



Intelligent Automation in Business Processes (IABP) – State of the Market Report 2020

Service Optimization Technologies (SOT) State of the Market Report – July 2020

Copyright © 2020 Everest Global, Inc.

We encourage you to share these materials internally within your company and its affiliates. In accordance with the license granted, however, sharing these materials outside of your organization in any form—electronic, written, or verbal—is prohibited unless you obtain the express, prior, and written consent of Everest Global, Inc. It is your organization's responsibility to maintain the confidentiality of these materials in accordance with your license of them.

Our research offerings for global services

► Market Vista™ Global services tracking across functions, sourcing models, locations, and solution providers – industry tracking reports also available	
 Application Services 	► Human Resources
▶ BPS Banking & Financial Services	► ITS Banking & Financial Services
► BPS Healthcare & Life Sciences	► ITS Healthcare
► BPS Insurance	► ITS Insurance
► Catalyst [™]	► IT Services Executive Insights™
► Cloud & Infrastructure	▶ ITS Life Sciences
► Customer Experience Management Services	► Locations Insider™
➤ Data & Analytics	► PricePoint™
► Digital Services	► Procurement
► Engineering Services	► Recruitment & Talent Acquisition
► Enterprise Platform Services	► Service Optimization Technologies

Membership information

► Finance & Accounting

- This report is included in the following research program(s)
 - Service Optimization Technologies (SOT)
- If you want to learn whether your organization has a membership agreement or request information on pricing and membership options, please contact us at info@everestgrp.com

More about membership

In addition to a suite of published research, a membership may include

- Accelerators™
- Analyst access
- Data cuts
- Pinnacle Model® reports
- PriceBook
- Virtual Roundtables
- Workshops

Custom research capabilities

- Benchmarking | Pricing, delivery model, skill portfolio
- Peer analysis | Scope, sourcing models, locations
- Locations | Cost, skills, sustainability, portfolio – plus a tracking tool
- Tracking services | solution providers, locations, risk
- Other | Market intelligence, solution provider capabilities, technologies, contract assessment



Table of contents (page 1 of 2)

Topic	Page no.
Introduction and research overview	6
Summary of key messages	
Section I: IABP market overview	
IABP market size	19
Key drivers	
Key challenges	
Section II: Buyer adoption trends	24
Buyer adoption by geography	
Buyer adoption by industry	27
Buyer adoption by business function	
Buyer adoption by buyer size	
Section III: IABP Solution characteristics	30
Talent by scope	
Global Sourcing	
Commercial models	
Section IV: IABP solution provider landscape	35
Market share by clients	
Market share by geography	
Market share by business function	
Market share by industry vertical	
Buyer satisfaction	
IABP Solutions PEAK Matrix® Assessment 2020	43



Table of contents (page 2 of 2)

Topic	Page no.
Section V: The future and how to prepare for it	44
Major solution provider investment themes	45
• Outlook for 2019-2021	
Appendix	48
Glossary of terms	49
Research calendar	51
References	52



How to read this document

Information desired

Where/how to locate the information

Summary of key messages

- The section on summary of key messages summarizes the IABP market insights
- The key messages are categorized along three dimensions:
 - IABP market overview
 - IABP solution provider landscape
 - IABP solution characteristics
 - The future and how to prepare for it

Key facts or analyses related to a specific topic

- A section is devoted to each dimension of the summary of key messages (listed above)
- Each section contains detailed charts on relevant topics within each dimension
- Refer to the table of contents (pages 3 and 4) to identify relevant topics covered within each section
- Summary pages at the beginning of each section cover the key trends

Outlook for 2019-21

The section provides a future outlook for the IABP market along the following dimensions:

- Growth and adoption of technologies
- Training and upskilling of solution provider FTEs
- Addressing of enterprise pain points
- Evolution of engagement and commercial models

Definitions for unfamiliar terms and related research

- Acronyms or technical outsourcing terms are defined in the glossary of terms (Appendix)
- Refer to the related Everest Group SOT research publications listed in references (Appendix)



Contents

- Introduction and research overview
 - Background of the research
 - Focus of the research
 - Everest Group's research methodology
- Summary of key messages
- IABP market overview
- IABP buyer adoption trends
- IABP solution characteristics
- IABP solution provider landscape
- The future and how to prepare for it
- Appendix

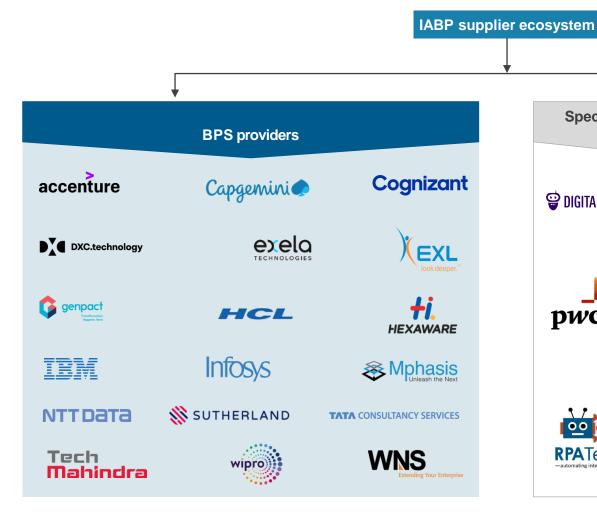


Background of the research

- Enterprise business operations are facing unprecedented pressure, even more so due to the ongoing COVID-19 crisis. Multiple digital elements are disrupting the status quo. Both on the demand as well as supply side, digital technologies, automation in particular, are becoming ubiquitous. Enterprises are expecting not only cost reduction but also next-generation benefits from their relationships, and solution providers have recognized the need to pivot quickly to a digital-powered model to provide those benefits to their buyers
- One of the most potent digital levers enabling this transformation is Intelligent Automation in Business Processes (IABP). A spectrum of IABP solutions leveraging a combination of RPA, Artificial Intelligence (AI), and advanced analytics is being deployed by solution providers to help buyers attain certain key benefits higher speed, improved accuracy, enhanced customer experience, and reduced cost, among others
- Ancillary technologies such as process mining are also making inroads, resulting in the development of deeper and more holistic solutions within the business process technology ecosystem
- In this research, we analyze the dynamics of the IABP space, along the following dimensions:
 - IABP market overview
 - IABP buyer adoption trends
 - IABP solution characteristics
 - IABP solution provider landscape
 - The future and how to prepare for it



Scope of this report





We focus on IABP solutions, offered either on a stand-alone basis or as part of a broader BPO deal, along with the associated implementation, consulting, and maintenance services.

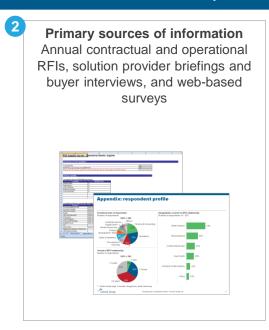
- Services scope: Business processes
- Geographic scope: Global
- Solution provider scope: 24 providers, including leading broad-based BPS providers, consulting firms, and specialist system integrators whose offerings fall in one of the three categories below:
 - IABP Services that include implementation, consulting, and maintenance. The automation technology license is already with the enterprise
 - IABP Solutions where the solution provider sources the automation technology as well as provides implementation, consulting, and maintenance services
- Intelligent Automation (IA) offered as part of a broader BPO deal within procurement, HR, banking, etc.

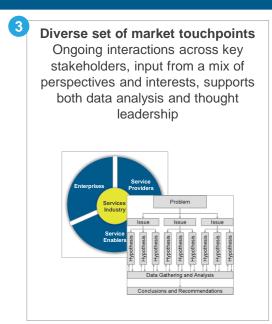


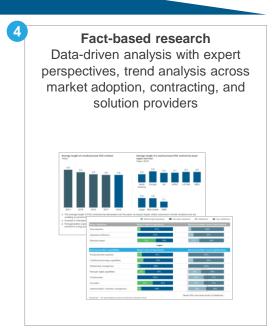
Our research methodology is based on four pillars of strength to produce actionable and insightful research for the industry

- Market thought leadership
- Actionable and insightful research
- Syndicated and custom research deliverables

Robust definitions and frameworks
Function-specific pyramids, Total Value
Equation, PEAK Matrix, and market
maturity







- Proprietary database on IA capabilities of 24 broad-based solution providers
- Large repository of existing research across AI, RPA, and advanced analytics
- Dedicated team for IA research, spread over two continents
- Executive-level relationships with buyers, solution providers, technology vendors, and industry associations



Everest Group's SOT research is based on multiple key sources of proprietary information

Proprietary database of 24 IABP solution providers

The database tracks the following elements for each provider:

- Automation design, development, and integration
- Automation control and monitoring
- Partnerships with enterprises, academic institutes, and other solution providers
- Support in terms of product training, maintenance, consulting, and other support services
- Availability and adoption of commercial model(s)
- Portfolio coverage in terms of industry, geography, process areas, and buyer size
- Vendor performance in terms of revenue and clients
- Proprietary database of the RPA, AI, and advanced analytics capabilities of 24 IABP solution providers, distributed among system integrators, BPS providers, and consulting & advisory firms to complement the research
- The database tracks the following for each provider:
 - Number of FTEs
 - Number of clients
 - FTE split by different lines of business

- Client split by region
- Location and size of delivery centers
- Technology solutions developed

- Solution provider briefings
 - Vision and strategy
 - Annual performance and future outlook
- Key strengths and improvement areas
- Emerging areas of investment
- Buyer reference interviews, ongoing buyer surveys, and interactions to understand:
 - Vision and objectives
 - Buying criteria
 - Apprehensions and challenges
 - Outcomes achieved
 - Future direction

Solution providers assessed



















































Contents

- Introduction and research overview
- Summary of key messages
- IABP market overview
- IABP Buyer adoption trends
- IABP solution characteristics
- IABP solution provider landscape
- The future and how to prepare for it
- Appendix



Summary of key messages (page 1 of 4)

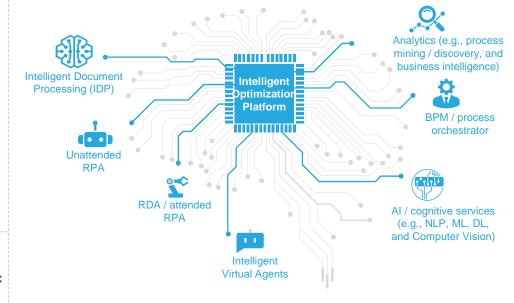
IABP market overview

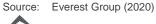
- The business process space is undergoing a tectonic shift. Enterprises are looking for value beyond the traditional benefits of cost reduction and process efficiency. Digital technologies are acting as the catalyst and enabler of this transition
- IABP is one such key disruptive digital technology. IABP technologies, including RPA and AI solutions, are opening up new vistas to attain next-generation efficiency, accuracy, scalability, compliance, and customer experience benefits, besides cost reduction
- IABP witnessed rapid growth in adoption at nearly 60% from 2017 to 2018, and this growth was
 estimated to reach ~ 65% by the end of 2019. While the current COVID-19 situation will temper growth
 for 2020, we expect a strong resurgence when we emerge out of the crisis
- The penetration as well as the scale of deployment of IABP is relatively low, given the nascent nature of the market. Barely a fifth of IABP deployments have an AI component – the majority are RPA-only deployments. Scaling up adoption is still a key challenge

IABP market adoption trends

- Adoption of IABP is the highest in North America, followed by Continental Europe, the UK, and Asia Pacific
- F&A, procurement, and contact center emerged as the leading areas for IABP application, followed by healthcare, banking, and insurance BPS segments

Key components of Intelligent Automation (IA)





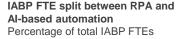
Summary of key messages (page 2 of 4)

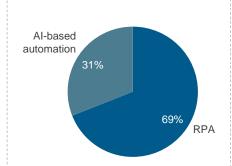
IABP market adoption trends

- Industry-specific use cases, especially in regulated industries such as BFSI and healthcare, see the highest IABP adoption, followed closely by F&A
- Intelligent automation adoption is highest among large enterprises as they have more avenues to deploy these solutions and gain efficiency and cost benefits. They are also more willing to spend on intelligent automation as compared with small and mid-sized enterprises

IABP solution characteristics

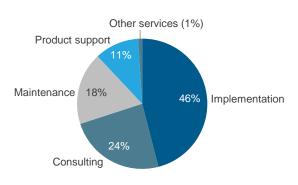
- The characteristics of IABP solutions can be described along three dimensions:
- Talent: Most IABP FTEs are working on RPA rather than AI-based automation. The share of IABP FTEs in product development is low because a significant number of providers use the partnershipbased approach to offer IABP solutions
- Shoring model: India is the most popular delivery location for IABP services, mainly because of its traditional cost and talent advantages
- Engagement and pricing model: The price of IABP is typically built into the overall price in BPS deals. Input-based pricing model is the most common, although more progressive licensing models such as transaction- and outcome-based are on the rise





IABP services FTE split across various service types

Percentage of total IABP services FTEs



Source: Everest Group (2020)



Summary of key messages (page 3 of 4)

IABP solution provider landscape

- Accenture, TCS, and Wipro have the highest market share in terms of active IABP engagements, together accounting for nearly 40% of the deployments
- In most geographies, TCS and Wipro have the largest share of active clients with IABP deployments. Continental Europe is dominated by Capgemini, while IBM has good traction in the APAC region
- Provider success varies across BPS segments. BPS segments with high potential for automation (such as F&A, procurement, banking, insurance, and healthcare) are highly competitive barring contact center, which is heavily dominated by TCS
- While referenced buyers have expressed average satisfaction with IABP, the Leaders are doing better.
 There is also significant scope for BPS providers to improve their AI expertise
- On Everest Group's PEAK Matrix™, IABP solution providers are segmented into three categories:
 - Leaders: Accenture, Capgemini, Cognizant, IBM, TCS, and Wipro
 - Major Contenders: DXC Technology, EXL, Genpact, Hexaware, HCL Technologies, Infosys,
 Mphasis, NTT DATA, PwC, Sutherland Global Services, Symphony, Tech Mahindra, and WNS
 - Aspirants: DigiBlu, Digital Workforce, Exela Technologies, qBotica, and RPATech

Solution providers' IABP market share by active engagements

(In alphabetical order within a bucket)









Summary of key messages (page 4 of 4)

The future and how to prepare for it

- While the current COVID-19 crisis has certainly tempered on-ground business activity and consequently IABP deals, the period leading up to and after recovery is likely to witness accelerated demand. Clearly, enterprises who were further ahead in their digital journeys did considerably better than their peers in weathering the pandemic. This realization is likely to lead to a frenetic pace of transformation and consequently IABP activity post-COVID-19
- Successful pilots and other success stories will further pave the way for IABP adoption
- Some technology-related barriers for embracing IABP will get addressed by vendors. As solution providers improve their consulting and maintenance support services, adopt more progressive pricing mechanisms, and expand upon their vendor partnerships, more buyers will look toward IABP for cost-savings and digital transformation
- As demand for IABP grows, talent availability will also increase with creation of dedicated roles within organizations adopting IABP
- Progressive models such as outcome- and transaction-based pricing will continue to attract buyers' interest
- The post-COVID-19 recession is likely to bring to the fore more interesting commercial models that depend less on initial outlay and work ways of incorporating run-cost into payouts



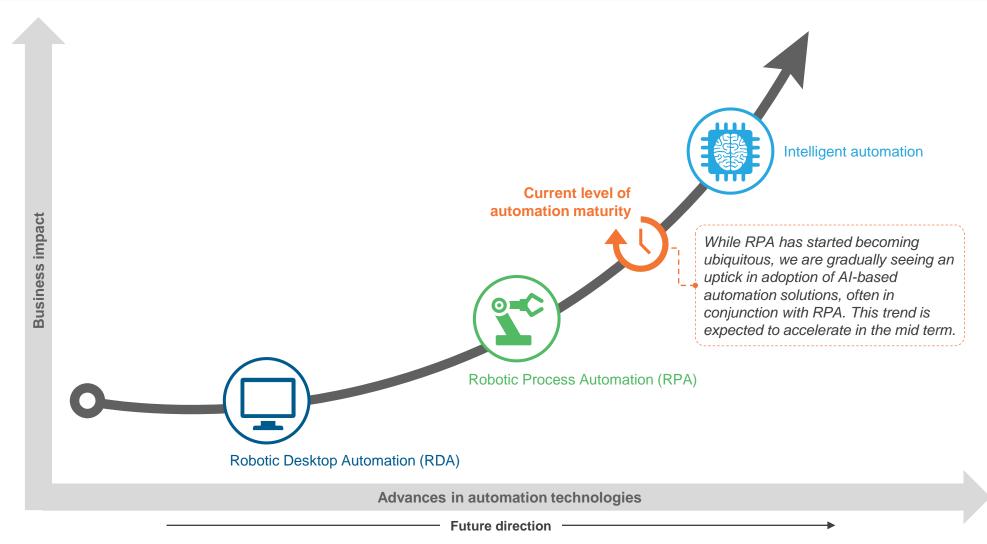
Contents

- Introduction and research overview
- Summary of key messages
- IABP market overview
 - Overall adoption and growth
 - Key drivers
 - Key challenges
- Buyer adoption trends
- IABP solution characteristics
- IABP solution provider landscape
- The future and how to prepare for it
- Appendix



Evolution of automation

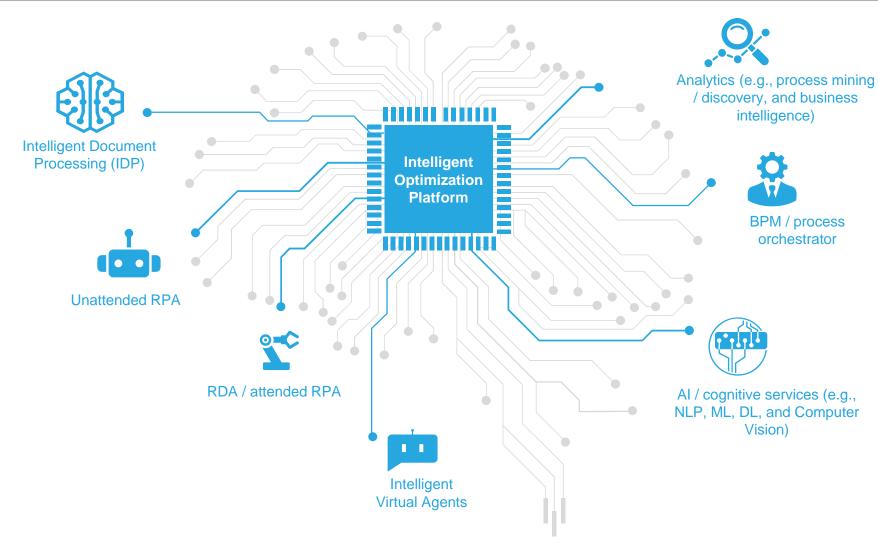
The automation ecosystem has evolved from basic automation for transactional tasks to intelligent automation impacting judgment-intensive processes





Key components of Intelligent Automation (IA)

RPA and RDA, along with analytics, BPM, and AI-based solutions such as IDP and IVA, form the IA ecosystem





The IABP market has witnessed significant growth in the past years, and is estimated to have grown at 60-70% CAGR in 2019





XX% CAGR (2017-19)

IABP services engagements

IABP solutions engagements

IABP embedded BPO engagements

IABP market engagements are estimated to have grown at ~65% in 2019, primarily driven by the following factors:

- Increasing buyer confidence in these solutions
- Rising sophistication of IABP solutions e.g., technologies such as process mining and IDP, allowing for further inclusion of IABP solutions within contracts
- Increasing number of vendor-led initiatives to drive margin improvements and gain efficiency

While the COVID-19 situation is likely to temper demand in the short term, we expect a resurgence and potential acceleration as we head toward recovery

¹ As on March 2019, there are \sim 5,200-5,300 active IABP engagements Source: Everest Group (2020)

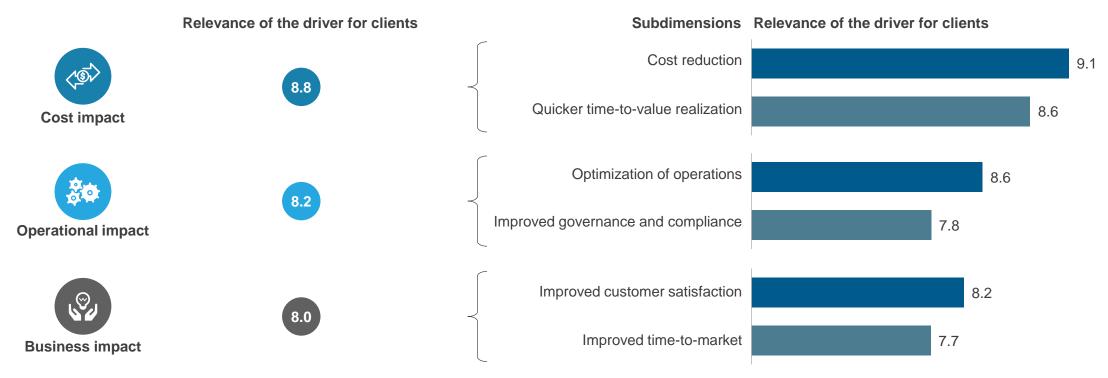


Drivers for IABP adoption

IABP growth is being driven by the need for foundational outcomes such as cost reduction and efficiency, as well as higher-order ones such as superior customer experience and agility

Key factors driving IABP adoption

Importance on a scale of 1 to 10



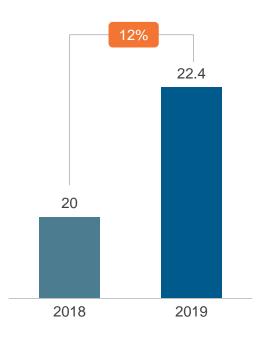
- Reducing costs continues to be the most important factor driving the adoption of IABP solutions. Other drivers include bringing in efficiency and accuracy in operations
- Increasingly, IABP is also being used to enhance customer experience through much shorter response time for handling requests, round-the-clock availability, and reduced need to manually bridge gaps in technology (for instance, through repeated data entry). When done well and even at a small scale, IABP can also lead to top-line growth through the ability to serve new groups of customers and building new products

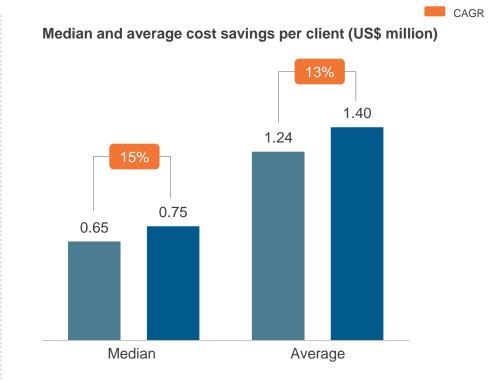


Benefits derived

This is clearly evidenced by the impressive outcomes achieved for enterprises through IABP deployments...

Average number of FTEs released per client



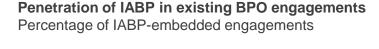


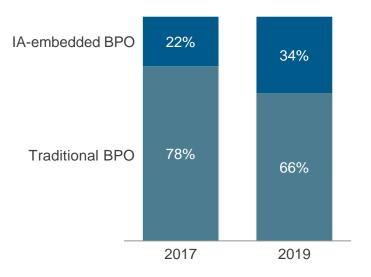
- Adoption of IABP solutions has brought in a multitude of benefits, cost reduction and quality improvement in operations continuing to feature at the top
- There are also multiple non-tangible savings such as:
 - Employee engagement redeployment of resources to higher value functions, allowing firms to offload tasks to robots so employees can focus on the customer
 - Improved customer satisfaction
 - Increased compliance and auditability



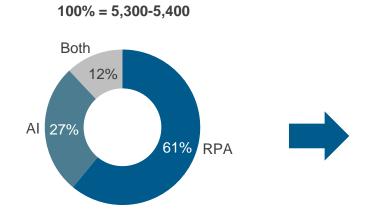
Challenges for IABP adoption

...however, the road to broad-based adoption is still quite bumpy; scaling up continues to remain a challenge...



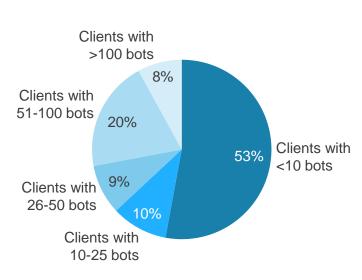


Split of deployments by category



Client mix by number of RPA bots

Percentage of clients



- Though the overall level of adoption of IABP solutions is on the rise, scaling up IA is one of the key challenges enterprises face in their automation journey
- More than half of the enterprises have less than 10 bots deployed and less than 10% have over 100 bots
- Some of the key reasons for enterprises facing difficulty in scaling up IA include:
 - Lack of robust IA strategy and roadmap
 - Ability to identify opportunities and sustain a pipeline
 - Organizational change management issues
 - Lack of experienced resources
 - Infrastructure setup



Challenges for IABP adoption

...which can be overcome

Challenges • Difficult to identify scientifically Shortage of skills Organizational change • Huge volumes of clean data • Ethics and transparency in AI • Longer time to scale Difficult to automate Lack of practical knowledge resulting from IA required to train Al decision-making than expected for implementing IA • Extracting this data and • Tracking the path taken by Multiple stakeholders involved higher-level processes Stakeholder buy-in and · Lack of standardization concerns from IT teams making it relevant for Al software in automating a use case training purposes in processes Availability of relevant Organizational Lack of sufficient Transparency in Al Implementation **Process** data to train Al decision-making selection and sufficient talent readiness Best practices / lessons learned Consider using process Vendors are boosting training IA should be treated as a Use past transaction Potentially use a Manage expectations around mining and other tools information or data and quality and education change program maker-checker construct in time and effort Starting out with a happy path • Taking initial help from · Establishing a CoE and check them for training AI • Enable the right environment critical decisions Integrating with BPM/process partnering with enterprise IT · Avail pre-trained solutions • Use explainable AI constructs (e.g., CoE) for stakeholders to third-party solution providers orchestrator from vendors offered by some vendors work efficiently Looking into process Making the right process



optimization before automating

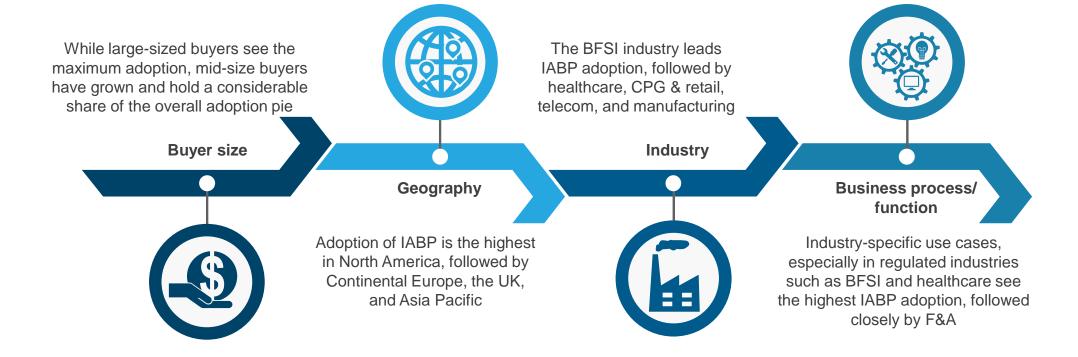
choices for Al automation

Contents

- Introduction and research overview
- Summary of key messages
- IABP market overview
- IABP buyer adoption trends
 - Buyer adoption by geography
 - Buyer adoption by industry
 - Buyer adoption by business function
 - Buyer adoption by buyer size
- IABP solution characteristics
- IABP solution provider landscape
- The future and how to prepare for it
- Appendix



Buyer adoption trends – sectional summary

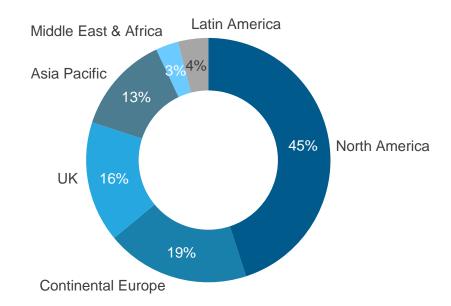




Adoption of IABP is the highest in North America, followed by Continental Europe, the UK, and Asia Pacific

Adoption trends by buyer geography Percentage split of IABP engagements

 $100\% = 5,200-5,300^{\circ}$



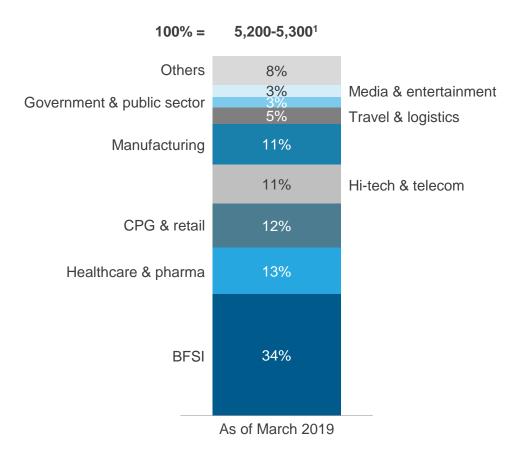
- North America is the largest adopter of intelligent automation solutions. Adoption in this region is primarily
 due to the mature market and presence of a large BFSI sector that is moving toward automation due to
 significant cost pressures and compliance burden
- Continental Europe, the UK, and Asia Pacific are also catching up with adoption of intelligent automation solutions in business processes
- Adoption in Continental Europe is largely driven by France, Germany, the Netherlands, and Sweden. An increase in the administrative workload due to regulations such as GDPR is also helping drive adoption
- Growth in Asia Pacific is mainly due to presence of a large number of GBS in India; and increasing demand from countries such as Japan, Singapore, and China
- While adoption of intelligent automation solutions has picked up in the Middle East and LATAM, these regions are still largely untapped and offer a huge potential for future growth



The BFSI industry leads IABP adoption, followed by healthcare, CPG & retail, telecom, and manufacturing

Adoption trends by buyer industry

Percentage split of IABP engagements



- The BFSI industry is a front runner in the adoption of IABP, accounting for more than a third of the market share, driven primarily by the need to maintain accuracy levels, increase speed, reduce costs, and follow stringent regulatory compliance
- Within BFSI, banking and capital markets accounted for 24% and the insurance industry accounted for 10% of the overall market share
- Similar to BFSI, healthcare & pharmaceutical industries are highly regulated and run several transactional business processes. Solutions comprising IDP and RPA components are witnessing great traction in this sector
- The CPG, retail, and manufacturing sectors are also leveraging RPA solutions, coupled with IDP, to tackle the processing of high volume of documents
- The telecom industry has a high volume of transactional back- and front-office processes, hence witnesses high adoption of RPA- and IVA-based solutions



Industry-specific use cases, especially in regulated industries such as BFSI and healthcare, see the highest IABP adoption, followed closely by F&A

Adoption trends by business process/function

Percentage split of IABP engagements

100% = 5,200-5,300



- Industry-specific processes, primarily those with a substantial volume of transactions are witnessing high adoption of intelligent automation. Solution providers have started to offer industry-specific pre-trained solutions of IVA and IDP to address the rising demand
- F&A is the leading horizontal business process segment in intelligent automation adoption. Most F&A BPS buyers are into mature stages of their BPS relationships and have achieved most of the traditional benefits of BPS. They are now looking to gain next-generation benefits from intelligent automaton technologies
- Procurement processes with high volume of transactions and error-prone nature are witnessing high adoption of intelligent IDP and RPA solutions
- Owing to the great pressure to improve efficiency, enhance customer experience, and reduce costs; adoption of IVA and attended RPA (RDA) is high in contact center use cases
- HR processes such as payroll automation, employee onboarding, attendance information update, and employee record management are driving intelligent automation adoption

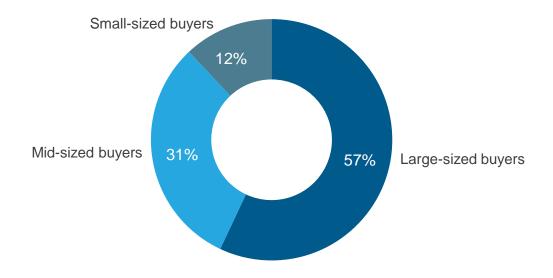


While large-sized buyers have been the earliest adopters of IABP, mid-size buyers have grown and hold a considerable share of the overall adoption pie

Adoption trends by buyer size¹

Percentage of IABP engagements

 $100\% = 5,200-5,300^{2}$



- Intelligent automation adoption is the highest among large enterprises as they have more
 avenues to deploy these solutions and gain efficiency and cost benefits. They are also
 more willing to spend on intelligent automation vis-à-vis small and mid-sized enterprises
- IABP implementations within small- and mid-sized buyers are also increasing as proof points increase

² Figures as on March 2019 Source: Everest Group (2020)



¹ Buyer size is defined as large (>US\$5 billion in revenue), mid-sized (US\$1-US\$5 billion in revenue), and small (<US\$1 billion in revenue)

Contents

- Introduction and research overview
- Summary of key messages
- IABP market overview
- IABP buyer adoption trends
- IABP solution characteristics
 - Talent
 - Global sourcing
 - Commercial model
- IABP solution provider landscape
- The future and how to prepare for it
- Appendix



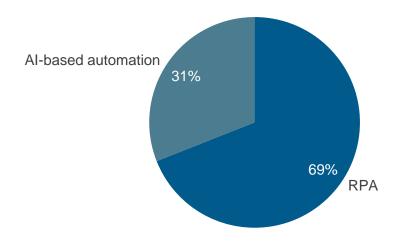
IABP solution characteristics – sectional summary

- Talent: IABP FTE talent is skewed in favor of RPA, while the service scope is dominated by implementation
- Global sourcing: The APAC region dominates as a source of IABP talent, with EMEA being a distant second
- **Commercial model:** Traditional input-based pricing is the most common model. However, we see increasing adoption of progressive models such as outcome- and transaction-based pricing in the market

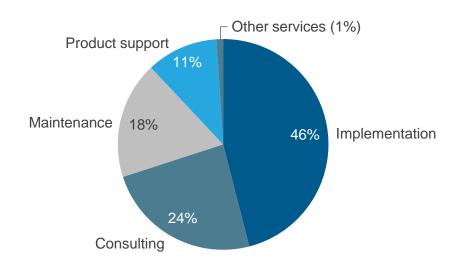


IABP FTE talent is skewed in favor of RPA, while the service scope is dominated by implementation

IABP FTE split between RPA and Al-based automation Percentage of total IABP FTEs



IABP services FTE split across various service types Percentage of total IABP services FTEs

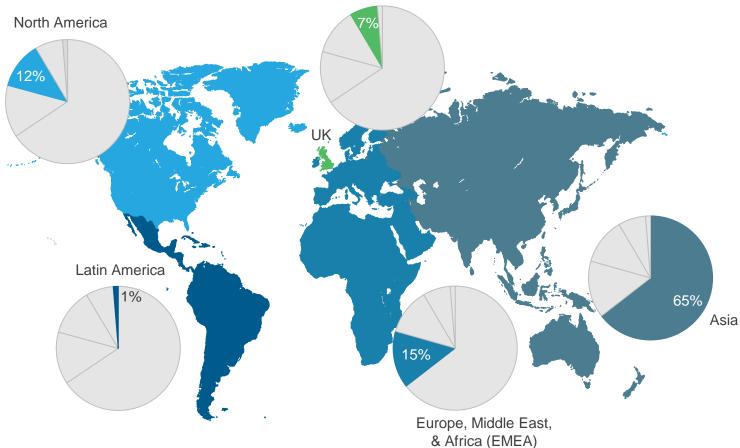


- Although a majority of the IABP FTEs are in RPA owing to higher maturity of this market, AI-based FTEs are increasing with the adoption of cognitive solutions
- Solution providers are focused on providing good implementation services to enterprises. More than half of their service FTEs are allocated in implementation of solutions
- With the emergence of new Al-based solutions and the increasing need to help enterprises scale their implementations/investments, there is a greater demand for consulting services



The APAC region dominates as a source of IABP talent, with EMEA being a distant second

Global sourcing of IABP services FTEs Share of total number of IABP services FTEs



- Asia Pacific accounts for two-thirds of the global IABP FTEs
- Within APAC, India has the major market share because of its traditional cost and talent advantages
- China and the Philippines are other emerging countries within APAC for delivery of IABP services
- Continental and Eastern Europe have emerged to be the preferred locations to enable better support to buyers located in the United Kingdom and other onshore European locations due to similar time zones and language capabilities
- The UK and North America continue to hold meaningful share, mainly for providing consulting services

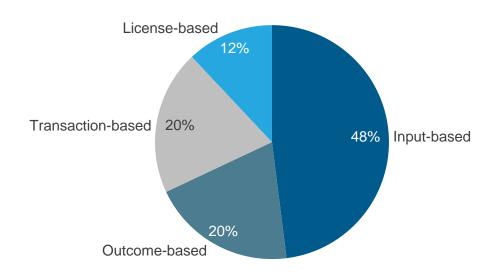
Asia Pacific



While traditional input-based pricing is the most common model, progressive models such as outcome- and transaction-based pricing in the market are being increasingly adopted

Adoption of commercial models

Percentage of clients



- Input-based pricing is the most prevalent model where pricing is based on the number of FTEs and the billing rate. With the emergence of more progressive commercial models such as transaction-based and outcome-based, its adoption is expected to go down in the future
- Outcome-based commercial models have started to see greater adoption in recent times where pricing is based on gainsharing or linked to outcomes such as Straight Through Processing (STP), measurable cost, or the revenue impact delivered. Quantifying the benefits from automation is a major challenge in this model, and hence adoption is seen to be higher with mature clients (i.e., those who have an established baseline)
- Transaction-based pricing continues to see increased adoption from enterprises. In this model, pricing is directly related to the outputs such as the number of documents processed (IDP) or number of conversations (IVA)
- License-based pricing model is the least prevalent model where solution providers charge enterprises on the basis of the number of licenses supplied



Contents

- Introduction and research overview
- Summary of key messages
- IABP market overview
- IABP buyer adoption trends
- IABP solution characteristics
- IABP solution provider landscape
 - Market share by active engagements
 - Market share by geography
 - Market share by business function
- The future and how to prepare for it
- Appendix



IABP competitive landscape – sectional summary

- Accenture, TCS, and Wipro have the highest market share in terms of active IABP engagements, together accounting for nearly 40% of the deployments
- In most geographies, TCS and Wipro have significant share of active clients with IABP deployments. Continental Europe is dominated by Capgemini, while IBM has good traction in the APAC region
- Provider presence varies across business functions. Functions with high potential for automation (such as F&A, procurement, banking, insurance, and healthcare) are highly competitive barring contact center, which is heavily dominated by TCS
- The majority of buyers are satisfied with solution providers about implementation and support services, but expect better RPA and cognitive technology solutions
- TCS and Capgemini have the highest number of FTEs dedicated to IABP. Capgemini and Accenture have the highest share of FTEs in services such as implementation, consulting, and maintenance



Accenture, TCS, and Wipro have the highest market share in terms of active IABP engagements

Solution providers' IABP market share by active engagements

(In alphabetical order within a bucket)



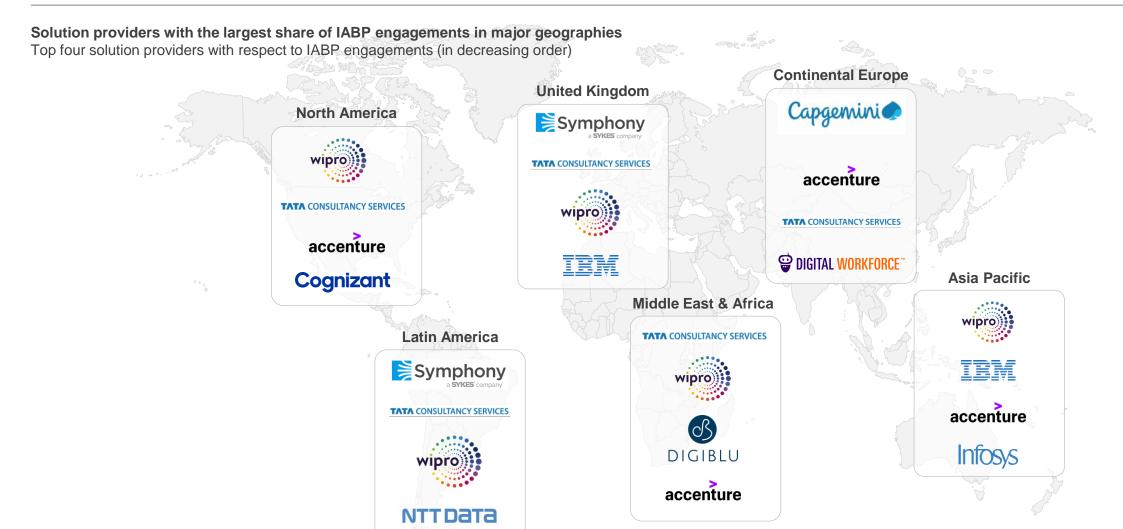




- Accenture, TCS, and Wipro have found significant success in the automation space, with a large number of clients with IABP deployments. TCS and Wipro are also experiencing notably high growth in their client portfolios as well
- Capgemini, Cognizant, Genpact, and IBM also have large and growing IABP client portfolios
- Though the other players have a much smaller number of automation clients, most of them have been growing fast as well



TCS is among the top three in most geographies; Wipro leads in North America, Capgemini leads in Continental Europe, while IBM is gaining traction in the Asia Pacific region

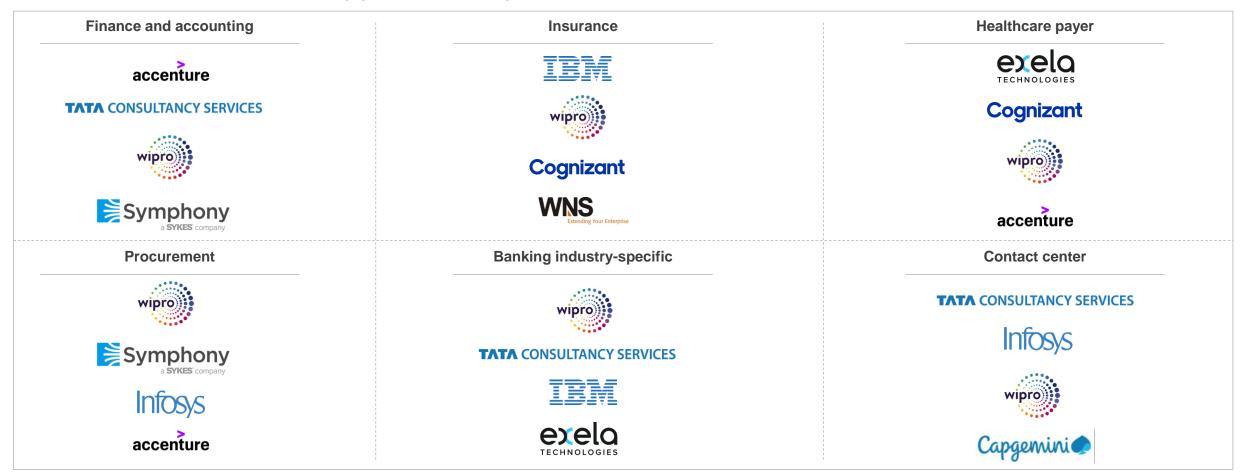




Accenture has found the greatest success in F&A, Wipro leads in procurement and banking industry-specific processes, while TCS leads in contact center processes

Solution providers with the largest share of IABP engagements in the top six business functions

Top four solution providers with respect to IABP engagements (in decreasing order)

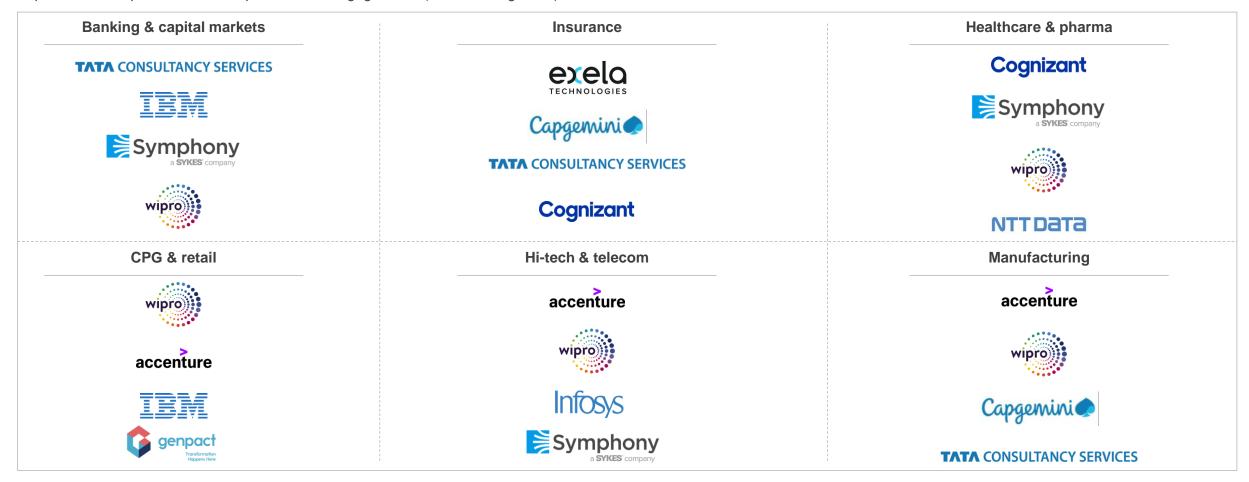




TCS and EXL lead in the banking and insurance industries respectively; Wipro has the highest market share in CPG & retail, while Accenture leads in manufacturing and telecom

Solution providers with the largest share of IABP engagements in the top six industry verticals

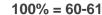
Top four solution providers with respect to IABP engagements (in decreasing order)

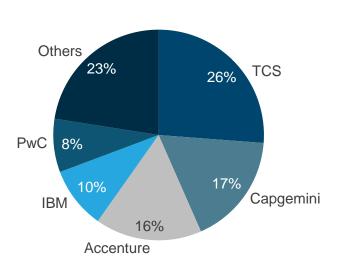




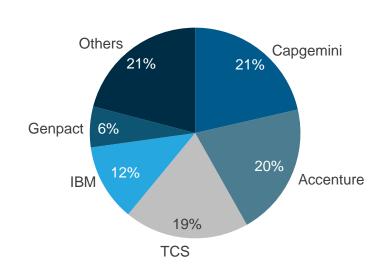
Overall, TCS and Capgemini have the highest number of FTEs dedicated to IABP, while Capgemini and Accenture have the highest share of FTEs in services such as implementation, consulting, and maintenance

Share of FTEs involved in IABP services and product development¹ Number of FTEs in '000s





Share of FTEs involved in IABP services² Number of FTEs in '000s

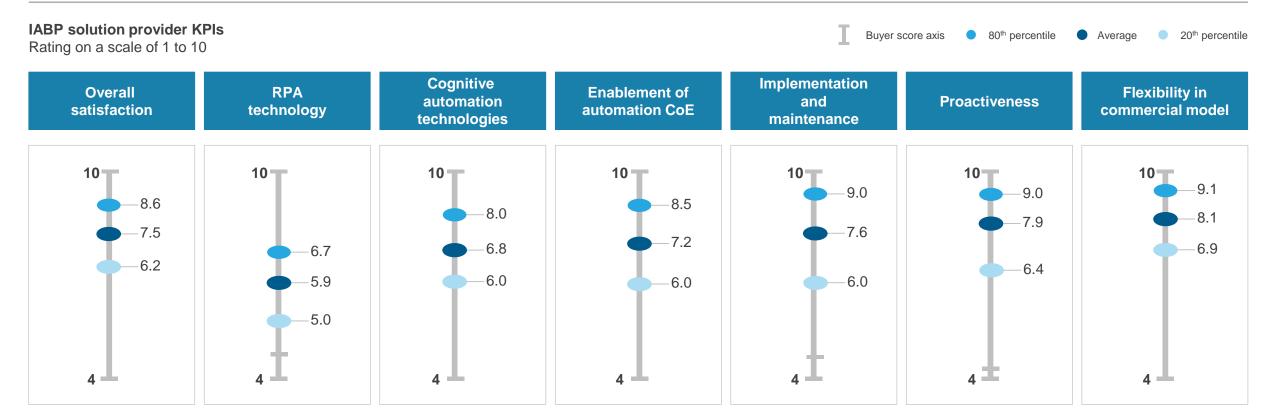


- Overall, TCS and Capgemini have the highest share of FTEs involved in IABP services and product development combined together
- Accenture and Capgemini have the highest share of FTEs in IABP services. Providers that focus on proprietary IABP solutions tend to have more FTEs in product development as opposed to those that adopt a partnership-based approach



Buyer satisfaction

Buyers are satisfied with solution providers about implementation and support services, but expect better RPA and cognitive technology solutions



- Buyers have indicated a low level of satisfaction with RPA technologies and expect them to focus more on enhancing features for the control and monitoring of robots. They also feel that RPA scalability is one of the biggest challenges, which indicates that solution providers should try achieving a better alignment with buyer expectations to help them achieve the desired outcomes
- Buyers have also indicated average satisfaction with the cognitive capabilities of providers-across a host of features such as computer vision, ML, NLP, and IDP
- Buyers rate the flexibility in engagement and commercial models, along with proactiveness, as key strengths for IABP solution providers. They are also moderately satisfied with provider implementation and maintenance capabilities



Everest Group PEAK Matrix®

Intelligent Automation in Business Processes (IABP) Solutions PEAK Matrix® Assessment 2020

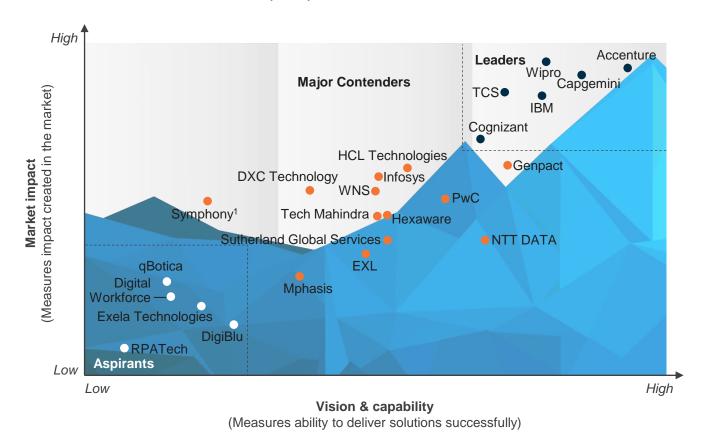


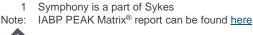
Leaders

Aspirants

Major Contenders

Everest Group Intelligent Automation in Business Processes (IABP) Solutions PEAK Matrix® Assessment 2020







Contents

- Introduction and research overview
- Summary of key messages
- IABP market overview
- IABP buyer adoption trends
- IABP solution characteristics
- IABP solution provider landscape
- The future and how to prepare for it
 - Major solution provider investment themes
 - Outlook for 2019-21
- Appendix



Intelligent Automation vendors are investing in building their technology capabilities, expanding their partner ecosystem, and building robust training programs

Major investment themes by Intelligent Automation solution providers







Technology capability

- Intelligent automation solution providers are investing extensively to develop built-in cognitive capabilities such as machine learning and NLP for their solutions
- Larger providers are increasingly adopting a platform approach to automation, typically building in several of the cognitive components while retaining the flexibility to connect to third-party solutions and microservices as required
- Some providers have also launched/enhanced automation-as-a-service, enabling users to have the option of on-cloud as well as on-premise deployments. This also provides a lower cost of entry and ownership vs. licensed or managed service models

With technology vendors

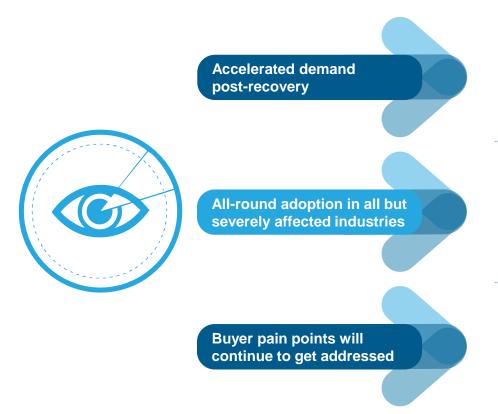
 Solution providers are partnering with vendors to leverage cognitive technologies for enhancing their Al and advanced analytics offerings

With research institutions

- Solution providers continue to partner with research institutions to further develop and improve upon existing intelligent automation solutions
- Technology vendors continue to provide hands-on training and RPA certification to address automation skills shortage
- Vendors are also setting up academies along with leadership development programs for their FTEs
- Solution providers are investing in learning and training programs for their employees to equip them with skill sets to enable successful automation for clients



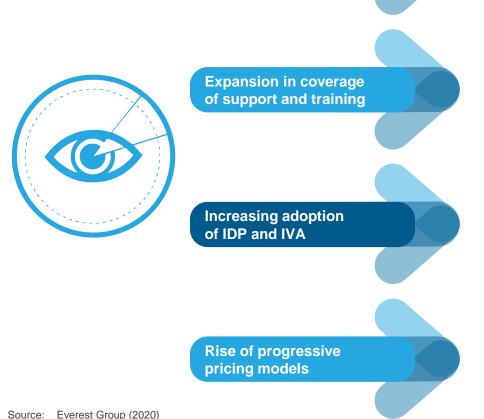
Outlook for 2019-21 (page 1 of 2)



- While the current COVID-19 crisis has certainly tempered on-ground business activity and consequently IABP deals, the period leading up to and after recovery is likely to witness accelerated demand. Clearly, enterprises that were further ahead in their digital journeys did considerably better than their peers in weathering the pandemic. This realization is likely to lead to a frenetic pace of transformation and, consequently, IABP activity post-COVID-19
- Successful pilots and other success stories will further pave the way for IABP adoption
- IABP adoption will span various geographies and industries (except for those experiencing existential issues due to COVID-19) and is expected to be independent of the buyer size
- Geographies such as Europe and Asia will see faster adoption due to lower maturity
- BFSI, healthcare, and pharma industries are expected to drive this growth in adoption due to increased
 pressure to meet high levels of accuracy, speed, and regulatory compliance, thus rendering IABP an
 attractive solution. Unpredictability in transaction volumes in some of these industries during and postCOVID-19 is likely to accelerate demand
- Some technology-related barriers to embracing IABP will get addressed by vendors. As solution providers
 improve their consulting and maintenance support services, adopt more progressive-pricing mechanisms,
 and expand upon their vendor partnerships, more buyers will look towards IABP for cost-savings and digital
 transformation
- As demand for IABP grows, talent availability will also increase with creation of dedicated roles within the organizations adopting IABP



Outlook for 2019-21 (page 2 of 2)



Pre-packaged

process-centric solutions

- IABP solution providers will continue to create specific solutions for processes such as F&A, HR, and claims
 processing. Pre-packaged solutions will contain pre-trained AI modules, pre-built workflow, reusable RPA
 components, and pre-built integrations with core systems of records
- Such solutions are not only likely to make it easier to deploy for buyers, but also reduce time to ROI
- IABP solution providers will continue to invest in increasing their FTE headcount across product development, implementation, and maintenance to increase their presence in the market
- More vendors are expected to establish dedicated curricula and academies for RPA training in the future.
 Also, certifications and accreditation will gain more importance as demand for RPA experts increases in the market
- The contact center segment is expected to lead the growth in demand for IABP technologies such as chatbots and intelligent virtual agents
- BFSI, telecom, and manufacturing are expected to see high adoption of IDP solutions due to their large share of transactional business processes as well as high compliance requirements that necessitate processing of a large number of documents
- Adoption of cloud and platform-based solutions is expected to increase for enhanced scalability
- Progressive models such as outcome- and transaction-based pricing will continue to attract buyers' interest
- The post-COVID-19 recession is likely to bring to the fore more interesting commercial models that depend less on initial outlay and work on ways of incorporating run-cost into payouts



Contents

- Introduction and research overview
- Summary of key messages
- IABP market overview
- Buyer adoption trends
- IABP solution characteristics
- IABP solution provider landscape
- The future and how to prepare for it
- Appendix
 - Glossary of terms
 - Research calendar
 - References



Glossary of key terms used in this report (page 1 of 2)

Term	Definition	
Artificial intelligence	Ability of machines to use cognitive computing to mimic human intelligence, such as visual perception, speech recognition, decision-making, and language translation	
Autonomic computing	Autonomic computing refers to the self-managing characteristics of distributed computing resources, adapting to unpredictable changes while hiding its intrinsic complexity to operators and users	
BPM tools	These are process optimization solutions with capabilities of process design, execution (through workflows and orchestration of different BPS technology systems), and monitoring (through analytics)	
ВРО	Business Process Outsourcing refers to the purchase of one or more processes or functions from a company in the business of providing such services at large, or as a third-party provider	
Buyer	The company/entity that purchases outsourcing services from a provider of such services	
CoE	Center of Excellence is a competency or capability center that specializes in some particular area of focus such as a technology, skill, or discipline	
Cognitive computing	Cognitive computing involves self-learning systems that use data mining, pattern recognition, and natural language processing to mimic the way the human brain works	
FTE	Full-Time Equivalent is a way to measure a worker's productivity and/or involvement in a project. An FTE of 1.0 means that the person is equivalent to a full-time worker	
FTE-based pricing	Input-based pricing structure; priced per resource type with significant price differences between onshore and offshore (e.g., per onshore clerk and per offshore clerk)	
Horizontal business processes	Horizontal business processes refer to processes that are common across the various departments in an organization and are often not directly related to the key revenue-earning business. Examples include procurement, finance & accounting, and human resource management	
IABP deployments	In production or scaled-up deployments of IABP solutions	
Machine learning	A type of artificial intelligence that provides computers with learning capabilities without explicit programming	



Glossary of key terms used in this report (page 2 of 2)

Term	Definition		
NLP	Natural Language Processing refers to a machine's ability to interpret human languages		
Offshoring	Transferring activities or ownership of a complete business process to a different country from the country (or countries) where the company receiving the services is located. This is primarily done for the purpose of gaining access to a lower-cost labor market, but may also be done to gain access to additional skilled labor, establish a business presence in a foreign country, etc. Companies may utilize offsho either through an outsourcing arrangement with a third party or by establishing their own Global In-house Centers (GICs) in offshore location, among other business structures		
RDA	It refers to a type of automation that interacts with a computer-centric process through the User Interface (UI) / user objects of the software application supporting that process. It works on agent's desktops, requires human triggers, and is aimed at increasing agent's productivity by integrating and automating processes on the desktop		
RPA	It refers to a type of automation that interacts with a computer-centric process through the User Interface (UI) / user objects of the software application supporting that process. It is typically deployed on virtual machines and can enable end-to-end process automation without the need for human triggers		
Semi-structured data	Semi-structured content is one that does not conform to the pre-defined structure of content, but nonetheless, contains tags / other markers to separate semantic elements and enforce hierarchies. In short, it has a self-describing structure. The placeholders of the content can be in varied sequences		
Structured data	Structured content is one that conforms to the pre-defined structure of content in terms of tags to separate semantic elements and enforce hierarchies of records and fields. Moreover, the placeholders for the content have a pre-defined sequence		
Transaction- based pricing	Output-based pricing structure; priced per unit transaction with significant price differences between onshore and offshore		
Unstructured data	Unstructured content refers to information that either does not have a pre-defined data model or is not organized in a pre-defined manner. Unstructured information is typically text-heavy, but may contain data such as dates, numbers, and facts as well		
Vertical-specific business processes	Vertical-specific business processes refer to processes that are specific to a department within an organization and are often directly related to the key revenue-earning business. Examples include lending process in case of the banking industry and claims processing in case of the insurance industry		

Source: Everest Group (2020)



Research calendar – Service Optimization Technologies (SOT)

	Published Planned Carrent release
Flagship Service Optimization Technologies (SOT) reports	Release date
Enterprise IA Automation Adoption – Pinnacle Model® Analysis 2019	December 2019
Intelligent Automation in Business Processes (IABP) Solution Provider Landscape with PEAK Matrix® Assessment 2020	February 2020
Process Mining – Technology Vendor Landscape with Products PEAK Matrix® Assessment 2020	February 2020
IA in Business Process Services (BPS) – Solution provider compendium 2020	March 2020
Conversational AI – Technology Vendor Landscape with Products PEAK Matrix® Assessment	March 2020
Intelligent Document Processing (IDP) – Technology Vendor Landscape with Products PEAK Matrix® Assessment	March 2020
Intelligent Automation in Business Processes (IABP) – State of the Market Report 2020	July 2020
Robotic Process Automation (RPA) – Technology Vendor Landscape with Products PEAK Matrix® Assessment 2020	Q3 2020
Thematic Service Optimization Technologies (SOT) reports	
Intelligent Automation: Accelerating from Short-term Wins to Long-term Strategic Business Outcomes	March 2019
Advanced Content Intelligence – Pivotal Technology to Empower the New Age Organization	May 2019
Who Takes on the RPA Mantle?	June 2019
Intelligent Document Processing (IDP) Playbook	September 2019
360-degree Enterprise Automation Playbook	May 2020
Intelligent Automation Orchestration	Q3 2020

Note: For a list of all of our published Service Optimization Technologies (SOT) reports, please refer to our website page



Additional SOT research references

The following documents are recommended for additional insight into the topic covered in this report. The recommended documents either provide additional details or complementary content that may be of interest

- 1. Intelligent Automation: Accelerating from Short-term Wins to Long-term Strategic Business Outcomes (EGR-2019-38-V-3088); 2019. This viewpoint examines how enterprises can adopt an automation strategy that embraces Intelligent Automation to successfully accelerate from short-term wins to long-term strategic business outcomes
- 2. Creating Business Value Through a Next-Generation Smart Digital Workforce (EGR-2018-38-V-2548); 2018. A viewpoint focusing on leveraging RPA and Al-based automation solutions to create smart digital workforce and generate business value for enterprises
- 3. Artificial Intelligence in Global Services State of the Market Report (EGR-2017-13-R-2397); 2017. This report helps bring about a better understanding of the AI market from the purview of global services. In particular, it includes a holistic definition of AI, buyer adoption trends, learnings from early adopters, and a deep dive into the AI technology vendor landscape

For more information on this and other research published by Everest Group, please contact us:

Anil Vijayan, Vice President: anil.vijayan@everestgrp.com

Priyanka Mitra, Practice Director: priyanka.mitra@everestgrp.com

SOT Team: SOTresearch@everestgrp.com

Website: www.everestgrp.com | Phone: +1-214-451-3000 | Email: info@everestgrp.com







About Everest Group

Everest Group is a consulting and research firm focused on strategic IT, business services, and sourcing. We are trusted advisors to senior executives of leading enterprises, providers, and investors. Our firm helps clients improve operational and financial performance through a hands-on process that supports them in making well-informed decisions that deliver high-impact results and achieve sustained value. Our insight and guidance empower clients to improve organizational efficiency, effectiveness, agility, and responsiveness. What sets Everest Group apart is the integration of deep sourcing knowledge, problem-solving skills and original research. Details and in-depth content are available at www.everestgrp.com.

Dallas (Headquarters)

info@everestgrp.com +1-214-451-3000

Bangalore

india@everestgrp.com +91-80-61463500

Delhi

india@everestgrp.com +91-124-496-1000

London

unitedkingdom@everestgrp.com +44-207-129-1318

New York

info@everestgrp.com +1-646-805-4000

Toronto

canada@everestgrp.com +1-416-388-6765

Stay connected

Website

www.everestgrp.com

Social Media

3

@EverestGroup



@Everest Group

Blog



www.everestgrp.com/blog/

This document is for informational purposes only and it is being provided "as is" and "as available" without any warranty of any kind, including any warranties of completeness, adequacy, or fitness for a particular purpose. Everest Group is not a legal or investment adviser; the contents of this document should not be construed as legal, tax, or investment advice. This document should not be used as a substitute for consultation with professional advisors and Everest Group disclaims liability for any actions or decisions not to act that are taken as a result of any material in this publication.