**Knowledge Brief**

Quadrant Knowledge Solutions

# Amelia is a Leader in SPARK Matrix: Virtual Customer Assistants (VCA), 2022

**Quadrant**
Knowledge Solutions

**2022**
**SPARK MATRIX**
**L E A D E R**

Virtual Customer
Assistants

# Amelia is Leader in SPARK Matrix: Virtual Customer Assistants (VCA), 2022

Virtual customer assistants (VCA) is a programming application that replicates human-like conversations to deliver information to customers, including text-based and speech-based engagements. Users can interact with VCA through a web, kiosk, or mobile interface, common messaging forums, and other web and mobile-based interfaces. The VCA adapts to the content and context of user inputs by combining natural-language processing and conversational artificial intelligence by updating its data repositories in real-time, providing sustained and strong customer value proposition, and enabling organizations to have an open channel to serve and communicate with their customers.

In the current digital economy, organizations want to engage with customers at every point of interaction. To create a smooth customer experience, organizations are leveraging virtual customer assistants (VCA) that are capable of undertaking multiple customer service tasks, including navigating the website, delivering product information, helping customers pay bills, and routing customer service issue inquiries to human agents. The growing desire for automation in the service industry is boosting the usage of virtual customer assistants to provide an enhanced customer experience. The biggest advantage of VCAs is that they effectively resolve repetitive client issues, including answering customer queries or FAQs. These mundane tasks otherwise lower the morale of human executives, which subsequently results in low customer satisfaction and delays the total query resolution time.

Multiple industries incorporate virtual customer assistants globally to improve the quality of responses and enhance customer experience. VCAs are used in various industries, including the BFSI, healthcare, and automotive sectors. VCA solutions comprise multiple services like digital banking, customer support, and employee self-service. These solutions are deployed by banks to assist customers with routine banking tasks such as balance enquiry and account statements. They assist customers with common questions, provide information about new products and services, and allow them to change their contact information. Additionally, VCA can be used to initiate better inter-departmental communication and employee leave applications, examine reimbursement information, and keep a tab on working hours.

Quadrant Knowledge Solutions' SPARK Matrix: Virtual Customer Assistants, 2022 research includes a detailed analysis of the global market regarding short-term and long-term growth opportunities, emerging technology trends, market trends, and future market outlook. This research provides strategic information for technology vendors to better understand the existing market, support their growth strategies, and for users to evaluate different vendors' capabilities, competitive differentiation, and market position.

The research includes detailed competition analysis and vendor evaluation with the proprietary SPARK Matrix analysis. SPARK Matrix includes ranking and positioning of leading Virtual Customer Assistants vendors with a global impact. This study includes an analysis of key vendors, including Amelia, Aivo, Amelia, Artificial Solutions, Boost.ai, Creative Virtual, DigitalGenius, DRYiCE by HCL Technologies, EdgeVerve, eGain, Enterprisebot, IBM, Inbenta, Interactions, Kore.ai, LogMeIn, Microsoft, Nuance, Omilia, Uniphore, and Verint.

# Market Dynamics and Trends

The virtual customer assistants (VCA) market has been gaining traction due to the increased need for personalization and increased focus on providing a better customer experience (CX). The COVID-19 pandemic has significantly impacted the global services industry, promoting the use of machine learning (ML) and natural language processing (NLP). This has driven the need for cost-effective VCA since VCA supports regional languages, enabling effective communication with clients around the world.

VCA vendors are focusing on strengthening their platform capabilities by leveraging AI/ML and analytics to gain and understand buyer insights. Vendors continue to augment their AI models to understand customer behavior, actions, intent, context, and sentiment. Furthermore, organizations are constantly looking for virtual assistants that can offer a personalized CX, adapt to their evolving business models, and enable them to efficiently design business and customer-centric strategies. AI is furthering the benefits of VCAs, which are being developed by technology corporations to boost revenue and employment and improve corporate operations.

# Technology Trends

The following are the key technology drivers as per Quadrant Knowledge Solutions' Virtual Customer Assistants strategic research:

- VCA Vendors are focusing on integrating third-party applications, which enables developers to build new solutions or features in less time by utilizing existing components. Third-party tools also add monitoring and reporting features, which enable users to gain insights into customer behavior and improve customer experience.

- Vendors are implementing multilingual support to VCA enabling users to communicate with a virtual assistant in their native language and respond to queries from the local culture and linguistic context, eliminating the need for hiring, training, and monitoring human agents to manage new markets and consumers.

- Vendors are providing users with actionable insights into their customer experience, assisting in real-time verification of overall chatbot health, identifying areas for improvement and bottlenecks, and optimizing the outcome.

- Vendors are focusing on providing a robust intent recognition based on user utterance. It assists users in handling multiple requests during a single interaction and automates the back-end process without human assistance regardless of the channel.

- Vendors are providing customers with an intuitive visual experience that solves their queries, reducing time to resolution and the likelihood of escalating to an agent.

- Vendors are focusing on enterprise-grade security, enabling organizations to provide superior security, adhere to a highly secure protocol, and use enterprise-grade encryption.

- Organizations are also using no-code tools to make technology accessible to non-technical users and to provide more self-service VCA.

# SPARK Matrix Analysis of the Virtual Customer Assistants (VCA) Market

Quadrant Knowledge Solutions conducted an in-depth analysis of the major Virtual Customer Assistants vendors by evaluating their product portfolio, market presence, and customer value proposition. Virtual Customer Assistants market outlook provides competitive analysis and a ranking of the leading vendors in the form of a proprietary SPARK MatrixTM. SPARK Matrix analysis offers a snapshot of key market participants and a visual representation of market participants. It offers strategic insights on how each vendor ranks related to their competitors based on their respective technology excellence and customer impact parameters. The evaluation is based on primary research, including expert interviews, analysis of use cases, and Quadrant's internal analysis of the overall Virtual Customer Assistants market.

| Technology Excellence | Weightage |
|---|---|
| Sophistication of Technology | 20% |
| Competitive Differentiation Strategy | 20% |
| Application Diversity | 15% |
| Scalability | 15% |
| Integration & Interoperability | 15% |
| Vision & Roadmap | 15% |

| Customer Impact | Weightage |
|---|---|
| Product Strategy & Performance | 20% |
| Market Presence | 20% |
| Proven Record | 15% |
| Ease of Deployment & Use | 15% |
| Customer Service Excellence | 15% |
| Unique Value Proposition | 15% |

According to the SPARK Matrix analysis of the global Virtual Customer Assistants market, "Amelia, with its unique enterprise-grade Virtual Customer Assistants, has secured strong ratings across the performance parameters of technology excellence and customer impact and has been positioned amongst the technology leaders in the 2022 SPARK Matrix of the Virtual Customer Assistants market."

**Figure: 2022 SPARK Matrix™**
(Strategic Performance Assessment and Ranking)
Virtual Customer Assistants Market
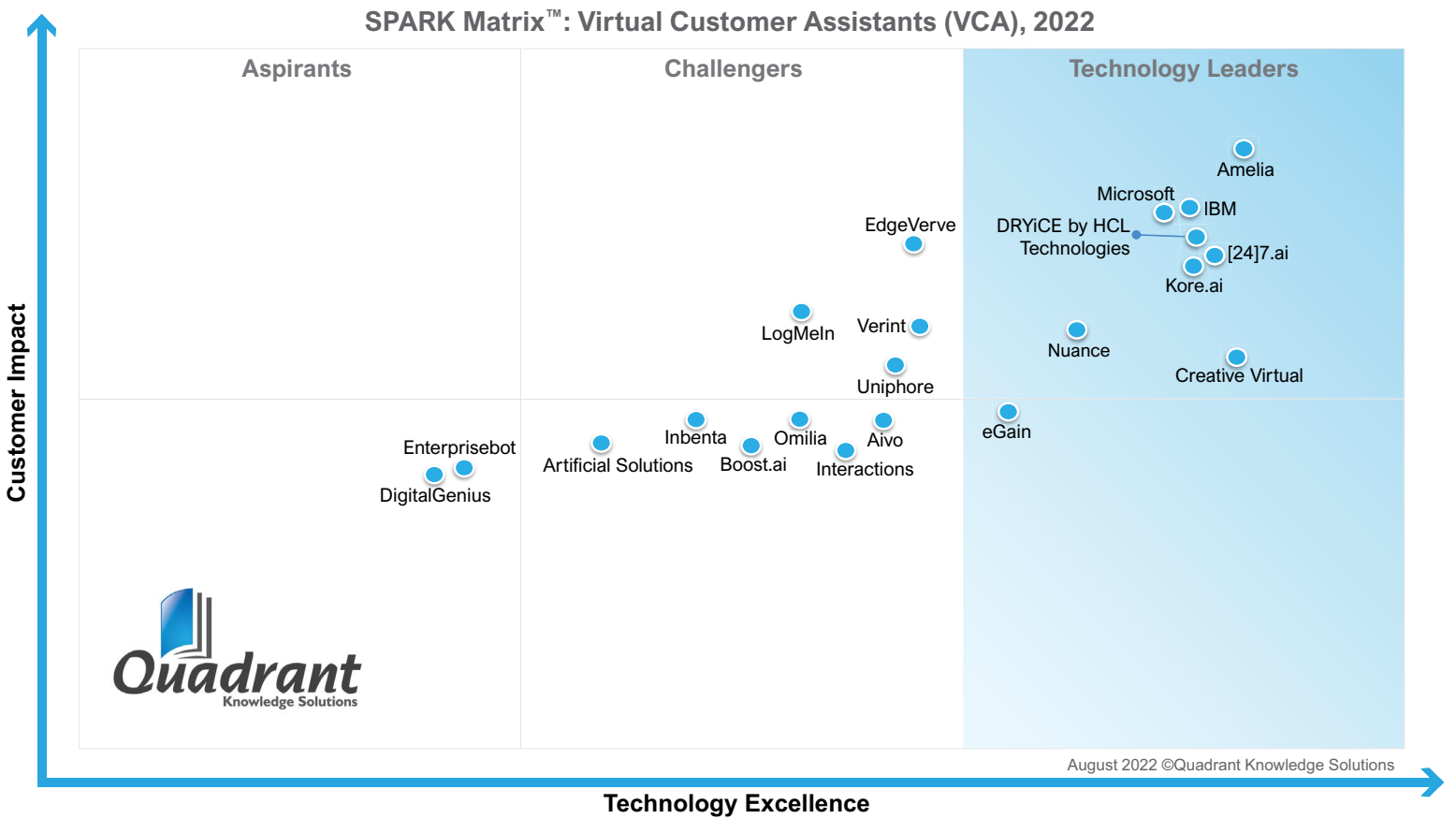
# Amelia

Founded in 1998 and headquartered in New York, USA, Amelia offers an intelligent virtual assistant that delivers cognitive and conversational solutions for the enterprise. Amelia helps enterprises achieve higher first-touch resolution, improves customer satisfaction, and increases workforce productivity. It uses advanced natural language processing (NLP) and deep neural networks (DNNs) to contextually comprehend the actual meaning of the user utterance and use that contextual understanding to respond accordingly. The key features and functionalities offered by Amelia include deep neural networks, sentiment analysis, digital employee builder (a no code design environment), AI-powered recommendation engine, NLP/NLU, human-like natural language dialog, reporting and analytics, integration and orchestration, automated learning, and continuous improvement.

Amelia is multi-threaded and uses several deep neural networks to understand user utterances via its syntactic dependency parsing and semantic role labeling that understands relations between the events and participants. It provides coreference resolution that allows users to switch between platforms and keep the context reference from an earlier conversation. The platform also provides sentiment analysis to understand user sentiment and improve overall customer satisfaction via textual entailment recognizer, sentence encoder, and sentence deconstruction.

Amelia's digital employee builder feature enables users to design custom-made, no-code virtual assistants at scale for various use cases. It allows easy incorporation of application programming interfaces (APIs), robotic process automation (RPA), and visual components by conversing with Amelia during the design process. It also assists users in building sophisticated and advanced new digital employees by offering suggestions and guidance during the creation of new roles and skills.

Amelia's AI-powered Agent recommendation engine monitors the dialog and recommends AI-powered responses based on contextual understanding of approved multi-turn conversations, which, in turn, helps agents resolve customer queries more efficiently. The AI-based agent assistance works in the background and provides information related to the query without intervening between an agent and customer. Amelia provides deep contextual understanding to filter through someone's speech in order to contextually interpret the true meaning and then utilizes that knowledge to produce a response. It also provides unsupervised analytics that provides insights into customers at risk of abandonment, which helps increase customer retention.

Amelia's virtual assistant, supported by fundamental orchestration services, is purpose-built to assist businesses in transforming into frictionless digital enterprises. Its virtual assistant delivers elements of human interaction that include conversation, expression, emotion, and understanding. This improves user experiences by driving deeper connections and greater business value. With its AI capabilities, Amelia creates engaging user experiences and generates business value by continuously learning from human interactions. It also allows users to create digital employees using an interactive interface for specific roles.

Amelia's automated learning and continuous improvement feature ingests chat transcripts, online FAQs, PDFs, and documents and extracts intents and can also observe human agents resolve requests and extract information, including process steps. It allows users to interact with Amelia through voice, chat, text, and email, and works in real-time to fulfill the user requests once submitted.

## Analyst Perspective

Following is the analysis of Amelia's capabilities in the global Virtual Customer Assistants market:

- Amelia allows users to build and deploy virtual agents as a new digital employee by offering suggestions and guidance throughout the creation of new roles and skills and is capable of interacting through conversations in order to resolve queries or tasks. It incorporates APIs, RPAs, and visual components by conversing with Amelia during the design process for more enhanced features. Additionally, it allows users to focus on more complex tasks rather than answering FAQs, and when integrated with back-end system integration such as human resources and IT operations tools, users can execute complex automation through spoken or typed commands.

- Some of the key differentiators of Amelia include its robust conversational capabilities and its ability to handle human variance using Amelia's built-in intelligence that can handle common but unpredictable situations, including changing information and decisions provided later in the process, digressions, context switching, handling conditional logic statements, and disambiguation. It allows users to build new use cases, including integrations with the new digital employee builder, which reduce the time taken from initial design to production, thereby increasing the velocity of the implementation teams. Amelia

offers inductive learning across all major responders and the sentient improvement system, reducing the ongoing maintenance effort for existing use cases in production as well as identifying new use cases. It also provides strategic orchestration capabilities on top of the built-in integration framework to digitally orchestrate and execute end-to-end processes across multiple IT, businesses, and applications.

- Amelia has a significant geographical presence in North America, the European Union, Asia Pacific, Latin America, and the Middle East & Africa. The company holds a strong customer base, including the leading brands across industry verticals such as banking & financial services, healthcare & life sciences, IT & telecom, hospitality, education, manufacturing, and energy & utilities.

- Some of the use cases of Amelia include end-to-end automated IT Services via AIOps that provide password resets, access permissions, and server diagnostics for IT support personnel, facilitating intelligent call centers, resolution of customer pain points, and its integrated platform for banks that support both employee support system and customer service.

- Amelia's strategic roadmap for the next few years includes moving from classification to comprehension for intent recognition by combining ML/DNN classification with Semantic Role Labelling and Ontologies with arbitration and built-in disambiguation. Additionally, the company will focus on incorporating AI-driven analytics for business improvements, including NPS causality dashboard, churn and service impairment analysis, value analytics, and escalation analytics.