

WHITE PAPER

Transforming Pharmaceutical Rebate Management with Artificial Intelligence

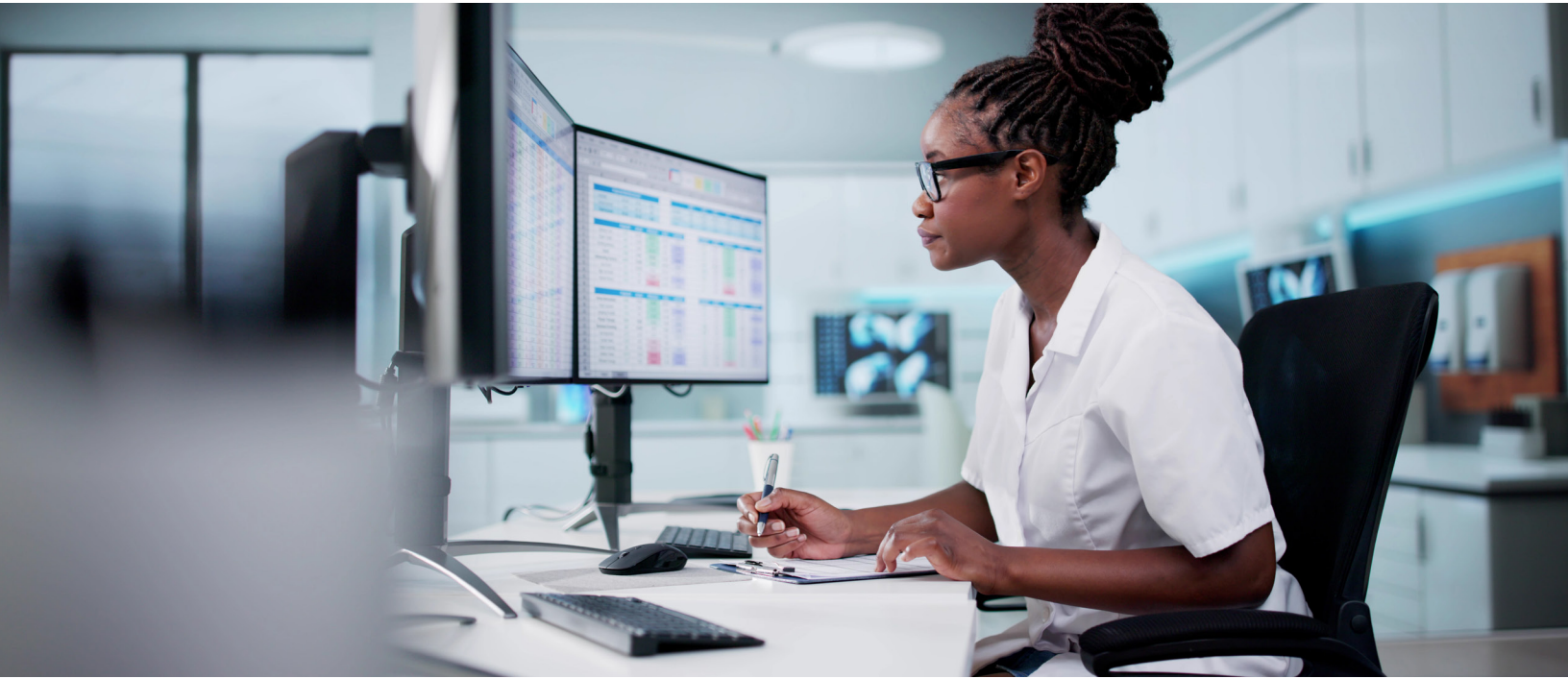


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The Current Landscape of Pharmaceutical Rebate Management

Effective rebate management is a crucial aspect of today's supply chain operations in pharmaceutical manufacturing and can impact up to 25% of the company's revenue (Gould, 2024). Rebates help ensure product distribution, impact an organization's financial performance, advance supplier relationships, and improve overall operational efficiency. Managing these rebates requires multiple areas of the supply chain to collaborate, including procurement, accounting, product management, revenue management and legal professionals (Shivaraj, 2024).

Rebate agreements are complex documents due to their scale, sensitivity and revenue importance. Many pharmaceutical companies manage between 5,000 and 50,000 of these important agreements, which, like the 340B Drug Pricing Program (Health Resources & Services Administration, 2024), often exceed 200 pages and contain multiple amendments. They include an abundance of critical information, like eligibility criteria, rebate rates and calculation methods. Furthermore, no two rebate agreements are the same and they often change at the last second (Shivaraj, 2024).

Pharmaceutical companies frequently rely on time-consuming and error-prone manual processes to handle these rebates and to ensure they comply with regulatory requirements. Highly educated rebate managers and contract teams spend considerable resources gathering, summarizing and analyzing these documents with legacy processes that often lead to missed opportunities, financial losses and strained supplier relationships. Jon Grundy, Senior Technical Consultant of EncompaaS shares, "[Rebate managers] were spending over 400 human hours per quarter manually reading through these contracts and extracting key data out of them to transfer into a spreadsheet. I won't mention the monetary value, but it was a significant cost to the company to carry out this process."

As pharmaceutical supply chains continue to grow and evolve, manufacturers must address the key challenges involved in rebate management like complexity, data quality, tedium, scale and stakeholder management in a structured, holistic and streamlined way. Organizations that prioritize optimizing their rebate management processes will be better equipped to achieve sustainable growth and a competitive advantage in the future (Shivaraj, 2024).



Transforming Rebate Management with Artificial Intelligence

Time is one of the most important resources for pharmaceutical companies. A survey of more than 500 biopharmaceutical leaders showed that speed-to-market is at the top of their “must-haves” list for pharmaceutical manufacturers (Myers, 2022). Indeed, accelerating drug development presents a substantial revenue opportunity, with an estimated daily value of between \$500,000 to \$6.5 million, enhanced profitability and a significant competitive advantage (Hill, 2024). Unsurprisingly, many organizations have been quick to adopt Artificial Intelligence (AI) to automate time-consuming manual processes, thereby significantly accelerating speed-to-market. Today’s AI-driven technologies may accomplish in seconds what used to take weeks, months or even years (Gould, 2024; Microsoft, 2024).

Adopting AI in rebate management offers additional benefits, including improved data quality by ensuring accurate, consistent data extraction analysis which reduces human errors and improves compliance and auditing. Further benefits comprise real-time insights and analytics that enhance decision-making, communication and negotiation, allowing managers to focus on strategic activities. Additionally, AI solutions handle increasingly vast volumes of contracts and data, supporting scalability without the need for extra resources (Gould, 2024).

One of the AI-based solutions used by the pharmaceutical industry in general and in rebate management specifically is Intelligent Document Processing (IDP). It combines Optical Character Recognition (OCR), Natural Language Processing (NLP), Supervised Machine Learning, and AI-powered analytics to capture, extract, transform, process and visualize key information, and optimize rebate strategies. The technology not only reduces manual effort and errors but also ensures greater consistency and accuracy in contract metadata extraction (Gould, 2024; Microsoft, 2024).

Optimizing Rebate Management with EncompaaS

Overview of the EncompaaS Platform

A global leader in information management, EncompaaS empowers highly regulated enterprises to rapidly mitigate compliance and privacy risks, while unlocking the full potential of their data.

EncompaaS’ intelligent information management platform is designed to help pharmaceutical companies achieve three key metrics to getting value from their rebate contracts:

1. **Scale:** the ability to analyze thousands of contracts and amendments
2. **Accuracy:** the ability to analyze these documents accurately with little or no human intervention required
3. **Speed:** the ability to do it quickly because answers are needed in minutes, not days or weeks.

The platform combines advanced AI technologies into a comprehensive solution providing a scalable and efficient way to enhance accuracy and operational efficiency across the rebate management process.



Grundy explains “When [our client] approached us, they asked if we could find a way to automate this critical business process [...] finding all the information pertaining to rebate contracts and amendments, copying it from the original agreements, putting it in a central repository, making sure it’s always up to date and accurate. That’s ultimately what we did. We built an end-to-end solution to achieve this.”

“The machine learning technology [...] is specifically designed for contract documents, and it’s already pre-trained on many millions of other contracts. It knows what a contract looks like and, what terms and conditions to look for,” says Grundy.

Key Features of the EncompaaS Platform

One of EncompaaS’ core capabilities is its AI-powered data extraction using Supervised Machine Learning. The process is designed to automatically scan and extract information based on pre-defined metadata from contracts, including master agreements, amendments, and associated documentation. Extraction properties include agreement types, effective and end dates, termination notices, eligibility conditions, look back periods, 340B utilization, product name and strength, rebate percentages by tier, dispute windows, best price and net floor price, among others.

Once the platform has scanned the content of contracts and extracted key information, it consolidates all agreements and amendments related to rebates into one centralized repository and can act as a single source of truth for managers and other stakeholders to reference. This comprehensive collection of data is continuously updated as new contracts and amendments are detected and processed, ensuring that information is always current and easily accessible.

The platform can handle complex calculations, including rollups and correlations. It displays the latest data from both the original agreement and any amendments in real-time. Without having to look at the documents, managers can see the current rebate percentages specified in the latest relevant amendment.

EncompaaS also offers analytics tools that enable managers to analyze data, identify trends and optimize rebate strategies. These capabilities are complemented by real-time visualizations and customizable dashboards, which present the data in a user-friendly format.

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Finally, EncompaaS includes features that address compliance and risk management, such as flagging potential regulatory issues related to current data privacy laws, such as the California Privacy Rights Act (CPRA). This ensures that all rebate management activities adhere to the necessary legal standards.

“From an information management and record-keeping perspective, this is what EncompaaS is really designed to do—find all of your corporate information across the entire enterprise and give you a single place to manage that information, whether it’s meeting your compliance and record-keeping requirements or utilizing that data for other purposes,” Grundy highlights.

Key Benefits of the EncompaaS Platform

The EncompaaS platform revolutionizes legacy rebate management and offers various benefits to pharmaceutical companies.

Automatic document processing at scale

Legacy document processing and data extraction involves scanning thousands of documents, amendments and associated information for a clause and copying it into a spreadsheet. Using AI-powered data extraction tools, EncompaaS automates this process and saves rebate contract teams hundreds of hours per quarter by eliminating manual processing.

High accuracy in data extraction and validation

The machine learning algorithm used in the EncompaaS platform is specifically designed for contract documents and is pre-trained on millions of examples. The platform is further refined with individual samples from the pharmaceutical company. Through these measures, EncompaaS achieves an accuracy beyond 95%, which surpasses human capabilities.

“It’s impressive that the machine performed better than the human in most cases. Machine learning is never 100% accurate, but neither is a human. The fact that we can do better than a human [by automatically extracting data compared with manually copying and pasting this into spreadsheets] represents a huge time-saving for the company,” Grundy says.

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Fast search and high visibility in seconds

The EncompaaS platform enables various stakeholders to create custom visual dashboards or tabulated entries in spreadsheets in seconds, which allows pharmaceutical companies to efficiently report on rebate performance and assess with accuracy the true profitability of any given drug.

Empowered teams and stronger vendor relationships

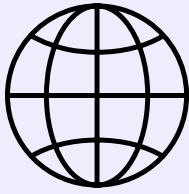
Improved rebate transparency from accurate, real-time rebate data allows pharmaceutical companies to strengthen the relationship with payers, pharmaceutical benefit managers and government agencies as well as with their own teams.

Risk-free AI environment

EncompaaS is designed with security and compliance in mind. The platform is hosted in a secure, closed environment, ensuring that sensitive data is protected and that AI is used responsibly.

EncompaaS enables employees to benefit beyond optimized business processes. “One of these [...] managers had built their own dashboard. [With it,] she could clearly see at an instant glance that in the next quarter, she had 10 major agreements coming up for expiry, so she knew she’d be extremely busy. She could now plan for other important things in her life, like spending time with her family or booking holidays,” Grundy recalls.






CASE STUDY:

Application of EncompaaS in a Leading Pharmaceutical Manufacturer


A global leader in pharmaceutical manufacturing sought to understand how vendor rebates affect a drug's revenue. The analysis involved tens of thousands of master contracts and amendment documents with huge volumes of data in inconsistent formats. To streamline the analysis, the organization reached out to EncompaaS.

Using its advanced AI-powered Intelligent Document Processing solution, EncompaaS built and trained a model with exemplar contracts from the pharmaceutical company to automatically extract rebate data from different formats and visualize this information in dashboards for comprehensive analysis.


Implementing EncompaaS resulted in:

 **10,000+** contracts and amendments analyzed using AI

 **140,000** data points extracted

 **95%** data accuracy rate achieved on average

 **4,000** hours saved in manual processing per quarter

 **150%** improvement in speed to source specific data points

 **90%** increase of finding commercial or contractual risks in data

 **Tens of millions** of dollars saved each year for their rebate program

With EncompaaS, the pharmaceutical organization has successfully automated a critical business process touching core revenue streams, enabling the business to assess with accuracy the performance of vendors and the net effect of rebates on a drug's revenue. The insights gained are now supporting them in making informed business decisions on drug pricing and sales targets, and to assess the true profitability of a drug.



Conclusion

EncompaaS revolutionizes pharmaceutical rebate management by performing weeks of tedious rebate data extraction and analysis work in seconds. This AI-driven solution enhances speed, accuracy, scalability and compliance, and empowers organizations to make faster more informed decisions while optimizing operational efficiency. By streamlining rebate management processes, EncompaaS not only saves significant time and resources but also enables pharmaceutical manufacturers to strengthen relationships with vendors and enhance overall profitability.

References

Gould, D. (2024). Transforming Rebate Contract Management in Pharmaceuticals: The AI Advantage. *The Journal of mHealth*. <https://thejournalofmhealth.com/transforming-rebate-contract-management-in-pharmaceuticals-the-ai-advantage/>

Health Resources & Services Administration. (2024). 340B Drug Pricing Program. Retrieved August 30th from <https://www.hrsa.gov/opa>

Hill, B. (2024). Generative AI and its Impact on Speed to Market for Pharmaceuticals. *The Journal of mHealth*. <https://thejournalofmhealth.com/generative-ai-and-its-impact-on-speed-to-market-for-pharmaceuticals/#:~:text=Did%20you%20know%20that%20it,accelerate%20insight%20and%20content%20generation>

Microsoft. (2024). Intelligent Document Processing. Retrieved August 15th from <https://adoption.microsoft.com/en-us/intelligent-document-processing/>

Myers, C. (2022). The Need for Speed: How Operation Warp Speed Shifted the Pharma Industry. *Pharmaceutical Technology*, 46(1), 32-33.

Shivraj, G. (2024). Optimizing Rebate Management in Supply Chain Operations, *International Journal of Advanced Research in Engineering and Technology (IJARET)*, 15(3), 110-118.



For more information about EncompaaS and how can help make rebate management a dream in your pharmaceutical organization, please contact us at:

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