

Leveraging AI in Intelligent Virtual Agents: Verascape's Key Insights and Strategies

The use of Artificial Intelligence techniques is revolutionizing the way businesses interact with their customers while improving call center operations. Intelligent Virtual Agents, powered by advanced AI technologies, are at the forefront of this transformation. This white paper illustrates how Verascape's applications utilize AI to enhance voice-enabled IVAs, improve customer interactions, and provide superior customer service including order management, bill payment, claims processing, appointment scheduling, and compliance.



AI Technologies Enhancing Verascape's Intelligent Virtual Agents

1 Voice Recognition

Our IVAs use advanced voice recognition technology to transcribe spoken words into written text. This conversion is essential for accurately processing voice commands and queries. For instance, when a user calls to ask about "my latest bill payment," the voice recognition engine converts the spoken question into written text, enabling the IVA to correctly interpret and address the inquiry.

2 Natural Language Models

Natural Language Processing (NLP) models are at the heart of Verascape's IVAs' ability to understand and generate human-like responses. These models analyze the text input to comprehend the context and intent behind user queries. For instance, when a customer asks, "Can I change my appointment time?" the NLP model interprets the request and determines that it pertains to rescheduling an appointment, enabling the IVA to provide relevant options to a Verascape application or an appropriate call center agent.

3 Data Models and Data Integration Models

Our applications utilize sophisticated AI data models to predict shipping schedules using past data and present circumstances. As an example, if a customer asks when their order will be delivered, the data model analyzes factors like fulfillment center location, shipping method, and carrier performance to provide an accurate estimate of delivery date and time.

Data integration models help create smooth communication between our IVAs and backend data systems. This technology ensures that our virtual agents can access and update information across various client databases efficiently. For example, when a user asks about the status of a claim, the data integration model retrieves the most recent data from the claims system and provides an up-to-date response to the caller.

4 Multi-Factor Authentication

To ensure HIPAA compliance and secure access to sensitive personal information, Verascape's IVAs employ multifactor authentication (MFA) where appropriate. This process involves verifying users through multiple data sources, such as security questions, voice recognition, and personal identification numbers. For example, when a healthcare provider requests access to patient records, MFA ensures that only authorized individuals can retrieve the personal information.

5 System Entities and Developer Entities

System Entities: Verascape IVAs use predetermined system entities to gather data on common concepts with minimal configuration. For example, if a customer inquires about their "order status," the system entity can recognize and process the request without needing any extra programming. This simplifies communication and cuts down on the amount of time required to address a wide variety of queries.

Developer Entities: For more specialized or context-specific content, Verascape uses developer entities. These entities help our IVAs comprehend and extract intricate data that goes beyond basic intents. For instance, when a user inquires about the "return status of a discounted purchase," developer entities aid in comprehending details regarding discounts, return policies, and item categories, providing a more personalized and efficient response.



Use Cases and Benefits

Verascope's IVAs handle a wide range of tasks, both inbound and outbound, including:

- ✔ **Conversational Greeting and Intelligent Call Routing:** Verascope's IVAs enable callers to use conversational speech to quickly and effectively navigate to the appropriate automated application instead of having to navigate through complex call menus.
- ✔ **Order and Claims Status:** Our IVAs can quickly retrieve and provide information about order status and claim details, reducing call times and improving customer satisfaction while reducing the need for live agents to engage on these calls.
- ✔ **Bill Pay:** Customers can make payments and check balances and due dates with ease, thanks to the IVA's ability to process, analyze and resolve requests efficiently.
- ✔ **Claims Submission:** Our IVAs guide users through the claims submission process, ensuring that all necessary information is captured and processed accurately.
- ✔ **Appointment Scheduling:** Appointment-related calls can be resolved without human intervention by enabling callers to book, reschedule, or cancel appointments using our IVAs.
- ✔ **Patient and Customer Surveys or Follow-Ups:** Our IVAs can execute outbound calls to conduct customer and patient surveys, collect feedback and manage follow-ups efficiently

Let's discuss a **no cost, no obligation proof of concept.**

Visit verascope.com or call us at 847-919-8150 to get started.

Conclusion

Verascope remains at the forefront of innovation by employing AI technologies within our IVAs. This not only enhances the customer experience but also streamlines call center operations. As AI technology continues to evolve, Verascope is committed to leveraging its capabilities to further enhance our Intelligent Virtual Agents and provide exceptional service and efficiencies to our clients.