



Trend Report:

# Inside Custom Voice Assistants

What they are, why they matter, and how your organization can get on top of the latest trend in voice experiences.

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It's easy to get caught up in the excitement surrounding the explosive growth of in-home smart speakers. While contemplating an enterprise voice strategy, a wise business analyst might take the time to research the walled-garden voice app ecosystem.

According to Amazon, meditation tools, gag apps, and party games dominate the list of top Alexa apps. While such diversions are worthy of a few hours of fun with friends, what's missing are branded voice applications providing real business value and meaningful customer experiences.

For this reason, that same analyst could be forgiven for deciding: "Our organization doesn't belong here."

Enterprise brands do not top the charts within the walled-garden voice ecosystem for three well-known reasons:

- Discoverability
- Retention
- Monetization

While lackluster individual efforts to market and promote branded voice experiences share the blame for the first two issues, it's a fair argument that organizations should not drive traffic to disconnected, shallow voice apps hosted on leased land. But rather, voice assistants should be another seamless layer in a well-considered, customer-centric experience.

However, when it comes to monetization, this problem suggests challenges around integration with varied digital commerce stacks. Unsurprisingly, Amazon and Google have payment solutions, but adoption remains elusive. For example, in 2022, over a third of U.S. adults own at least one smart speaker<sup>i</sup>. That's more than a hundred million households, and doesn't consider the considerably larger pool of smart phones and other speaker-enabled devices that could run the Alexa app. Yet remarkably, less than 1% of all Alexa skills in the U.S. use Amazon pay<sup>ii</sup>.

By usage, the most popular use cases in the walled-garden ecosystem continue to be simple, single-turn interactions such as asking a question, checking the weather, or setting a timer. In fact, among the top 18, making a purchase is last on the list. Contrast this with the top reasons enterprise organizations have decided to adopt voice technology, and a stark misalignment emerges. In a 2022 survey of 400 decision-makers<sup>iii</sup>, 87% are looking for improved productivity, 77% want new business opportunities, and 62% want to increase revenue. In another recent survey<sup>iv</sup>, when asked how Voice Assistants drive value, 83% said convenience and speed, 77% said improved customer support, and 74% said brand identity and experience.

What businesses want  
from voice in 2022:

82%

Improved Productivity

77%

New business opportunities

62%

Increased revenue

## Custom voice assistants to the rescue

The good news is there is much to be excited about, despite the many challenges organizations have faced with first wave, walled-garden voice applications. The current ubiquity of smartphones, smart speakers, and all other voice-enabled devices has trained consumers to use the medium, and as a result, commercial interest continues to grow. More and more organizations are considering a strategy that leverages custom voice assistants like Erica, the virtual financial assistant in the Bank of America mobile experience. Deployed outside the walled-garden ecosystem, deeply integrated custom voice assistants solve more complex and transactional business problems and offer many other attractive benefits to brands and the customers they serve.

It is possible to broadly categorize these benefits under alignment, flexibility, and control. Unlike previous voice efforts, the organizations that create custom voice assistants own them completely. That means total control over data, features, and conversation design. Organizations layer voice assistants into products and services at the level of brand, experience, and data integration to extend and improve them. And they can be built once and deployed anywhere, with an end-to-end conversational AI platform. This last point provides organizations with more flexibility and allows them to meet their customers where they are.

## What are custom voice assistants?

Ask ten experts what custom voice assistants are, and nine will start by explaining what they are not. This response is natural because custom voice assistants are both an alternative to and the evolution of all the previous applications of voice technology.



First and foremost, custom voice assistants are not low functioning voice apps deployed exclusively into the walled-garden smart speaker ecosystem. However, custom voice assistants are not necessarily highly complex point solutions explicitly designed for tightly defined use cases like call center deflection. Interestingly, one could build a custom voice assistant specifically for call center deflection, but there are already very mature solutions in that space.

In the most straightforward terms, custom voice assistants are branded software that allows users to access the features and functionality of a product, service, or experience through an intelligent voice interface. In-car voice assistants that enable drivers to manage car systems, including entertainment, climate, and navigation, are a prime example of the technology in action.

Because custom voice assistants are not deployed within the walled-garden ecosystem, they come packaged with solutions to voice-specific challenges. These include wake words, automatic speech recognition, natural language understanding, and text-to-speech processing.

## Why do they matter?

At the highest level, all custom voice assistants share common attributes that help distinguish them from first wave walled-garden voice apps and help explain why they are so critical to the future of conversational AI.

### Value creation

As the voice market has matured, use cases for the technology have transcended mere novelty. Value creation, the most fundamental reason enterprise brands are excited about voice, is also the most salient design imperative for a custom voice assistant. Fortunately, when voice becomes a seamless layer of a brand's end-to-end customer experience, it can move the needle on meaningful metrics like increasing revenue, decreasing cost, and improving customer satisfaction.

### Tight integration

Custom voice assistants are easier to integrate because they are completely owned at every layer. Organizations have total freedom to connect them to legacy technology or any other platform via webhooks and APIs. This freedom and flexibility allow brands to weave voice into their products and services in far more seamless, meaningful, and valuable ways than orphaned and atomic, first wave voice applications.

### Brand alignment

Although the top apps deployed into the walled-garden ecosystem are not branded voice assistants, that doesn't mean brands are not there. Many organizations have built and deployed useful and valuable first-wave voice apps. But because users must invoke them through another brand's ecosystem, they are orphaned splinter experiences. Conversely, a custom voice assistant isn't another experience that a user needs to go and find. Custom voice assistants are a seamless layer of the brand's overall customer experience, whether as a product extension or any other part of the customer's journey with the brand.

### Needs focused

One of the top considerations driving the design of the walled-garden ecosystem is the need to handle every possible question a user might ask. The resulting experience is breathtakingly wide but incredibly shallow. This need to be all things to all users also amplifies the complexity of the discoverability challenges inherent to screenless experiences. If a user asks to talk to wolverine, are they talking about the animal? The movie? Or the shoe brand? Custom assistants solve the discoverability problem by narrowing the scope of a potential user's needs to a specific domain and including custom handlers for any edge cases. Also, custom voice assistants typically go much deeper into the information they are designed to handle. The result is a far more elegant and seamless experience.

### Privacy and data protection

By owning the data and experience at every level, organizations that choose a custom voice assistant strategy are free to create and adhere to their privacy and data protection policies. While this may seem like a small detail, in an era of increasing regulation and spiraling costs related to a breach, not to mention the loss of trust and brand affinity, for many organizations, it is the best rationale for eschewing the old strategy for deploying voice apps.

## Data access

Unfettered access to information is another benefit of owning the data associated with a branded voice experience. The walled-garden ecosystem doesn't allow access to all the data that helps brands understand the value of their voice efforts. With complete access, it's possible to see how long users engage, where they drop, and what they are asking for that are not provided. Organizations can leverage this information to optimize conversation design over time, increasing the value of a custom voice assistant.

## Decreasing cost of ownership

While it may be accurate to say that it's long been possible to design, build, and deploy custom voice assistants, it's not always been an economically viable choice for most organizations. Recent innovations are putting significant downward pressure on the cost to create and own custom voice assistants.

For example, it is estimated that Bank of America assembled a team of more than 100 people to bring Erica to market in 2018 for about \$30 million. Less than five years later, with a conversational AI platform built to deliver custom voice assistants, it is possible to provide the same features and functionality at a tenth of the cost of money and human resources.

## Planning to succeed with custom voice assistants

Like all change, it pays to have an informed plan. While a complete strategy for custom voice assistants will be unique to each organization and beyond the scope of this document, some knowledge and experience gained from leading other organizations down this path are universal.

### Strategy

Organizations realize the core strength and value of voice assistants when the medium transcends novelty and aligns with their strategic goals and objectives. Achieving this goal demands careful planning that considers many factors with a diverse group of thinkers from across the organization and various levels of experience.

Like all good business strategies, planning for voice will be informed by a comprehensive and current understanding of the organization's customers, competitors, and industry trends. However, it will also dive into specifics like attitudes and sentiment towards the medium.

A voice assistant strategy should include a vision for how customers and, in many cases, employees will experience the brand differently after introducing a voice communication layer. This vision will also articulate what success looks like in measurable, unambiguous terms when done well.

And finally, the strategy should also define how the custom voice assistant will deliver a competitive advantage. Like all other parts of the strategy this definition should be data-driven and therefore be based on the documented results of an objective, comparative benchmarking analysis.

### Technology

The universe of options used to design, build, and deploy voice experiences is evolving fast. In such a dynamic environment, it can be tricky to find the tech strategy that will allow an organization to recognize the dramatic reductions in the total cost of ownership since Bank of America's Erica came online, but it is possible. Fortunately, there are identifiable characteristics to look for in a conversational AI platform built from the ground up to deliver and grow custom voice assistants.

The platform must provide an end-to-end solution set with features to handle wake words, automatic speech recognition, natural language understanding, a decision engine, and text-to-speech processing. With

all this functionality included, custom voice assistants can be delivered anywhere because they are not reliant on the infrastructure provided by walled-garden ecosystems.

The platform must also provide an intuitive visual interface for administration and conversation design, so business users are not reliant upon developers to create and manage the experience. At the same time, it must provide an open and well-documented API, so developers can manage any detail and connect to any other integration. The importance of interoperability cannot be understated because the point of a custom voice assistant is to be an extension of a brand's products, services, or experiences and not an isolated application.

Finally, the platform should provide an integrated analytics toolset so business users can find and process any information about how their custom voice assistants are used. This access to information makes it possible to grow and optimize the experience based on data and provide critical business metrics to prove value.

## Organization

It probably comes as no surprise that a culture of innovation is prevalent among organizations with a desire to augment their products and services with custom voice assistants. Earlier, novelty-driven efforts were categorized as a mechanism to reach audiences with smart speakers and driven by marketing. The latest wave of interest in delivering sophisticated and integrated voice assistants is more likely to be sponsored by c-suite executives who drive product, technology, or innovation strategy.

However, leadership is not culture, and although their buy-in is necessary, it's certainly not enough to succeed. Organizations also need sharp resources with relatively recent skills to deliver. When done well, custom voice assistants are not one-and-done projects. Ongoing care and feeding are required to deliver the best results. While it is possible to outsource these skills, it is ideal for them to be internal resources or part of a trusted and strategic agency partnership.

## Getting started with Custom Voice Assistants

Whether your organization has a voice app or you're just getting started in the space, there's never been a better time to design, build, and deploy custom voice assistants. The technology is continuously becoming more intelligent, better integrated, and more valuable while the cost and complexity of delivery go down.

Voicify is an end-to-end, SaaS conversational AI platform built from the ground up to deliver intelligent, custom voice assistants. If you're interested in learning more, please don't hesitate to contact us for a no-cost, no-commitment consultation. We're happy to provide a demo or talk about the role custom voice assistants can play in your products or services. [www.voicify.com](http://www.voicify.com)



<sup>i</sup> 2022 Smart Speaker Consumer Adoption Report by Voicebot.ai

<sup>ii</sup> 2021 Transacting via Voice The next frontier by Voicelab

<sup>iii</sup> 2022 State of Voice Technology by Opus Research

<sup>iv</sup> 2021 Global Survey: The Business Value of Customized Voice Assistants by Opus Research