

# The Definitive Guide to Cognitive Procurement



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# On The Origin of Cognitive Procurement

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In the complex ecosystem of business, procurement stands as a vital organ, evolving through epochs of manual processes, digitalization, and automation. Each stage has marked a gradual honing of efficiency and intelligence, culminating in a profound revolution: the dawn of Cognitive Procurement.

This new age, where machines not only compute but comprehend, analyze, and act, redefines not just the form but the very essence of

procurement. It is a shift as profound as the most transformative moments in biological evolution, promising a future where Cognitive Procurement emerges as a sentient partner in the orchestration of business.

Embark on a journey that explores the origin, transformation, and future of procurement—a tale as intricate and fascinating as the evolution of life itself.



# Understanding Cognitive Procurement

## Evolution of Procurement: From Traditional to Cognitive



### The Paper Age: Manual Processes and Limited Efficiency

- In the earliest stage of procurement evolution, paper-based processes reigned supreme. Though functional, they were slow, prone to errors, and lacked visibility.



### Digital Dawn: Email and Productivity Tools

- The arrival of digital tools like email and Microsoft Excel revolutionized procurement by enabling quicker communication and basic organization.



### The Automation Era: ERP Tools

- The advent of Enterprise Resource Planning (ERP) tools introduced automation and better collaboration to procurement. While there were significant improvements in visibility, efficiency, and control, it was still not the zenith of what procurement could achieve.



### Cognitive Procurement: The Latest Shift

- This latest shift is succeeding in making procurement not just efficient, but intelligent. AI, machine learning, and other technologies have enabled procurement to become more strategic, agile, and responsive to business needs.

# Why is Cognitive Procurement important? Challenges Solved

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Time-Consuming Paperwork  
and Manual Approvals



Inaccurate Data and  
Reporting Mistakes



Difficulty in Identifying and  
Negotiating with the Right Suppliers



Complex Compliance and  
Risk Management



Struggles with Maintaining  
Supplier Relationships



Challenges in Sustainable  
Procurement Practices



Limited Visibility into  
Supply Chain

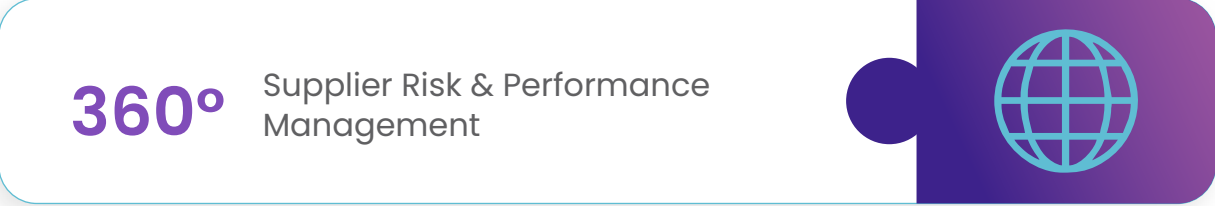
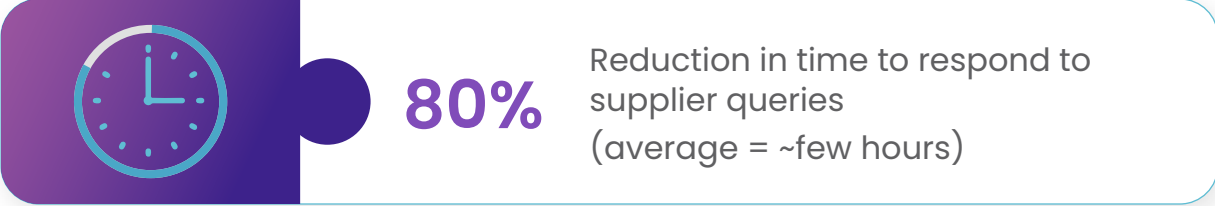
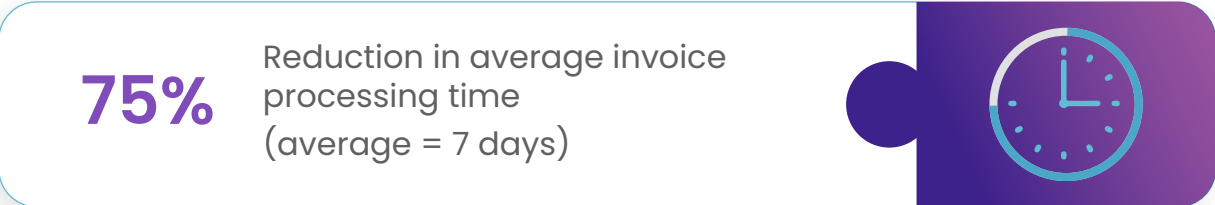
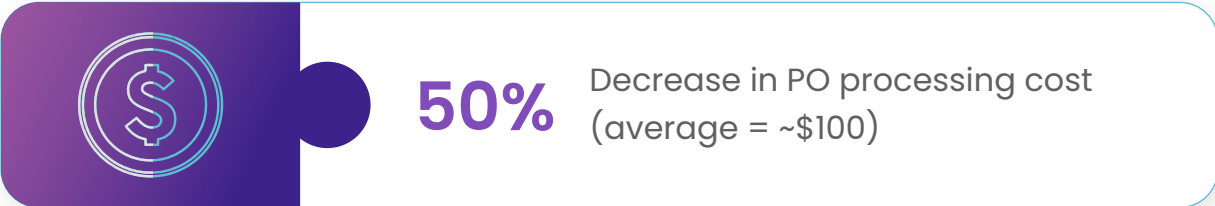
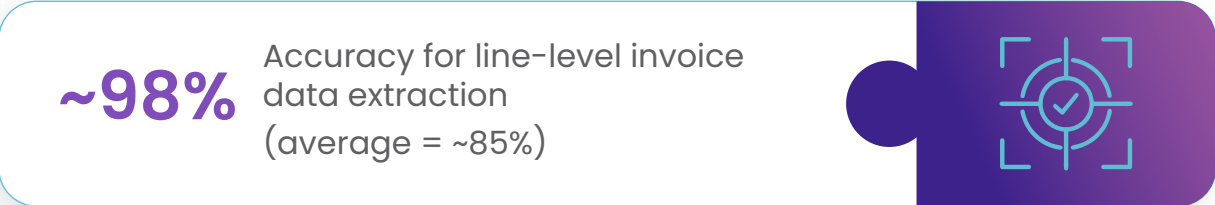
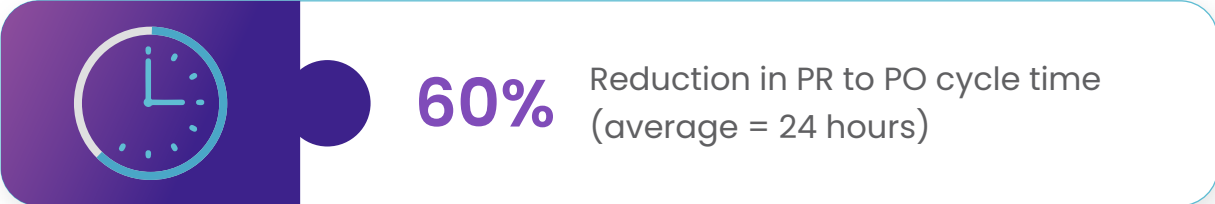


Difficulty Adapting to  
Market Changes

AI can solve these issues in the time it took you to scroll to this page!

No, really!

Here is a snapshot of AI-led improvements in procurement processes.



# Cognitive Procurement Technologies

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Cognitive Procurement leverages various technologies that collectively bring intelligence, automation, and efficiency to procurement functions. Below is an overview of key technologies involved:

1

## Artificial Intelligence (AI):

- **Machine Learning:** Enables predictive analytics, pattern recognition, and automated decision-making.
- **Natural Language Processing (NLP):** Facilitates chatbots for supplier interactions and document processing.

2

## Robotic Process Automation (RPA):

- Automates routine, rule-based tasks, such as data entry and basic validations.
- Streamlines purchase order creation, invoice processing, and compliance checks.

3

## Data Analytics:

- **Predictive Analytics:** Forecasts demand, price trends, and supplier performance.
- **Descriptive Analytics:** Provides insights into current performance and identifies areas for improvement.

4

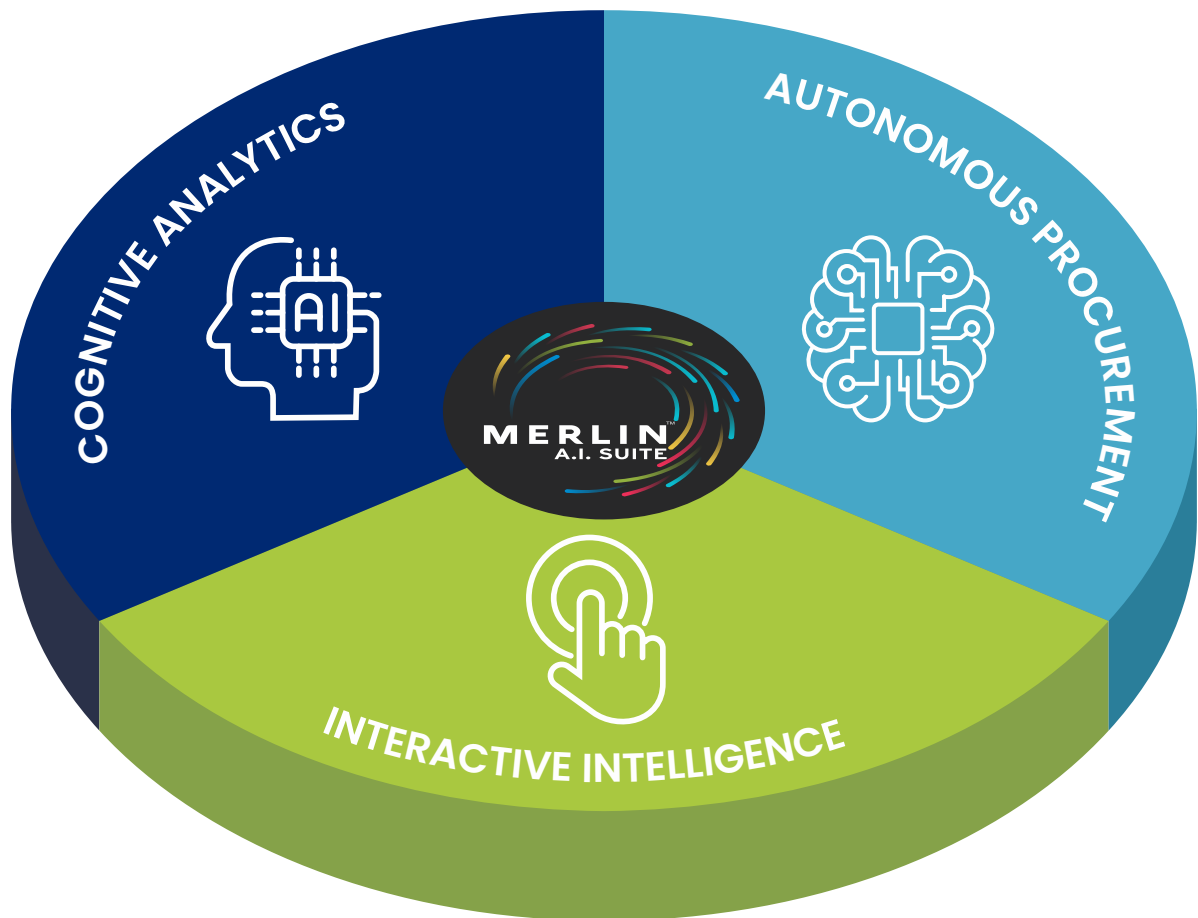
## Intelligent Process Automation (IPA):

- Combines AI, RPA, and analytics for end-to-end process automation.
- Enables dynamic adaptation to changes in the procurement environment.

# The Building Blocks of Cognitive Procurement

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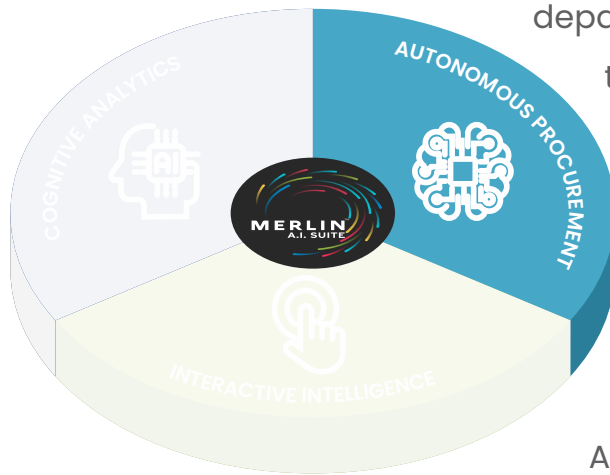
Cognitive Procurement broadly comprises of 3 elements – Autonomous Procurement, Interactive Intelligence, and Cognitive Analytics.





## Autonomous Procurement

Expectations from procurement have undergone an evolution. With rising complexity comes risk. Since purchasing is interlinked with several



departments, the onus is on procurement to become a competence center. This is not restricted to smart purchasing and cost savings, but extends to risk elimination, maintaining process efficiency, as well as driving innovation.

As Hervé Legenvre of EIPM puts it, 'Procurement professionals need to embody power & pace, and transform into **5th Generation Purchasing Professionals.**'

An example of what a 5th Generation Purchasing professional does –

If the pace is slow on the demand side of purchasing, the best decision would be to leverage technology, and pass on routine, yet important tasks to AI. This frees up time spent on erstwhile mundane activities.

If the demand is stable, and the pace of operations is good – tenders are awarded in weeks, not months – then purchasing professionals must look into supplier information, and ensure that they have access to comprehensive & reliable data on not just their first-tier supplier, but also suppliers in tiers 2, & beyond.

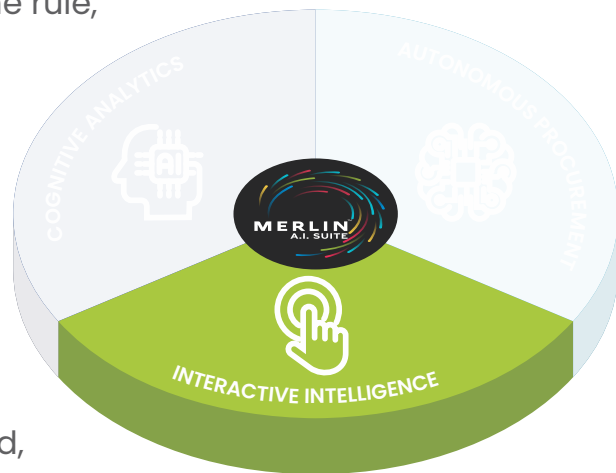
Thus, autonomous procurement helps take procurement up a notch, by automating & digitizing procurement tasks & processes.

## Interactive Intelligence

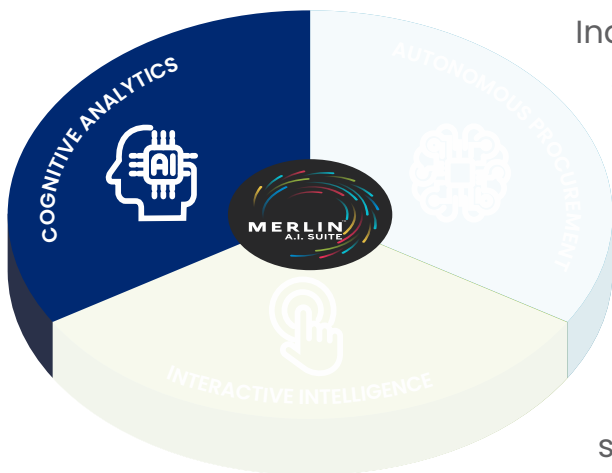
Until now, the use of AI in procurement was limited. Furthermore, AI-led technology was being used to automate processes hitherto performed by humans. Called Robotic Process Automation, this technology offers a marginal increase in efficiency, and frees up negligible time. RPA-based tech also suffers from the limitations of being unidimensional, and rule-based. If there are exceptions to the rule, or if a situation required a judgement call, the RPA tech would crumble.

In today's procurement environment, this is akin to running macros on Excel. While Excel macros are great for a limited, short-term, use case, an integrated AI-led S2P solution can communicate with multiple modules, giving it greater information, and hence, enabling it to provide better, actionable insights.

Leading procurement solutions feature cutting-edge 'Interactive Intelligence' offerings that fulfill the twin objectives of expediting routine, tactical activities like eProcurement, and driving user adoption by simplifying their interactions with sophisticated AI-integrated solutions. Business users, in particular, can derive great value from interactive intelligence such as conversational-UI based offerings, chatbots, or guided procurement applications, making purchasing quick and frictionless. Indirectly, it also frees up the core procurement team's bandwidth to refocus on strategic activities.



## Cognitive Analytics



Industries all over the globe have learnt the value of embracing big data, and using insights from the analyses thereof, to guide their strategy & operations. Procurement is no stranger to this. Whether it is a global corporation with an expansive supply chain, or a relatively smaller organization that still depends on an

offshore corporation for input, data has truly brought everyone closer.

While a relatively superficial data analysis does bear fruit, Cognitive Analysis – performed with sophisticated AI – has the potential to make a large impact on the overall organization.

Predictive & prescriptive analytics can identify risks & opportunities, project demand, account for volatility, and provide forewarnings & real-time recommendations for procurement officers to position themselves well for what's to come. If organizations have the proper resources, they can take these further by leveraging technologies such as Internet of Things, RFIDs, Digital Twins, et al. to have true visibility & transparency over all their operations.

We're seeing real results from the applications of Cognitive Analytics – organizations are now able to decide whether they should build a new business unit or factory, where they should do it, which suppliers they should retain/replace, where they should redirect spend for most ROI, which clauses in contracts increases exposure, which transactions lead to more favorable terms of payment, et al.

The combination of these 3 spheres of Cognitive Procurement is the shot of adrenaline a procurement team needs to actualize the full potential of their resources and drive strategic value to the organization.

# AI in Procurement: Prioritized Procurement Use Cases

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If you're initially hesitant or wary of going all out, and investing a spanking brand-new AI-led S2P Suite, don't worry.

We recognize that budgetary constraints or C-suite skepticism can often delay you getting the tools you need to do a great job!

So, here are 3 specific parts of the procurement process you can invest in to see faster than normal returns and convince the powers that be to get you what you need to optimize procurement performance.



**Supplier  
Management**



**P2P**



**Contract  
Analytics**



## P2P Processes: Enhancing Efficiency with Touchless Transactions

Many organizations are caught in the operational conundrum of the Procure-to-Pay (P2P) process – consisting primarily of requisitions, purchase orders (Pos), and invoices – consuming substantial time and resources without adding significant business value. A potential solution lies in AI –

**A study by the Center for Advanced Procurement Strategy (CAPS) highlighted that companies implementing AI in their operations required 53% fewer transactional Full-Time Equivalent (FTE) resources than those without.**

Starting with AI-driven enhancements in P2P activities can make a compelling case for a broader implementation. AI can transform these processes into "low touch" or "no touch" operations, allowing the reallocation of resources to strategic tasks. It can handle accounts payable autonomously, interpret inbound supplier emails, suggest appropriate responses, and even extract invoice details to fill out e-invoices.

AI can also validate non-catalog requisitions, verify product and supplier selections, and match price quotes and statements of work with relevant contracts. By automating these routine but critical checks, most requisitions can proceed as "touchless" transactions, requiring human intervention only when anomalies arise.

2

## Contract Analytics: Securing Value with AI-Assisted Compliance

With the overwhelming volume of contracts organizations deal with, AI can be a game-changer. Leveraging AI in contract analysis can unearth insights into exposure, limitations, best practices, and more, as noted by Robert Handfield, a respected authority on supply chain management.

By demonstrating how AI can reduce the effort spent on contract review – **predicted by Gartner to decrease by 50% by 2024** – you can present a compelling case for AI's value in improving efficiency and reducing risk.

3

## Supplier Risk Management: Harnessing AI for Comprehensive Risk Assessment

Navigating the data deluge to accurately assess supplier risk is a significant challenge, especially given that roughly 80% of supplier-related data is unstructured or "dark data." Utilizing AI to aggregate and analyze data from diverse sources can provide insightful risk assessments, enabling better decision-making.

Handfield explains the depth of these semi-autonomous processes: "Leveraging supplier rating systems, customer input, meeting notes, social media, legal filings, news feeds, employee and customer data, economic indicators, weather data, and other diverse data forms, AI can mine this data to provide alerts that trigger procurement actions and supplier management activities."

By demonstrating AI's ability to simplify complex data analysis and mitigate risk, you can build a compelling case for its wider application within your organization.

What's more, Zycus' cutting-edge Merlin AI-powered Risk Radar offers a 360° Supplier Risk Assessment Dashboard, enabling you to proactively act on potential disruptions before they occur!

[Learn more at The Merlin Experience Center](#)

# Implementing Cognitive Procurement

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## Key Considerations for a Successful Implementation

1

### Identify Business Needs

Every organization is unique with different needs and goals. Understand your business requirements and define the scope of your cognitive procurement system to align with your organization's needs.

2

### Involve Stakeholders

Involvement of all key stakeholders, including management, end-users, and IT personnel, is crucial from the inception. This promotes understanding, ownership, and acceptance.

3

### Select the Right Vendor

Choose a vendor with a proven track record in delivering effective cognitive procurement solutions. Assess their expertise, support services, and customer reviews.

4

### Pilot Testing

A phased approach is advisable. Start with a pilot project, assess its effectiveness, and then gradually roll it out across the organization.

5

### Training and Development

Ensure that adequate training is provided to all end-users to understand and use the system effectively.

# Change Management & Post-Implementation Best Practices

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Once you've bought a solution & you're bought in for ensuring it's success, you've got to examine your change management plan and ensure it is made with the following principles -

## 1 Balancing Automation with Human Expertise

In the era of Cognitive Procurement, it's crucial to find the right balance between automation and human intervention. Leveraging AI and other technologies shouldn't mean sidelining the human element.

- **Understanding the Role of Automation:** Automation should handle repetitive, time-consuming tasks, allowing humans to focus on strategic decision-making.

AI should be seen as an enabler to the decision-making process, parsing vast amounts of data, identifying patterns, and making recommendations thereof.

- **Training and Development:** Ensuring that the workforce is trained to work alongside automated systems is vital. In the process of equipping your team to work with AI, upskilling or hiring new talent who are well-versed in dealing with sophisticated tech.

- **Human Oversight:** Implementing regular human oversight can catch anomalies and bring empathy and context that technology might miss. Introducing AI doesn't mean you can wash your hands of what it takes over - regular/occasional human intervention & oversight is necessary.



## 2 Overcoming Challenges in Adopting Cognitive Procurement

The path to implementing cognitive procurement is not without its hurdles. Here's how to overcome common challenges:

- **Resistance to Change:** Addressing cultural resistance through education and engagement. 'Enablement over exodus' should be the mantra.
- **Integration Issues:** Seamless integration with existing systems through careful planning. Choosing the right solution provider, and the right implementation partner goes a long way in preventing the issue outright.
- **Cost Concerns:** Justifying the investment through clear demonstration of ROI. As discussed in detail earlier, try and align your organization's problems with modules or areas that offer quick, guaranteed improvements to build a solid foundation for transformation.

## 3 Steps to Integrate Cognitive Procurement with Existing Systems

Integrating cognitive procurement technology with existing systems is a critical step. It's the difference between being stuck with a *white elephant*<sup>1</sup> and pushing your procurement to the **APEX!** Here's how to integrate for success -

- **A**ssessment: Identify compatibility and gaps with existing systems.
- **P**lanning: Create a step-by-step plan for integration.
- **E**xecution: Implement the integration with regular monitoring.
- **eX**cellence: Regularly review and optimize the integration for maximum efficiency.

<sup>1</sup> A white elephant is a possession that the owner cannot easily dispose of, costs a lot of money & effort to maintain (literally & metaphorically, in this case), and is in general, much less useful than it initially seemed.

## 4 Success Metrics/KPIs - Go-Value

Often, procurement leaders consider their job done once the solution is implemented.

To borrow from the brilliant Phil Knight, “your job is not done until the job is done.”

It's at this stage where procurement leaders need to pay close attention. While metrics & KPIs are not the be-all and end-all of ROI, it helps quantify & communicate value in an easier manner. Apart from the typical metrics one is likely to measure – cost per invoice, invoices/POs per FTE, etc., one should look at KPIs that are derivative/indicative of overarching values such as:

- **Cost Savings:** Reduction in processing costs and time. Identification of savings opportunities in sourcing events, payment terms and more.
- **Compliance Rate:** Improvement in adherence to policies and regulations. Driving in-contract purchases, and minimizing maverick spend.
- **Supplier Performance:** Enhanced efficiency in supplier collaboration and management. Enhanced evaluation of supplier performance.
- **Stakeholder Satisfaction:** Increased satisfaction levels among internal stakeholders, especially business users.

Zycus believes in seeing things through, and enables clients to pick from 40+ KPIs across the areas of Supplier Management, Performance Management, Sourcing, Contract Management, Procurement and Invoicing to ensure a successful implementation in every sense of the word.

# Cognitive Cases

## Customer Case Studies from AI Implementations

**Client:** A multi-billion-dollar, global, premier business solutions provider, headquartered in the US.

### Business Challenges:

- Manual procurement processes leading to longer procurement cycle times
- De-centralized sourcing processes
- Missing structured accounts payable workflow and approval processes
- Lack of visibility on the indirect spend of the company
- Lack of KPIs and scorecards for suppliers and inefficient vendor management

### Zycus' Solution

The company partnered with Zycus for eProcurement, eInvoicing, Supplier Management, equipped with Merlin A.I.

### Business Impact

The client was able to achieve its business objectives by automating its Procure-to-Pay workflow, efficiently onboarding suppliers, and managing the process and information more efficiently with a better view of data and KPIs.

Here's a snapshot of key stats & metrics 60 days into Zycus' implementation

<b>\$13 Million</b> Processed purchase orders worth	<b>\$49 Million</b> Processed requisitions worth	<b>600</b> Total invoices generated	<b>\$4 Million</b> Merlin BOT processed invoices worth over	<b>584%</b> Increase in number of user requisitions
<b>99%</b> compliance of spend under PO	<b>62%</b> Reduction in cost per invoice	<b>6,200</b> Total No. of suppliers on-boarded	<b>600 Active</b> Total no. of users	<b>75%</b> Volume of Merlin BOT processed invoices

## Client: A multi-billion-dollar, US healthcare solutions provider

### Business Challenges:

- **Lack of control:** A scattered procurement process left no control points for assessment
- **Poor visibility:** No transparency on spend due to unavailability of a digital, automated system, and the use of manual AP processes led to numerous non-PO invoices
- **Supplier dissatisfaction:** No standard process for supplier onboarding & management
- **Change management:** Users had no experience of SaaS platforms and were hesitant to engage

### Zycus' Solution

The client partnered with Zycus for its seamlessly integrated Merlin-AI-led Source-to-Pay suite (Procure-to-pay, Spend analysis, Supplier management, eSourcing, Contract management, Financial Savings Management)

### Business Impact

**Efficiency improvements:** Business process mapping to a single, fully integrated platform helped manifest greater efficiency

**Cycle time reduction:** End to end reduction in cycle time for ordering, contracting and sourcing

**Enhanced user satisfaction:** Improved user visibility enabling online tracking, enhanced search & report mechanisms and simplified processes & solutions leading to greater user satisfaction

**Compliance:** Control points provided at various milestones ensured process adherence

**Supplier satisfaction:** Implementation of a customized supplier onboarding program ensured a single point of entry for suppliers, facilitating transparency on orders, payments, and contracts

**Mobility:** Use of mobile applications for approvals reduced approval cycle time significantly

### Key Stats

150,000+

Spend transactions

\$13 Billion

of Spend classified

3 Million

Worth of savings tracked

31,000+

Suppliers on-boarded

29,000+

Pos raised

62,000+

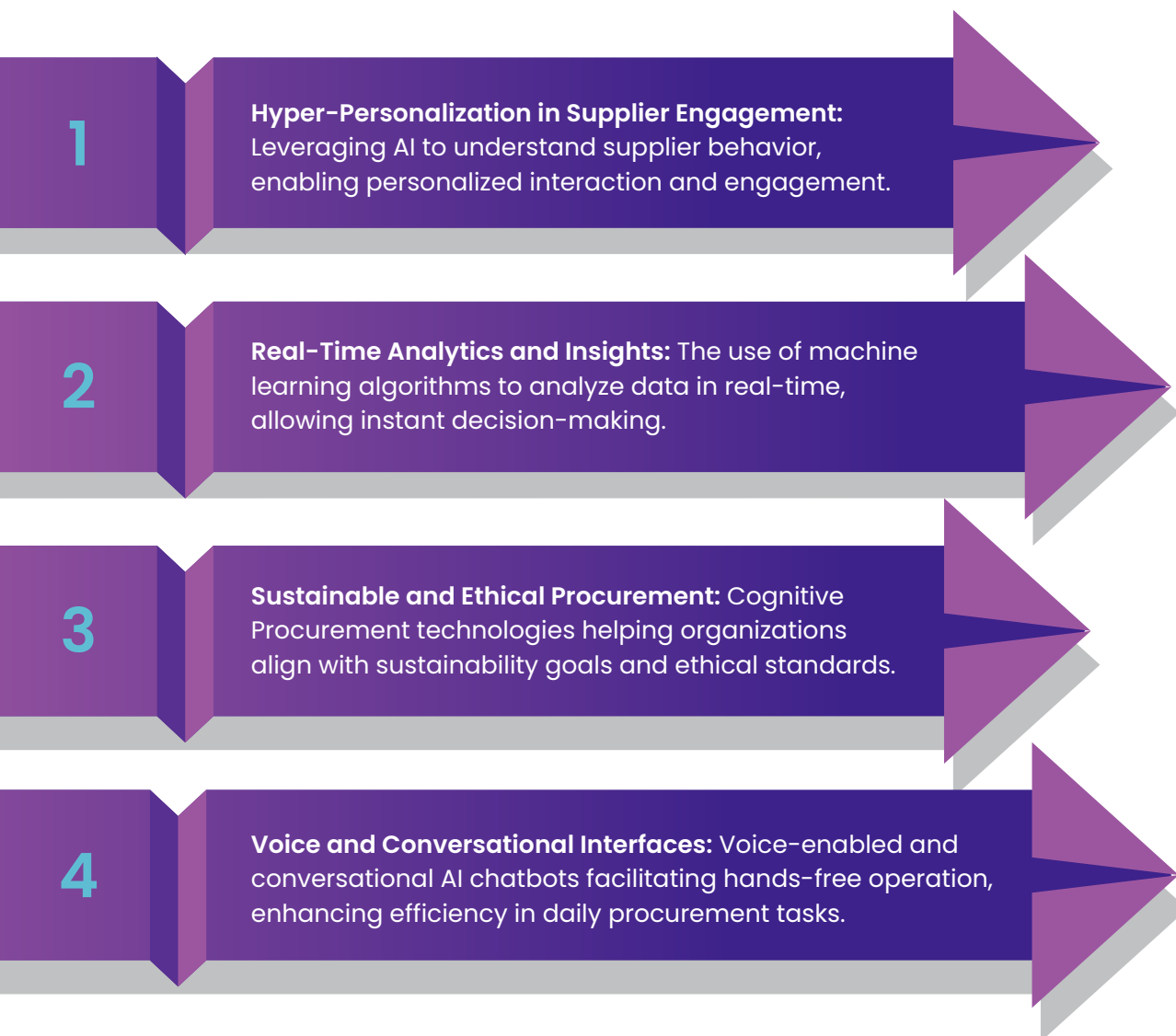
Invoices generated

# The Future of Cognitive Procurement

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As CPOs take more of the spotlight in the C-Suite, and in turn, the C-Suite starts to realize procurement's value in the organization, procurement innovation will continue to burgeon. Procurement solution pioneers continue to create AI-led tools, and with growing interest in AI due to, in no small part, Generative AI platforms, we're poised to see a quantum leap in how we procure.

## Emerging Trends in Cognitive Procurement



Seems like an exciting future for Cognitive Procurement.

Are you ready for a Cognitive *Present*?

[Register for our gift of a free demo today!](#)

# Cognitive Procurement Resources – Downloadables

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## Section 1: Questions to Ask Stakeholders

**Introduction:** Effective communication starts with the right questions.

Download our questionnaire tailored for engaging various internal stakeholder groups about Cognitive Procurement.

[Download Stakeholder Questions Now](#)

## Section 2: Questions to Ask Vendors

**Introduction:** Selecting the right Cognitive Procurement solution is a crucial decision. Our vendor questionnaire guides you through the essential queries to ensure you choose wisely.

[Download Vendor Questions Now](#)

## Section 3: Checklist for Procurement Professionals

**Introduction:** From the first step to the last, this comprehensive checklist ensures that you're well-equipped for your Cognitive Procurement journey.

[Download Checklist Now](#)

Zycus is the pioneer in Cognitive Procurement software and has been a trusted partner of choice for large global enterprises for two decades. Zycus has been consistently recognized by Gartner, Forrester, and other analysts for its Source to Pay integrated suite.

Zycus powers its S2P software with the revolutionary Merlin AI Suite. Merlin AI takes over the tactical tasks and empowers procurement and AP officers to focus on strategic projects; offers data-driven actionable insights for quicker and smarter decisions, and its conversational AI offers a B2C type user-experience to the end-users.

Zycus helps enterprises drive real savings, reduce risks, and boost compliance, and its seamless, intuitive, and easy-to-use user interface ensures high adoption and value across the organization.

Start your #CognitiveProcurement journey with us, as you are #MeantforMore.

