Six Key Ways to Reinvent the Customer Experience with IVR
The Interactive Voice Response (IVR) system has come a long way from the complex, legacy ecosystem it once was. Companies no longer need to resign themselves to maintaining stale IVR call flows well past their expiration date, subjecting customers to inefficient and frustrating experiences. Today’s IVRs are built with flexible, cloud-based APIs. Innovative organizations are using IVR systems to connect with customers in meaningful new ways. In this e-book, you’ll learn about six key ways to reinvent the customer experience using your IVR, and then see exactly how to do it.
SIX KEY WAYS TO REINVENT THE CUSTOMER EXPERIENCE WITH IVR

THE NEW PARADIGM FOR IVR

WHY BUILD AN IVR WITH API’S?

BUILD IT YOURSELF

USE CASE #1: INBOUND FLOW

USE CASE #2: OUTBOUND IVR

USE CASE #3: CALL DEFLECTION, OR ADVANCED IVR WITH SMS

USE CASE #4: DECISION-BASED IVR

USE CASE #5: DYNAMIC IVR

USE CASE #6: AI-DRIVEN IVR

TWILIO IVR IMPLEMENTATION
The New Paradigm for IVR

Many businesses’ communications systems were built with legacy infrastructure. For financial services and other businesses in highly regulated industries, these systems have traditionally operated with high levels of complexity and security protocols. They were based on rigid hardware that required long update cycles and weeks or months to roll out changes. They didn’t allow for experimentation, A/B testing, or continuous improvements. These systems couldn’t improve over time because they weren’t designed to keep up with the level of service that today’s customers demand.

However, as the needs of customers evolve, businesses need to evolve, too. Customers increasingly expect exceptional customer experiences from the businesses they interact with, whether it’s a gardening supply store or a bank. Today’s successful companies stand out based on the customer experience they deliver. They’re shifting their communications infrastructure to stay relevant and service the ever-evolving needs of their clients.

The customer experience you deliver sets you apart from your competition. Many companies are leading the way in digital customer experience by creating easy-to-use mobile apps and exploring innovative ways to support their customers across multiple channels. However, no matter how great your app is, if a customer calls your company, chances are that their first point of contact with your business will be with your IVR system.
With legacy contact center systems, even minor changes to an IVR, often require updates from professional services and weeks of effort. The provider’s roadmap dictates what you can do and when, while optimizing metrics and customer satisfaction take a backseat. But with APIs, you can build or update an IVR with a few lines of code. This is how modern IVR systems are built.

APIs are software building blocks that let you update your IVR on demand, with full control of your phone tree and routing logic. With APIs, you can create custom greetings, collect speech and dual-tone multi-frequency signaling (DTMF) input, and intelligently route callers, all with a few clicks—no professional services required. With APIs, you can A/B test as often as you want because you have the flexibility and autonomy to make changes quickly.

At Twilio, we’ve seen thousands of businesses build IVRs that quickly adapt to the needs of their customers. These systems are designed to adapt because they’re built on cloud-based infrastructure rather than on-premise legacy systems. They’re designed to be updated with just a few clicks. These IVRs let you create greetings, build menus, rearrange call flows, and easily customize any aspect of your customer experience—using the web languages you already know. And with the Twilio visual builder, Studio, you can build workflows and make changes using an intuitive drag-and-drop visual editor instead of code.
Why Build an IVR with APIs?

Industry experts J.D. Power estimate that 30% of a customer’s interaction with a company’s contact center is with an IVR. For financial services companies, that figure could be even higher.

A great IVR experience isn’t just a “nice to have” for businesses, it’s imperative. Consumer research shows that 67% of customers will give more business to a company as a result of a positive communication experience, but over 50% of customers will leave a brand after just one bad communication experience.

Beyond better customer experiences, a cloud-based IVR can have a positive effect on many measurable key performance indicators (KPIs). When you continually measure the success of your IVR, you see what’s happening in real time, so you know where your immediate focus needs to be. Understanding the unique metrics that apply to your business and exploring their interdependability will help you provide a best-in-class customer experience and accelerate your growth.

On the next two pages we’ll explore several KPIs that can have a tremendous impact on your business, allowing you to:

- Manage your workforce.
- Control costs effectively.
- Continuously improve your customer experience.
- Increase the overall profitability of your organization.
1. Reduce: Decrease spam call rates.

When your agents are busy serving customers, spam calls are more than a nuisance; they clog phone lines and waste business time and resources. Your IVR is like a bouncer in a nightclub, tossing out the spam and letting only the quality calls proceed.

2. Deflect: Turn calls into texts.

Nine out of ten consumers want to talk to businesses using messaging, according to market research firm Vanson Bourne. And since calls are more time-consuming for everyone, why not use your IVR to suggest a text instead of a call? Agents can typically handle more than one text interaction concurrently, which means call deflection reduces the cost per contact as well as decreases costly voice communications.

3. Automate: Scale your capacity.

IVRs simplify customer support by automating many customer activities such as payment collection, balance inquiries, and simple requests. Customers with more complex needs and high-value issues that require a human touch can be routed to the best agent, streamlining the process for everyone. For businesses, automation decreases the burden placed on customer service staff and can reduce the total number of staff hours needed to cover customer needs.
4. **Context: Have rich conversations with customers.**

When your IVR is infused with real-time contextual analytics, you can capture and leverage customer information and route it to agents to deliver a personalized “wow” experience. The more an agent knows about who the customer is, what they’re looking for, and what conversations they’ve already had, the easier it is to provide better, faster service.

5. **Efficiency: Reduce call handling times.**

‘Handling time’ for your agents is a measurement that includes talk time, hold time, and wrap up time. From the vantage point of your customers, ‘experience time’ is the total time your customer spends on the call including ring time, time in your IVR, time on hold, and time talking to an agent. With an efficient IVR, both agents and customers can achieve more in less time.

6. **Qualification: Increase the number of qualified leads.**

In addition to being a tool for inbound communications, an IVR can also automate the process of reaching out to prospective clients. Perhaps you want to generate leads for a new loan offering or credit card. An outbound IVR can pre-qualify interest and support lead conversion, connecting qualified leads to a live agent. By enabling sales to pick up where the conversation left off, your agents can focus on what they are good at—selling.
Build it Yourself

Twilio makes it simple to build an IVR into your business’s contact center. For companies that do not have developer resources and/or want to get into production faster, Twilio Studio lets you build workflows and make changes in content, routing logic, and more using a visual builder instead of code. This can be an excellent way for companies to quickly prototype IVR workflows, including everything from phone tree menus to surveys and chatbots.

Using a visual interface to build a custom IVR system allows every department within a business—including non-technical users in product, marketing, support, and engineering—to design, build, scale, and A/B test IVR interaction flows. Twilio Studio uses an intuitive drag-and-drop visual editor with a library of omnichannel widgets that handle the underlying communication logic.

We’ve gathered six use cases that demonstrate key ways to reinvent your customer experience using the power of your IVR. You’ll not only see how these use cases can apply to your business but also see just how easy it is to build them in Studio with actual architecture diagrams and workflow examples. By applying simple web application logic, you’ll be building your IVR in no time.
USE CASE #1

Inbound Flow

Adding an inbound IVR is the easiest way to scale your contact center capacity. This use case involves building a simple navigation menu for incoming callers. Most often, this system will connect your customers (and potential customers) to what they need. An inbound IVR allows incoming voice dialers to navigate a phone menu and receive the right information, perform automatic transactions and lookups, and find the right person to help.

An inbound IVR captures user input in the form of decoded DTMF tones, or in modern IVR systems, speech recognition. With some simple web application logic, this lets you supplement your human operators or bypass them entirely for common transactions and information requests. With Twilio, your inbound call flow also becomes a branded experience, where you can inject brand values, introduce a special offer, or deliver a custom marketing message while routing customers to their requested destination.

By asking relevant questions to gather more input from your customers before routing them to an agent, you can drastically increase your inbound call capacity. In some cases, callers’ needs are completely taken care of without needing to speak to an agent.
At Twilio, we’ve seen our clients’ number of fully automated inbound calls increase, on average, from one percent to ten percent after implementing an inbound IVR.

For example, let’s say your business provides roadside assistance. A customer calls in for support, and before the customer is connected to an agent, the IVR system gathers relevant information such as the customer’s account number, phone number, and location. By the time the customer connects with an agent, the agent already has all of the information needed to get the customer help fast.

Here’s the flow:

1. The customer calls in for assistance.
2. The IVR plays menu options or simply says, “How can I help you?”
3. The customer enters digits that correspond to the menu options or speaks.
4. The IVR collects the customer’s data and routes her to the next available agent.
5. The customer is connected to the best agent to address her needs, and this agent already has the data the customer previously gave to the IVR.
**Want to know how to build it?**

With a drag-and-drop visual builder, you can build your IVR menu in minutes, without writing a line of code. This basic setup, built with Twilio Studio, routes callers to support or sales based on simple routing logic:
USE CASE #2

Outbound IVR

Today, IVR systems are used for much more than routing a caller’s incoming inquiry. Outbound IVR systems are being utilized in entirely new ways: to send bill notifications, appointment reminders, and retail order updates, or to deliver promotions, payments, polls, and brand awareness—all without involving a live agent.

Companies that make a large number of outbound phone calls typically have outbound contact centers that qualify inbound leads or prospect for new customers. For these companies, the number of calls agents can process is tied to the amount of revenue the company can generate. When call volume is consistently high, any downtime has a direct impact on revenue. Agent efficiency is paramount. An outbound IVR system adds automation to the lead conversion process, by providing a simplified way to pre-qualify interest and support lead conversion.
For example, let’s say your banking business is running a new credit card promotion. Using the Twilio REST API, your IVR will make an outgoing call to a customer who completed an online form. The IVR plays a message such as, “If you’d like to apply for a new credit card, please listen to the following options.”

At that point, the process looks just like a webhook for an inbound call. The IVR then waits to receive a DTMF or speech response from the person called, which triggers an API. After responding to a few simple questions, interested and qualified prospects can be quickly routed to a live sales agent to seal the deal.

For the customer, the experience goes like this:

1. The customer receives a phone call.
2. He hears the IVR ask if he’s interested in a new credit card. He is.
3. The IVR plays menu options in a friendly recorded voice.
4. The customer enters digits or speaks to take the next step.
5. He is connected to an agent to complete his credit card application.

The customer is connected to the best agent to address her needs, and this agent already has the data the customer previously gave to the IVR.
Want to know how to build it?

Here’s the basic setup built with Twilio Studio:
Call Deflection, or Advanced IVR with SMS

Calls aren’t only more time-consuming for your agents, but for your customers as well. With call deflection, you can use your IVR to suggest that the interaction move over to an SMS. This lets you respond to customer needs immediately with automated, context-driven text messages.

“Call deflection” may sound like call avoidance, which isn’t the objective for a business that wants to retain loyal customers. Using channels like SMS intelligently helps your customers get a response faster and your agents serve more people in less time.

According to consumer research conducted by Lawless Research, responsiveness is the number one factor driving customer perceptions of their overall communication experience with a company. They found that 96% of consumers say they want companies to be more responsive, and 97% will give more business to companies that respond quickly.
Meanwhile, 9 out of 10 people want to talk to businesses using messaging, with millennials preferring to receive messages from companies through social media, mobile apps, and messaging apps at more than twice the rate of older customers. Instead of keeping your callers in an IVR phone tree or transferring all incoming calls to an agent, you can reduce handling time while increasing customer satisfaction by changing the channel.

For example, retail businesses handle a high volume of routine inquiries. Customer satisfaction is the driving metric for these types of businesses, so they naturally want to create simple, intuitive experiences for their customers. Let’s say a customer calls the toll-free number from their smartphone to ask about the status of an order and is connected to the company’s IVR.

The IVR uses Twilio Lookup to determine if the number is a mobile phone number. If yes, the IVR responds, “I see you’re calling from a mobile phone, do you want to start a text?”

If the customer says “yes,” the IVR triggers an SMS to the incoming phone number detected, and the interaction continues by text. An agent (or in some cases, a bot) can now provide the customer with the information they need via text, and the contact center experiences lower call volume. By automating and deflecting many common inquiries, an IVR that diverts to SMS can free up agents to work on the most complex issues.
So, from the customer’s perspective, the interaction looks like this:

1. The customer calls the business to check on her retail order.
2. The IVR asks the customer if she’d prefer to text.
3. She loves that idea and says, “Yes.”
4. The customer receives an immediate SMS message asking how to help.
5. She can then either get the information she needs via text, or is directed to the appropriate action, which initiates a two-way conversation with an agent.

Since the customer was served right away, she is happy with her experience. Meanwhile, the business is using SMS to increase agent efficiency and lower the cost per contact.

**From Twilio’s perspective, the interaction looks like this:**

![Diagram of interaction between phone, Twilio, and app]
Decision-based IVR

An IVR system can be used to make informed business decisions based on customer input. This doesn’t just save time; it saves money too. According to Forrester, an interaction with a live agent can cost as much as six to twelve dollars per interaction, while an automated interaction on an IVR can cost as little as 25 cents. By enabling your IVR to make intelligent decisions, customers can receive immediate, considered responses.

IVRs can be equipped to make decisions that range from where to route the customer to authenticating new and returning users. Since Twilio APIs let you update your IVR on demand, you have full control of your decision logic. You can build the exact workflow that gets your callers the answers they need quickly. Your IVR can use telephone keypad input via DTMF tones and/or speech recognition to give your customers a more natural way to navigate.

Let’s look at an example. It’s typical for a financial services company to receive a large volume of inquiries from consumers. Banks that deal directly with consumers have the most to gain or lose based on the quality of their customer experience, since this is often what sets them apart from their competition. Decreasing the time it takes customers to verify their identity and reducing the time they have to spend talking to agents are key ways financial services companies can lower their costs and increase their productivity.
If you work for a bank, how can you know for sure that a caller is really who they say they are? The rise and severity of account takeover fraud and data breaches proves there is a real need for user authentication that goes beyond entering a birth date or the last four digits of a social security number. Before handing over sensitive financial data, you need to verify the caller’s identity using two-factor authentication.

A decision-based IVR allows you to have an interactive call with your customers to verify their identity. The customer enters their account information and other identifying data into the IVR. Once the customer’s identity is verified using Authy 2FA, the IVR triggers a time-bound SMS token to be sent to the customer. With this token, the customer can now access their account details. This kind of authentication can be used with both inbound and outbound IVR.

Using an outbound IVR, this is what the customer would experience:

1. The customer is trying to access his account information on the bank website; the bank wants to verify the customer’s identity.
2. The customer receives a phone call from the bank’s IVR system.
3. The customer speaks his account details and a few identifying details out loud.
4. The IVR uses Twilio Lookup to determine that the customer is using a mobile phone. He then receives a time-bound code via SMS.
5. After inputting the code on the bank website, the customer can now access his account.
How would you build this?

With Twilio Studio, it’s as simple as drag and drop.
Dynamic IVR

Every customer is unique, and every call will be unique as well. A dynamic IVR system changes the call flow in real time, based on input or context from the caller. As the IVR gathers information from a customer using speech recognition or DTMF tones, it modifies the menu options accordingly. With a static IVR menu, the option a customer might need may be several items down the list. In contrast, a dynamic IVR is interactive; it personalizes the experience to handle customers faster.

Dynamic IVR systems can be linked to information about customer behavior on other channels, in previous interactions, or from your CRM, for example. By performing a data dip, the IVR retrieves the information it needs to accurately personalize the experience for your customer. Since they’ll hear the option most relevant to them first, a dynamic IVR allows customers to spend less time in your IVR system, leading to reduced handle time and increased customer satisfaction.

Let’s look at how a dynamic IVR can help organizations that conduct surveys. Surveys are an excellent way to garner immediate feedback and make informed business decisions based on customer input. However, some surveys require a different set of questions based on the type of input they’re receiving. By performing a data dip, a dynamic IVR can modify survey questions on the fly.
IVR-enabled surveys are often limited to just a few questions, with the most important question positioned early in the call, in case customers drop off. With a dynamic IVR, you can modify your survey as the call goes along, so the most critical information is always being collected. For example, let’s say you’re sending out a customer satisfaction survey following a loan application with your financial services company.

With each question that your customer answers, the IVR will perform a data dip and serve up the following question accordingly. Using an outbound IVR, this is what the interaction would be like:

1. The customer receives a phone call from the bank where she recently applied for a loan, asking if she’ll participate in a brief survey.

2. The customer says “yes” and the IVR asks, “In what location did you recently apply for a loan?”

3. The customer answers “San Francisco,” which triggers the IVR to access the relevant data for the San Francisco branch.

4. The IVR pulls data that indicates the customer’s representative was Angie Lee, and asks, “How would you rate your experience for applying for a personal loan with Angie Lee from one to ten, with ten being the highest?”

5. The IVR has all of the data it needs for this survey and thanks the customer for her time.
Want to build it?

Here’s the diagram in Twilio Studio.
USE CASE #6

AI-Driven IVR

Artificial intelligence (AI) helps businesses engage with larger numbers of customers without sacrificing the quality of the interaction. By 2020, Gartner predicts that customers will manage 85% of the relationship with an enterprise without interacting with a human. With an AI-driven IVR, businesses can build more efficient customer journeys, enabling customers to solve their issues faster or independently.

AI-driven IVR systems take customer engagement to the next level. They provide intelligent responses to queries using APIs like Twilio Understand, which analyze text and determine intent during a live call through natural language understanding. Proactive companies are leveraging natural language understanding and sentiment analytics to create “conversational assistants” to help customers get the real-time information they’re seeking.
Let’s look at an example. Imagine if you could order your favorite cup of coffee on the phone without talking to a human. This example is of a barista ordering system via a bot who can manage your order end-to-end. The bot takes your order, shows the order to a barista, and sends you an SMS when your coffee is ready.

Here’s how it works:

1. The customer calls an IVR phone number and is asked to say “latte, cappuccino, Americano, cortado, or cold brew.”

2. The IVR converts the speech to text and sends the order to the barista.

3. The customer receives a text message when his order is complete.

This example bot, integrated with an AI-driven IVR, serves as an assistant to a barista. However, you could implement this use case in a variety of other ways.

Bots can also link to other apps, such as Facebook, to find out a customers’ preferences and make suggestions for new items to try. This type of next generation “conversational commerce” is easily facilitated with technologies like APIs from Twilio.
Build your own version.

Here’s how to set it up with Twilio Studio:
Twilio IVR Implementation

As you can see, today’s businesses are using IVR for much more than just a dial-and-wait service. Across organizations—from marketing to sales to operations—companies are using this technology to interact with customers 24/7. Their IVR menu flows are determined by using A/B testing and data analysis of historical call records, and they’re seeing real benefits.

In theory, existing IVRs should be easy to change. But the reality is, changes often require statements of work for professional services. Whether A/B testing call flows and measuring changes in handle time or CSAT, or integrating IVRs into different custom databases, many businesses move their IVR control over to Twilio to have more flexibility and autonomy when making changes quickly.

IVR is both a tool and a means to an end in your contact center. The best setups tie seamlessly into tools such as intelligent routing to instantly assign tasks to human operators when needed, or use transcription and recording to assist your workforce. Ultimately, the goal of an IVR is to help customers have a more personalized and efficient experience without them even noticing.

With Twilio Studio, it’s now easier than ever to build an IVR. It’s also more accessible to anyone and everyone to create, edit, and manage IVR flows. Your Twilio IVR build will save customer time and reduce negative feedback while getting your customers exactly what they need, faster.

We’re always ready to help you with your implementation and best practices. Get in touch with sales or support and we’ll get you going with an IVR in no time flat.
Thanks for reading.

Would you like to learn more about what Twilio can do for your business?

Talk to us