The impact of generative AI in procurement

Contents

01

Shaping the future of business using generative AI

For forward-thinking business leaders, staying at the cutting edge of technology isn't an option but a strategic imperative, crucial to maintaining a competitive edge and elevating their operational landscape. The rise of generative AI (GenAI) and what it means for businesses is at the forefront of C-suite and board discussions in every Fortune 500 company. In a report discussing technology's impact on procurement in 2024, Gartner finds that procurement organizations that do not embrace artificial intelligence (AI) technologies will find themselves at a cost and agility deficit compared to their competitors.[1] It is not a coincidence that two-thirds of Chief Procurement Officers (CPOs) surveyed are increasing investment in Procurement digitization.[2] In fact, forward-looking CPOs are already piloting GenAI prototypes to address these mandates from C-suite leadership:

▸ "Do more with less" due to continued labor shortage and further reduction in procurement operations budget.

▸ Drive savings realization at a faster pace.

▸ Optimize business user experience.

▸ Aid in supplier onboarding.

▸ Drive resolution of help desk tickets for PO and invoices

▸ Reduce risk across financial, cybersecurity, technical, supply chain, geopolitical, regulatory and buy channel compliance.

A strategic shift toward GenAI in procurement could pave the way for organizations to secure early mover advantages, revolutionize their supply chains and establish a formidable competitive stronghold.

Projected spend on generative AI ($US, b)

An almost **$2 trillion market** over the next seven years

$29.0 $63.1 $137.3 $298.6 $649.7
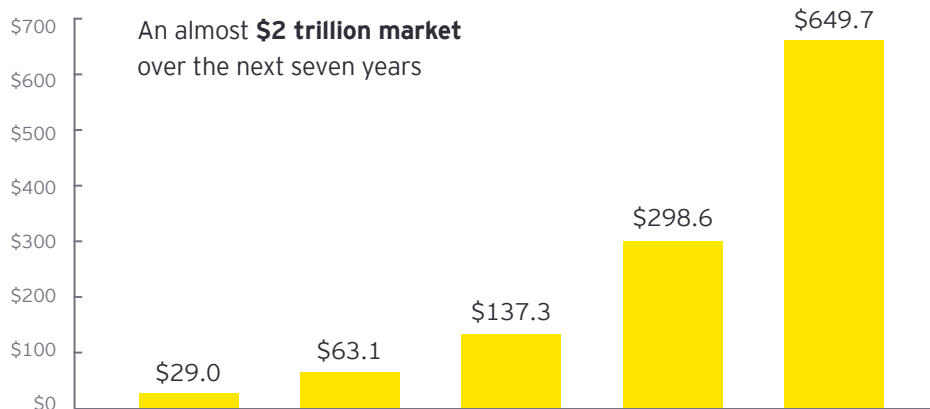
Source: Fortune Business Insights, 2023

The ease of use and insights of today's large language models mask the complexity of GenAI's real deployment.
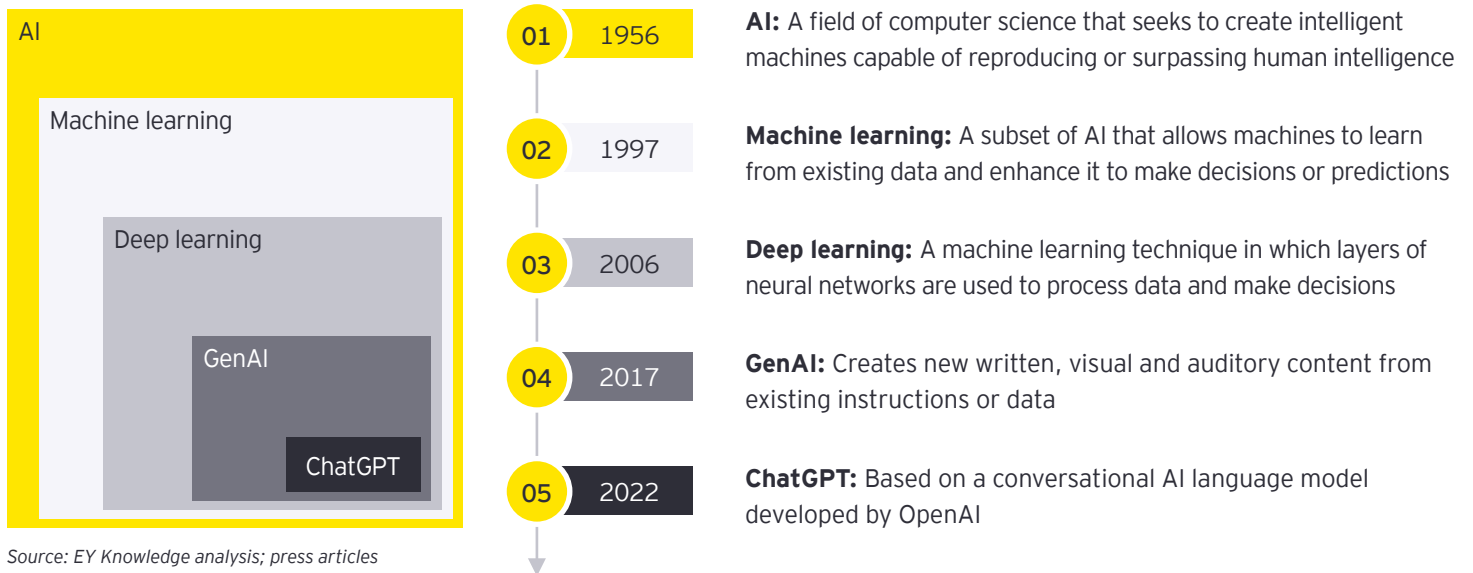
Enterprises will need help with **strategy**, setting the **foundation**, transforming **functions**, **managing risk** and mobilizing their **workforce.**

02

Understanding GenAI and its impact on your business

Utilizing the transformer architecture, an advanced deep learning algorithm that simulates human cognitive processes, GenAI exhibits exceptional levels of creativity and problem-solving capabilities that are desperately needed in labor-intensive and document-centric operations such as procurement. Documents such as contracts, requests for proposals, purchase orders and invoices that traditionally take significant time and human effort can be more effectively managed using GenAI models. While traditional machine learning techniques are best at crunching numerical data to find patterns and make predictions, GenAI is best at crunching words and sentences to invent new patterns that reflect the tone and context of the original data. This ability to create novel outputs based on learned patterns from unstructured data is a key strength of GenAI, making it particularly useful in the document-driven world of procurement.

GenAI is the result of an evolution of AI capable of generating original content

AI		
Machine learning		
Deep learning		
GenAI		
	ChatGPT	

01	1956
02	1997
03	2006
04	2017
05	2022

AI: A field of computer science that seeks to create intelligent machines capable of reproducing or surpassing human intelligence

Machine learning: A subset of AI that allows machines to learn from existing data and enhance it to make decisions or predictions

Deep learning: A machine learning technique in which layers of neural networks are used to process data and make decisions

GenAI: Creates new written, visual and auditory content from existing instructions or data

ChatGPT: Based on a conversational AI language model developed by OpenAI

Source: EY Knowledge analysis; press articles

Two-thirds of current occupations could be partially automated by GenAI, with approximately one-fourth of current work tasks having the potential to be automated in the US and Europe.[3] As experts continue to explore and refine its capabilities, the potential use cases for this technology are bound to grow exponentially, igniting even greater innovation, and affecting procurement and other supply chain functions in unprecedented ways.

Applications of GenAI in procurement

Category management

Dynamic category intelligence

Proactively monitor the supply market to recommend actionable value creation insights.

- ‣ Inventory level monitoring
- ‣ Demand forecasting
- ‣ Commodity index modeling
- ‣ Policy compliance enforcement

End user request intake

Compile supplier published rates or sends messages to suppliers for latest rates and contract terms for materials and services.

- ‣ General procurement capability
- ‣ Supplier selection
- ‣ Contract creation and amendment
- ‣ Order placement
- ‣ Invoice and payment processing

Sourcing and contracting

Sourcing event strategy development

Gather and analyze market data, demand, supplier profiles, and trends to recommend improved sourcing strategies.

- ‣ Eliminates and consolidate RFPs
- ‣ Business requirement compilation
- ‣ Market basket recommendation

Sourcing event execution

Evaluate suppler proposals based on predefined criteria, develops fact-based negotiation strategy, and, in preparing negotiation strategy, negotiates directly with suppliers on procurement's behalf.

- ‣ Award scenario generation
- ‣ Negotiation strategy drafting
- ‣ Negotiation execution

Smart contracting

Create contracts by generating standard clauses and term as well as highlighting potential inconsistencies or issues in existing contracts.

- ‣ Contract clause selection
- ‣ Contract authoring
- ‣ Obligations management
- ‣ Contract compliance monitoring

Supplier management

Supplier monitoring

Provide indicators of risk across financial, cybersecurity, technical, supply chain, geopolitical, regulatory and buy channel compliance.

- ‣ Supply chain visibility
- ‣ Quarterly business review creation
- ‣ Sustainability insights
- ‣ Performance and risk reporting

Purchasing and payments

Requisition-To-Pay Assistant

Guide business users with supplier onboarding and drive resolution of help desk tickets for purchase orders and invoices.

- ‣ Supplier onboarding
- ‣ Order placement assistance
- ‣ Invoice defect resolution

03
Keys to success

When considering investing in new technologies and improving a company's digital landscape, there are some fundamentals that should be considered to help ensure the deployment is successful. Business leaders must adopt a "fail fast, learn fast" mentality by tapping into their workforce to source ideas for GenAI adoption and drive innovation cycles. Additionally, it is critical to consider the following prerequisites before implementing GenAI into their procurement functions.

Centralize and consolidate

When leaders are evaluating systems, they will need to consider cloud-based solutions that can easily integrate with other systems through APIs. Their core system can act as a hub and communicate to other tools to ensure continuity.

Data quality

Prioritizing the quality, source, storage and ownership of data is essential in digital implementations. Alongside having a strong master data foundation, leaders must consider how they will optimize data analysis and visualization leveraging the right algorithms that balance speed and performance.

Information security

It's important to set up proper integration between supplier, internal systems and AI to assure the data is secure. Operating in closed networks can provide another layer of protection.

Leadership alignment and collaboration

CPOs and CIOs must be in lockstep as they build their digital roadmap. It is important that they work together to help ensure they are meeting both organizations objectives. Funding and leadership buy-in is another factor that needs to be considered.

04
Lessons learned

As GenAI emerges as a transformative force in procurement, organizations must navigate this nascent field with careful consideration. The power of GenAI presents unprecedented opportunities, but successful integration requires addressing critical considerations:

✓ Identify priority impact areas and align applications with business objectives for tangible outcomes.

✓ Safeguard sensitive data, address biases and uphold ethical principles to build trust with suppliers and customers.

✓ Manage workforce changes through training, upskilling and finding the right balance between automation and human involvement.

✓ Stay informed about advancements and collaborate with experts to harness the full potential of AI.

✓ Continuously improve, test and retest your large language models in the back end to increase data accuracy and enhance the carbon footprint.

In embracing these considerations, organizations unlock generative AI's true potential—gaining a competitive edge, driving impact, and redefining procurement practices for a sustainable and prosperous future.

Conclusion

As a procurement leader, it is your imperative to understand the value generative AI-driven tools can bring to your team and deliver them in a way that propels your organization into a new era of excellence. GenAI is currently at an inflection point. The recent spike in creative attention will propel generative AI to the next level, directly impacting the relationship between humans and machines. CPOs interested in GenAI should heed three important truths:

1. GenAI is here to stay and will only become more important in the coming years. Take time to educate yourself on its potential impact on your business before making any important decisions.

2. Begin discussions with critical business stakeholders about how AI can address your business needs and prioritize which aspects of the procurement process are most ripe for transformation.

3. Once you are comfortable with the capabilities of GenAI, work with an experienced AI solution provider to craft a long-term, actionable strategy that helps ensure scalability, seamless integration and alignment with your specific procurement needs.

Sources:
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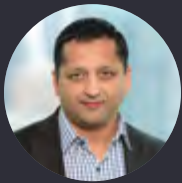
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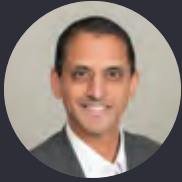
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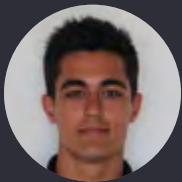Ernst & Young LLP
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