



Conversational Voice Assistant Platform (VIVI)

Conversation Voice AI Assistant Platform - VIVI

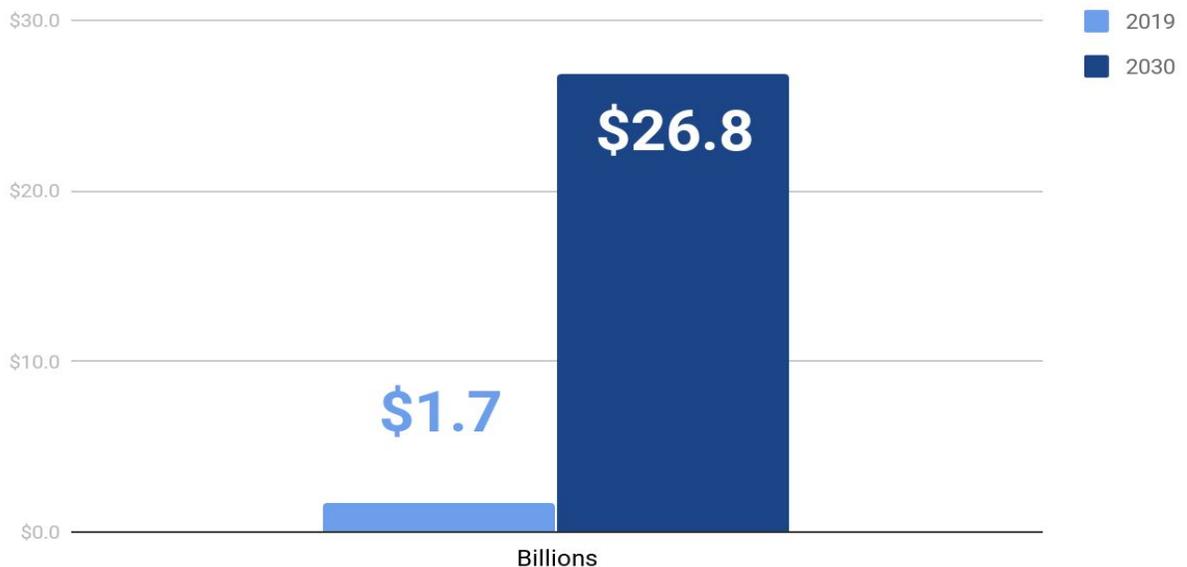
Intelligently humanizing the user experience

Smart speakers have socialized voice assistants

While voice assistants have been around for over 30 years, it has taken dramatic improvement in processor speeds, microphones, Internet bandwidth, speech processing, and natural language understanding technologies to deliver human-like user experiences customers desire. With the advent of smart home voice assistants have become socialized into even day use. However, the problem with using those products for your customers is that it promotes their brand and not yours and they control the customer experience and data.

Socialization is proven by the \$1.7 Billion market that is expected to grow to \$26.8 Billion. This growth is being driven by new vertical market applications and the integration of voice assistants into everyday business processes. All companies need to start deploying Voice Assistants to remain competitive and relevant. However, home appliances and mobile apps are not the only channels of deployment. The same technology easily deploys on the telephone channel, where it's particularly useful since the only available medium of communication is via the voice.

Voice Assistant Market Growth



Why are conversational voice assistants needed?

Human - like dialog provides a more natural user experience. When voice is combined with chat, then it provides the flexibility of both.

Voice Assistants offer a new dimension of branding that encompasses more than a name but a voice and **personality**. This is sort of like a spokesperson. Assistants provide **Intelligent** efficiency that reduces the time to complete a task or transaction or just find answers and information. This intelligence is **proactive** and uses information gathered on the caller or user to bring forth information to notify, collect or inform. Dialog should always be both intelligently initiated by the voice assistant and actions driven by the voice assistants requests. Voice assistants should be deployed across **multiple communication channels**, such as telephony, web, mobile, and smart speaker devices to provide a consistent, branded user experience that builds **cognitive** customer data. Customers want a consistent experience when contacting companies no matter what the method. Lastly, voice assistants can **augment** existing business processes, call centers, applications and services. While voice assistants can become a new user interface, often they augment existing applications to add help, reminders, and simpler ways to complete tasks.

Why deploy Govivace Conversational Voice Assistant VIVI?

Govivace offers a **highly scalable**, adaptable conversational artificial intelligence platform that uses best of breed technologies with strong localization capabilities and a superior dialog design expertise. Here are the key feature advantages:

Company Branded Assistant VIVI

VIVI allows companies to select a text-to-speech voice to be used and the personality of the assistant that matches their customer base and enhances their brand. Dialogs are designed back by our team to reflect your company's image and core values, but operate in an intelligent and efficient manner.

Control of Data

Our platform stores all data encrypted and not accessible to any other company unless configured to do so. All data is controlled by you.

On Premise or Assistant-as-a-Service Scalability

Our platform can be deployed in the cloud as an Assistant-as-a-Service or in your datacenter. In both situations, your data is always secure. We can manage the performance of the service or you can. It is your choice. We utilize Docker containers with AWS instances to dynamically scale the platform based on demand.

Advanced speech recognition

Our speech recognition is tailored to your application dialog, local language, and communication channel to provide the highest level of accuracy possible. We have specific enhanced accuracy modules for telephone number, names, address, and dates. Performance is tracked through multiple analytical tools. We can monitor the performance and retrain the STT and dialog engine as required to improve performance.

Multi Channel - Multi Agent Design

VIVI is designed to provide agents for telephony, web, mobile and smart speaker devices. We provide a SIP Api with ability to control transfers, texting,

Best of Breed Natural Language Understanding Technologies

VIVI platform utilizes RASA NLU, tensorflow NLU, Spacy NLU and Duckling ai to craft a highly responsive voice assistant. This approach allows us to add new technologies as they improve and utilize the best of breed approach for your application.

Responsive Support & Improvement

Govivace has a highly skilled team of speech, language processing engineers, and dialog designers to provide quick response to any deployment problems. Our team provides ongoing speech and dialog tuning services using our advanced analytical and training tools. VIVI has access to Amazon AWS support and a service level agreement (SLA) for production deployments.

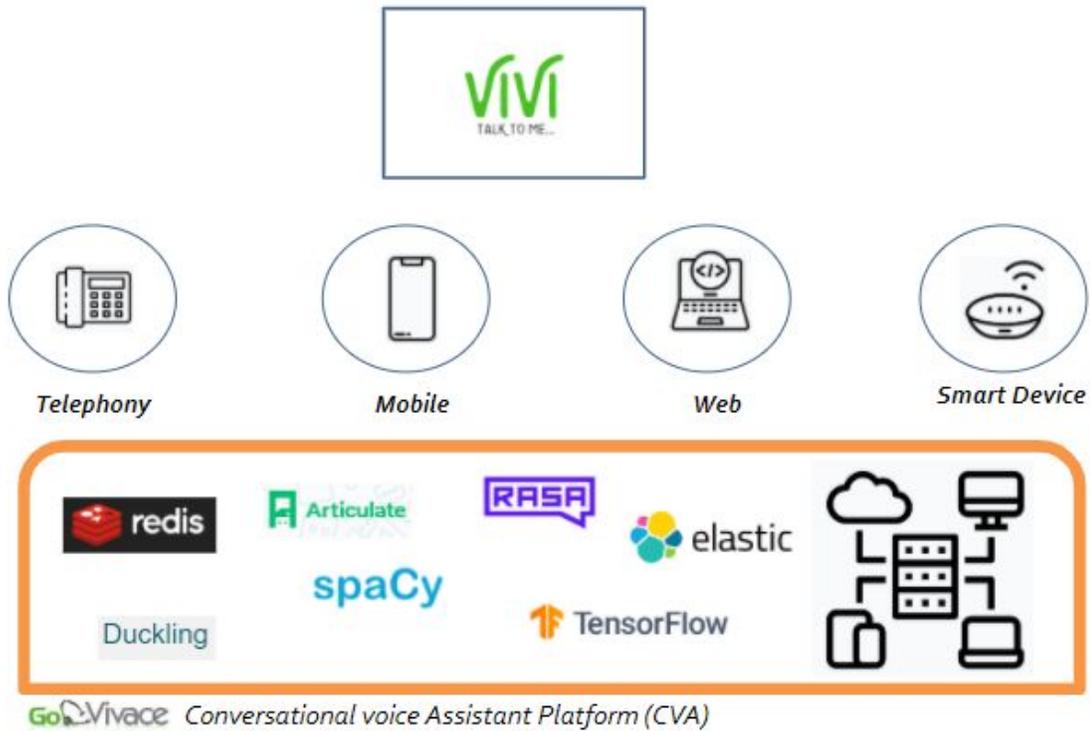
Voice Biometrics

Voice biometrics can be integrated into the flow of the dialog. Speaker verification can allow you to quickly complete the authentication stage of the dialog to save valuable customer, agent and system times.



GoVivace Conversational AI Assistant Capabilities

One Assistant Platform for Universal Branded Experience



Scaleable, Multi Channel Conversational AI and Speech Platform

Platform Features

Visual and Code Based Design

VIVI -Govivace Conversation Voice Assistant Platform is an advanced development suite for creating conversational AI applications, including voice assistants, chatbots, and IVR bots. It includes a visual development and test application for dialog development, collaboration and versioning tools, and backend application and data connectors. CVP is cross-platform and can connect to your own apps, existing telephony platforms, and social network chatbots.

Agents

Agents are a specific set or group of intents or individual intent. For example, an appointment agent will perform functions for booking, modifying or cancelling appointments. Each agent can be isolated from another agent or integrated with them. Agents are also used to switch languages. Usually the main agent is designed for the

communication channel being used, such as telephony, web, mobile or device. Example of agents that work interactively but dialog data is isolated:



Intents are Actions

An intent is a goal derived from the user’s response from speaking, pressing a button or typing a response to a specific question. By recognizing the intent expressed in a user’s response, VIVI statistically or programmatically decides the correct dialog flow for responding to it. An intent is a category that are trained using representative examples or usage data. Recognizing the intents does not require knowing the exact user request, but acts as dialog flow guide.

Entities

An entity is the structured information of a user’s purpose. By recognizing the entities that are mentioned in the user’s input, VIVI statistically decides the specific action or change of actions to take to fulfill an intent. Entities are the subjects of intents. Entities are specific values that clarify user intent and trigger fine-tuned actions and responses. For each value, you can include a list of synonyms to capture the possible varieties in user expression or a modifier for a single word response. Entities represent information in the user input that is relevant to the user’s purpose. For example a telephone number, a person’s name, a location, the name of a product.

Dialog Slots

Add slots to a dialog to gather multiple pieces of information from a user with a single sentence. Slots collect data at the user's instruction. Details the user provides upfront are saved, and the service asks only for the details they do not. Slots reduce development time and get the information needed by asking follow-up questions without having to start over. The responses can be from a list or free form text.

Messenger Connected

We've added in the plumbing to allow fast and extensible integration with almost any messaging platform. We have pre-built connections available today for Facebook Messenger, Google Home, Rocket.Chat, Slack, and Twilio. Most of the connections require some setup in the respective platform but then are just a few fields to fill out.

State-based data models

Allows agents to reuse intents, intuitively define transitions and data conditions, and handle supplemental questions. Agent versioning and copying make it easy to create different versions of agents.

Authentication

VIVI platform supports OAuth 2.0 for user and group level permissions as well as several new login providers: AzureAd, Github, and Twitter. Each group can be customized to have specific global permissions as well as per agent permissions.

Rich Response Types

We have built in support for rich response types for images, cards, audio clips, and buttons. Not only are they implemented on our platform and apps, but if you connect a compatible platform like Facebook messenger or Slack we will automatically translate them into the formats needed for those platforms.

Multilingual support

VIVI platform supports 5+ languages by agent. Dialog is usually designed for different languages. More languages can be added or localized upon request.

Efficient Intelligent Design

Provides end users with natural experiences that include multi-turn conversations with different agents. Handles chit chat and diverse actions to allow the user to deviate from the

main options or sub topic, yet can return based on programmatic design. External applications and data is used to tailor the behavior of the agent dialog to ask the most efficient questions to yield the most efficient responses.

Call and Conversational Analytics Platform

Analytics is critical to a successful voice assistant deployment. Both the dialog and speech accuracies must be tracked and used to retrain or tune the NLU and speech engine. The analytics also will provide sentiment of the user or caller to see how they respond to the assistant. Sometimes personality or dialog may need to be changed. This technology also works with live agents, so the customer or user speaks to a live agent, further analysis is performed.

