intellect
live your dream

Procurement transformation in the Age of AI

Revolutionising the Procurement Operations

Prepared on
July 2024

Industry Experts

Ambadas Choudhari

CTO-iDTC, Intellect Design Arena

Ambadas is a seasoned technology executive with rich experience in various facets of technology management. He is proficient with a proven track record in building robust platforms, providing enterprise architecture consulting and overseeing technology governance. He has also been instrumental in driving landscape modernisation across industries. He has worked in extended fintech domains where he gained valuable experience in commerce, banking, cards and insurance.

Beyond his professional accomplishments, Ambadas is a passionate technology enthusiast with a keen interest in emerging trends and innovations. He is a published author, having written a book on blockchain technology which reflects his knowledge and hands-on experience in this area. His proficiency also expands to technologies like analytics, artificial intelligence, observability, etc.

Ramesh Mahadevan

BDM, Intellect Design Arena

Ramesh Mahadevan is an IT professional with a robust academic and professional background. He holds a Postgraduate degree in Physics, a Diploma in Computers, and a Post Graduate Diploma in Human Resource Management. With over 28 years of professional experience in the IT industry, Ramesh has developed a diverse and comprehensive skill set. His certifications include PMP (Project Management Professional), ITIL V4 Managing Professional, Agile Certified Scrum Master (CSM), Six Sigma Black Belt, and ISO 9001:2015 Lead Auditor.

Ramesh's extensive career includes significant expertise in procurement, having worked with the Government e-Marketplace, our prestigious customer, for over 7 years. This combination of technical knowledge, management skills, and practical experience makes him a valuable asset in the IT and procurement sectors.

CONTENTS

Abstract

This white paper aims to explore the significant impact of artificial intelligence (AI) on procurement processes and how organisations can undergo a transformation to leverage AI capabilities. With the rapid advancements in AI technologies, the procurement landscape is experiencing a paradigm shift, changing the way organisations source, negotiate, and manage supplier relationships. This paper discusses the potential benefits of integrating AI into procurement, challenges associated with transformation, and provides insights into best practices for successful procurement transformation in the age of AI.

Introduction

In recent years, the role of procurement has evolved from being solely transactional to strategic, owing to technological advancements and market dynamics. The emergence of AI has further accelerated this transformation, empowering procurement professionals to make data-driven decisions, automate routine tasks, and extract valuable insights from vast amounts of information. The integration of AI in procurement processes promises to streamline operations, improve efficiency, enhance strategic sourcing, and mitigate risks.

Benefits of AI in Procurement

a. Predictive Analytics: AI enables procurement teams to leverage predictive analytics to forecast demand, identify market trends, and anticipate potential supply chain disruptions. By analysing historical data and external factors, AI algorithms can provide insights that aid in making proactive decisions, optimising inventory levels, and mitigating risks associated with supply chain disruptions.

b. Process Automation: AI-powered systems can automate routine procurement tasks such as supplier identification, request for proposal (RFP) analysis, contract management, and invoice processing. This automation reduces manual intervention, streamlines processes, and allows procurement professionals to focus on strategic activities that drive value for the organisation.

c. Supplier Relationship Management: AI facilitates the analysis of supplier performance, risk assessment, and real-time monitoring of supplier activities. It enables organisations to proactively manage supplier relationships, mitigate potential risks, and identify opportunities for collaboration and innovation.

d. Cost Optimisation: AI algorithms can optimise sourcing strategies by analysing large datasets to identify cost-saving opportunities, negotiate favorable terms with suppliers, and identify alternative sourcing options. This leads to cost reductions, improved supplier negotiations, and enhanced value for the organisation.

Challenges of Procurement Transformation with AI

Despite the promising benefits of AI in procurement, organisations face several challenges when undertaking a transformation to integrate AI capabilities into their procurement processes.

a. Data Quality and Integration: One of the primary challenges is the quality and integration of data from various sources. AI algorithms rely on high-quality, structured data to deliver accurate insights. Procurement systems must ensure that data from disparate sources are integrated and standardised to enable effective AI-powered analytics and decision-making.

b. Change Management: Implementing AI in procurement requires a cultural shift within the organisation. Resistance to change, lack of understanding of AI capabilities, and fear of job displacement among procurement professionals can impede the successful adoption of AI technologies.

c. Skills Gap: Integrating AI in procurement necessitates a workforce with advanced analytical, data science, and AI skills. Many organisations may face challenges in upskilling their procurement teams to effectively leverage AI technologies and interpret the insights derived from AI-powered analytics.

d. Regulatory Compliance and Ethics: AI in procurement raises concerns related to data privacy, ethical sourcing, and compliance with regulatory requirements. Organisations must ensure that AI-powered procurement processes adhere to legal and ethical standards to mitigate potential risks associated with non-compliance.

Best Practices for Procurement Transformation with AI

To successfully navigate the procurement transformation in the age of AI, organisations should consider the following best practices:

a. Strategic Alignment: Align the procurement transformation with the organisation's strategic goals and objectives. Establish a clear vision for how AI will enhance procurement performance and contribute to overall business success.

b. Data Governance and Quality: Prioritise data governance and establish robust data quality standards to ensure that AI algorithms receive high-quality, reliable data for analysis. Invest in data integration technologies and data management practices to centralise and standardise procurement data.

c. Change Management and Talent Development: Implement a comprehensive change management strategy that addresses the cultural shift required for AI adoption. Invest in talent development programs to up skill procurement professionals in AI, data analytics, and advanced procurement technologies.

d. Ethical AI Practices: Develop ethical guidelines and standards for the ethical use of AI in procurement. Ensure transparency in AI algorithms, uphold ethical sourcing practices, and adhere to regulatory compliance requirements related to AI in procurement.

e. Usage of business centric AI platforms from technology partners: Collaborate with technology partners and AI solution providers to assess the organisation's AI readiness, select appropriate AI technologies, and develop customised solutions that align with the organisation's procurement needs and objectives. Business centric platforms like Intellect's Purple Fabric can give business users control over use case discovery as well as checking feasibility without being dependent on technical experts with strong AI knowledge

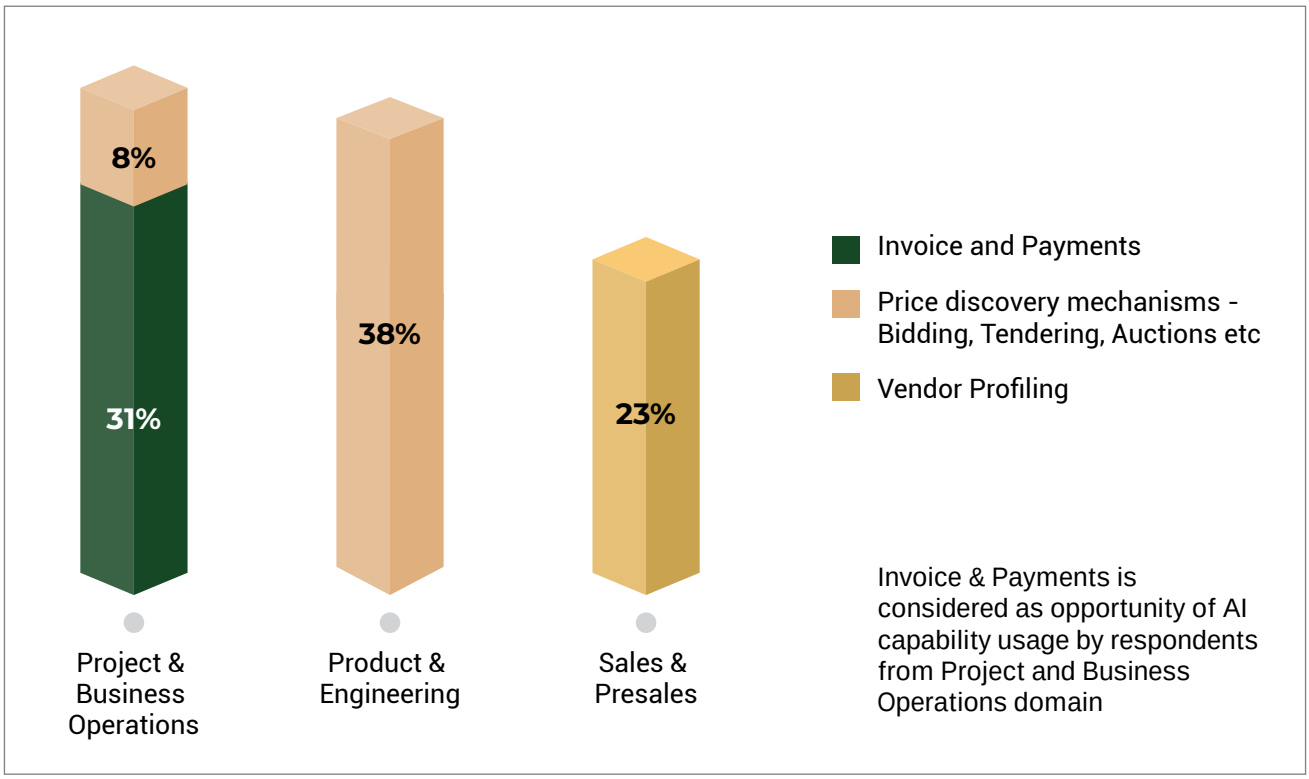
Industry Insights:

Authors conducted a survey with procurement domain experts across experience levels. Participants from various procurement domains with their work experience ranging from 5 Years to 28 years were actively engaged to respond to 4 comprehensive questions each.
The following were the research questions & major interesting inferences from the survey:

Which is the most effective subdomain of enterprise procurement where AI can make a significant impact?

The Project & Business Operations teams are a respondent domain where the huge impact of AI can be observed in 'Invoice & Payments' which is a manual heavy activity dealing with tons of paperwork & compliance checks. Impact of 'AI' through automation deeply impacts the quality & time of the output.

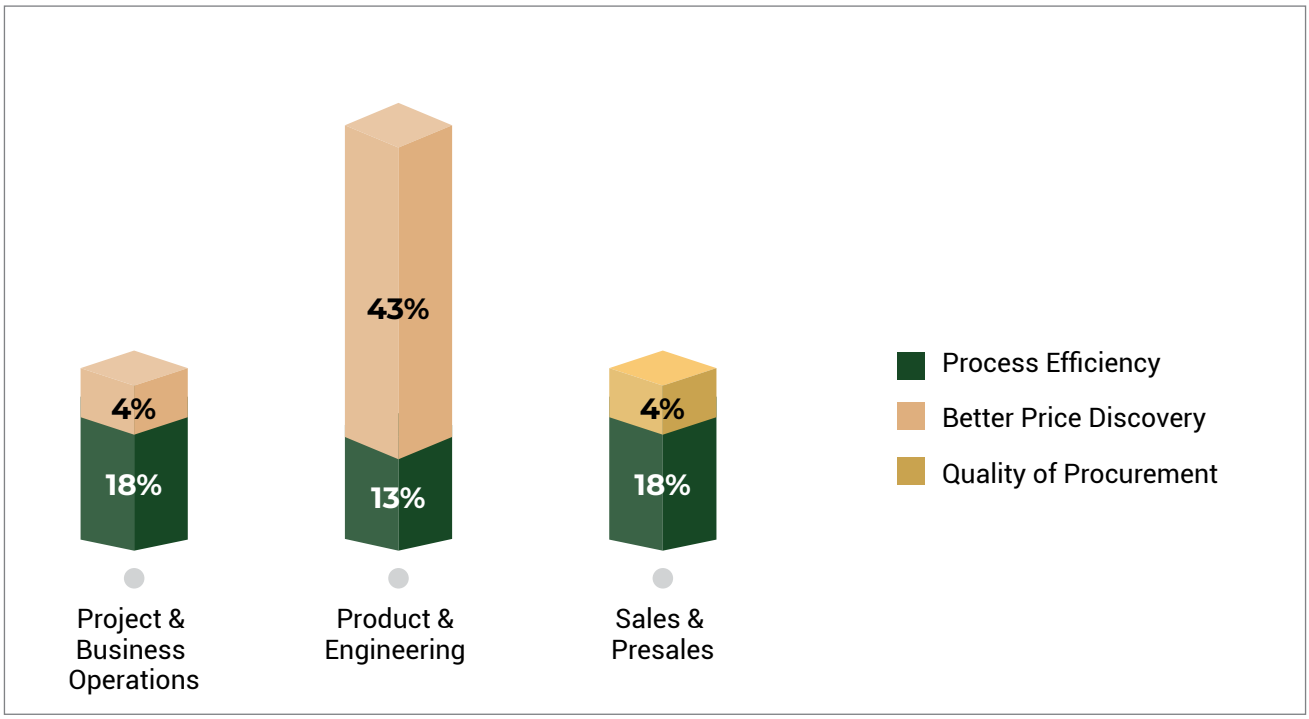
Product & Engineering are not much behind to subscribe to the importance of AI in enhancing the effectiveness of the product that multiplies with contextual & cognitive features of AI technology.



What is the largest impact benefit that procurement processes can achieve through AI?

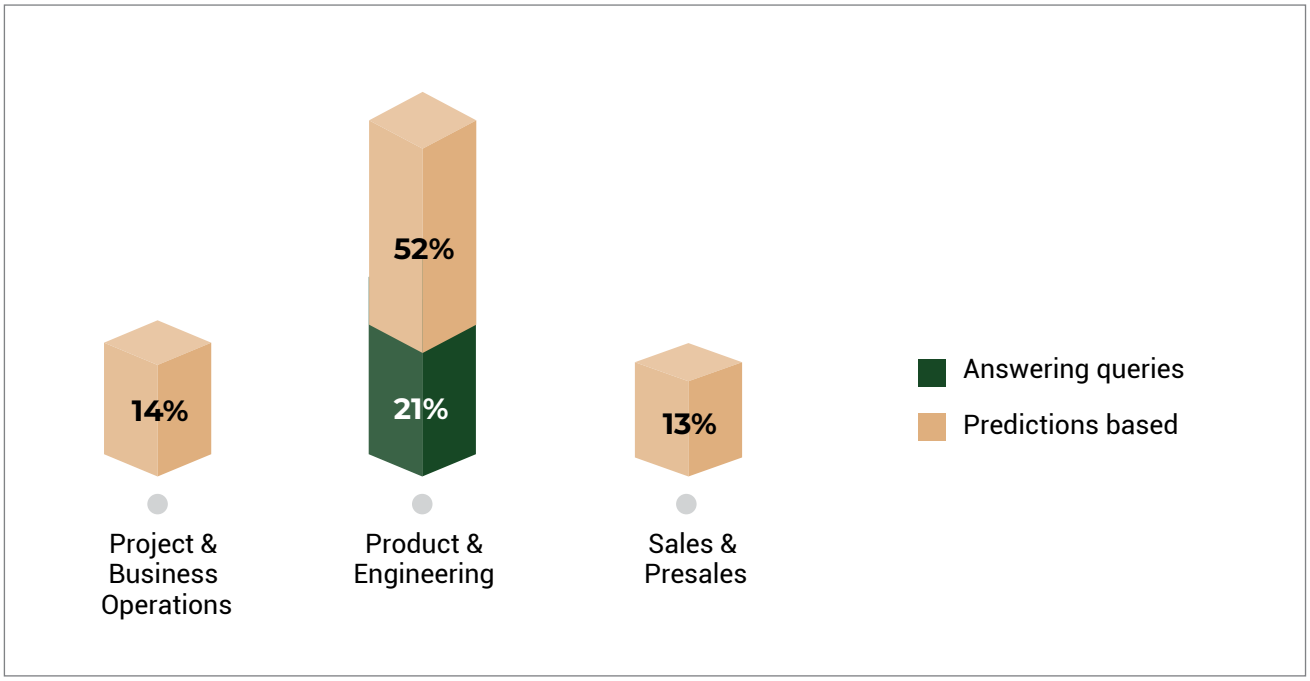
'Process Efficiency Improvement' with its horizontal capability that serves all subdomains. The intervention of AI allows to substantially improve upon manual & repeatable processes, allowing the teams to work on strategic tasks.

'Better Price Discovery' is heavily promoted by Product & Engineering teams, as it directly impacts the cost savings, which is among the top pain points organizations intend to address with automation products. The intervention of AI removes the need of manual validation of best price and leads to predictive insights into past purchases for fair negotiations & discounts.



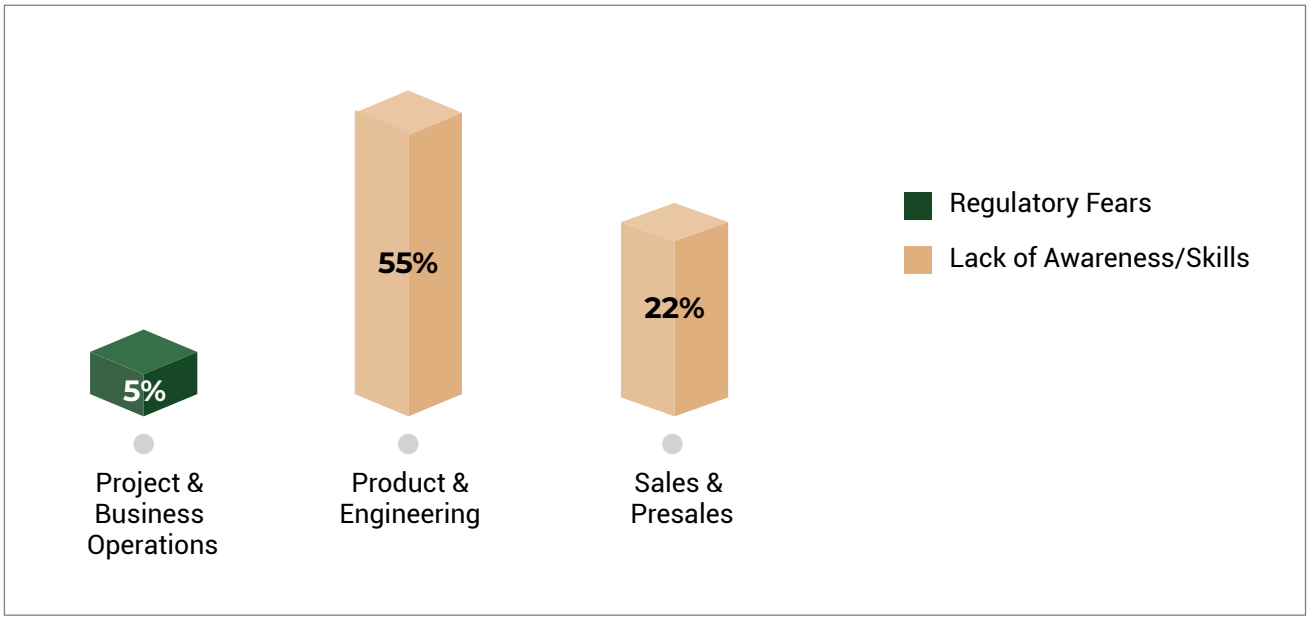
What are the largest impact AI use cases in the procurement domain?

'Predictive Analytics' outclassed all other use cases including generative content to answer queries across all procurement subdomains. It can be inferred with confidence that the value by utilizing predictive analytics through which a company can make informed decisions and anticipate that those decisions will have a better chance of a positive outcome, is a strongly preferred choice.



What do you think will be the largest obstacle to AI adoption in the procurement domain?

An overwhelming percentage of respondents (more than 95%) confirmed that lack of awareness across procurement subdomains on how & where to leverage AI is the biggest hurdle to overcome for the technologists.



Conclusion

As organisations strive to stay competitive and resilient in a rapidly evolving business landscape, procurement transformation powered by AI presents an opportunity to drive efficiency, strategic decision-making, and value creation. Leveraging AI in procurement processes holds the potential to revolutionise how organisations manage their supply chains, source goods and services, and build strategic supplier relationships. However, successful procurement transformation with AI requires a strategic approach, investment in talent development, and a focus on ethical practices and compliance. By embracing AI technologies and adopting best practices, organisations can position their procurement functions to thrive in the age of AI, driving sustainable value and competitive advantage

> **Artificial Intelligence will be a rampant in Digital Supply Chain**
>
> **- Dave Waters**

iCPX

Reimagining Procurement

intellect live your dream

Contact us: icpx@intellectdesign.com

Intellect Design Arena Ltd, a Polaris Group company, has the world's largest cloud-native, API-led microservices-based multi-product platform for Global leaders in Banking, Insurance, and Capital Markets. eMACH.ai, the most comprehensive open finance platform, is at the forefront of the BankTech Wave 5, a significant phenomenon that enables banks and financial institutions to move from product and process to design and experience to compose their unique "My Signature Solution". With over three decades of deep domain expertise, Intellect is the brand that progressive financial institutions rely on for digital transformation initiatives. It offers a full spectrum of banking and insurance technology products through its three business lines: Intellect Global Consumer Banking (iGCB), Intellect Global Transaction Banking (iGTB), and Intellect Digital Technology for Commerce (iDTC).