Best Practices for Building Customer Engagement from the World's Leading Brands

twilio

Customer engagement strategies

Communications is intertwined with both our personal and professional lives. On average, Americans spend almost three hours per day on their phone. It is not surprising then that improving customer engagement builds more successful businesses. The world's leading brands know the importance of constantly staying ahead of changing consumer expectations: from channel preference, frequency of communication, and deep personalization.

For more than 10 years, Twilio has been fueling the future of communications with APIs and services to empower developers to increase customer engagement. These

APIs and services, and more recently complete solutions such as the Flex Contact Center and SendGrid Marketing Campaigns, abstract away much of the complexity inherent with communications. By taking a software platform approach, the Twilio Customer Engagement Platform provides a layer of agility across traditional hardware-based telecommunications infrastructure and networks. Developers and Businesses building atop the platform, inherit improvements and gain access to new engagement channels, intelligent services, compliant access to new geographical regions, and new features without having to spend time in rebuilding existing applications, managing servers, or engaging specialist consulting partners to build costly and complex integrations.

More than 170,000 customers use Twilio Customer Engagement Platform to create a differentiated experience for their customers to help drive higher sales conversions, increase NPS scores and customer loyalty, and improve contact center efficiency. This e-book provides best practice guidance, gathered from thousands of hours of real-world experience working with many of the world's leading brands, from global household names, to digital disrupters and high growth startups, on how you can get started creating world class customer engagement.

Engagement channels

Only a few years ago, the primary engagement channels a business needed to consider was web, SMS, voice, and email. Now, it seems there is a new channel every 6-12 months, from social media, AI chatbots, and the explosive rise in Messenger platforms. In addition, the emerging RCS standard has the potential to completely change how consumers experience your brand. The following channels, all supported by the Twilio Customer Engagement Platform will be used through this e-book. As new channels emerge, Twilio will continue to add support for them. By building atop the Customer Engagement Platform, these are immediately available to you without any retooling.

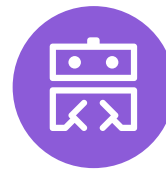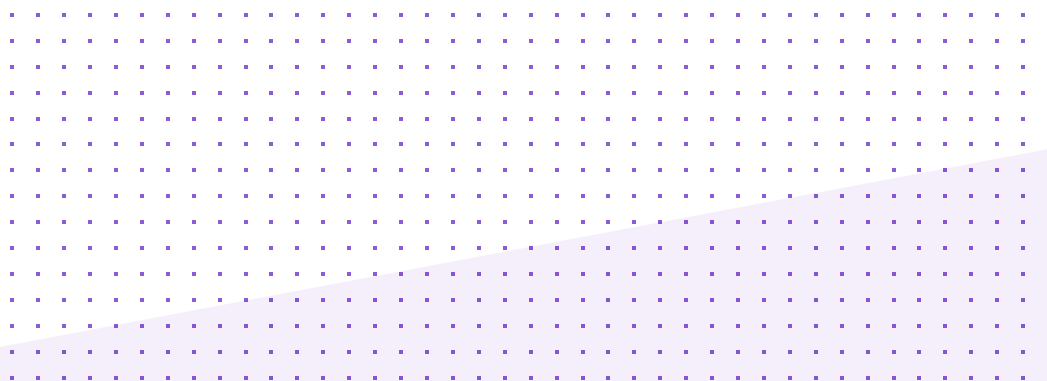|		
Voice	Facebook Messenger	SMS
Line	Chat	Chatbots
Email	Fax	WhatsApp
Connected Devices	Video	RCS

Getting started

Getting started can be overwhelming. For the majority of customers, how they get started depends a lot on what they want to build. This e-book is divided into the four most common engagement strategies: send messages on the right channel, orchestrating self-service, customizing call center agent experience, and using AI for scale. For each of these strategies, best practice and implementation patterns are provided, including customers who have successfully implemented similar patterns. The goal is to provide you with real, tangible steps to help you get started fast.

Thankfully, building upon the Twilio Customer Engagement Platform allows you to start small and grow solutions over time. Start your journey by identifying the most important engagement strategy to you and implement this. Then, come back and expand your solution based on the other patterns provided. Taking a platform approach gives you the flexibility to pick and choose the channels and services you need, and have confidence that as consumer and business requirements change, you can easily keep pace.

Send messages on the right channel

The most common requirement of customers is to send a message via common channels like SMS, voice, or email. The Twilio Customer Engagement Platform provides access to all major channels with global infrastructure that ensures your messages get delivered reliably and in compliance with more than 100 countries around the world. Which channel you use to send the message depends a lot on your specific use case.
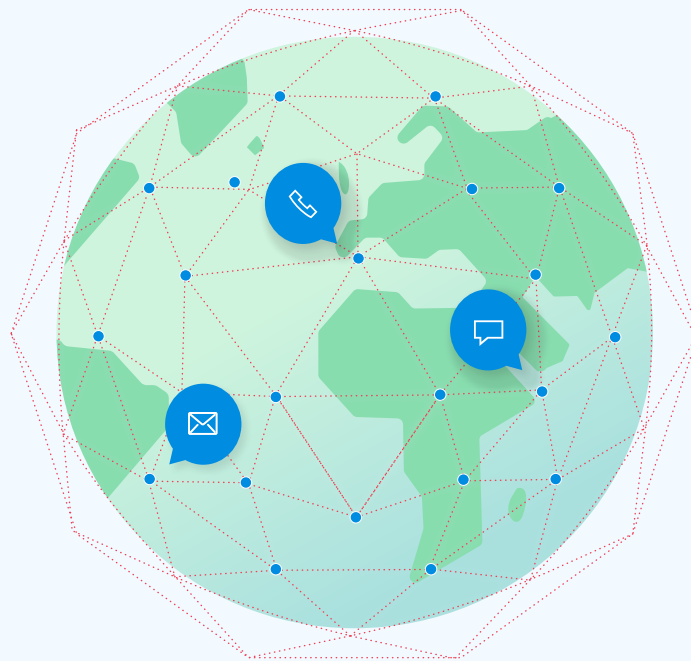
Consider the use case

Marketing

Both SMS and Email are great for marketing use cases with high open rates. Businesses can also leverage additional strategies such as short-codes to generate personalized codes, then track performance. Walmart, for example uses short-codes in their SMS marketing for limited time offers, and Groupon uses email marketing for coupons. Whilst SMS and Email are perhaps the most popular marketing channels, Messenger channels are also a viable alternative. Care must be taken however to ensure that a particular Messenger service allows marketing messages to be sent. WhatsApp, for example, explicitly prohibits the use of marketing messages.

1.5b
*increase in new click-to-call mortgage process.*

Bank of America.

70%
increase in clicks via personalized emails.

Strava.

Verification

Verification requests require channels that offer immediate delivery, often coupled with physical access to devices such as a phone with registered phone number for two-factor authentication. SMS, voice, and increasingly video, are great channels for verification. Twitch, a popular gaming platform utilized SMS-based verification for account authorization, and Transferwise, an online money transfer service, uses Two-Factor Authentication to verify fund transfers in order to protect customers.

50%
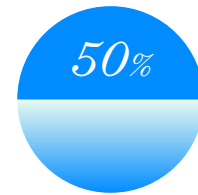
reduction in sign-up errors.

Twitch.

Chat

Email

SMS

Video

Voice

Security Code
* * * * * * *

Notification

Finally, notifications for appointment reminders, shipping status etc. can be delivered across many channels, with Messenger channels rapidly increasing in popularity, especially for companies looking to create bi-directional engagement strategies and expand into new geographies. Companies like Deliveroo use SMS for time sensitive notifications for food delivery updates, whereas Spotify utilize emails for personalized notifications like monthly emails highlighting new artists or releases from a favorite band that a subscriber may want to check out.

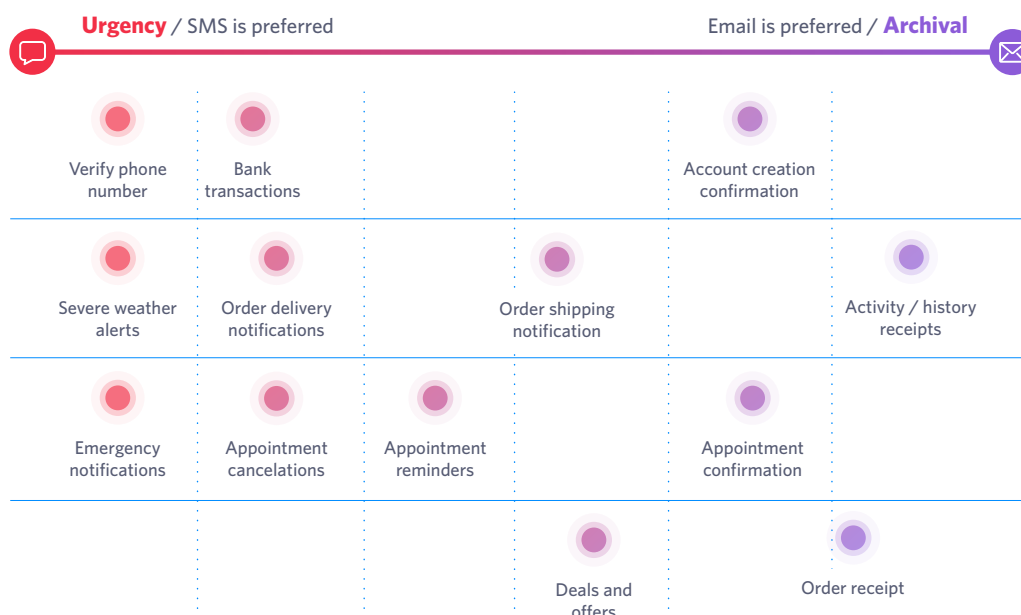*840%*
increase through refill reminder messages.

LensDirect.

Message urgency vs. archival

Use cases give a great sense of which channel is the most effective for sending a particular message. But there can be some confusion where channels overlap. For example, you could send an appointment reminder via email or SMS. Which is the best approach? A good strategy is to look at message urgency vs. archival.

Urgency / SMS is preferred   Email is preferred / **Archival**

| Verify phone number | Bank transactions | | | Account creation confirmation | |
Severe weather alerts	Order delivery notifications		Order shipping notification		Activity / history receipts
Emergency notifications	Appointment cancelations	Appointment reminders		Appointment confirmation	
			Deals and offers	Order receipt	

Put yourself in the customer's shoes and think of the customer experience you want them to have. What's the impact if they don't receive a message for five minutes? What about if they need to search for a receipt next week? Thinking about your use case along the lines of message urgency vs. archival will help you determine the best fit.

Urgent message pattern

Implementing the urgent message pattern typically starts with a customer interacting with your system in some way: booking a ride, ordering food, or similar. Developers will then call the Twilio channel APIs, using a Twilio SDK in the programming language they prefer. Then, depending on need, leverage additional Twilio services like number masking, or short-codes, before relying on the underlying Twilio Super Network to deliver the message. The Super Network abstracts away the complexity of dealing with geographies and carrier networks.
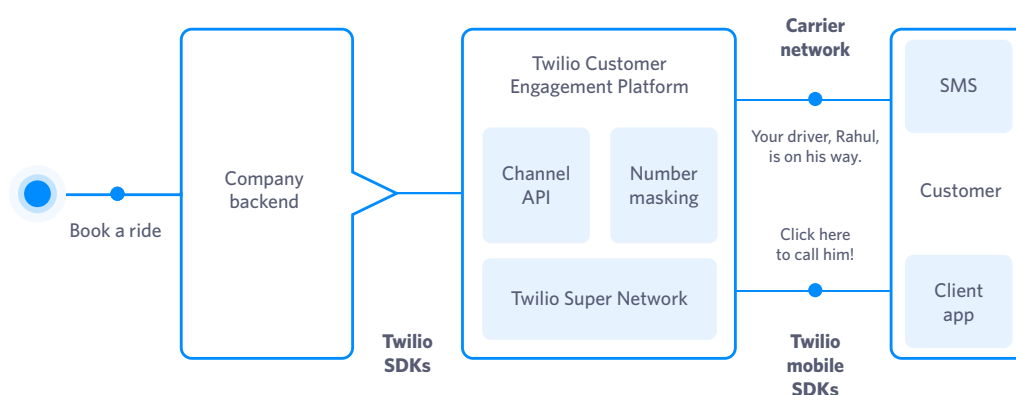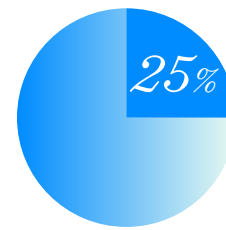

Archival message pattern

Implementing the Archival pattern is very similar to the Urgent message pattern. It starts with a customer touchpoint like a ride ending, or order placed, which updates your system. Developers will then utilize the SendGrid SDKs to call platform APIs. As part of the API request, the developer will associate the request with an existing email template created within SendGrid. Then, the email will be delivered via the platform's Mail Transfer Agent.
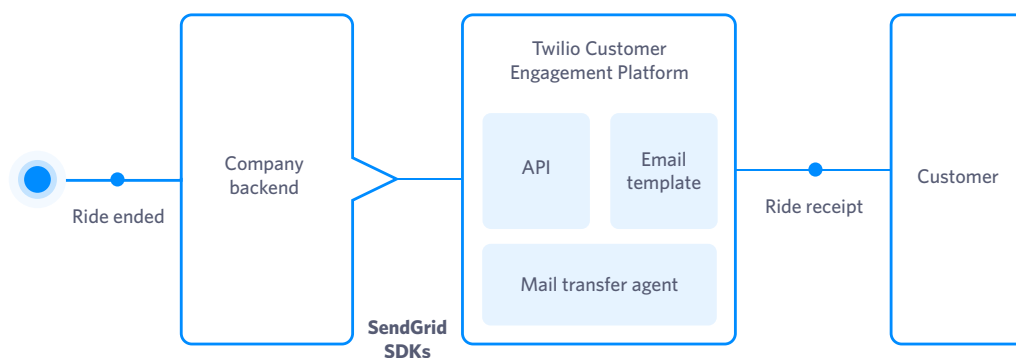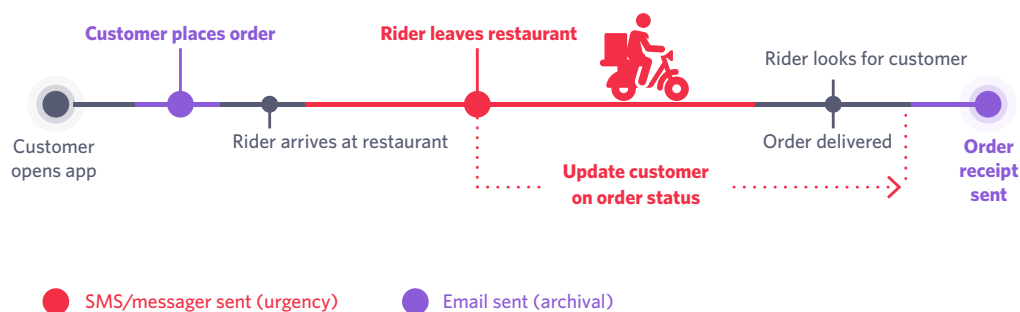
Multi-channel engagement

For many use cases, urgency and archival channels work in harmony to great great customer engagement. For example, imagine placing an order for a pizza through a company like Deliveroo or JustEats. You may place an order and receive an email confirmation that the order is placed. This email can also include a payment receipt. In this instance, an archival strategy works great. When you want to be kept up-to-date in real-time on order delivery status however, email isn't ideal. Channels like SMS or WhatsApps are much better suited. By understanding the customer journey and touch-points you can utilize both urgency and archival patterns to provide the right message on the right channel at the right time.

25%

opt-in rate for WhatsApp.

Deliveroo.

Urgency + archival = great customer engagement

Customer places order

Rider leaves restaurant

Rider looks for customer

Customer opens app

Rider arrives at restaurant

Update customer on order status

Order delivered

Order receipt sent

● SMS/messager sent (urgency)   ● Email sent (archival)
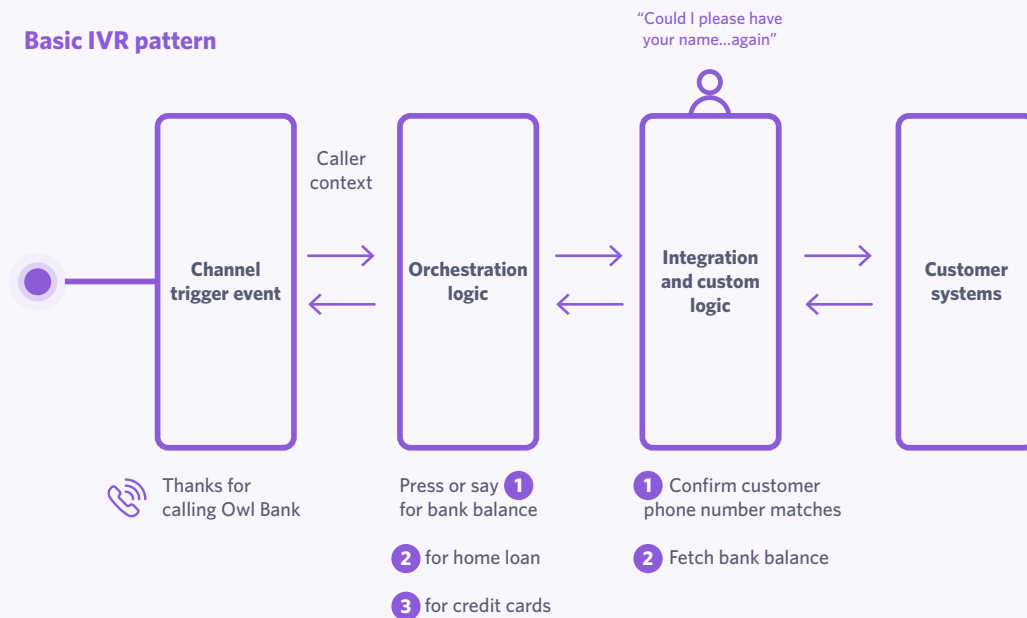
Orchestrate self-service

Great customer engagement involves both outbound - sending messages to the right channel, and inbound - where customers want to reach back to your business, to solve a problem, or be updated on a particular topic such as order status, bank balance and so on. For many companies, this inbound request is handled by IVRs.

Basic IVR pattern

"Could I please have your name...again"

| Channel trigger event | → ← Caller context | Orchestration logic | → ← | Integration and custom logic | → ← | Customer systems |

Thanks for calling Owl Bank

Press or say **1** for bank balance

2 for home loan

3 for credit cards

1 Confirm customer phone number matches

2 Fetch bank balance
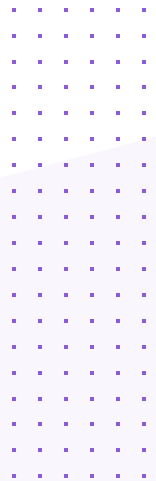
An IVR, or Interactive Virtual Response system is an automated telephony system that interacts with callers, gathers information regarding the request and requestor, then attempts to resolve the request either via integration with other systems, or by routing a call to the appropriate recipient within an organization.

The basic building blocks of an IVR are:

1. A channel trigger event. A customer calling their bank to request information

2. The implementation of orchestration logic. Press "1" for bank balance, "2" for home loans, and so on.

3. Development of integration or custom logic to validate the caller information (identity, correct account number etc.) and fetch a response from existing customer systems. Unfortunately, for many IVRs, this integration is lacking. We have all experienced situations when we start in an IVR only to be handed over to a call center agent ask you to repeat information you just entered.

Build IVRs with Twilio Studio

The challenge of building integrated IVRs that support all the major interaction channels is solved with Twilio Studio. Twilio Studio, part of the Twilio Customer Engagement platform, is a drag and drop workflow builder for developers to create communication-based orchestrations like IVRs. Developers can drag input channels—voice, text, etc.—into the design canvas, which automatically collect caller contextual information, add widgets to gather further input and perform decision logic. Studio supports rapid iterations and the ability to seamlessly switch over to new versions of your orchestration flow allowing customers the ability to rapidly iterate and continuously improve their IVR processes.
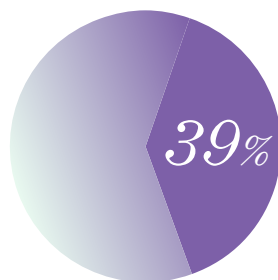
Integrate existing systems with Functions

Eliminate customer frustrations by connecting your IVRs flow created with Studio with backend systems or integrating custom logic via Functions. Functions, accessed by dragging a widget into the canvas, provide the ability for developers to write code in Node.js and run them within the Twilio Customer Engagement cloud runtime.

Twilio connected IVR pattern

By using the Twilio Customer Engagement Platform, customers can rapidly deliver each component of the basic IVR pattern and implement additional logic, integrations, to improve customer inbound experiences.

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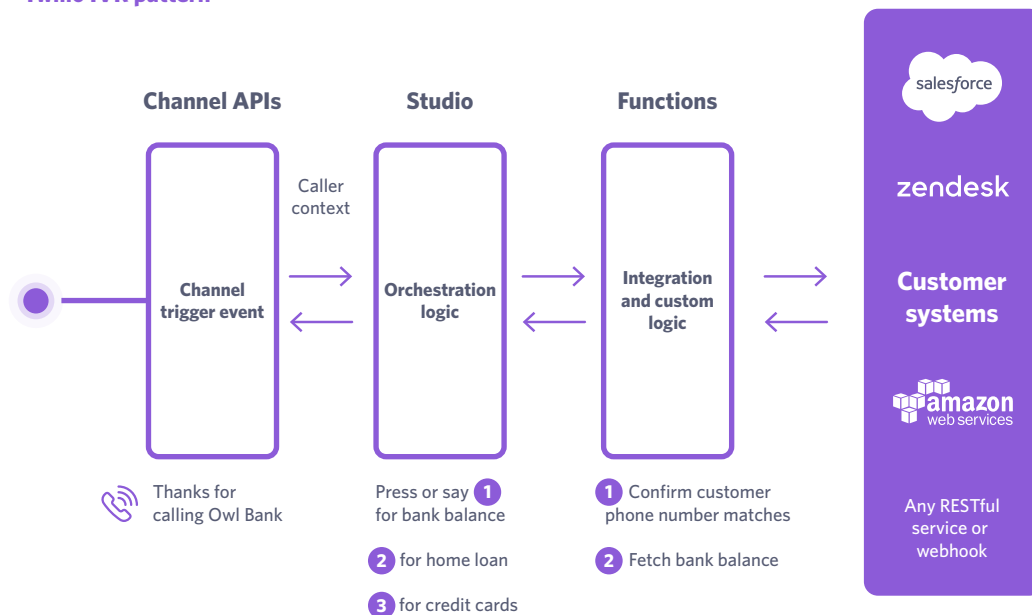
39% *increase in CSAT through seamless omni-channel experiences.*

ING.

Twilio IVR pattern

Channel APIs → Caller context → **Studio** → **Functions** → **Customer systems**

Channel trigger event

Orchestration logic

Integration and custom logic

salesforce
zendesk
Customer systems
amazon web services
Any RESTful service or webhook

📞 Thanks for calling Owl Bank

Press or say **1** for bank balance

2 for home loan

3 for credit cards

1 Confirm customer phone number matches

2 Fetch bank balance

The rise of chatbots

By 2020, analysts suggest that 25% of all <u>customer service interactions will be via some form of virtual assistant</u>. Chatbots, and the advances in machine learning, give consumers the ability to interact with your IVRs in a more conversational way.

Natural language understanding

Natural Language Understanding, or NLU, is the ability to utilize AI for a computer to interpret unstructured text or voice requests known as utterances, derive intent, and respond. In order words, provide the ability for a computer to handle requests in the multitude of nuances a customer may ask them. For example, "I need a hotel room," "do you have any rooms available," and "I need to make a booking" are all valid requests a human would interpret as the same. NLU enables a computer to do the same, and parse the phrase into conversational intent, context, and sentiment:

> *"I need a hotel room in San Francisco from April 4th to the 8th, near the Convention Center."*

```
Need:hotel {intent} - context:San Francisco {city} -
context:April 4th {check-in} context:April 8th {check-out} -
need:near the convention center {intent} -
sentiment:0.5 {neutral}
```

Build chatbots with Twilio AutoPilot

Twilio Autopilot utilizes NLU to allow companies to build natural language chatbots that work across every customer interaction: from web and mobile chats, SMS, WhatsApp, and your contact center. Autopilot allow you to create and train bots based on real conversation transcripts like call logs, FAQs, and more. Each time the bot has a conversation, it learns and improves.

With the Autopilot widget, developers can drag and drop chatbot capabilities into Twilio IVRs, and if need be, automatically hand that conversation to a contact center agent should the customer prefer.

Twilio chatbot IVR pattern

Implementing chatbots for IVRs follow the same pattern as the connected IVR pattern, with one difference; the initial trigger event will be handled by a chatbot. In addition, as part of an IVR Studio flow, the decision logic may direct this to an Autopilot chatbot, before returning to the flow. Lastly, with Twilio Flex, chatbots can hand-off the call live contact center agents.
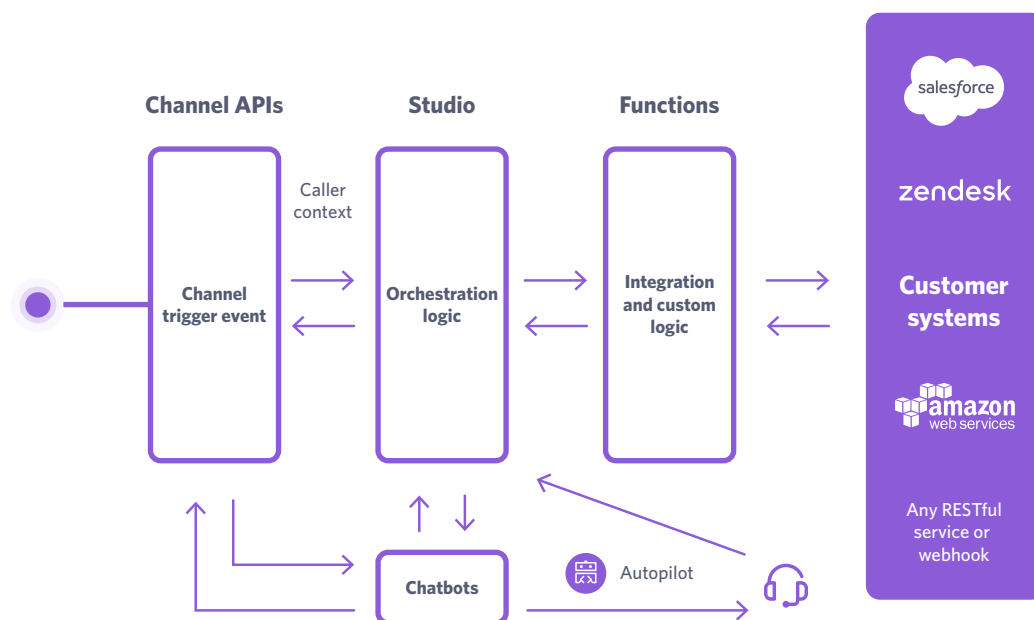
IVRs and connected devices

Smart homes and connected devices such as Amazon Echo, Google Assistant and many more are rapidly growing channel for customer engagement. These channels highlight the importance and benefits of chatbots that include powerful NLU and AI models. AutoPilot provides out of the box connectivity for companies to integrate with leading smart devices, utilizing the same builder interface and chatbot IVR pattern.

Organizations like the city of Lake Forest of California are building innovative solutions with Autopilot and Amazon Echo smart speakers to improve residents' ability to report council issues like potholes and other administrative services from the comfort of their home.

Smart devices IVR pattern
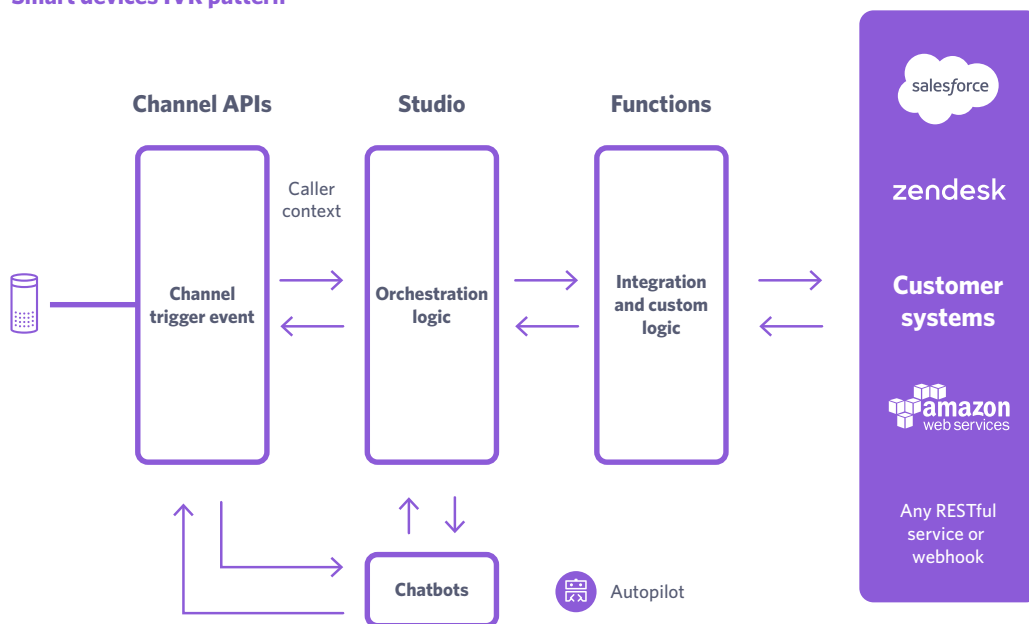
Use AI to build for scale

Discussions pertaining to chatbots and IVRs often focus purely on the customer experience of how it can improve customer self-service. Chatbots can also great impact the financial and employee experience of a business, in particular call deflection and agent retention. By using designing and implementing chatbots effectively, organizations can use AI to scale their business.

Factors impacting scale

Call deflection

Call Deflection is a measure of the impact of the amount of times a customer didn't not have to call a contact center because their problem was solved in another way, self-service. It is estimated that call deflection can save upwards of $8 billion annually.
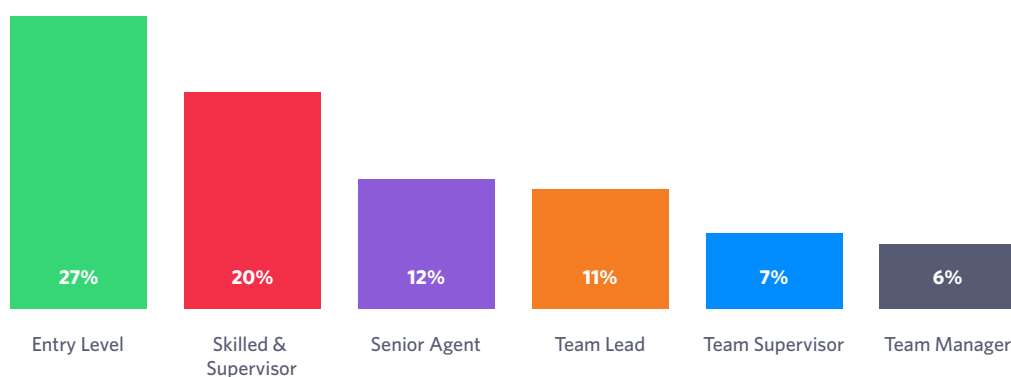
$8B
saved annually from call deflection.

Agent retention

Further, chatbots can help organizations scale through increasing agent retention by reducing the time agents spend on non-challenging work such as responding to frequently asked questions, and freeing them up to focus on more complex, high touch customer engagement activities. A non-challenging work environment was one of the primary reasons cited for agent turnover in a recent Mercer study.

Agent turn over rates

Entry Level	Skilled & Supervisor	Senior Agent	Team Lead	Team Supervisor	Team Manager
27%	20%	12%	11%	7%	6%

Implementing chatbots can free up to 80% of agents time to focus on higher skilled activities. This is especially important in entry level agents who will have more opportunity to gain new skills and progress in their career, resulting in significant reduction in turnover rates.

80%
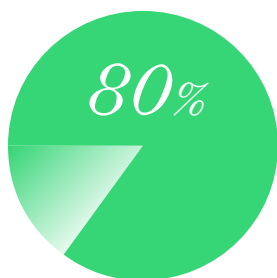
Implementing chatbots can free up to $80% of agents time.

Conversational design principles

Building chatbots that consumers find value in and do not opt-out of by pressing '0' to talk to an agent, therefore reducing retention benefits, requires planning and thoughtful design. The chatbot should solve the customer's problem in a human way. To achieve this, organizations must follow conversational design principles to answer the who, what, and how the bot is designed for.

Who is your bot audience?

Age
Consider the age of your audience. Are they young? Are they millennials? Are they elderly individuals who need help scheduling doctor's appointments? It may be the case that your bot will be used by a range of ages. If that is the case, consider creating a persona for each age range.

Personality
What is the personality or personalities of your audience? Are they silly and playful? Are they more serious and conservative? Think of the personalities for each of the age ranges identified and make note of that in your persona development.

Habits
What are your audience habits? Does your audience prefer text over a phone call? Would your audience expect to see emojis in a chat conversation? Would your audience find gifs childish or amusing?

What is your bot's personality?

Tone of voice

Tone of voice relates to the way a bot speaks to someone. Aside from the scripts that you write for your bot, one way to bring your bot's personality to life is to integrate with voice services such as Amazon Polly.

Amazon Polly is a service provided by Amazon which turns text into lifelike speech, which is fully supported by Twilio Autopilot. Poly supports for more than 20 voice and accents and the ability to change particular word tones and inflections and is fully supported by Twilio Autopilot. Further, numerous psychology studies have been conducted to find that most "trusted" accent is British, and children trust native (to them) speakers much more than those with foreign accents. Tools like Polly help you really boost your bot's personality.

Jargon

Jargon refers to the words and phrases that are relative to your audience. Jargon also includes words that may be considered to be slang or even terms that your particular audience know that may not be well known outside your audience. Take golf for example. Golf, like many sports, contains jargon that makes it more relatable to the audience. If my bot talks about a fore, or a mulligan, it feels more conversational.

Mannerisms

Mannerisms are defined as your bot's habitual way of speaking or behaving, in context with the discussion. For example, perhaps I'm talking to a bot at a crisis line, and it says, "no worries, I can help you", it is not authentic–I AM worried, and telling me I am not makes me feel like I am not being heard. The reverse could be true for your brand. Is it a lighthearted brand, or more serious? Aussie Bum, an iconic Australian brand, and Twilio customer, is a super fun and cheeky underwear and swimwear brand; The mannerisms of a bot for Aussie Bums will sound very different from that of a lawyer, for example.

How do you train your bot?

Transcripts

Learn from past call logs and transcripts to understand how customers ask questions, and what the correct responses are. Out of the box, Autopilot understands default data types like dates, names, times, and more. You can create custom data types to flag and take action on information that's vital to your customer interactions.

Integrations

We've already seen how we can use Studio and functions to connect IVRs to backends. Your bot can take advantage of this technology to integrate with your knowledge base for FAQs, or even broader AI platforms like Watson for generic knowledge.
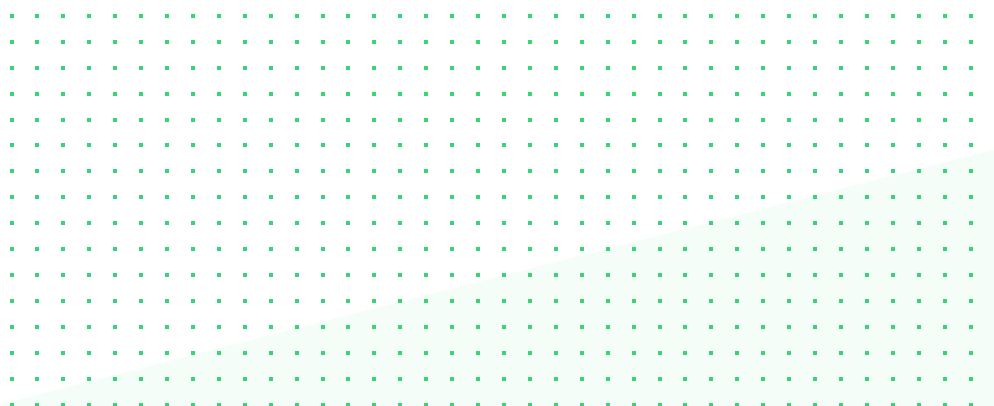
How do you test your bot?

Sample size
The sample size for testing out your bot will vary. However, this does not mean that you should only test your both with 1-2 users. Aim for a minimum of 10 users that will hopefully provide you with diverse feedback for your bot.

Test scenarios
As you begin to put together your test plans, think of the various scenarios that you would like your testers to try. Ensure you include basis-path testing that will test both successful and unsuccessful outcomes. Spend additional time on testing the phrases that appear in existing sources, such as call logs, paying particular attention to variants on common phrases or responses.

User questions
Develop behavioral questions to ask your users to gain better insight on how they feel about the bot. Avoid asking yes or no questions, also known as polar questions. You'll want to be able to dive deeper than what's on the surface to get feedback about the bot. Consider questions such as 'In which ways does communicating with the bot provide an experience that is human-like?' or 'How can the bot be improved?'

Analyze feedback
After you've collected feedback from testers and have witnessed a decent flow of conversations between the bot and potential users, you'll want to analyze the feedback and modify the bot's script and personality where appropriate.

Customize call center agent experience

For many years, Call Center customers have had to trade off flexibility and customization. On-premises contact centers are notoriously difficult to customize, requiring expensive specialist resources and multi-year projects. Cloud-based solutions offer well defined customization abilities, but if you want to do more, it's impossible.

What about UI?

Plugins

Customize agent workflow and integrations with **Studio and Functions**

Programmable UI

Self-service via **AutoPilot-based** chatbots may hand-off to a Flex call center agent

Workflows

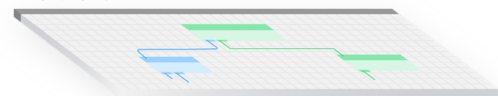Calls come into your Flex contact center via **Channel APIs**

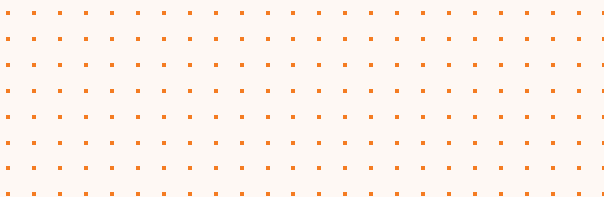**Routing**

Channels

Twilio Flex provides a completely programmable experience which allows businesses to build a solution that fits their business. And, it is built using modern, open technologies used by millions of developers worldwide.

> *Twilio Flex is built using modern, open technologies that any millions of developers use worldwide.*

Flex, along with all the strategies and implementation patterns described in this guide, are built upon the Customer Engagement Platform. What this means is that you know already know a lot of best practices on how to be successful with Flex.

Calls come into your Flex-based contact center via channel APIs. Customers may begin a self-service via Autopilot chatbots and handed over to call center agents should they desire. And you can customize agent workflows and integrations using Studio and Functions. But what about the UI? At a high level, the Flex UI is fully programmable. You can take the standard interface and make it anything you like.

When beginning to customize the UI, it is helpful to think in terms of UI sections or components that solve a particular business requirement.

Each section of Flex is made up of components. Developers can build these components in React.js and HTML, two very popular developer frameworks. A component consists of both UI and logic. Not only does this component-based model make the UI very flexible is also empowers developers to work independently on components, promoting a high level of re-use across teams, and allow them to work in parallel. When you are ready to deploy changes, developers simply need to drag and drop component into the Twilio platform via Flex's pluggable architecture.

Integration

Messaging
(incoming channels)

Orchestration
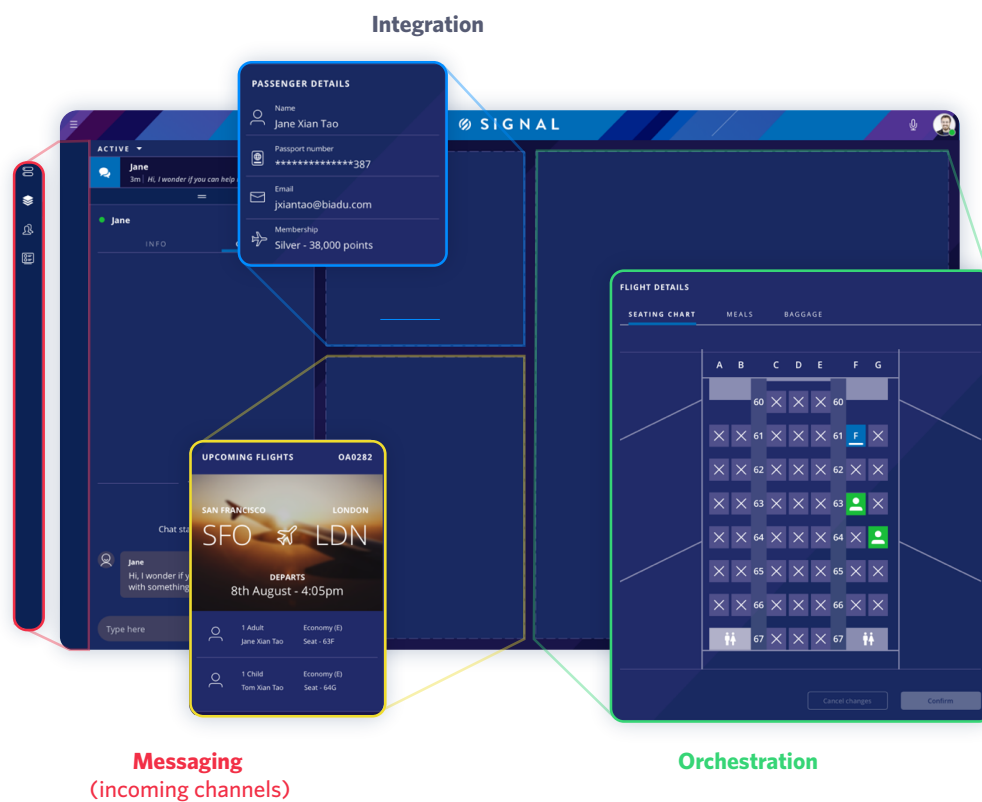
Successful organizations like Shopify, Lyft, TripActions, and Scorpion all follow a component-based approach to customize their Flex implementation as a strategy to make the UI more modular, and benefit from reusability and quicker time to market.

Integration
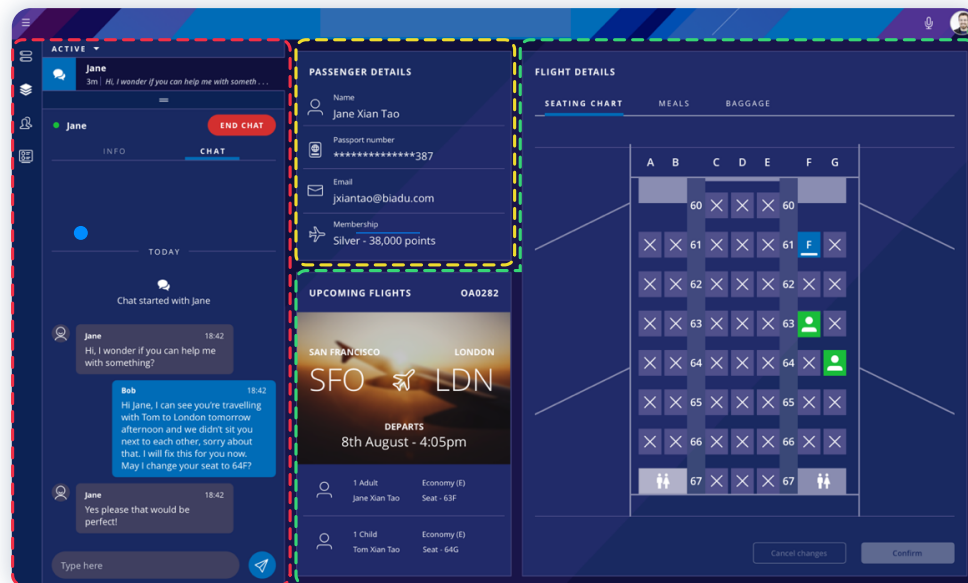
Messaging
(incoming channels)

Orchestration

Get started creating world class customer engagement

In summary, this guide provides implementation patterns and best practices used by real customers who have built solutions using the Twilio Customer Engagement platform. The patterns and best practices describe how you can send messages on the right channel, create integrated and intelligent IVRs, scale your business and improve agent retention with human-centered chatbot design principles, and utilize component-based models for customizing your contact center. By building upon the Twilio Customer Engagement platform, you are delivering customer experiences that build loyal customers and grow your business, with the knowledge that as consumer trends change, you can immediately take advantage of it, once again making customer engagement your competitive advantage.

We can't wait to see what you build.

Your all-in-one customer engagement toolbox.

Thanks for reading.

Learn more about what Twilio
can do for your business.

Contact sales