



Artificial Intelligence in Global Services – State of the Market Report – 2017

Service Optimization Technologies (SOT)

Market Report – October 2017: Complimentary Abstract / Table of Contents

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Background and scope of the research

Background of the research

There is growing interest among organizations about Artificial Intelligence (AI) technologies, given that they are enablers for intelligent automation. AI presents unique opportunities for organizations – enabling them to improve customer experience, operational efficiency, enhance employee productivity, cut costs, accelerate speed-to-market, and develop more sophisticated products. The definition of AI is continually evolving and understanding of its capabilities and applications varies widely in the market. Since it is a relatively new area in global services space, many organizations are still in the early education and adoption stages of maturity. To help its clients understand the AI technology market better, Everest Group has researched this space from the purview of global services (e.g., IT and business process services, such as F&A, HR, contact center, and corporate functions).

In this study, we analyze the state of the AI Independent Software Vendor (ISV) market. We focus on:

- Market size and growth
- Adoption by buyer geography, size, industry, and business function/process
- Value propositions, key challenges and barriers to adoption, AI use cases, and learnings from early adopters
- AI technology vendor landscape (including ISVs and traditional IT/BPS providers)
- Future outlook

Scope of study

Only AI products that are sold on license, and irrespective of any ongoing business or IT process outsourcing services, were considered for this report. These include software that can be deployed and run by the clients in-house or those that require professional services for deployment

This report is based on three key sources of proprietary information

1

Proprietary database of 40 AI Independent Software Vendors (ISVs)

- The database offers the following information
 - Description of company (including revenue) and types of products/platforms offered
 - Key clients and their characteristics (industries, client revenue, and geography)
 - Adoption levels for key functions
 - Prevalent technologies leveraged
 - Global sourcing headcount

2

Interactions with AI ISVs, buyers, and other industry stakeholders

- Interviews with ISVs, buyers, and other stakeholders covering the following topics:
 - Product capabilities and solutions
 - Evolution and current state of the AI market
 - Opportunities and challenges
 - Company-specific growth trends, prevalent AI technologies leveraged, and use cases
 - Expected direction of movement in the industry
 - Future trends in the AI market

3

Proprietary database of SDA capabilities (including AI capabilities) of ITS/BPS providers

- The database covers the following:
 - SDA vision and strategy, top SDA solutions, their value propositions, development mode, and RPA and AI capabilities
 - Key SDA technologies & solutions and their adoption by industry and function
 - Technology partners and collaborations with academic institutes
 - Investments specific to SDA
 - Engagement & commercial models

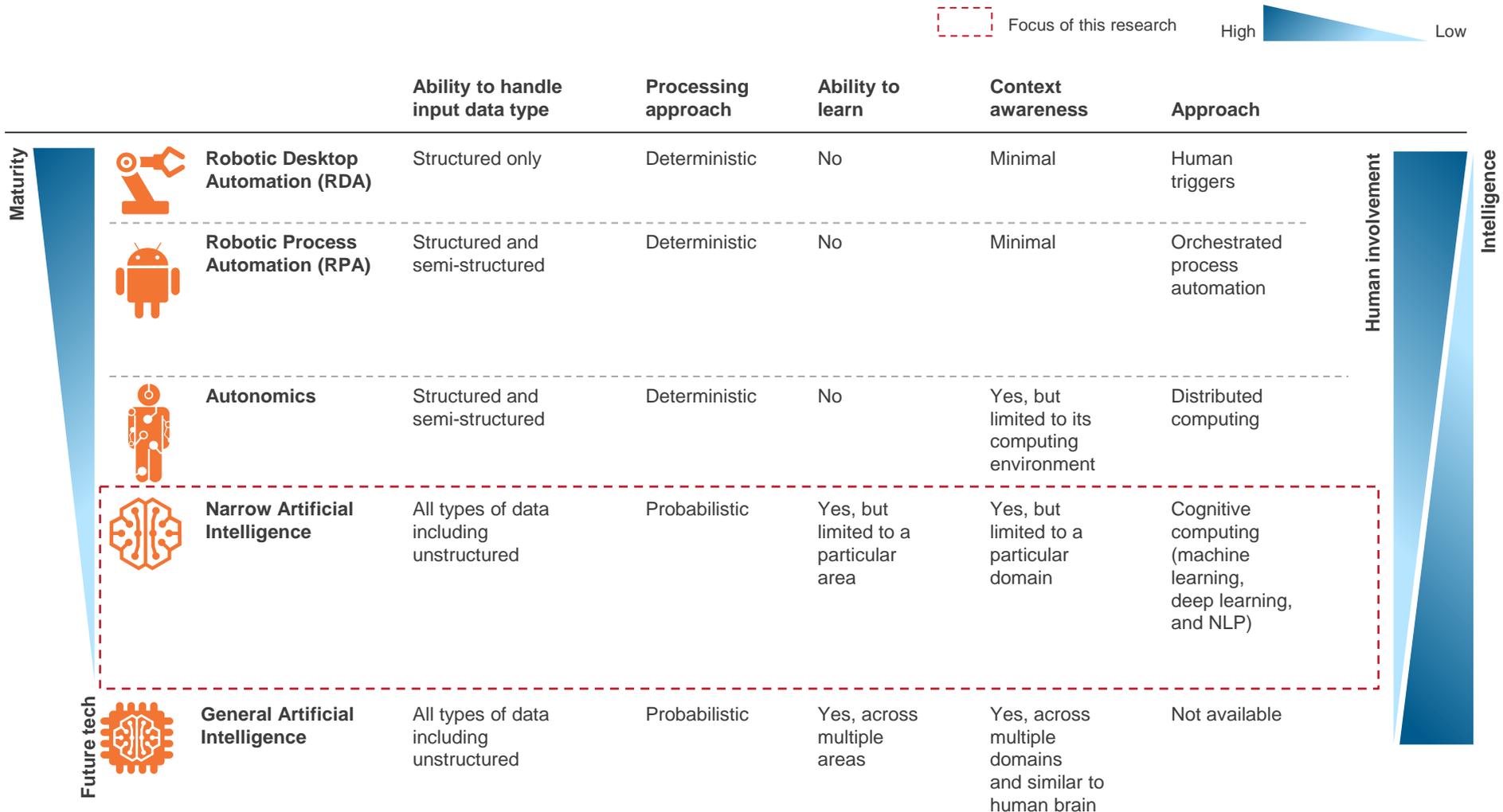
AI Independent Software Vendors (ISVs) covered in the analysis



Note: Everest Group takes its confidentiality pledge very seriously. Any contract-specific information collected, will only be presented back to the industry in an aggregated fashion

Everest Group's Service Delivery Automation (SDA) Spectrum

SDA includes a spectrum of automation solutions for delivering global services



Note: In this report, we have referred to rules-based/deterministic SDA solution (i.e. RDA, RPA, and Autonomics) collectively as RPA

Overview and abbreviated summary of key messages

This report examines the Artificial Intelligence (AI) market from a global services perspective and analyzes it across various dimensions such as market overview, buyer adoption drivers and trends (across geographies, functions, industries, etc.), key AI technologies and their applications, and key challenges in the AI market. It also describes the AI technology vendor landscape and outlook for AI market for global services

Some key elements and findings of the report are:

Market size and growth

- The 2016 Artificial Intelligence (AI) Independent Software Vendor (ISV) market for global services is estimated at over US\$1.2 billion, and is expected to witness a growth of 45-55% in 2017
- The growth rate is on an upward trend due to rising buyer confidence in AI technologies and increasing number of Proofs of Concept (POCs) moving into production

Drivers behind and barriers to adoption

- Some of the drivers behind AI adoption are related to enterprises trying to achieve efficient business outcomes, a visible change in the attitude towards adopting such solutions, and the availability of a plethora of data for training AI systems
- While the amount of data is steadily increasing, its usability is not always guaranteed as most of it is “dark data”. Other barriers to adoption include lack of transparency in AI decision-making and certain doomsday predictions about AI overrunning the world

Key AI technologies and applicability

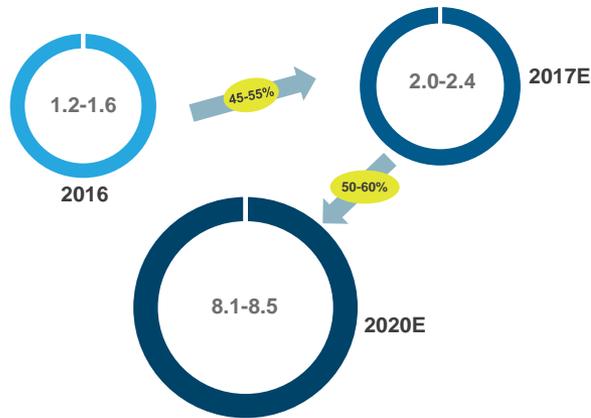
- There are multiple technologies within the AI umbrella, but Natural Language Processing or NLP is the key technology. Other prevalent technologies include computer vision and machine learning
- AI is typically leveraged for customer engagement and data analytics within back-office functional delivery. AI developers are also introducing innovative products for key industries such as banking, financial services and insurance, healthcare and life sciences

AI technology vendor landscape

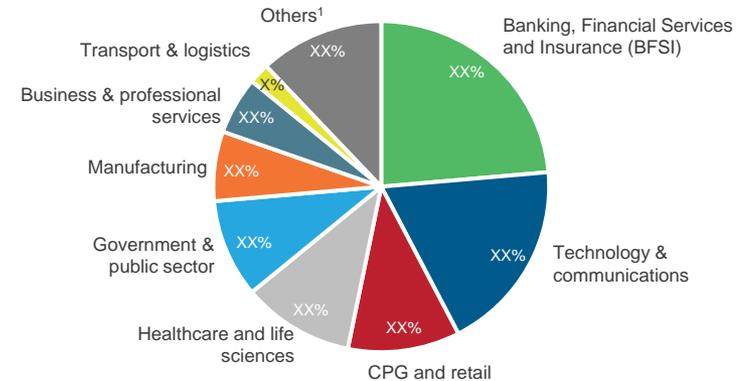
- The supplier landscape in the AI space comprises multiple players – traditional IT/BPS companies which typically offer AI as part of their automation tools/platforms, providers of open source platforms, and independent software vendors which offer specific solutions across a variety of industries and functions

This report examines the AI technology market from a global business services perspective; below are some charts to describe the depth of this study

AI ISV market size and growth

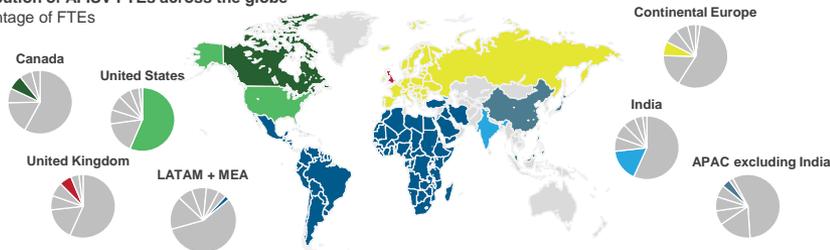


AI adoption by buyer industry



Distribution of AI ISV FTEs across the globe

Distribution of AI ISV FTEs across the globe¹ Percentage of FTEs



- XXX is the leading location for global sourcing of AI product development skills
- It is reflective of high availability of high quality talent (due to large number of enabling educational institutions which offer relevant PhD courses in data science and machine learning) and the relevant technologies for developing these products
- Most AI ISVs have their headquarters in this country, partly due to XXX being the biggest market for AI products. Average scale of operations at ISVs is XXX FTEs

- In the XXX, YYY, and ZZZ regions, AAA is one of the leading global sourcing locations, followed by BBB, CCC, DDD, EEE, and FFF
- Few XXX locations are leveraged for this kind of work. Key amongst them are XXX, YYY, ZZZ, and XYZ
- In the Middle East, XXX is a key location for sourcing of AI product development skills

- Within offshore/nearshore locations, XXX is the leader in terms of global sourcing for AI FTEs
- While most ISVs have some presence in XXX, typical/average scale of operations continues to be low. This is due to the nascent nature of this industry
- Other key APAC countries for global sourcing of AI FTEs are China, AAA, BBB, CCC, DDD, and EEE

Outlook for the AI market for global services

AI will become more pervasive and entrenched

- The definition of AI is continually changing, depending on the perception of end-users and the purpose for which it is being leveraged. Thus, AI has a different meaning for different users
- It is expected that AI will become more fully entrenched in everyday life, more so with the advent of home AI solutions such as Amazon Alexa and Google Home. These, and similar products, will cross over into the B2B world and will become interfaces for business systems of the future. With progression into such solutions, the definition of AI is also expected to change in a manner that it no longer evokes confusion or suspicion, but instead is considered a software solution which is prevalent and standard

Increasing competition will lead to increasing acceptance of AI

- The global services AI market is in a nascent stage where players are dependent on one another to ensure increasing success with respect to its adoption
- As more independent software vendors and IT/BPS service providers develop AI-focused solutions, its value as a business solution is expected to increase. Particularly, global IT/BPS service providers are expected to lead the charge by incorporating AI solutions in their contracts with existing clients/organizations, which, in turn, will pave the way for independent software vendors

Human talent will continue to remain relevant

- One of the key concerns regarding the adoption of AI is that it might render human talent irrelevant
- However, it is expected that people will continue to remain an important part of business operations by acting as trainers and regulators for decision-making; human intervention will always be necessary when AI cannot make the correct decision (relevant for all industries, but particularly, banking and financial services)
- Concurrently, it is expected that human interaction with customers will become more of a 'premium service', with human agents/workers being accountable and responsible for only the most important and mission-critical pieces of work and AI providing more of a supportive role in the background

Source: Everest Group (2017)

Research calendar – Service Optimization Technologies (SOT)

Published
 Planned
 Current release

Flagship SOT reports

Release date

Robotic Process Automation (RPA) - Technology Vendor Landscape with FIT Matrix Assessment	December 2016
Robotic Process Automation (RPA) – Technology Vendor Profile Compendium	December 2016
Robotic Process Automation (RPA) – Technology Vendor State of the Market Report	February 2017
Service Delivery Automation (SDA) in BPS – Service Provider Landscape with PEAK Matrix™ Assessment	July 2017
Service Delivery Automation (SDA) in BPS – Service Provider Profile Compendium	September 2017
Service Delivery Automation (SDA) in BPS – State of the Market Report	October 2017
Artificial Intelligence in Global Services – State of the Market Report – 2017	October 2017

Thematic SOT reports

The Impact of SDA on Services TCO	August 2016
IT Infrastructure Services Automation: “Codified Consciousness is the Future”	September 2016
Business Case for Robotic Process Automation (RPA) in Global In-house Centers (GICs)	September 2016
The Service Delivery Automation (SDA) Journey	September 2016
IT Application Services Automation: Think Benefits, Not Costs	November 2016
Rise of Automation in P&C Insurance	January 2017
Pushing the Dial on Business Process Automation	May 2017
Talent Model and Location Hotspots for Service Delivery Automation (SDA) Center of Excellence (CoE)	July 2017
Experience and Learnings from RPA Implementation in GICs	Q4 2017
Creating Business Value Through Next-Generation Smart Digital Workforce	Q4 2017

Note: For a list of all SOT reports published by us, 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. **Business Process Services Delivery Automation (BPSDA) – Service Provider Landscape with PEAK Matrix™ Assessment 2017** ([EGR-2017-13-R-2243](#)); 2017. This report uses Everest Group's proprietary PEAK Matrix to assess and evaluate automation capabilities of service providers in the business process services space across two key dimensions – market impact and vision & capability. It also includes market share analysis of service providers and Everest Group's remarks on service providers highlighting their key strengths and development areas, with specific focus on automation
2. **Business Process Services Delivery Automation (BPSDA) – Service Provider Profile Compendium 2017** ([EGR-2017-13-R-2346](#)); 2017. Automation is one of the key enablers of digital transformation in global services. This report provides accurate, comprehensive, and fact-based snapshots of BPSDA offerings and capabilities of 18 leading broad-based service providers. Each profile includes company overview, recent acquisitions and partnerships, offering structures, delivery capabilities, clients portfolio mix, technology solutions, measure of capabilities across PEAK Matrix dimensions, and key strengths and areas of improvement for service providers
3. **Robotic Process Automation (RPA) - Technology Vendor Landscape with FIT Matrix Assessment – Technologies for Building a “Virtual Workforce”** ([EGR-2016-13-R-2030](#)); 2016. This report uses Everest Group's proprietary FIT Matrix™ to assess and rate RPA technology vendors on the various dimensions of their market impact and vision & capabilities. It also includes Everest Group's remarks on vendors, highlighting their key strengths & areas of development, as well as insights into advances in RPA technologies, operating models, capabilities of different platforms, and commercial models
4. **Service Delivery Automation (SDA) – Best Practice Guide to Establishing an SDA Center of Excellence** ([EGR-2016-13-R-1750](#)); 2016. This report provides a guide to setting up and expanding an SDA CoE. It is intended for organizations that are setting out to build a CoE, service providers looking to build CoEs for their clients, and SDA technology vendors seeking insights into the bigger CoE picture

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

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About Everest Group

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