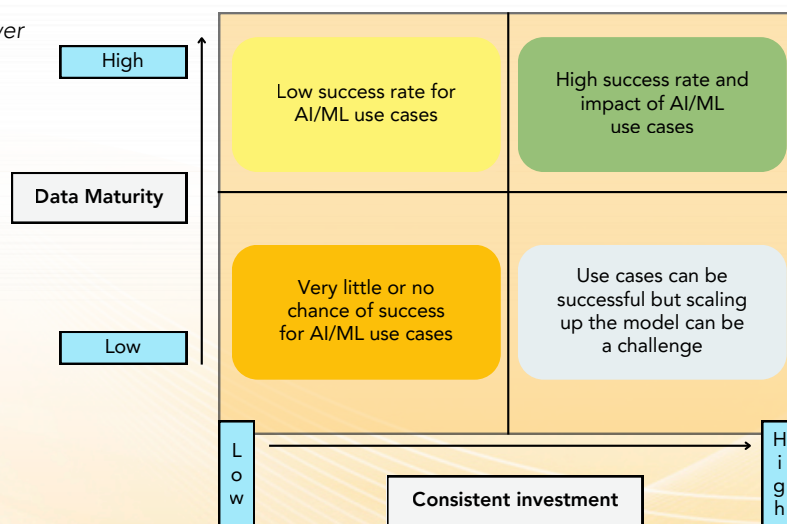
THE ACHILLE'S HEE

Although every company and function aspire to be implementing AI/ML, few have been doing this right in our opinion. The issue is that the Achille's heel in many companies and departments is often consistent, quality data. Since data sets are often incomplete, complex and/or dated, sub-optimal data has often been a key obstacle to the success of the implemented use cases.

Data quality and availability cannot be built in months and it takes years of consistent effort and diligence to build a solid repository of high-quality structured data that can be leveraged for AI/ML techniques. As organizations are understandably keen to lock in quick wins, they simultaneously miss the longer term, larger strategic picture of creating the data launch pad for future gains. Too often the patience and strategic vision to embrace that journey is lacking. This is further aggravated by frequent organizational changes which further derail initiatives, and especially those without rapid results.

As was illustrated by the multiple use cases, AI/ML thrives on quality data sets. To achieve a sustainable business impact a consistent effort and strategy are therefore needed to deliver results. This can only be achieved through consistent investments and a strategic data-oriented intent.

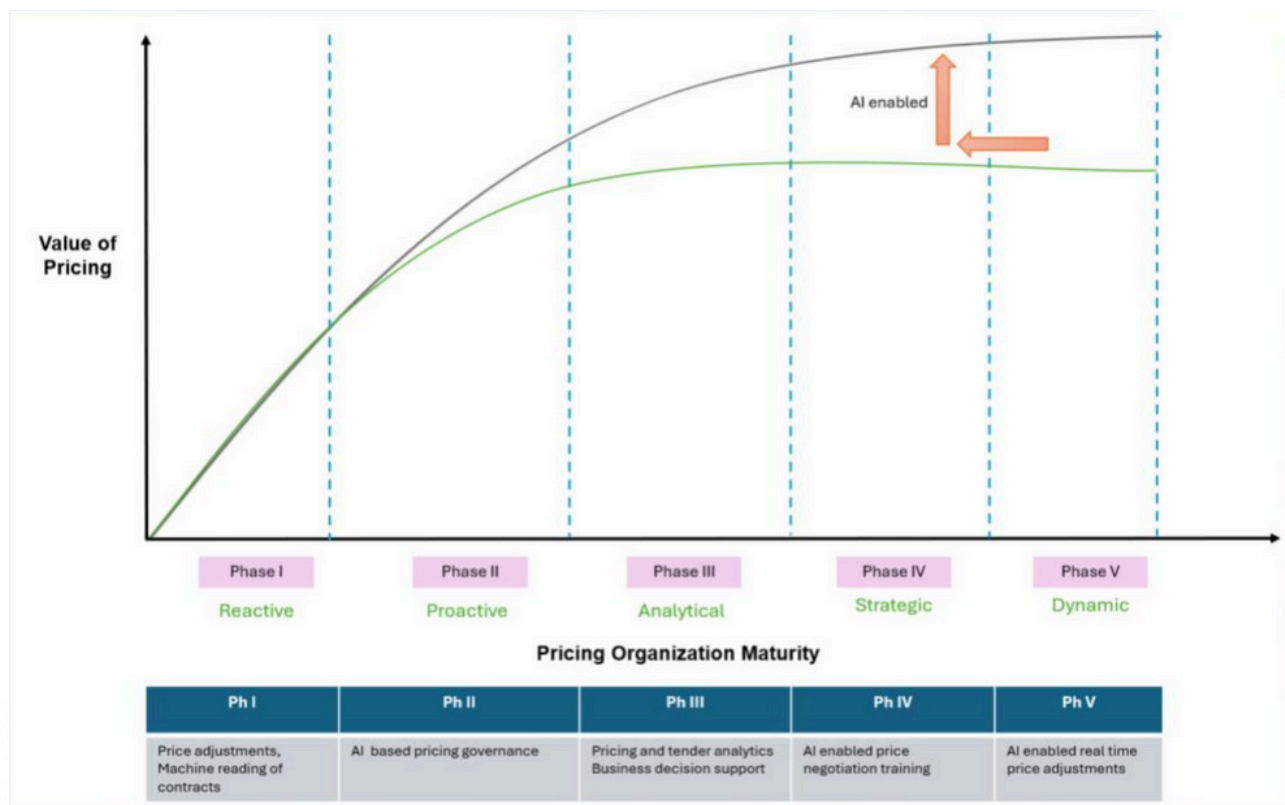
Figure 1. AI/ML data success-driver



THE JOURNEY TOWARDS PROMPT PRICING

The multiple use cases have shown how pricing and market access department can leverage AI/ML to accelerate decision-making processes, create better decisions, more process efficiencies and generate longer term strategic value. Experimentation, the Beginner's initial Best Practice, is helpful but should be complemented with a long-term data strategy. Such a "experimentation with a purpose" can accelerate an organization's pricing management maturity road map such that it enables both a faster progression and a higher value-add at every stage.

Four steps are required for such purposeful experimentation: set the vision, set the strategy & experimentation use case plan, develop the organizational technical capabilities and finally an active change management by leadership. Leveraging the phases of an organization's pricing maturity level, what follows are how and where some of the miscellaneous AI/ML use cases can be placed to guide and accelerate the pricing (and P&MA functional) maturity:



New staging:

I Ad-hoc pricing, II price management, III competitive differential pricing, IV price segmentation, V dynamic pricing



THE FUTURE TOWARDS PROMPT PRICING MATURITY

As more companies embrace AI technology, there will be more opportunities for professionals with knowledge in machine learning and prompt engineering to accelerate their careers. Unsurprisingly there is already a huge demand for engineers and data scientists skilled in this area – a trend that looks set to continue. Interestingly, the line between the IT and the business skill set is getting blurred. IT teams need to better understand the purpose of the pursued analytics and so acquire more business skills. Conversely, given the centrality of data integrity, it is also important for business teams to have some level of understanding about the software techniques being applied and because an integrated ownership of data will be critical in an organization.

In pricing specifically, the future probably belongs to those dynamic pricing analysts and strategists who are able to craft precise pricing prompts, who understand the translation rules and who can leverage the AI tools to achieve specific results to optimize pricing. In smaller leaner organizations, it will be critical to combine both the AI/ML operational capabilities with the strategic pricing capabilities into one person.

THE KEY TO SUCCESS

It's not the rules of the game but the game itself which is changing. The rules have not changed since high quality data and organizational capabilities were and continue to be important. But the game has changed. As organizations are adapting to the opportunities of AI/ML at different paces, there is now also a unique opportunity to go through the pricing, and why not organizational, maturity levels much faster than ever and adding a value much higher than ever!

Over the last year the use cases have reminded us of the centrality of data, the need for an overarching strategic AI/ML vision and the need to develop AI capabilities amongst employees. As if that is not enough and beyond P&MA, it will be critical for IT departments to collaborate more intensely with P&MA. Historically the P&MA function is used to working intensely cross-functionally ranging from medical affairs to commercial to regulatory. IT was not historically a cross-functional partner to that same level of intensity, but they will need to be in the future. That future is here today, and so is the imperative.



REFERENCES

- Interviews-Praful Mehta (CEO-Vamstar)
- Interviews-Gianclaudio Floria (Head of European operations - Pharmsight GmbH)
- Interviews Pol Vanaerde (EPP)
- LinkedIn survey



ABOUT EPP

"EPP is dedicated to providing professional guidance, adding value, and co-creating impactful learning journeys, events, and content to improve top-line revenues and profitability. Our new quarterly publication, EPP Pulse, is designed to further this mission by gathering actionable insights, monitoring the market, and collecting success stories and relevant case studies for the benefit of the pricing and RGM community.

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."

More on www.pricingplatform.com

TRAININGS

CERTIFICATION

EVENTS

BODY OF KNOWLEDGE

RESOURCES

COMMUNITY

Everyone wants inspiration. Call us, we help.

Pol Vanaerde, *President EPP*



[linkedin.com/in/pol-vanaerde-152365](https://www.linkedin.com/in/pol-vanaerde-152365)

Ani Dungerwal, *Senior Digital Marketeer*



[linkedin.com/in/ani-d-95279550/](https://www.linkedin.com/in/ani-d-95279550/)