WHITEPAPER



Cloud Platform: The Next Generation Approach For Contact Centers

OVERVIEW

Unlock innovation and boost customer experience ...using APIs as your master key

- Evolving the role of the contact center
- The future: a contact center that never becomes obsolete
- Principles of the platform approach to contact centers
- Benefits of the contact center platform approach
- Is the contact center platform approach right for you?
- Introduction to Twilio Flex
- City of Pittsburgh leaps to cloud
- U-Haul builds for scale
- BGL shifts to a remote working model
- Cover Financial redefines customer service with a Flexible platform
- Free your contact center

Evolving the role of the contact center

We are living in the era of constant digital bombardment (social media alerts, push notifications, unsolicited emails, robocalls, etc.) coming from all sorts of applications and websites. One study found that users receive on average **over 63 notifications per day**. Keeping up with all the information is causing a wave of communication burnout.

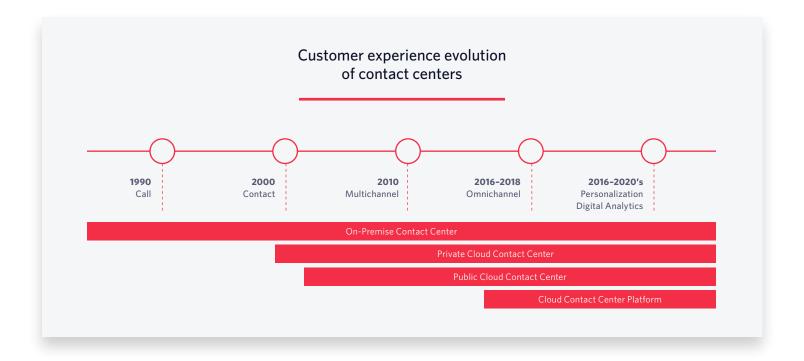
Hence, consumers seek out more personalized, real and authentic conversations. Whether it is through the front office or the storefront, the website or the customer service line, over text, email or social media, companies need to know how their customers engage to provide a consistent experience. This engagement consists of all the touchpoints that organizations define with their customers, from marketing and sales to service and support.

For over 30 years, contact centers have served as the primary interface for conversations between businesses and their customers. Actually, 75% of the businesses' touch points are customer service interactions. As a consequence, companies must rapidly adapt to connect with customers, and go beyond the contact center, extending it to other areas of the business that are typically not considered part of it.

Contact centers are now becoming the customer communications hub, no matter if the interaction starts with a phone conversation, a message or at the store curbside pickup. Because contact centers engage with customers before, during, and after a purchase or service, it is crucial that they have the capability to communicate with customers worldwide, around the clock, or on customers' preferred channels. The mission of this contact center hub is to always be ready for the future.

Is your contact center technology giving you the ability to constantly evolve?





The future: a contact center that never becomes obsolete

Contact centers have been changing over the past 30 years. First, the on-premise platforms that delivered the foundations of the existing contact centers. Going from phone to multiple channels, inbound to outbound and, even integrations with other business tools. However, the era of on-premise systems is coming to an end, due to the high upfront cost (capital expenses), and the complexity involved in managing, operating, supporting and keeping the systems up to date. It is also difficult to quickly evolve these systems with the customers changing needs, and when it is possible to change, it ends up being too expensive.

These pain points triggered the move to cloud services. Contact Center as a Service (CCaaS) vendors reduce the upfront cost by moving to a monthly cost per seat (operating expenses), while eliminating the need for managing onsite servers. But CCaaS vendors often deliver a fixed software application that prohibits constant innovation. For this reason, when application leaders buy the software that everyone else does, they struggle to address the broader ambitions and challenges of the customer service organization.

Today's applications (including the contact center) are stuck in the past, and they represent an obstacle to innovation. Technical leaders envision a future where applications will be designed around how businesses want applications to work versus applications telling businesses how to work.

For years, business organizations have been dependent on technology vendors to deliver the applications and features they need. Software is redefining the landscape of modern organizations, and it's not coming from pre-packaged applications.

It is evident that contact centers of the future need to be flexible enough to continuously evolve as customer habits and preferences change. The common engine to get this into the cloud is the Application Program Interface (API).

APIs are leading the next generation of contact centers platforms, as the easiest and fastest path for developers and partners to deeply integrate their contact center operations with the rest of the organization. This is why Twilio believes the future of contact center technology is programmability.



Companies such as Allianz, Nike, Lyft, Airbnb and Tripactions have built exceptional customer engagement using Twilio. With apps and services that range from simple notifications to intelligent bots, and video collaboration to highly tailored contact centers via programmability.

Twilio is not new to the contact center space. Since Twilio was founded in 2008, partners and customers have been building contact center use cases with Twilio APIs because they valued the increased control to define and manage customer and agent experiences, free from dependency on vendor roadmaps.

Twilio's infrastructure powers over 548,000 contact center agents¹ making Twilio the 2nd largest cloud contact center provider in the world.



Over 190 thousand businesses and over 8 million developers choose Twilio as their customer engagement platform for three main reasons:

- 1. Programmability to solve the toughest customer engagement problems.
- 2. Access to every channel needed to communicate with customers around the world.
- 3. A trusted, reliable, secure and scalable global cloud infrastructure.

This is the reason why Twilio created Flex, a programmable contact center platform, to build customer engagement applications that fit your business, rather than the other way around.

¹Source: DMG 2019 - 2020 Cloud-Based Contact Center Infrastructure Market Report



Principles of the platform approach to contact centers

The contact center platform approach empowers organizations to design, develop, deploy, and change applications, features and integrations to support customer engagement across all customer channels. The platform offers APIs, SDKs (Software Development Kits), and IDEs (Integrated Development Environments) that enable custom development, and simplifies the integration of communication capabilities into business processes and applications.

The defining principles of the contact center platform approach are:

- Programmability. Opens the door to innovation by giving customers the option to use code to modify and extend the behavior, user experience, and functionality of the contact center. With programmability, businesses are in control of their own roadmap, and they are able to define the exact customer experience that they need. Programmable services can be threaded together to support innovative and unique business workflows.
- Speed to launch. Leverage an agile platform that allows DevOps teams to build and deploy a cloud contact center in days or weeks — not months. As the contact center platform is a modular solution, your developers can continue iterating and extending capabilities across different modules such as data analytics, user interface, integrations to third-party tools, plugins, artificial intelligence, routing, channels, adding numbers, interconnecting to other systems via SIP, or even connecting your own carrier.
- Flexible. The era of a one-size-fits-all is over. This is why flexibility is a key differentiating factor when choosing a contact center. Add new capabilities without breaking the system; increase traffic volume or users without affecting the performance of the platform; and grow at your own pace with a consumption-based pricing model.

- Iterable. Instead of waiting for product releases to be made available by your contact center vendor, the cloud contact center platform allows you to build the features and integrations you need as your business evolves.
- Scalable and Reliable. A reliable contact center platform can manage multiple fault-independent regions with built-in capabilities to re-route and regenerate hosts automatically, without downtime or human intervention.



Look for solutions that offer "five nines," 99.999%, uptime—the software is down for less than five minutes/year.

In addition to connectivity, security is also a facet of reliability. Security covers encryption over any interaction within the network, user authentication to keep your data safe, protected integrations between your contact center and business applications; and privacy compliance with the General Data Protection Regulation (GDPR).



Benefits of the contact center platform approach

Twilio's point of view is that businesses must continually adapt to survive and to stay ahead of customers' changing expectations. Otherwise, they will slide into irrelevance. Contact centers are no exception to this.

- Tailored to your business. The contact center platform delivers total control for continuous innovation to stay ahead of changing conditions. Besides, companies have control over how, when and what they deploy. Mold the technology to fit your business, instead of the other way around.
- Agile. Companies have the tools to deploy a solution in days instead of months, along with the flexibility to bring new functionality and incorporate the latest services at your organization's pace. You can define your own timelines with in-house developers or dev partners to set up and evolve your contact center.
- Unlock Innovation. With control over your contact center roadmap, your developers can create, change, or extend every part of your solution. Creating new capabilities without depending on vendors' releases, means you can regularly refresh your contact center to optimize competitive differentiation.
- Improve Customer Engagement. Your customers communicate
 with their family and friends using different channels such as
 phone calls and messaging apps. There is a high chance that
 they want to connect with your business using other channels
 as well. Connect to your customers via multiple channels such
 as Voice, SMS, WhatsApp, Facebook Messenger and Web chat.

- Gain Operational Insight. Collect data from your customers to improve the engagement experience. You can monitor realtime and historic metrics and dashboards. From interactions time, satisfaction ratings, to track marketing campaigns, gauge department performance and stream information to your data warehouse.
- Cost Savings. The cloud platform requires a lower initial investment for your company. Rather than spending money on hardware and licensing, cut down your capital expenses by moving to the cloud.



Take advantage of leveraging operating expenses either through a subscription-based model or a consumption-based alternative. The platform also offers global carrier connectivity helping you to consolidate your communications with a better pricing through a single vendor.



Is the contact center platform approach right for you?

This table identifies some characteristics and differences of the main contact center solutions available in the market.

	On-premise Contact Center	Contact Center as a Service	Contact Center Platform Approach
Responsible Team	IT + Professional Services	IT + Professional Services	Developers + IT + Professional Services + Dev Partners
Features	Hardware intensive Time consuming Dependant on Professional services	Plain vanilla	Extensible via in-house developers or dev partners Programmable features tailored to exact business requirements
Architecture	Complex and expensive Requires hardware to meet customers' requirements	Aging cloud platform Built for speed of deployment but lacks flexibility	Extensible and flexible Microservices modern architecture
Integrations	Extensive customization available but server dependant	Limited to a few APIs and pre-built integrations	Extensive APIs to get advanced and deeper integrations Serverless environment to maintain code
Modify user interface to fit business needs	One time alteration	Limited to color, logo and fonts changes	Flexible alteration based on each organization's needs
Control the definition of existing metrics	No changes on the metrics' definition, but creating new ones using professional services	No changes on the metrics' definition	Change the metrics' definition and keep iterating if needed
Define your own business routing rules	No	No	Program your own routing roles and keep changing as needed
Add emerging channels	With 3rd party systems Routing, reporting and administration are siloed on separate platforms	With 3rd party systems Routing, reporting and administration are siloed on separate platforms	Extensible APIs to add emerging channels
Ability to innovate	Limited to some APIs for integrations Dependant on vendor's releases	No control Dependant on vendor's releases	Customers control it Ability to innovate and experiment
Cost	Upfront cost for hardware, license and onsite server (CAPEX)	Monthly service usage (OPEX)	Monthly service usage or consumption-based (OPEX)



Introduction to Twilio Flex

Programmable contact center platform

Twilio is not new to the contact center space. Since Twilio was founded in 2008, partners and customers have been building contact center use cases with Twilio APIs, because they valued the increased control to define and manage customer and agent experiences, free from dependency on vendor roadmaps.

Twilio Flex represents a new approach to enterprise cloud software. Eliminating the decision around buy vs. build. Twilio Flex delivers the control to design, build and test customer and agent experiences using tools developers are already familiar with, including Twilio APIs, React SDKs and visual workflow builders.

- Twilio Flex delivers complete control to design and build customer experiences and apps using API-based programmability and breadth of channels.
- Twilio Flex improves contact center productivity by integrating data and apps that agents and supervisors need in a single user interface.
- Twilio Flex enables faster feature delivery with tools developers are already familiar with including React SDKs, Twilio APIs and visual workflow builders.

Key Flex features:

- Programmability to get granular control over each module (channels, interface, routing, workflows, etc.) that make up the Flex stack.
- Routing to manage the workflow and define which channel, activity, or event is transferred to an agent or to another process based on your business rules.
- Self-service uses a drag-and-drop visual builder to be the front-end of your customer conversations through a variety of channels while leveraging automation bots.

- Programmable dialpad to build and personalize your contact outreach solution either with click-to-call, callback services, automated text services or more.
- Channels to communicate with your customers (voice, SMS, chat, messaging apps, video, and others) based on their preferences.
- User interface that can be programmed to allow you to control the way apps load, as well as the behavior of individual Flex components.
- Integrating other tools by using our native integrations for Zendesk and Salesforce, or leveraging the APIs and SDKs of any business application (ServiceNow, Calabrio, Aspect, etc.) and integrate them with Flex.
- Artificial Intelligence to interact with your users via chatbots across any channel supported by Twilio Flex. Twilio also integrates with Google CCAI to deliver virtual agent and agent assist through Natural Language Understanding, and dynamically present information to the agent interface based on customers' conversations.
- Dashboards and Metrics to monitor the performance of your contact center, no matter the channel or direction (inbound or outbound). Drill down from top-level performance indicators to individual conversions. Besides you can create custom metrics via a drag-and-drop tool.
- Super Network delivers carrier interconnections for call ingress and egress. Twilio provides local phone numbers in six regions and 50+ countries and it has the ability to terminate calls in over 200 countries.



City of Pittsburgh leaps to cloud

City of Pittsburgh offers 311 services for individuals to report a nonemergency problem or get information about what is happening in their municipality. Amid COVID-19, an outdated network kept the city's Department of Innovation and Performance team from answering calls and solving tech issues from home. They had to be physically present in the building, where the phones and computer servers connected to the network, to take calls.

"Normally implementing something like this would take six months, at least. With Twilio Flex, we were able to launch remote agents in less than a week."

Santiago Garces, CIO at City of Pittsburgh

City of Pittsburgh was up and running in just four days with Twilio Flex. Their staff now works from home, able to handle the increased volume more efficiently with on-demand access to their knowledge base.



U-Haul builds for scale

U-Haul was interested in a cloud platform to economically scale over 7,000 agents to support their seasonal business. Overall, U-Haul wanted more control for their developers to collaborate with line of business leaders to design, prototype, and deploy new customer experiences as demands change.

Twilio Flex was a big upgrade from their previous system. U-Haul integrated chat directly into their iOS and Android mobile apps, improved the agent interface, reporting, queuing, and task disposition. In fact, queue wait times went down significantly since launch.

"We are excited about the flexibility
Twilio Flex gives us to create and quickly
implement new support experiences that
can address the wide-ranging needs of
our customers across different channels."

Artie Tonan, Vice President of Development at U-Haul



BGL shifts to a remote working model

Over the years, BGL tried to move its customer service to a homeworking environment, but every time they tried, they concluded that challenges were too complex and time consuming.

In response to COVID-19, their technology team designed, built, and deployed a cloud contact center for 1,000+ remote agents using the Twilio Flex platform.



Nead the BGL Story

"BGL Group shifted its entire customer services operation to full scale remote working in just 10 days."

Barry Webb, Senior Manager in Business Technology at BGL

Cover Financial redefines customer service with a flexible platform

Cover Financial sought to deliver great customer service anytime, anywhere by allowing customers to buy policies, make customer service requests, and get help filing claims -- all on their own terms.

Ultimately, Cover Financial chose Twilio Flex as the most configurable and flexible option in the market, one that could meet both goals: delivering on-demand customer service and doing it in a faster and completely customizable way.

"We were looking to modify every aspect of our contact center to be the right fit for our business and our customers. And, Flex enables us to write our own custom rules, directly pulling in business logic into the routing itself, making sure that the agents have all the information they need on the screen, so they are not telling the customer: Let me look you up."

Ben Aneesh, Co-Founder at Cover Financial

Cover Financial has seen the following results since the adoption of Twilio Flex platform:

- 57% faster response time
- 8% higher resolution rate
- 50% reduction in handle time while agents now handle 2.5x as many calls/day



Free your contact center

For years, contact center vendors have controlled the customer service with solutions that are stagnant, that limit integrations, and that take years to bring impactful services that matter to your specific business.

"With other vendors, we were beholden to their workflows and views on how contact centers should work. With Flex, the technology works with us rather than against us. It gives us the freedom to create the workflows that are best for our users, and extract the granular insights we need to serve them."

Director of IT at a Political party

Organizations with contact centers need to adopt a platform that is:

- Programmable to define their own rules
- Iterable to change services as their business needs evolve
- Agile to deliver at their own pace

Twilio Flex is that platform. By adopting Flex, contact center leaders are finding out that their business is not just thriving within their industry, but completely innovating the way customer engagement is delivered.

"Given the complexity of our call center and the things we actually want to do, we decided that we could not do it due to a product limitation. We wanted to have that knowledge in-house and be able to program as much as we wanted. Twilio Flex gives us that ability."

Director of Software Engineering at a Home Remodeling Company

With a flexible contact center that never gets obsolete...
... We can't wait to see what you build!



Twilio powers the future of business communications, enabling phones, VoIP, and messaging to be embedded into web, desktop, and mobile software. We take care of the messy telecom hardware and expose a globally available cloud API that developers can interact with to build intelligent and complex communications systems.