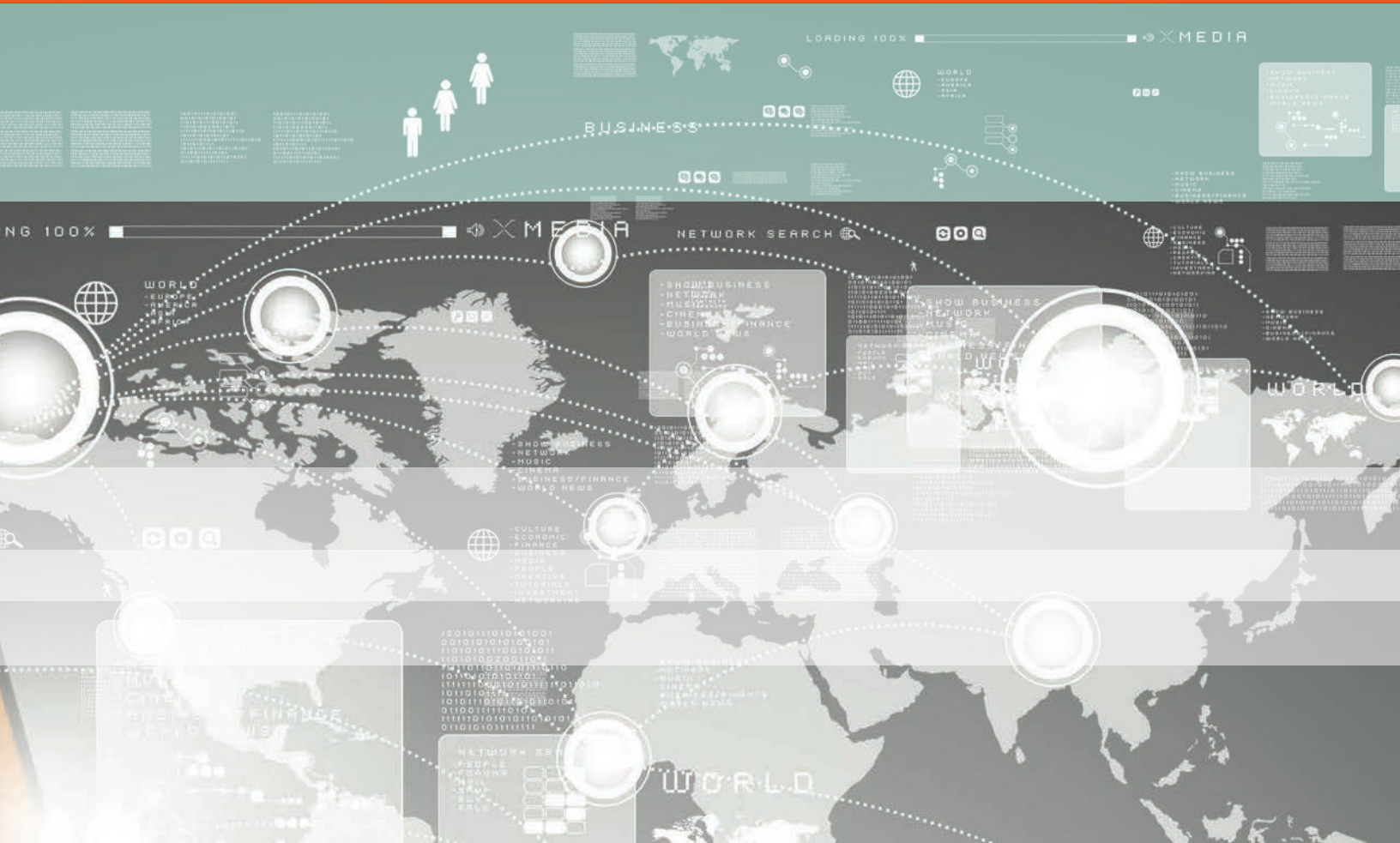# Decision Makers' Guide to Enterprise Intelligent Assistants

(2021 Edition) »

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Decision Makers' Guide to Enterprise Intelligent Assistants

(2021 Edition) »

While it's important to acknowledge we're still in the "early days" in the development and acceptance of Enterprise Intelligent Assistants, the proliferation of chatbots, voicebots and virtual assistants has already reached billions of end users. With a growing audience, the number of use cases will grow as well, and there is no turning back.

Opus Research presents a comprehensive assessment of enterprise-grade Intelligent Assistant solution providers bringing natural language processing, machine learning, AI and analytics to support customer care, self-service, employee assistance, messaging and device control. This report evaluates 13 firms to better understand enabling platforms & technology, integration points & scalability, track record and future vision for enterprise-scale Conversional AI.

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Tracking Developments in the Intelligent Assistance Solution Stack

Opus Research has been producing the Decision Makers' Guide to Enterprise Intelligent Assistants" since 2015 to describe how "NLP-powered, automated self-service resources can offer consistent answers and responses to queries or instructions on behalf of brands or enterprise companies."

That definition encapsulates the selection criteria Opus Research has applied to documenting how enterprise-ready Intelligent Assistants leverage automated conversational technologies to engage with customers, prospects and employees.

The companies included in this year's report offer the products and services that leverage technologies that support intelligent assistants for customer service and employee assistance (highlighted in gold, Figure 1 below). They offer platforms that include service creation tools and a range of native or third-party solutions capable of ascertaining the intent of each individual conversation based on natural language input. It associates that input to recognized "intents" and then, in the midst of the conversation, provides responses or recommended next actions that help people accomplish their goals more quickly.

Figure 1: Layers of Conversational AI

Source: Opus Research (2020)

Solution providers offer a growing range "Enabling Technologies" that may start with increasingly accurate Automated Speech Recognition (ASR) coupled with human-like text-to-speech rendering, supporting so-called "voicebots." In this document, we also evaluate each respondents library of native capabilities or connectors that support emerging requirements surrounding emotion detection and sentiment analysis that give a "bot" an empathetic feel as well as biometric measurement capabilities that support more personalized responses based on high certainty that the customer or prospect involved in the conversation is the person he or she claims to be.

Successful solutions also incorporate data or processes that Opus Research calls "Conversational Intelligence". In many, real world use cases, chatbots or voicebots are called upon to access highly-dynamic data such as flight status, store inventory or the physical location of a package. This report highlights exemplary integrations of chatbots, voicebots, and virtual assistants using natural language understanding, speech processing, machine learning, artificial intelligence and analytics to support customer care, self-service, employee assistance, messaging and device control.

In cataloging Intelligent Assistant implementations, Opus Research has found it starts with conversational data. Natural language processing, AI and automation help derive intents for businesses deliver insights, create operational efficiencies, and boost the bottom line. The goals achieved include completing tasks, reducing costs, universal availability, improving customer experience, and accelerating digital transformation.

PARAPHRASING OBSERVATIONS WE'VE HEARD FROM SOLUTION PROVIDERS AND PRACTITIONERS ALIKE: BUILDING BOTS IS EASY, MAKING THEM INTELLIGENT, SCALABLE AND SUCCESSFUL IS NOT.

From Risky to Robust: The Evolution of Intelligent Assistants

"Intelligent Assistance" has entered a new phase of maturity as firms of all sizes look for the best ways to employ chatbots, voicebots and virtual agents to create better customer experiences and promote employee productivity. In just five years, they have evolved significantly. Not long ago, core technologies like natural language processing (NLP), machine learning (ML) and dialog design were considered "risky" and were relegated to proof-of-concepts and pilots conducted only by the largest firms in select verticals like financial services, travel or healthcare.

Today, both the market and technologies have evolved from risky to robust. Intelligent Assistants (IAs) are now part of nearly every firm's strategy to improve customers experience and employee productivity across all digital channels. Large companies may call it "digital transformation" but, for the vast majority of companies, but for smaller firms, it is a competitive necessity. To handle a surge in both online and voice-based commerce from home-bound individuals that coincides with the mass deployment of work-from-home customer care personnel, companies were delighted to find that those customers often chose to accomplish those tasks through automated virtual assistants.

Expediency Meets Complexity

Through IAs, companies provide customers, prospects and employees with an increasingly broad array of answers, recommendations and actions. This year's evaluation of solution providers put a premium of the following:

➤ **Open platforms**: In year's past, this would have been an oxymoron, like "jumbo shrimp" or "working vacation." Yet one of the biggest changes in our evaluation criteria reflects an acknowledgement that businesses look to recognized brands like Google (Dialogflow), Amazon (Lex) or IBM Watson for trusted/reliable NLU, ML, speech processing, translation and the like.

➤ **Tools for the non-technical:** Responsibility for the performance of IAs falls to customer care and other departmental personnel who are not normally trained to know dialog design or computational linguistics.

➤ **Vertical knowledge modules:** Solution providers get extra credit for bringing pre-packaged dialog modules or conversations into the mix as part of plans to shorten the time it takes to get an IA up and running

➤ **Intelligent search & discovery resources:** Experience taught early adopters that tools that detect or discover query patterns that are ripe for automation are vital. This is especially true post-deployment for conversations that are treated as out-of-bounds or off-topic.

➤ **Integrated reporting and administration:** Accuracy and rapid recognition of intents remain important, but integration of metrics that reflect the value and impact of Conversational AI and EIAs revolve around impact on CX and task completion.

➤ **Ecosystem wingspan:** In the age of open platforms, extra credit goes to solution providers that have successfully integrated and created business opportunities for category leaders in contact center infrastructure, cloud computing, system integration, business process outsourcing, CRM and, most importantly, cloud-based NLU, ML, ASP, discovery and translation.

In addition, on an operational level, here are key considerations:

➤ **Service Creation and Administration Tools:** Highest ratings go to firms with proven tools for non-technical personnel to define, build, train and maintain Intelligent Assistants with capabilities that recognize and respond to complex customer intents. Extra points go to tools that integrate "no-code" or "low-code" user interfaces.

➤ **Pre-trained Language Models and Use Cases:** Out-of-box capabilities minimize the need for expensive resources and professional services to train chatbots, voicebots. In addition, "discovery" tools for adding new capabilities and use cases when groups of queries go off-topic.

➤ **Orchestration Tools:** Providing IA managers with comprehensive tools to provide consistent answers to complex queries across multiple channels and modalities, involving data from a multiplicity of processes. Extra points go to "openness" in integrating with third-party resources (like Dialogflow, Lex, Watson) and promoting AI-human balance.

➤ **Omnichannel Support** (Voice and Text): Supports conversations involving smartphones, websites, IVRs and multiple messaging platforms. Extra points for retaining awareness of activity/conversation across platforms and supporting smart speakers.

"[The COVID pandemic] and work from home changed everything. With the resources to scale up, we saw automated conversations contained in our messaging channel increase from 15-20% to 60% of interactions inside 3 days. [Our solution provider] charted a really clear path."
—Chief Experience Officer, Global Financial Services Firm

Elephant in the Room: The Impact of Google, Amazon, IBM and Microsoft

Popularizing platforms for building Enterprise Intelligent Assistants relies on leveraging access to affordable resources for natural language understanding, machine learning, analytics and cognition. Dialogflow and IBM Watson were early choices based on accessibility, robustness, with Dialogflow winning out based on affordability. Amazon has been a relative newcomer to the contact center and it leverages long-standing experience as the engine that powers conversational virtual agent Alexa on hundreds of millions of devices worldwide.

Both Google and Amazon have added "agent assist" to their repertoire. They deploy conversational analytics to serve suggestions for scripts or next-best actions during a call, chat or messaging session. To support the conversational user interface among customers, agents and virtual agents, both constantly refine automated speech recognition, text-to-speech rendering and translation services. Both features improved sentiment or emotion detection in support of market demand for more empathy from both intelligent virtual assistants (VAs) and human customer service representatives or agents. Collectively they have turned what once were "bleeding edge" technologies into table stakes or mere features in a broader product offering.

Next up is applying NLU and analytics for after a call to support summation, analytics and sentiment analysis. This is an opportunity area where contact center managers see great justification for investment based on making agents more productive and detecting and remediating customer concerns.

Both Amazon and Google have invested billions of dollars in the personnel, compute power and cloud storage required to build the language models and such to make conversational commerce possible. Their peers, in this respect are Facebook, Apple, IBM and Microsoft. Google was first to forge ahead with packaging designed to bring conversational AI's to enterprise contact centers, but it is now becoming a crowded space where the projects that once required teams of developers and expensive computers can now be accomplished by having subject matter experts and departmental execs employ tools that bring in the expensive resources from Amazon, Google and others on an as-needed, pay-per-use basis.

Intelligent Assistants Support Conversational Service Automation

Since Opus Research issued the first "Decision Makers' Guide to Enterprise Intelligent Assistants", the solutions under investigation have been made available to employees in every sized enterprise across all verticals. Instead of a "digital transformation," we've observed the introduction of a "conversational layer" to systems and processes that make it possible for employees and customers alike to take command, achieve objectives and complete tasks by speaking, typing or texting to automated services using their own words.

That's Conversational Service Automation (CSA) in a nutshell.

Conversational Service Automation (CSA) makes sure that virtual assistants and conversational IVRs "don't suck." They are automated assistants that understand natural language input with above-average and human-like accuracy. They provide resources that enable intelligent assistants to recognize the intent of natural language input and take proper action. This year's leaders put emphasis on tools that enable managers to get IAs up and running quickly without offering a dumbed-down "answerbot" with "rule-based" responses and static, pre-defined answers.

CUSTOMER PERSPECTIVE

"In launching our intelligent virtual assistant, scalability was critical. We needed [our partner vendor] to be adaptable and flexible. Able to manage the resources and demand [in order for us] to meet our commitment to drivers and customers."
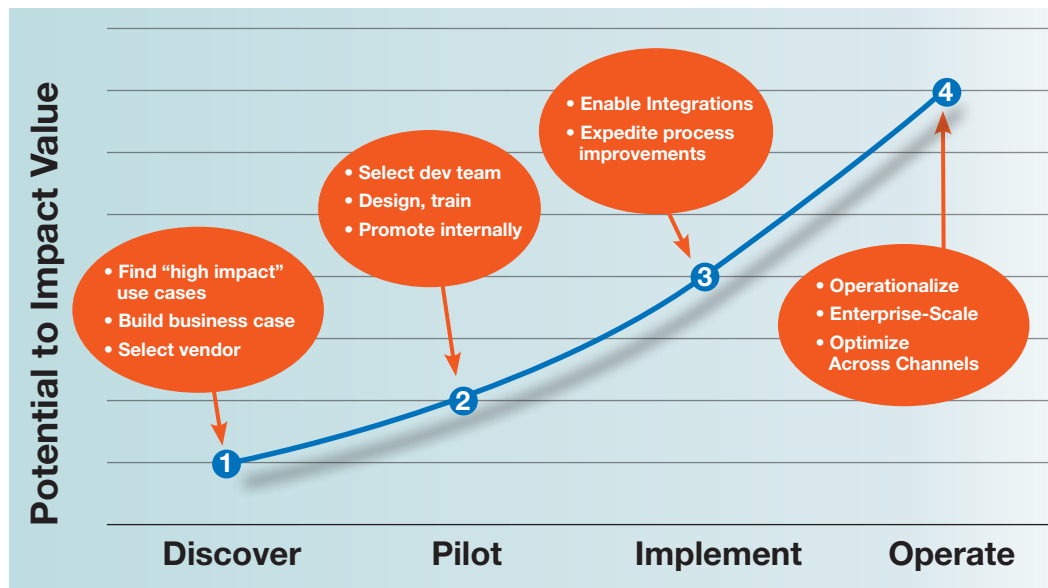**—Technology Manager, Global Ridesharing Company**

How the COVID Pandemic Accelerated Adoption

With the ongoing global pandemic, millions of home-bound individuals are learning new ways to carry out daily commerce. In response, Enterprise Intelligent Assistants have been pressed into service at an unprecedented rate, driven by the adoption of customer care strategies that are multi-modal, multi-channel and conversational. The pandemic accelerated an already-established trend toward digital channels for e-commerce, healthcare, banking, government services and entertainment. Individual customers are finding that intelligent assistants serve as the most efficient ways for them to complete tasks.

These changes make selection of solution providers supporting Enterprise Intelligent Assistants (EIAs) a first-order concern for customer service and customer experience professionals. Intelligent Assistants are no longer relegated to "proof of concept" or "pilot" status. They are the first resources to answer important questions, complete tasks or, when necessary, steer individuals to the resources or live agents that are of the greatest help.

Figure 2: Maximizing Value of Enterprise Intelligent Assistants

Potential to Impact Value (y-axis)

- **Find "high impact" use cases**
- **Build business case**
- **Select vendor**

- **Select dev team**
- **Design, train**
- **Promote internally**

- **Enable Integrations**
- **Expedite process improvements**

- **Operationalize**
- **Enterprise-Scale**
- **Optimize Across Channels**

Discover   **Pilot**   **Implement**   **Operate**

In Figure 2 above, Opus Research outlines the steps that many teams take to launch a successful, scalable Enterprise Intelligent Assistant. What's notable is working with a seasoned solution provider at defined touchpoints in order to properly evaluate and assess the tools they provide and the services rendered. It's critical to work closely with firms that fulfill the "time-to-value" requirement without compromising robust results.

Selection Criteria for Today's Solution Providers

Evaluation criteria have new weightings this year. Companies with little or no staff or budget to master arcane language processing disciplines are being called on to spin up Intelligent Assistants that enhance both employee productivity and customer satisfaction. That means mastering much more than Q&A to recognizing workflows and providing conversational intelligence at the right place and the right time.

Top performers provide their customers access to an ecosystem of solutions for initializing, training, managing and administering Intelligent Assistants over their lifecycle. They take an "open" approach to connecting with or integrating both internal IT systems (CRM, ERP, RPA…) and cloud-based resources. They provide development and management tools that are accessible to both technically proficient and business-focused employees or developers.

Leaders articulate and follow a "vision" for IAs that anticipates and addresses the major challenges and opportunities involved in informing customer support, sales, marketing, operations, Help Desk, HR and other departments with "Conversational AI". Solutions are aware of the power of AI to augment, rather than replace, humans by rapidly recognizing the task(s) they seek to complete and propelling them toward completion. In addition, support of AI and DNN for both security measures and personalizing customer experiences.

Finally, the vision should speak to agility and reliance on an ecosystem of technology providers and partners that support deployments (large and small) across every medium, channel, platform, architecture and use case.

In these pages, Opus Research has compiled dossiers on 13 firms that specialize in Enterprise Intelligent Assistants (EIAs). [Note: All qualified vendors were invited to participate. To be included, solution providers needed to respond to Opus Research's request for information.] We evaluate the solution providers according to criteria that determine how well they perform in today's fast-changing digital, e-commerce environment. Specifically:

➤ **Features and Technologies:** Assessing tools, core technologies and resources that enable experts to incorporate what they deem to be "best-of-breed" resources for training EIAs and then to enhance their capabilities and capabilities in response to customer or employed driven changes in levels of demand as well as functions.

➤ **Integration and Ability to Scale:** Connecting to internal workflows and processes as well as APIs from others for Natural Language Processing, translation, cognition and other popular elements of Conversational AI.

➤ **Track Record:** Measure of market credibility, deployment strategy, reach and effectiveness, including multiple deployments, operating history, number of verticals, references, and enterprise-scale maturity.

➤ **Future Plans and Vision:** Assessing how well a solution provider's staffing, development, investment and partnering strategies create an ecosystem or platform that anticipates and fosters large-scale deployment of conversational Intelligent Assistants for customer care, employee productivity, sales, marketing and transactions.

Opus Research has asserted that the overall objective is to provide consistently correct responses, recommendations or actions across all media and devices at scale. That objective will always be true which places an emphasis on core platforms for rapidly recognizing intent, matching those intents with the proper resources and continuously learning new vocabularies. What will continue to change as we move into the future is the diversity and mix of devices, channels and use cases. It will be coupled with changes in the expectation surrounding conversations, such as the ability to engage not just in multiple turns, but multiple threads over time.

Vendors are grouped into one of two following categories:

➤ **Leaders:** Success is necessitated with a holistic approach, recognizing tangible differences in high-value use cases, omnichannel support, orchestration & management, and growing ecosystem of partners and industry collaborators.

➤ **Challengers:** Building the next generation of tools and platforms, with a keen understating of conversational intelligence data sources to help companies create compelling customer experiences and employee productivity gains.

Figure 3: Firms Included in 2021 EIA Report & Intelliview

Company	Category	Distinction
[24]7.ai	Leader	Emphasis on blended AI-HI; cost-per-resolved-conversation
Artificial Solutions	Challenger	Teneo platform for dialog management, integrated tools
ASAPP	Challenger	Focused on accurate ASR/Intent recognition; research commitment
Cognigy	Challenger	Targets non-technical with low-code support and developer options
Creative Virtual	Leader	Longstanding field experience, flexible integration options with V-Portal
IBM Watson	Leader	Highly regarded cognitive resources combined with next-gen tools
Inference (Five9)	Leader	Success with entry-level and midsize IVAs; acquired by Five9
Interactions	Leader	Solid engagement model, unique "Human Assisted Understanding"
Kore.ai	Challenger	Impressive NLP technologies, claim notable enterprise deployments
Nuance	Leader	True omnichannel deployments, superior platform, rich APIs
Omilia	Challenger	Full stack of solutions and tools, customer support model
Uniphore	Challenger	"Conversational Service Automation" platform for multiple touchpoints
Verint	Leader	Billions of interactions; open, modular platform; continuous improvement

This document (Appendix A) provides brief profiles of each company's enterprise intelligent assistant offerings and also positions them on a map below (Figure 4) based on the strength of their product offerings and market positions.

## Intelliview Map for Enterprise Intelligent Assistants

To assist decision makers in evaluating competing solutions providers, Opus Research represents their positioning in a series of "Intelliview Maps. In reference to Figure 4 we have arrayed the solution providers to relative market positioning and success. The axes on the Intelliview reflect two, all-important factors:

➤ **Product Completeness/Flexibilit**y – Platform providers receive the highest assessments of "completeness" of services, features, and orchestration capabilities.

➤ **Strategic Potential** – Capturing how vision and roadmap appeals to current and evolving technology requirements in contact center and beyond.

Opus Research has developed a solution provider comparison chart to help decision-makers evaluate how current enterprise solutions fulfill the requirements of Intelligent Assistance.

The size of the ovals represent each vendor presence based on company-provided or publicly available information of current financial strength (revenue, profitability, financial banking, longevity and size of customer base).

Figure 4: 2021 Enterprise Intelligent Assistant Intelliview
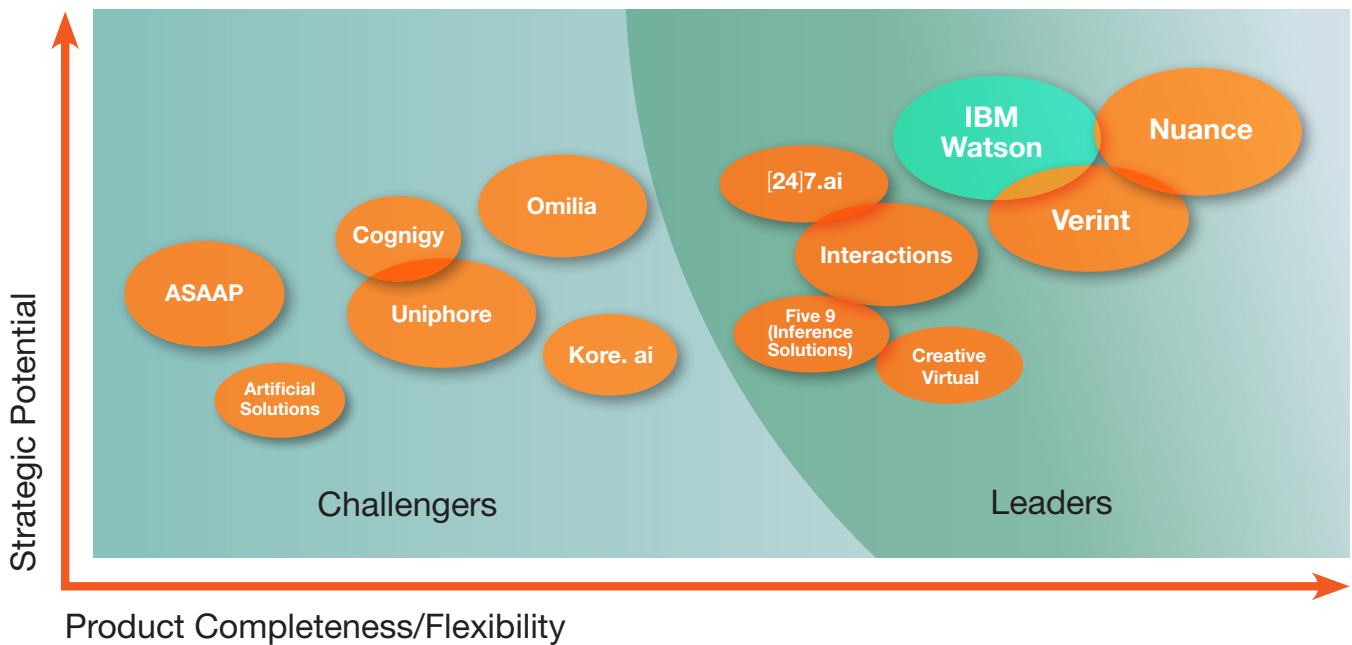
[Note: IBM Watson is a "category of one" because IBM provides both tools for development of Intelligent Assistants for many verticals (Watson Assistant) and simultaneously offers APIs and connectors to some of the most popular cloud based cognitive resources, including ASR/TTS, Discovery, machine vision, translation and others.]

Appendix A – Vendor Profiles

EDITOR'S NOTE: The accompanying dossiers contain information provided by the vendors under evaluation in response to a questionnaire and guidelines provided by Opus Research. While the information is directly from vendors, we have made an effort to normalize the responses in order to support comparison by prospective implementers in light of criteria that Opus Research has deemed important based on feedback from decision makers.

Nuance

Year business started: 1992
Investment/Funding: Public (NASDAQ NUAN)
Number of employees: ~8,500
Revenue : ~$1.5B

Features & Technology	●
Integration & Scalability	●
Track Record	◕
Future Plans & Vision	●

Core Intelligent Assistant Products and Services
The Nuance Intelligent Engagement Platform (IEP) provides one omni-channel platform for virtual agent (VA) and human-assisted, async or sync conversations, including biometrics capabilities. Enterprises can author VA/chatbots once and manage and deploy on all channels – such as voice IVRs or digital VA/Chatbots on asynchronous messaging channels like SMS, ABC, WhatsApp, FBM, web, in-app chat and more. Enterprises create consistent VA experiences across IVRs and digital channels enabling customers to easily switch from voice to digital or vice-versa without starting over. Conversational proactive outbound capabilities allow consumers to respond to an outbound SMS or WhatsApp message in the same channel and have it fielded by a VA/chatbot and, if needed, passed to live agents with context.

With an open and flexible framework and cloud-native services and APIs, IEP modules can integrate with solutions from other vendors (3rd-party chat, VAs, other AI services).

Nuance offers one conversational AI development tool, Nuance Mix, and unified reporting across channels with Nuance Insights. Customers can access all that the Intelligent Engagement Platform offers through one unified pricing model with a single price for IVR or digital VA/live agent conversations. Firms using Nuance IEP span all major verticals including financial services, insurance, telecom, retail, government, healthcare and travel.

Enabling Technologies
- **ASR/TTS** - Nuance offers over 50 TTS languages/dialects, >160 voices, and 90 languages/dialects across voice, NLU, and text spanning all major geographies. ASR and TTS can be utilized for various channels and devices, from the phone (to design IVR experiences), to mobile apps, TV, and the website.
- **Natural Language Processing (NLP)** - Foundation of the platform to power both text and voice engagements. This "one brain" approach allows for one underlying knowledgebase that updates and tunes across any channel quickly and easily. Has approximately 2,350 patents; 300 patent applications. Creates and maintains its own unique NLP engine that utilizes the latest advancements in DNN and ML.
- **Dialog Management / Tooling**: Shared dialog management enables organizations to utilize one platform to manage customer engagements in any channel (IVR, messaging, webchat, TV, etc.) Tools are used to design, deploy, and maintain the VA and automate intent and entity handling. Automatic clustering used to suggest the right intent for each user response from production. Nuance Mix offers a unique approach to managing multi-channel, multi-language virtual assistants and IVRs in a single project. Mix.nlu allows users to define and train a multi-language ontology with intents and entities, leveraging a comprehensive set of predefined entity types. Mix.dialog allows users to orchestrate the dialog logic. For voice-enabled deployments, Mix supports any combination of prerecorded prompts and TTS for system output and both speech and DTMF recognition for user input.
- **"AI" / Machine Learning**: In addition, the platform also intertwines AI and live agents seamlessly and offers active learning for both VAs and live agents. Agent Coach leverages an ML-based prediction model to provide next-best-response recommendations to live agents, resulting in higher agent SAT, and improved business results like higher sales conversions, lower AHT and better compliance
- **NoCode/LowCode service creation**: Mix enables organizations to build out dialog logic in a configuration-only environment that allows users to build out conditional logic and channel- and language-specific behavior without having to code. The Intelligent Engagement Platform is open by design, which enhances experiences by linking other apps; supports external interfaces for customers & live/virtual agents; feed client analytics, data lakes & real-time dashboards; flexibility to start small and add functionality.

Conversational Intelligence Elements
- **Speech and/or Text Analytics**: Captures customer insight from calls as well as text-based communications to monitor customer interactions. Can extract information from transcripts to create business-specific VAs, streamlining design and reducing time to create knowledge base.
- **Integration with CRM, ERP:** Provides a flexible, highly customizable integration framework that enable integration with third parties and/or their existing deployments through various APIs.
- **Knowledge Management Tools:** Can integrate with any third-party knowledgebase platform. Working on leading-edge AI to support low-effort creation of FAQ-style bots.

- **Tools/Support:** Web-based Authoring Tools (Mix.dialog, Mix.nlu, Mix.dashboard and others) that support creation of conversational dialog & NLU models. Clients have access to Portal, a Web-based tool that enables admins to configure client integrations, set agent skills, and add/manage targeting business rules

Platform Features and Functions
- **What works out of the box?** - Offers vertical-specific packaged design, from leveraging existing data stores (FAQs, search engine data, chat logs/transcripts, customer IVR data) to language models for each supported language and vertical-specific NLU intent starter packs, social interactions, etc.
- **Channels currently supported**: Phone/IVR; Messaging: SMS, ABC, FBM, Twitter DM, GBM, WhatsApp, Viber, Line, Telegram and soon Instagram & RCS; Web/Mobile/in-app chat; Smart devices such as television, and soon Alexa and Google Home; Two-way and one-way video for web/mobile web.
- **Engagement Type/Modalities supported**: Asynchronous and synchronous; Inbound initiated and conversational proactive outbound initiated; Speech, text, rich text, rich widgets
- **Deployment Platforms supported**: With a cloud-native foundation, solutions can be deployed in Nuance datacenters, third-party cloud, or on-premises, offering a broad choice of deployment scenarios.
- **"Intelligent Routing"**: Routes consumers from one channel to another; utilizes real-time data from the customer journey to direct consumers to the agent (VA or live agent) with the best skill set to help. Asynchronous conversations enable both users and agents to be flexible.
- **Personalized CX:** Serves consumers on their channel of choice with a "build once, deploy many" approach to enable the deployment of shared NLU and Dialog content across multiple channels; providing targeting capabilities to present the right engagement at the right time.
- **Support of live agents:** VA can seamlessly escalate to the best skilled human agent with full context
- **Analytics & Reporting:** Nuance Insights: intuitive, omnichannel reporting/analytics solution that provides monitoring/near real-time actionable intelligence to improve on going optimization/ROI. Provides organizations with a unified view of customer engagement via highly secure/scalable data platform
- **Authentication & Security:** Secure every channel with layered approach; advanced voice and behavioral biometrics engines, intelligent detectors, ConversationPrint language analysis, anti-spoofing technology.

Workflows, Process Automation and Complexity
- **Ability to support multiple use cases:** Differentiators include: conversational design expertise; enterprise-grade, mission-critical, secure technology; complex multi-turn dialogs and advanced semantic reasoning;.
- **Organizational roles**: Recommend Project Manager; UI/Marketing Lead; Content Manager; NLU Specialist; Subject Matter Experts; Technical Team; Testing Team; Reporting Specialist; Optimization Lead
- **Support of multi-turn conversations:** Supports multi-turn and multi-slot conversations for the VA and IVR; (enables fewer turn conversations that are correlated with higher VA containment)
- **Transfers context with conversation:** Targeting engine and business rules enable the platform to collect data prior to the user invoking the VA; this data can be used to capture user intent, offer potential questions.
- **Recommended success metrics**: For sales-focused: improved conversion rates, uplift in average order value, increase in revenue; For service-focused VA: CSAT and increased self-service rates

Track Record, Partnerships & Enterprise IA Maturity
- **Market presence:** More than 6,500 enterprises; customers include more than half the world's largest banks and telecom companies, as well as many global travel, logistics, government, and retail organizations.
- **Customer engagement strategy:** Supports the full spectrum, from licensing individual components (i.e. ASR, TTS, NLU, etc.) to full solution design across multiple channels and modalities.
- **Go-to-market partners:** CCaaS partners such as Avaya, Cisco, Genesys, NICE InContact, Mitel, Enghouse Interactive and Five9; system integrators like IBM, Telstra, Verizon Business, AT&T, Presidio, Accenture.
- **Highlighted customers:** H&M, Rakuten, USAA, Cabify, Albertsons, and hundreds more.

Key Differentiators
- **Omni-channel customer engagement, with seamless blend between AI and live agents:** Delivers a truly integrated omni-channel customer engagement solution for VA and human-assisted conversations, on messaging, voice, and video channels. Targeting and proactive outbound allow VAs to initiate conversations proactively on messaging and voice channels and route customer responses back to a VA/live agent
- **DNN-based Advanced NLU:** Pre-training using large-scale data and Deep Neural Nets enables the NL model to better generalize the user input and more accurately identify the words, intents, and entities with less adaptation required by the author of the NL model.
- **Open Platform with Rich API Integration Framework:** Option to deploy out-of-the-box packaged VA or use Conversational AI APIs to deploy custom solutions. The platform delivers the kind of flexibility and high customizability that is often critical for successful enterprise deployments.

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About Opus Research

Opus Research is a diversified advisory and analysis firm providing critical insight on software and services that supports digital transformation. Opus Research is focused on the merging of intelligent assistance, NLU, machine learning, conversational AI, conversational intelligence, intelligent authentication, service automation and digital commerce. **www.opusresearch.net**