Transforming Procurement with AI:
Opportunities, Challenges, and Best Practices
Abstract

Procurement leaders have been cautiously intrigued by the potential of Artificial Intelligence (AI) in recent years. While the subject was fascinating, it still seemed far off and futuristic. However, everything changed at the end of 2022, when AI suddenly became tangible and essential, driven by breakthrough tools like ChatGPT and Google’s chatbot Bard. These mindblowing technologies have made AI a must-have tool for procurement professionals, redefining what’s possible in the industry.

As companies across diverse industries race to adopt AI for a competitive edge, procurement leaders are left wondering how they can leverage this transformative technology in practical ways to achieve a material advantage. Fortunately, this white paper offers a range of approaches for procurement executives looking to integrate AI into their operations.

From harnessing the power of AI-driven innovation to unlocking procurement’s potential, this paper delves into the rise of AI-powered strategies and the potential for procurement to take a quantum leap beyond traditional methods. The document provides a comprehensive guide to help procurement leaders navigate this rapidly-evolving landscape and capitalize on the advantages that AI offers.

As the industry-wide theme of AI continues to gain momentum, it’s crucial for procurement leaders to stay ahead of the curve and explore the possibilities of this groundbreaking technology. Whether you’re looking to power up your procurement processes with AI or rethinking procurement altogether, this white paper provides valuable insights to help you make the most of AI in your operations.
Reducing Time-to-Value in Procurement: Leveraging AI for Strategic Impact

It’s undeniable that a significant portion of procurement functions still rely on manual processes or outdated and inefficient technology. Generally, this can negatively impact the efficiency and effectiveness of organizations striving to modernize their operations and gain a competitive advantage.

Procurement leaders recognize the need for change, but they face several challenges when it comes to implementing new technology solutions. Some organizations strive to determine the right technologies to adopt or the most important use cases to tackle, while others struggle with motivating their team and adopt new solutions that would change their work processes. Artificial Intelligence can help procurement leaders overcome these challenges and unlock the potential of their organizations. But what are exactly these challenges?
Empowering Procurement Professionals with AI: Practical Applications

Procurement leaders face significant challenges in reducing the time-to-value in today’s fast-paced business environment:

- Firstly, their teams spend too much time on routine tasks that can hinder the focus on strategic initiatives driving practical value for the organization. This can lead to missed cost savings, increased risk, and reduced innovation.
- Secondly, and related to the first point, employees may experience frustration and burnout due to the repetitive and time-consuming nature of these tasks, resulting in decreased engagement and morale, as well as higher turnover rates.
- A third issue to be considered is risk mitigation, in particular with the current climate of geopolitical unrest and economic downturn. In the modern business landscape, it can be very challenging to stay up-to-date with global events.

To tackle these problems, organizations can leverage AI and machine learning technologies to automate typical procurement tasks such as certificate validation, supplier onboarding, research, risk and performance monitoring, as well as invoice-PO matching in the procure-to-pay process. This can help save time, reduce errors, and free up resources for strategic initiatives that improve time-to-value.

In summary, reducing the time-to-value in procurement requires a shift away from routine tasks towards more strategic initiatives. Automation using AI and machine learning can help achieve this goal by freeing up resources, reducing errors, and providing employees with opportunities for growth and development. In the next section, we will see exactly how.
As stated before, despite advancements in technology, many procurement functions continue to heavily rely on manual processes, which can lead to inefficiencies and limitations in the daily activities performed by procurement professionals. Also, they have been tasked with more activities that go beyond the simple PO creation and expand into other areas such as vendor compliance, managing discounts or preparing budgets.

In addition, according to the “Levvel” Research conducted involving over 297 Procurement professionals (see chart below), a large portion of the Procurement Employee tasks hovers around the following main topics:

- Researching and evaluating suppliers
- Creating purchase orders
- Qualifying and assessing suppliers

Source
In light of the recent surge in generative AI tools, numerous companies are racing to create AI-powered solutions for procurement professionals. However, there is a risk that some of these tools may not adequately address the challenges faced by these professionals or be tailored to practical use cases, resulting in inefficiencies and wasted resources. To develop truly valuable AI tools, it is crucial to address key questions such as:

1. Do we have enough of the right kind of data?
2. What business case clearly articulates the benefits for our organization?
3. How will the human-machine collaboration work?

Furthermore, “manual data entry and inefficient processes”, as shown in the other chart below, is still the biggest challenge for procurement departments:

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Nowadays, many organizations are developing AI tools without fully considering the primary objectives of their clients. It is now more important than ever to acknowledge that AI is no longer just a buzzword, but a practical approach to creating value. And businesses across multiple industries are already aware of this fact.

While leveraging the multiple subfields of AI, such as OCR, NLP, or smart recommendation, can be beneficial, it is essential to have effective use cases to solve problems successfully. To truly empower procurement professionals and free them from tedious tasks, consider these practical applications of how a robust AI/ML model can make the work of procurement teams easier and more empowered.

A first, practical application can be found in the supplier relationship and onboarding process, where hundreds of certificates and documents might be required to evaluate suppliers before doing business with them. Manually checking each document can be an error-prone and repetitive task. However, using a combination of machine learning (ML) and OCR technology, supplier documents can be automatically validated without the need for human intervention.

In fact, a ML algorithm can deliver results in a matter of seconds, unlike manual checking, which could take up to two minutes for a simple document. Considering the need to verify multiple documents daily, an AI system’s time-saving benefits can be significant.
Another ML model can analyze multiple data points together to instantly:

- identify specific supplier development actions for underperforming suppliers.
- recommend strategic sourcing events to be extended.
- suggest changes in supplier status when a document expires.
- recommend the most appropriate suppliers for high priority sourcing events.
- identify supplier coverage related to high risk categories to minimize supply chain disruptions.

All of these tasks, if done manually, would consume a significant amount of time for a supplier manager. Consider the potential benefits of freeing up the time of supplier managers and empowering them to work on strategic activities.

Finally, procure to pay operations involve a lot of manual input, particularly when it comes to automatically matching invoices received without a purchase order (PO) to their respective invoice. Without a smart solution, an accounts payable clerk would need to manually scan through hundreds of POs to find the right one to match with the invoice.

However, with the help of a specific ML model, this process can be fully automated. In fact, when an invoice without a PO is received, the machine can automatically suggest a shortlist of related POs based on specific invoice data such as item description, quantity, date, and other relevant factors. This saves valuable time and improves efficiency in the procurement process.
AI Benefits: Unlocking Efficiency, Accuracy, and Value

The implementation of AI into procurement processes like the three examples mentioned above can offer significant business benefits for organizations seeking to optimize their procurement operations. Five tangible benefits of AI include:

1. **Increased efficiency**: AI-powered procurement systems can automate time-consuming tasks such as data entry and document processing, freeing up procurement professionals to focus on more strategic activities.

2. **Improved accuracy and reduced risks**: By leveraging machine learning algorithms and natural language processing, AI can improve the accuracy and consistency of procurement activities, reducing the risk of errors and improving compliance.

3. **Real-time insights**: AI can provide real-time insights into procurement activities, allowing organizations to make more informed decisions and respond quickly to changing market conditions.

4. **Cost savings**: By automating manual processes and improving efficiency, AI can help organizations to reduce procurement costs and achieve greater value from their procurement activities.

5. **Enhanced supplier relationships**: AI can help organizations to better manage their relationships with suppliers, enabling them to identify and address issues more quickly and effectively.

To support these benefits, a recent research from IBM showed AI has proven to be a cost-effective solution for businesses, with over 85% of advanced AI adopters reporting a reduction in operating costs. Executives have observed cost savings in various areas, including process efficiency (47%), supply chain production (41%), and headcount efficiency improvements (39%).
Overall, integrating AI into procurement processes can offer a competitive edge and add value to organizations in a rapidly changing business environment.

By identifying key use cases and adopting these technologies, businesses can achieve greater efficiency, accuracy, and cost savings in their procurement operations. Embracing AI can position organizations for success in the long term!

In conclusion, AI is transforming the procurement industry and has become a crucial tool for organizations striving to gain a competitive edge. By automating routine tasks, reducing errors, and freeing up resources, procurement professionals can focus on more strategic initiatives that drive practical value for the organization. However, in order to truly unlock the potential of AI, organizations must consider the right technologies to adopt and the most important use cases to tackle. They must also consider how to balance the role of AI with that of human collaboration, enabling employees to grow and develop new skills.

As AI continues to evolve and become more advanced, procurement leaders must stay ahead of the curve and explore the possibilities of this groundbreaking technology. The future of procurement is undoubtedly powered by AI, and organizations that embrace it will be able to achieve significant competitive advantages.

We hope this white paper has provided you with valuable insights and practical approaches for integrating AI into your procurement operations. Remember, reducing the time to value in procurement requires a shift towards more strategic initiatives, and AI is the key to unlocking this potential!
Your Next Steps!

Now, are you ready to take your business to the next level?

Contact us today for our NEW free AI Maturity Model Assessment to discover where you are positioned in your AI journey and what your points of improvements can be. And that’s not all! As a special offer for our readers, we’re also giving away a free consultation with one of our AI expert advisors.

Don’t wait, seize this opportunity to gain a competitive edge in your industry and start your journey towards success! Ready to get started?

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