



THE USE OF AI THROUGH THE TENDER MANAGEMENT JOURNEY

How to harness its power for efficiency & profitability

Tender & deal management play a pivotal role in the Life Sciences industries.

In Pharma, MedTech and Digital Health Solutions tenders serve as a significant revenue stream. For medical technology companies, these bidding processes, required by public hospitals to procure goods and services, often constitute a substantial portion of their revenue, [ranging from 70% to 85%. Similarly, pharma companies can attribute a significant share of their income, ranging from 25% to 40%, to tendering*](#). In the case of off-patent molecules (generics, biosimilars) it can go up to over 80%.

Despite their importance, these processes have historically remained predominantly manual, resulting in time-consuming and error-prone operations.

The complexity of tender management in these highly regulated sectors demands precision and efficiency, making it increasingly imperative for companies to explore innovative solutions, including the integration of AI technologies, to streamline and optimize their tender and deal management workflows.

In the dynamic landscape of healthcare procurement, [AI and Machine Learning](#) are driving significant change. From intelligent automation and digital process mining to advanced analytics, these technologies are reshaping the tendering world. Yet, the true game-changer is generative AI, which can synthesize new content from existing data. In this article, we explore generative AI's profound impact on procurement and discover how businesses can use this technology to make more informed decisions, mitigate risks, and achieve cost optimization, all from a high-level perspective.

As we begin our exploration of AI's impact on bidding & tendering, we'll break down its application across [the seven steps of tender management: discovery, qualification, preparation, evaluation, approvals, submission, and governance](#). Each section will unveil how AI empowers Life Science organizations to optimize their tender journey, enhancing efficiency, profitability, and decision-making at every turn.

Let's get started!



1. Strategic Foundations: Leveraging AI for the critical Tender **Discovery and Qualification** steps.

In such a competitive landscape, opportunities are abundant, but resources are limited and the journey of tender management begins with the crucial phases of **Discovery and Qualification** (see Fig.1 for the 4 different phases).

These initial steps set the stage for success, and the use of AI-driven solutions proves to be a game-changer.

The Challenges:

1. Diverse Tender Sources:

One of the fundamental challenges faced by Life Science organizations is the influx of tenders from numerous sources. This diversity can quickly become overwhelming, making it imperative to efficiently filter through and prioritize opportunities.

2. Resource Allocation:

Effective resource allocation is paramount. Organizations must direct their limited resources cautiously, focusing on tenders that align with their product portfolio and manufacturing capacity.

3. Regulatory Compliance:

The pharmaceutical industry operates within a highly regulated environment. Each tender typically comes with specific regulatory requirements and quality standards that must be met, adding an additional layer of complexity to the qualification process.

4. Risk Management:

Assessing the risks associated with each tender is a time-consuming yet critical task. Factors such as supply chain complexities, regulatory hurdles, and market competition need to be carefully evaluated to avoid costly issues down the line.

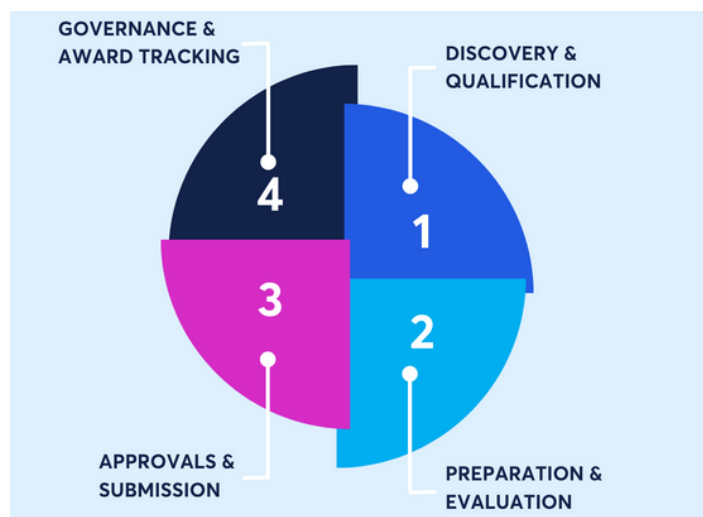


Fig.1: Tenders & deals lifecycle | The 4 phases

The AI advantage in Tender **Discovery and Qualification**

In the pursuit of uncovering the most relevant tender opportunities and valuable insights, in Cube RM, we leverage Large Language Model (LLM) capabilities, to analyze and generate human-like text, enabling seamless automation of document processing and data extraction across multiple languages. Through automated processes like web page scanning and fetching, coupled with focused web crawling techniques designed to seek out specific information and topics, our AI-driven system ensures that Life Sciences organizations can identify, assess, and capitalize on the most relevant tenders and market insights.

Discovery of relevant tenders:

We have established a procedure to extract tenders in situations where specific requirements are needed beyond simple keyword search. Our technology enables us to train the AI model to understand the context of each customer's business and product portfolio, enabling the qualification of tenders using alternative terminologies, therapeutic areas, product classifications, etc., resulting in more accurate tender qualification and noise reduction.

Tender Details:

We use AI to derive meaning from unstructured texts, scan procurement documents, and extract all relevant details, including product information, into a structured format through text parsing.

This process results in a valuable outcome for our customers, enabling us to identify and extract all necessary information about a product out of each procurement document that can then be used as a filtering option.



We harness AI to not only unveil the product category but also to pinpoint the precise product from our extensive portfolio that aligns perfectly with the tender requirements. This capability allows for the seamless auto-mapping of tender products to our SKUs.

Benefits:

- **Efficiency:**

AI streamlines operations, reducing manual effort and increasing productivity.

- **Increased Tender Discovery:**

AI finds tenders with specific requirements and opens up opportunities that might have been overlooked using traditional methods.

- **Competitive Edge:**

Being able to identify, assess, and capitalize on the most relevant tenders & market insights faster than competitors can provide a significant competitive advantage. This positions the business as a proactive and agile player in the market.

- **Noise Reduction:**

AI's contextual understanding & qualification capabilities help reduce noise in the tendering process. By filtering out irrelevant tenders and focusing on those that align with the business's core competencies, resources are allocated more efficiently.

In the next stages of our journey through the tender management process, we'll continue to explore how AI enhances efficiency & profitability, through the remaining steps of preparation, evaluation, approvals, submission, and governance.

2. AI-Enhanced Tender Preparation & Evaluation: Paving the Path to Competitive Excellence

The next steps of [Preparation and Tender Evaluation](#) emerge as critical junctures, where AI-driven solutions can really make a difference. These phases hold the key to crafting winning responses and predicting optimal pricing, addressing several complex challenges head-on.

The Challenges:

1. Pricing Complexity:

Estimate optimal bidding price for a product portfolio in pharmaceutical products in response to tenders is a multifaceted challenge. Factors such as market fluctuations, regulatory constraints, and varying customer requirements add layers of complexity to this crucial task.

2. Preparation & Supply Availability:

Coordinating efforts among multiple departments, including manufacturing, demand planning, pricing, marketing, product teams, legal, and others, can be challenging but is essential to ensure a well-rounded tender proposal. Also, ensuring that manufacturing and demand planning can confirm supply availability is crucial for meeting procurement requirements and avoiding potential disruptions.

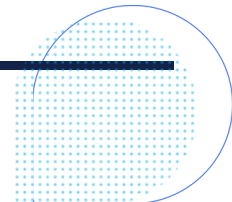
3. Competitive Positioning:

Navigating the fine line between overpricing and underpricing, while also determining the competitiveness of pricing and response quality compared to other bidders, is a daunting task.

The AI advantage in Tender Preparation & Evaluation

When it comes to tender preparation & pricing, having an AI-based tool at your disposal can make all the difference, by providing valuable insights and data-driven guidance.





We are using AI in our [predictive pricing algorithm](#) which instantly analyzes a multitude of factors, running through thousands of pricing scenarios in seconds, incorporating key competitor information for each tender, allowing you to assess their potential pricing strategies. By doing so, it provides invaluable [insights into winning probabilities at critical price points](#) and gives a strategic advantage in the decision-making process.

Benefits:

- **Optimized Pricing:**

Predictive guidance for competitive bids, maximizing the chances of winning while maintaining profitability.

- **Regulatory Compliance:**

Reduced risk of errors and penalties.

- **Competitive Advantage:**

Enhanced bidding and response quality.

In the following stages of our exploration, we will continue to unveil the transformative power of AI as we delve into the remaining steps of approvals, submission, and governance. These phases are where AI not only streamlines operations but also empowers organizations to achieve long-term success.

3. Efficiency and Excellence in Tender Proposal Approvals and Submissions: Navigating Regulatory Complexities for Success

The phases of [Approvals and Submission Proposal](#) stand as the gatekeepers of success. These stages carry the weight of creating meticulous and compliant tender proposals that meet regulatory requirements while adhering to unforgiving submission deadlines. Keep reading to understand the complex challenges and ingenious solutions that make these steps a pivotal part of the tender management journey.

The Challenges:

1. Proposal Complexity:

Crafting winning tender proposals demands expertise in an array of domains, from in-depth knowledge of regulatory standards to an understanding of intricate product specifications and tender-specific requirements. Navigating this multifaceted landscape is a challenge that demands precision.

2. Time Sensitivity:

In the world of pharma & MedTech tenders, time is a precious and limited resource. Strict submission deadlines require proposal generation to be not only efficient but also error-free to prevent late submissions, which can be detrimental to success.

3. Regulatory Compliance Check:

The pharmaceutical industry operates within a web of intricate and ever-evolving regulatory standards. Ensuring that each proposal aligns meticulously with these standards and other tender-specific requirements is a complex and mission-critical task.

Generative AI holds immense potential in proposal generation for tendering and bidding processes.

By leveraging natural language generation capabilities, [generative AI can automatically create well-structured proposals](#). It can analyze the specific requirements of a tender, generate detailed responses, and craft coherent narratives that align with the client's needs. This not only saves valuable time but also ensures consistency and quality across proposals.

Benefits:

- **Efficient Proposal Generation using GenAI:**

Saves time while maintaining quality and compliance.

- **Regulatory Compliance:**

Mitigates the risk of regulatory issues and penalties.

- **Deadline Adherence:**

Ensures timely submissions, avoiding disqualifications.

- **Quality Assurance:**

Consistently high-quality proposals align with unique tender requirements.

As we continue our journey through the tender management process, the next phase of Governance awaits exploration.

4. AI-Enabled Governance: Tracking outcomes & awards in Tender Management Excellence

In the concluding phase of Governance within the tender management journey, the spotlight falls on Tracking Outcomes and Award Scoring, where the integration of AI transforms the landscape.

The Challenges:

1. Lack of Historical / Past Insights:

Understanding the factors behind the selection of winning bidders in past tenders and why some competitors were awarded contracts while others were not remains a challenge. The absence of historical data analysis hinders organizations from gaining valuable insights.

2. Competitor Assessment:

Evaluating competitors based on award criteria such as pricing competitiveness, product quality, delivery capabilities, and regulatory compliance is a resource-intensive task.

3. Future Tender Strategy:

Data-driven decision-making for future tenders, including simulations and response evaluations, holds the key to optimizing resource allocation and increasing contract win rates.

In conclusion, the Governance phase within the tender management process, enriched by AI, offers a panoramic view of outcomes and award scoring.

It empowers organizations to embrace transparency, streamline assessments, harness competitive intelligence, and make data-driven decisions.

The AI advantage in Tender & Awards Tracking

In Cube RM we have deployed workflow automation technologies, enabling us to coordinate the often-complex sequence of tasks involved in tendering. By automating these steps, we significantly reduce the need for manual intervention, ensuring a faster, more efficient tendering cycle. This not only saves time but also minimizes the potential for human error.

Furthermore, we employ workflow mining, a data-driven approach, to scrutinize historical data and identify patterns and trends within our tendering workflows. This analysis allows us to pinpoint bottlenecks, inefficiencies, and deviations from best practices, which we can then address proactively.

Repetitive tasks, which have historically consumed significant time and effort, are now automated thanks to AI. This means that tasks such as data entry, document sorting, and basic data validation are handled automatically, freeing up your team to focus on higher-value, strategic aspects of the tendering process.

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AI-driven solutions are pivotal in extracting award details from tendering documents. Through the application of natural language processing (NLP) and machine learning, our systems can automatically extract crucial information such as the awarded value and the names of awardees.

This information is invaluable to our customers, empowering them to build comprehensive market intelligence, track industry trends, and make informed business decisions with confidence.

Benefits

• Informed Decision-Making:

Data-driven insights inform decisions for future tenders.

• Increased Win Rates:

Simulations and tender analysis & evaluation optimize bids for success.

• Strategic Planning:

Historical award insights inform long-term strategy and market positioning.

AI's capacity to extract valuable insights is a game-changer in the business landscape. Unlike manual efforts, AI can process vast volumes of data instantly and efficiently, enabling organizations to uncover hidden opportunities, providing a holistic view that would be practically impossible to achieve with just human effort.

This ability to distill meaningful insights from complex and diverse data empowers pharma & MedTech companies to make informed decisions, refine strategies, and stay ahead in today's data-driven world.

In essence, our commitment to leveraging AI technologies in the tendering process is not just about saving time and reducing manual effort; it's about revolutionizing efficiency, consistency, and decision-making, ultimately delivering a superior tendering experience and bid management for both our clients and their stakeholders.

Content developed through joint conversations with our partner [Robertjan Van Amstel De Vries, Commercial \(Markets\) Leader LS Sales & Marketing ISG at Cognizant](#), exploring the applications of AI in Tender Management.

**Source: Cognizant -Tender and deal management: The journey to excellence*

Looking to capture more tender data & insights?

Reach out to learn more about [Tender BI](#), our AI-based Intelligence & Data Visualization platform that supports your strategy & decision making for tendering in the Life Sciences.



The screenshot displays the CUBE Tender BI interface. At the top, there are navigation tabs for 'Tender Calendar', 'Tender Details', and 'Lot Details'. Below this, a 'Total Tenders' section shows 273 tenders, with a progress bar indicating the status of 'Anticipated', 'Active', and 'Past' tenders. A table lists tender details with columns for 'Type', 'ID', 'Country', and 'Publication'. Below the table, there are two main charts: 'Award Criteria' and 'Year on Year Trend'. The 'Award Criteria' chart is a horizontal bar chart showing the percentage occurrence and average weighting for various criteria like Price-Commercial, Product-Technical Features, Quality, etc. The 'Year on Year Trend' chart is a line graph showing the percentage of MEAT vs Price-Only tenders from 2020 to 2022. A 'CONTACT US' button is located at the bottom left of the screenshot.

