



RPA & AI in SCM, Procurement & Order Management

A curve of infancy, growth
or maturity?



Robotic Process Automation (RPA) and Artificial Intelligence (AI) are holding center stage in many boardroom discussions around disruptive technologies. The impact of these two technologies is percolating far beyond mere margin and productivity improvements and standardization of tasks to generating topline efficiencies and even enhancing end customer experiences.

An internal Wipro research reveals that RPA & AI are going to grow at a CAGR of ~44% from 2018-2024 respectively.

Let us now examine the penetration of these two technologies across industry horizontals, such as Finance & Accounting (F&A), Human Resources (HR), Technology Platform Services (TPS), back office contact centers, Supply Chain Management (SCM), Procurement, Order Management (OM), Industry Specific domain businesses (ISDB) etc. to understand the relative adoption rates. As per a Wipro internal research and Everest group research ¹ (**Figure 1: Penetration of RPA & AI across**

horizontals), it is observed that F&A remains the most penetrated industry horizontal currently, followed by ISDB and TPS, while SCM, Procurement & OM remain the most underpenetrated horizontals.

Considering that the market for RPA & AI in Supply chain management, procurement & order management are still relatively underpenetrated, it appears to be a bright spot in the AI & RPA roadmap.

RPA & AI evolution

The fact that there is low penetration within these segments can also be examined based on the different phases of growth that we are seeing for RPA & AI today.

Currently, the market is in a zone somewhere between basic RPA service and cognitive RPA (**Figure 2: RPA & AI progression roadmap**).

Yet, it is expected that the industry will soon tend to move towards Intelligent RPA. Basic RPA is applicable to businesses with a relatively low Business Automation Maturity (BAM), typically characterized by businesses that are figuring how to venture into automation considering the breadth of processes. While Cognitive RPA can be correlated with a medium automation maturity, where organizations think about being task driven and envisage the need for reconfiguring applications, the subsequent wave of RPA & AI is known as Intelligent RPA. This stage of RPA & AI is characterized with high automation maturity - where organizations are driven by business conclusions and actions, and think of reconfiguring complete IT and business landscape.

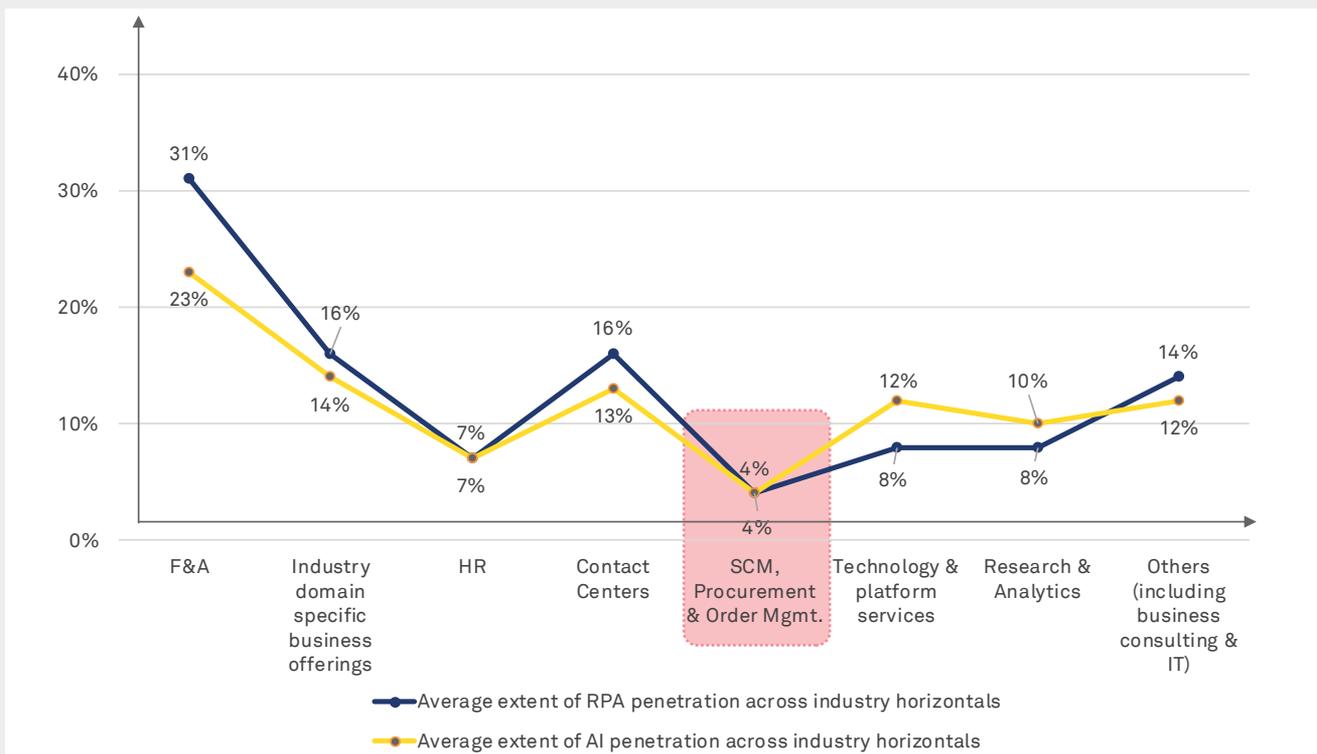


Figure 1: Penetration of RPA & AI across horizontals

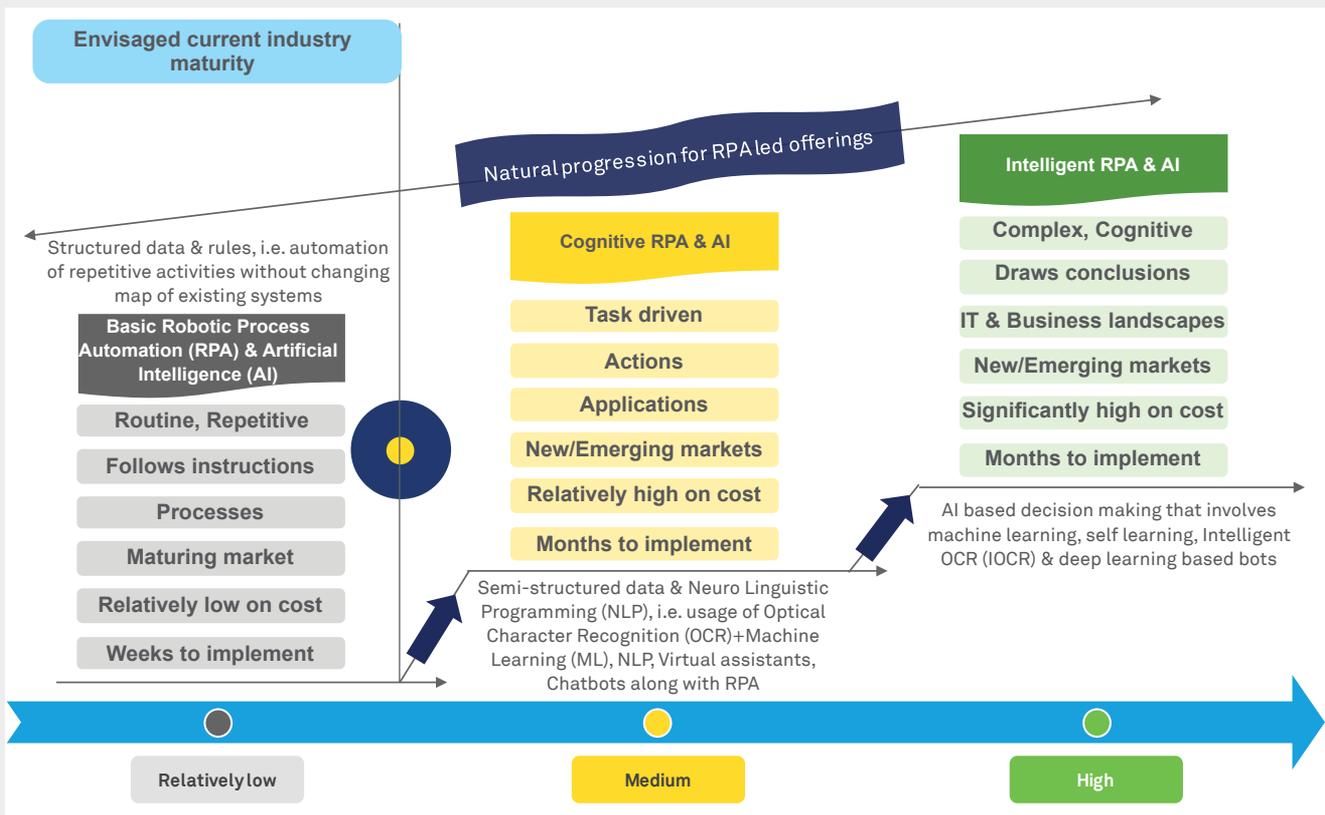


Figure 2: RPA and AI progression roadmap

Potential of RPA & AI in SCM, Procurement, and Order Management

Let's test a couple of hypothesis that can be tested to further examine the potential for AI and RPA adoption within the three horizontal defined, i.e. SCM, procurement & order management.

- There are limited use cases or areas of usage for penetration of digital technologies, especially within these three industry segments.
- There doesn't seem to be a larger market size for the three industry segments compared to other segments, such as Finance & Accounting, Sales & Marketing, HR, IT etc.

Hypothesis (b), more or less stands validated, apparently from the fact that the penetration levels are very high in these set of areas. In regards to the hypothesis (a), a recent study by ISG² shows that automation technologies can allow up to a 43% reduction in resources for order-to-cash processes, 34% for invoicing, and 32% for vendor and talent management.

Further insights by ISG³ shows that the greatest impact is envisaged on customer services and order-processing functions (43 percent), followed by procurement, logistics and supply chain (40 percent), and sales-marketing functions (38 percent). Transforming SCM, Order Management & Procurement becomes paramount when there are value creation points⁴ such as improved cycle time by 25-50% and processing time by 15-45%, and elimination of 40-60% of manual effort, possible because of automation and streamlining processes with envisaged benefits leading to 20-40% improvements in the data collation and administration effort involved in supply and demand planning.

For validating hypothesis (a), consider some⁵ of the following use cases in SCM, procurement & Order Management, where RPA & AI could make a further difference:

- **Streamlining vendor-supplier relationships:** It involves activities, such as preparing a request for proposal/quote (RFP/RFQ), communication to different vendors, and analysis of vendor documents received, evaluating vendors and executing their credit history and finalizing a vendor selection.

- **Managing performance of vendors-suppliers:** Instead of a manual data search, RPA & AI could be used to have a robot track and generate alert if a supplier digresses from his SLAs/KPIs. The same case be used for instances of product Damages, Extras, Pilferages & Shortages (DEPS).
- **On-boarding, de-boarding & renewal of vendors-suppliers:** Bots could generate an alert based on the SLAs/KPIs adopted or set to board/de-board a vendor/supplier or similarly enable renewal of contract with a vendor/supplier. Additionally, data insights, such as payment history, on-time delivery and customer satisfaction levels can be tracked.
- **Communication of shipment status:** This subsumes activities, such as opening/reading an email, recognizing text, logging onto a SAP/Oracle portal, examining shipment status, replying to a customer and then reading the next email.

- **Supply chain planning & analytics:** This entails gathering data from various sources by deploying tools like optical character recognition (OCR) or smart/intelligent OCRs (IOCRs) to read data, manage communication with various partners, customers, transporters and logistics teams etc.

While the above are only indicative use cases, consider the following heat map (**Figure 3: use cases heat map**) to understand the gamut of offerings RPA & AI could further encompass. The heat map below covers an indicative area of offerings within the SCM, OM & Procurement domain and it is only indicative but not exhaustive.

Based on the indicative use cases and the heat map, it is evident that the segments of SCM, Procurement & Order Management have enough potential that can be tapped by RPA & AI together.

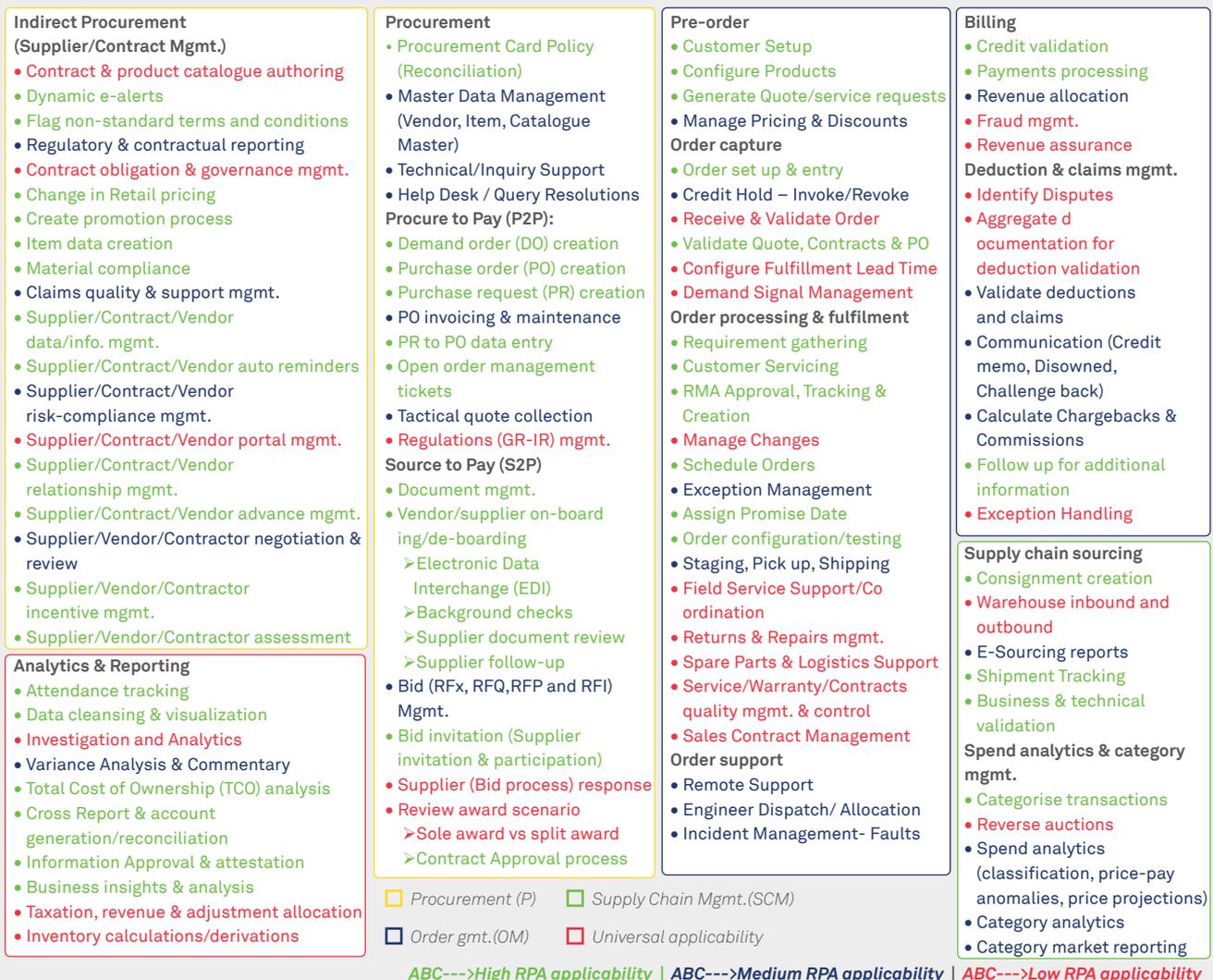


Figure 3: Use cases heat map

Let's try and map the breadth of use cases (areas) envisaged for deployment of RPA & AI on the Y-axis and envisaged actual adoption on the X-axis, i.e. on a 3*3 grid (**Figure 4: Use cases & adoption heat map**). For the breadth of use cases, a Low (<10 use cases), Medium (10-30 use cases) & High (>30 use cases) shall be the varying degrees of measurement and for envisaged adoption, Low (<10 client cases), Medium (10-20 client cases) & High (>30 client cases) is a milestone that could be defined based on the available case studies, secondary references and the pace of relevant client conversations in the industry.

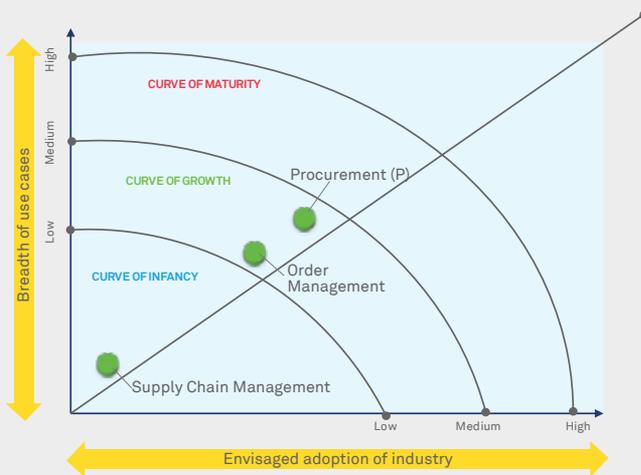


Figure 4: Use cases & adoption heat map

About the author

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Mehul brings in 11 years of rich experience dealing with CXO level client executives in Fortune 100 organizations across domains such as Digital transformation, Corporate & Business strategy, B2B/B2C Consulting, Marketing, Pre-sales & Operations.

Endnote

- <https://www2.everestgrp.com/Files/previews/Everest%20Group%20-%20RPA%20Technology%20Vendor%20Profile%20Compendium%202018%20-%20Complimentary%20Abstract.pdf> & Wipro internal research on automation whitespaces, October 2018
- <https://www.uipath.com/blog/rpa-the-glue-for-supply-chain-management>
- <https://www.analyticsinsight.net/9-out-of-10-industries-to-implement-robotic-process-automation-by-2020/>
- <https://www.atkearney.com/procurement/article?/a/procurement-riding-the-transformative-digital-wave>
- Only indicative of a larger potential and not exhaustive

The way ahead

Procurement & Order Management seem to be in the curve of growth marked by a breadth of use cases and a low adoption, while SCM could be currently categorized by the curve of infancy marked by a relatively lower breadth of use cases and lower envisaged industry adoption and the current state is only aimed for the subsequent state, i.e. the curve of maturity. This is only indicative of the immense growth potential that lies ahead for the SCM, Procurement & Order Management domains and sooner the adoption, the greater is the possibility of additional use cases emerging in the industry.

The SCM, Procurement and Order Management areas are potential goldmines in terms of the opportunities they provide to derive benefits from disruptive technologies like RPA and AI, and organizations that proactively start investing in these areas will be better-positioned than their competitors in their transformation journey.



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