



Conversing with AI – Intelligent Virtual Agents (IVA) Market Report 2019

Service Optimization Technologies (SOT)

Market Report – November 2018: Complimentary Abstract / Table of Contents

Our research offerings for global services

▶ Market Vista™

Global services tracking across functions, sourcing models, locations, and service providers – industry tracking reports also available

▶ Application Services

▶ BPS | Banking & Financial Services

▶ BPS | Healthcare & Life Sciences

▶ BPS | Insurance

▶ Catalyst™

▶ Cloud & Infrastructure

▶ Customer Experience Management Services

▶ Data & Analytics

▶ Digital Services

▶ Engineering Services

▶ Finance & Accounting

▶ Human Resources

▶ ITS | Banking & Financial Services

▶ ITS | Healthcare & Life Sciences

▶ ITS | Insurance

▶ IT Services Executive Insights™

▶ Locations Insider™

▶ PricePoint™

▶ Procurement

▶ Recruitment & Talent Acquisition

▶ Service Optimization Technologies

More about membership

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

- Price book
- Accelerators™
- Data cuts
- Analyst access
- 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 | Service providers, locations, risk
- Other | Market intelligence, service provider capabilities, technologies, contract assessment

Membership information

- This report is included in the following research program(s)
 - **Service Optimization Technologies**
 - **Customer Experience Management (CXM) Services**
- 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, unitedkingdom@everestgrp.com, or india@everestgrp.com

Table of contents (page 1 of 2)

Topic	Page no.
Introduction and overview	5
Summary of key messages	8
Section I: Key developments in IVA market	11
• Evolution of the IVA market in the last 12 months	12
• Going beyond basic customer service to serve specialized needs across industries and horizontals	14
• Synergy with other digital solutions	15
• Impact of IVAs on the contact center operations	16
• Collaboration with human agents in contact center	17
Section II: Market Overview	18
• Maturity adoption curve for IVA	19
• IVA adoption by geography	20
• IVA adoption by industry	21
• IVA adoption by business function	22
Section III: Solution characteristics	23
• Product landscape	24
• Product capabilities	25
• Pricing	27

Table of contents (page 2 of 2)

Topic	Page no.
Section IV: Vendor landscape overview	28
• Vendor landscape	29
• Assessment criteria for IVA vendor evaluation	31
• Assessment for IVA vendors	32
– AIVA – [24]7.ai	33
– Aivo	35
– Amelia – IPsoft	37
– Creative Virtual	39
– HCL DRYiCE Lucy	41
– IBM Watson	43
– Inbenta	45
– Konverso	47
– Kore.ai	49
– Nia – Edgeverve	51
Section V: Outlook for 2019-2020	53
Appendix	56
• Glossary of key terms	57
• Research calendar – Service Optimization Technologies (SOT)	59
• Research calendar – Customer Experience Management (CXM) Services	60
• References	61

Background and scope of the research

Background of the research

Intelligent Virtual Agents (IVAs) are Artificial Intelligence (AI) powered conversational bots that have potential to offer high value in various business functions such as contact center, F&A, HR, and IT & helpdesk through superior customer satisfaction, round the clock support, and reduction in service costs for the enterprises. Realizing these benefits, many enterprises, vendors, and service providers are investing in this area. However, IVA is a burgeoning market with advanced and sophisticated cognitive technologies that are still relatively unknown to many potential buyers in terms of solution features, deployment models, supporting frameworks, and commercial aspects. The technologies are also evolving with an expanding feature set and increasing richness of functionality. With a rewarding business opportunity and a huge market potential, multiple vendors are looking at building competitive solutions to compete in the market.



In this study, we investigate the state of the IVA market. We focus on:



Key developments in the IVA market



Adoption trends by geographies, industries, and business function



Solution characteristics



Vendor landscape overview



Future outlook for 2019-2020

Overview and abbreviated summary of key messages (page 1 of 2)

This report is meant to provide IVA buyers, IVA technology vendors, and third-party enablers (for e.g. system integrators) a detailed view of the current state of the market. The current report provides insights into key developments in the IVA market, adoption trends by geographies, industries & business functions, solution characteristics, vendor landscape overview, and future outlook for 2019-2020.

Some of the findings in this report, among others, are:

Key developments in the IVA market

- In the last 12-18 months, the market has witnessed a gradual shift from rule-based solutions to AI-driven IVA solutions
- IVAs have evolved beyond solving basic customer queries and are becoming capable of handling much more complex interactions such as sales & marketing, payment collections, employee support, and customer acquisition & retention
- Due to their ability to work in synergy with other digital and automation technologies such as RPA, IoT, image recognition, and analytics, IVAs are becoming capable of enhancing the overall customer experience

Market overview & current adoption

- IVA solutions are currently in the initial adoption stage with most of the enterprises running them as POCs/pilots in silos
- North America leads the overall adoption of IVA solutions given the high maturity of the contact center market in the region; however, the technology elicits interest across major geographies including emerging markets in Asia Pacific and Latin America
- BFSI is the biggest adopter of IVA solutions with focus on improving CX and saving costs; telecom, technology, and manufacturing are the other major adopters

Overview and abbreviated summary of key messages (page 2 of 2)

Solution characteristics

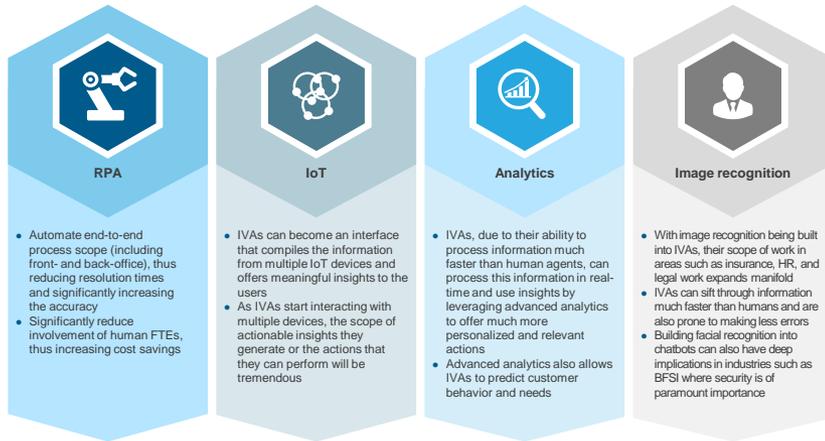
- IVA solutions are offered as off-the-shelf solutions, platform-as-a-service, or software-as-a-service, depending on the requirements of enterprises
- NLP capabilities, Machine Learning (ML), and language & channel support constitute the core capabilities of IVA solutions, while sentiment analysis, image recognition & extraction, and analytics are additional offerings that enhance their value proposition
- The majority of the vendors leverage usage-based pricing model wherein clients are charged based on the number of interactions or some derivatives, thereof. They also charge a one-time implementation fee and an annual maintenance fee

Vendor landscape

- The IVA vendor landscape consists of AI/NLP companies, technology companies, and service providers
- Based on Everest Group research, we have assessed ten IVA vendor products across different parameters. These include:
 - AI/NLP companies: Aivo, Amelia – IPsoft, Creative Virtual, Inbenta, Konverso, and Kore.ai
 - Technology companies: IBM Watson and HCL DRYiCE Lucy
 - Service providers: AIVA – [24]7.ai and Nia – Edgeverve

This study offers five distinct chapters providing a deep dive into key aspects of IVA market; below are four charts to illustrate the depth of the report

Synergy with other digital solutions



Assessment for IVA vendors

Measure of capability: ● High ◐ Low

	NLP/AI capabilities	Breadth of services	Ancillary services	Language and channel coverage	Training and support	Implementation and deployment	Market success
Vendor 1	●	●	◐	●	◐	●	●
Vendor 2	◐	◐	◐	◐	◐	◐	◐
Vendor 3	●	●	●	●	●	●	●
Vendor 4	●	●	◐	●	◐	●	●
Vendor 5	●	●	●	◐	◐	●	●
Vendor 6	◐	●	◐	◐	◐	◐	●
Vendor 7	◐	◐	◐	◐	◐	◐	◐
Vendor 8	●	◐	●	◐	●	●	●
Vendor 9	◐	◐	◐	◐	◐	◐	◐
Vendor 10	◐	◐	●	◐	◐	◐	◐

Everest Group assessment

Company overview

Vendor is a customer experience software and services company. It leverages AI and machine learning to help companies create a personalized and predictive customer experience across various channels. It provides off-the-shelf customized IVA solution to its clients

Year of establishment: xxxxx

Headquarters: New York, USA

Solution overview

- It is focused on automating enterprise support functions and offering off-the-shelf solutions to enterprises
- It plans to focus on the B2B market and considers its rich data sets in this area as its core strength
- It supports multiple languages such as English, Arabic, Chinese, Dutch, French, German, Italian, Japanese, Korean, Portuguese, and Spanish
- Along with voice conversational capabilities, it is capable of understanding intent and emotion of the conversation and respond accordingly. Its NLP engine uses past conversations & customer history to generate more personalized messages and to understand intents more accurately
- The IVA can also assist human agents with the recommendations during the conversation with the user. The IVA is capable to learn based on whether the recommendations were accepted or rejected by human agent
- It also has a developer community forum that acts as a knowledge exchange center for users to interact, share ideas, and connect

Further opportunities for investments

- Image recognition could be another value addition to its portfolio of IVA. It is provided as built-in capability by many of the other players in the industry
- Offering accreditation/certification and online user community would make its training & support more robust
- Providing on-premise deployment can be a good value addition for its clients especially in industries such as BFSI and healthcare

Capabilities & offerings

■ Available
 ■ In the roadmap
 ■ Available via partner
 ■ Not available

Hosting options	On-premise	Cloud			
Cognitive/AI capabilities	Natural Language Processing (NLP)	Natural Language Generation (NLG)	Image recognition	Sentiment analysis	Voice conversation
IVA learning	Code-free training	Ability to learn while processing	Human-in-the-loop		
Product training and support	Training by vendor	Training by partners/resellers	Online training courses ¹	Classroom training	Accreditation for individuals and/or organizations
Commercial model	Perpetual licensing ²	Subscription licensing	Fixed capacity/per bot-based	Usage-based	Outcome-based

Research calendar – Service Optimization Technologies (SOT)

Published
 Planned
 Current release

Flagship SOT reports

Release date

Enterprise RPA adoption – Pinnacle Model™ Analysis 2018	March 2018
Robotic Process Automation (RPA) – Technology Vendor Landscape with Products PEAK Matrix™ Assessment 2018	April 2018
Robotic Process Automation (RPA) – Technology Vendor Profile Compendium 2018	May 2018
Robotic Process Automation (RPA) Annual Report 2018 – Creating Business Value in a Digital-First World	June 2018
SDA in Healthcare BPS – Service Provider Landscape with PEAK Matrix™ Assessment 2018	Q4 2018
Intelligent Document Processing – Technology Vendor Landscape with PEAK Matrix™ Assessment 2018	Q1 2019

Thematic SOT reports

Role of Artificial Intelligence (AI) and Cognitive Solutions in Delivering Customer Experience of the Future	March 2018
Defining Enterprise RPA	May 2018
Buyer Satisfaction with Robotic Process Automation (RPA) – How Far or Close is Reality from Hype?	July 2018
GDPR Compliance – Can Automation Save the Day?	July 2018
Reimagining the Employee Experience in the Age of Artificial Intelligence	August 2018
Conversing with AI – Intelligent Virtual Agents (IVA) Market Report 2019	November 2018
Smart RPA Playbook	Q4 2018
Toolkit – RPA in GICs Toolkit	Q4 2018
Fulfilling the promise of RPA in F&A - A reality check	Q4 2018
RPA in Banking - A prioritization framework	Q4 2018

Note: For a list of all SOT reports published by us, please refer to our [website page](#)

Research calendar – Customer Experience Management (CXM) Services

Published
 Planned
 Current release

Flagship CXM Services reports

Release date

Contact Center Outsourcing (CCO) – Service Provider Profile Compendium 2017	July 2017
Contact Center Outsourcing (CCO) – Annual Report 2017	August 2017
Contact Center Outsourcing (CCO) – Service Provider Landscape with Services PEAK Matrix™ Assessment 2018	June 2018
Contact Center Outsourcing (CCO) – Service Provider Profile Compendium 2018	August 2018
Contact Center Outsourcing Annual Report 2018: Transforming Customer Experience through a Digital-First Approach	September 2018

Thematic CXM Services reports

The Philippines Pivoting to Deliver Customer Experience of the Future	October 2017
Chatbots Delivering Enhanced Customer Experience: It is Easy to Get it Wrong	October 2017
The Business Case for RPA and Chatbots in Contact Centers	December 2017
The Evolving Customer Experience Management (CXM) Talent Model: The Rise of the Super Agent	March 2018
Role of AI and Cognitive in Delivering Customer Experience of the Future	March 2018
Contact Center Services for the U.S. Market: Location Strategies for the Digital World	March 2018
Digital CXM Overview: Transforming Customer Experience in a Digital-First World	September 2018
Conversing with AI – Intelligent Virtual Agents (IVA) Market Report 2019	November 2018
Innovation within CXM: Understanding the enterprise needs and the role of service providers	Q4 2018
Accelerating CX through an Optimized Outsourced Contact Center Delivery Model	Q4 2018
CXM Analytics – Service Provider Landscape with Services PEAK Matrix™ Assessment 2018	Q1 2019

Note: For a list of all CXM reports published by us, please refer to our [website page](#)

Additional SOT and CXM Services research references

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

1. **RPA – Technology Vendor Landscape with Products PEAK Matrix™ Assessment 2018** ([EGR-2018-38-R-2595](#)); 2018. Robotic Process Automation (RPA) is one of the key enablers of digital transformation for enterprises and global service providers. This report uses Everest Group's proprietary PEAK Matrix™ to assess and evaluate RPA capabilities of technology vendors across two key dimensions, market impact and vision & capability. It also includes market share analysis of technology vendors, insights into advances in RPA technologies and Everest Group's remarks on technology vendors highlighting their key strengths and areas of improvement, with specific focus on RPA
2. **Robotic Process Automation (RPA) Annual Report 2018 – Creating Business Value in a Digital-First World** ([EGR-2018-38-R-2691](#)); 2018. Robotic Process Automation (RPA) continues to expand its reach and client base as more enterprises become aware of the benefits of the technology. In this report, we have focused on RPA market size and growth, buyer adoption trends & key learnings from early adopters, RPA solution characteristics, technology trends, RPA technology vendor landscape, and future outlook for 2018-2019.
3. **Decoding Digital Customer Experience Management** ([EGR-2018-21-R-2791](#)); 2018. This report aims to provide detailed insights into the role of digital solutions in delivering customer experience of the future. It establishes the scope of digital in Customer Experience Management (CXM) services, overview of the digital CXM market, adoption characteristics for digital solutions, and investments required for a successful digital transformation of CXM for enterprises
4. **Contact Center Outsourcing Annual Report 2018: Transforming Customer Experience Through a Digital-First Approach** ([EGR-2018-21-R-2768](#)); 2018. This report will assist key stakeholders (buyers, service providers, and technology providers) understand the changing dynamics of the CCO market and help them identify the trends and outlook for 2018-2019. In this backdrop, the report provides comprehensive coverage of the global CCO market including detailed analysis of the market size & growth, buyer adoption trends, CCO value proposition & solution characteristics, and service provider landscape

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

Sarah Burnett, Executive Vice President & Distinguished Analyst: sarah.burnett@everestgrp.com

Anil Vijayan, Practice Director: anil.vijayan@everestgrp.com

Skand Bhargava, Practice Director: skand.bhargava@everestgrp.com

Amardeep Modi, Practice Director: amardeep.modi@everestgrp.com

Sharang Sharma, Senior Analyst: sharang.sharma@everestgrp.com

Akash Munjal, Analyst: akash.munjal@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
+91 806-781-9999

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



@EverestGroup



@Everest Group

Blog

[Sherpas In Blue Shirts](http://www.sherpasinblueshirts.com)

www.sherpasinblueshirts.com