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# The Fundamental Advantages of the Twilio Flex



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# Summary

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## In brief

The lifecycle of the contact center has followed a slow and winding process since the 1960s when the first one was installed. For too long the contact center industry has been beleaguered by its reputation for slow service, expensive and complex hardware technology, a “cost center” label, its expensive customization process, and its reactive rather than proactive approach to meeting customer needs. However, during the last 20 years there has been a rapid improvement in the status and stature of the function once known as the call center, now the contact center, being implemented by today’s leading large and small enterprises.

The product has evolved in form in multiple ways: there has been a major shift from hardware to software, from being premises based to being cloud based, and more recently, a redesign of its platform from a centralized arrangement to a decentralized platform staffed by remote workers. Now even the latest cloud-based versions of the software-as-a service (SaaS) contact center are being criticized for their limited flexibility in structure and the difficulty and expense of customizing them to meet the unique needs and requirements of the businesses and customers they serve. The programmable contact center (PCC), which enhances the traditional cloud contact center by enabling rapid deployment, low-risk timely feature rollout, and easier and less expensive customization and agent workflow design, is now looked to as the next logical step in customer engagement platform technology.

## Omdia view

Despite the remarkable changes that have taken place in the contact center marketplace over the past 10–15 years in terms of equipment, technologies, new applications, and delivery platforms and the large number of new market entrants, the level and quality of services provided to enterprises and their end-user customers have not seen the levels of service improvements that might have been expected. While things have improved, the onset of COVID-19 and the resulting business difficulties experienced over the past year indicate that there is still a long way to go to optimize customer service and the tools enterprises use to manage it. Suddenly there emerged a requirement to supplement customer engagement systems with an array of additional and alternative channels beyond the traditional voice channel and to add self-help options when the number of live agents had to be reduced because of stay-at-home orders. Businesses were required to relocate workers to their homes on short notice while trying to maintain the service levels required to meet growing customer expectations.

Omdia believes it has become clearer that contact center equipment, software, processes, and employee management tools must be improved beyond even today’s advanced SaaS cloud contact center offerings. The need is for products and services that enable enterprises, and even small and medium-sized businesses, to react more quickly to future disruptions, evolving customer needs and

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requirements, and changing economic conditions and that offer solutions that can grow and evolve with customers at their own pace. Omdia sees the modern PCC, already being approached and/or delivered by some vendors, as the solution that will lead to the future of customer engagement delivery. The requirements for the next step in the evolution of customer service tools are a rethinking of overall system capabilities and pricing methodologies, the addition of a more efficient and economical method of system customization, and incremental flexibility that must be provided to drive a fluid and consistently improving customer journey.

## Key messages

- The traditional preconfigured, out-of-the-box contact center, whether premises based or in the cloud, is no longer adequate to address customer experience (CX) needs, changes in consumers' preferences, and the evolving workplace of the future.
- An increasing proportion of enterprises are becoming aware that the return on investment (ROI) of a contact center is not solely dependent on the payback period of its purchase price.
- The main criterion used to evaluate the purchase of and transition to a new contact center is no longer the simple ROI calculation but more often a measure of speed, flexibility, and efficiencies to be gained with a more customizable system
- The traditional out-of-the-box contact center functionality, even with its set of included application programming interfaces (APIs), is seldom adequate to match the ongoing needs of an enterprise without more work and extended time periods for additional customization-related investments.
- The product response to the evolving requirement for contact centers that are ready out of the box to meet a company's unique needs or can be programmed to do so in an agile fashion has been slow. However, the so-called "programmable contact center" is quickly gaining in popularity.
- Not all enterprises believe they are staffed, equipped, or willing to go beyond the capabilities of the out-of-the-box contact center, but a growing number are becoming open to the possibility of adding value with internal IT talent or the help of certified outside partners as required.
- For these companies, the value of these systems is measured in terms of the expanded capabilities enabled by the enterprise, the rise in employee morale and customer satisfaction, and the incremental efficiencies gained in daily operations.

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# The evolution of customer experience platforms

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## The move to the cloud was simply an initial step into the future

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Not very long ago, most call centers around the world were premises-based hardware products, single-voice-channel-centric systems that provided services from a monolithic box within the enterprise. They required significant vendor professional services to install and maintain. While they were customizable during setup, they lacked flexibility to adjust as business needs changed. However, over the past decade the industry has experienced a move from hardware to software and from premises-based call centers to cloud-based multichannel/omnichannel contact centers that have made the purchase process much easier and more flexible and have eliminated a great deal of the upfront cost previously associated with system acquisition.

These contact-center-as-a-service (CCaaS) offerings are plentiful today, and their acceptance by enterprises is becoming more common across all business sizes and a growing number of vertical markets globally. The marketplace for these offerings has grown dramatically in the past five years, and Omdia predicts continued rapid growth in the years ahead. Because of cloud delivery, shorter contract terms, and a decreased dependence on hardware, the once-major barriers that made switching from the products and services of one vendor to those of another have been greatly diminished.

Omdia has spent several years tracking the transition from the contact center's premises-based origins to the cloud era and continues to be impressed by the frequent entry of new providers to the marketplace and by the pace at which traditional premises-based contact center providers are adapting to the cloud mode of delivery. The latest Omdia forecast, completed in February 2021, estimates that by 2024 approximately 47% of contact center agents will be working in the cloud environment. This is up from 25% since 2018 when Omdia first began tracking cloud contact center penetration. Among the benefits of the cloud contact center are the avoidance of long-term vendor contract lock-ins, rapid implementation, more flexible pricing plans, minimal upfront costs at system acquisition, easy up and down scaling, and simplicity of agent remote-working scenarios. These benefits proved especially important during the COVID-19 pandemic, when flexibility, speedy implementation, and agent remoting became necessities. However, Omdia does not believe that the shift to the cloud is the endpoint of contact center evolution. The industry still has many challenges to overcome, and there is still room for improvement and further technology advancements.

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# Out-of-the-box capabilities and expanded possibilities

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For several years, the PCC provider Twilio was best known for its cloud-based platform-as-a-service (PaaS) offering that enabled its nearly 2 million independent developers to capitalize on its strong and reliable platform to develop and deliver applications to businesses of all sizes on a pay-as-you-go basis. Many of these independently developed applications were in support of enterprises and small and medium-sized enterprises (SMEs) attempting to improve their customer engagement solutions with applications that large contact center vendors did not have the time or resources to create. Twilio initially disrupted the marketplace by offering a set of APIs that allowed developers to embed voice and digital communications into websites and mobile apps with low risk and at a low cost.

In early 2017, Twilio rebranded the collection of customer interaction capabilities on its platform into a bundled package named Twilio Engagement Cloud. This was an initial sign that Twilio was planning to enter the customer engagement contact center market with its own cloud contact center offering. Driven by its view that one-size-fits-all solutions are not meeting market needs, Twilio has consistently championed the developer-led build approach for contact centers. The current Twilio Flex contact center offering is designed to be tailored to specific business use cases, and Flex is increasingly seeing use in nontraditional contact center use cases such as curbside delivery and outbound sales. Flex allows companies to reach customers in more than 100 countries, based on the Twilio global network, without having to manage their own infrastructure or global carrier relationships. The system also enables contact center managers and internal IT shops with programming and applications experience to add customized functionality via the cloud to legacy premises-based solutions as required to support hybrid solutions until a shift to a total cloud solution is made.

To be clear, Twilio Flex is quick to set up with several cited customer deployments taking less than a week to go live. It includes a complement of preintegrated API capabilities to connect to popular existing adjunct applications with little additional cost or time spent. While not necessary for starting up quickly, the system is easily customizable by internal IT staff with some developer capabilities or by using the many Twilio-certified developers that are available to assist.

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# Programmable contact center benefits

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The Twilio Flex CCaaS is now known as a PCC and has the same advantages of the original CCaaS, delivered through easily integrated API interfaces with the ability for enterprises to cost-effectively customize their solutions to meet their individual customer experience needs. After Twilio Flex is up and running, companies are finding it relatively easy to customize and enhance to fit the needs of their specific enterprise. Those interviewed by Omdia spoke of the capabilities to support multiple programmable channels, including voice, chat, text messaging, email, and social network interactions, that may each be provided and supported by a different vendor. In many enterprises, there can be a multitude of peripherals and backend systems already in place to be connected to optimize company operations. Twilio Flex can be easily connected by integrating APIs into these CRM, billing, and fulfillment systems with minimal effort.

One major Twilio customer interviewed by Omdia, Lyft, the ubiquitous passenger transport company and already a user of the Twilio PaaS offering, pointed out the quick ROI resulting from using Twilio Flex to facilitate a single merged channel concurrency to simplify agent tasking. Before the implementation of Twilio Flex, Lyft agents were having difficulty drawing on information coming in from seven or eight different data sources in order to meet customer needs. They were moving from one web browser tab to the next to collect required input to assemble a response to customer inquiries. After Flex was implemented, the company was able to customize the agent user interface (UI). This consolidated all the data sources on to one tab, speeding up problem resolution and cutting minutes off each interaction while making the agent's job easier and more enjoyable. The rewards reaped were improvements in first-contact resolution, customer satisfaction, speed of interaction, and agent morale, while agent churn rates dropped.

Another Twilio Flex advantage identified by Lyft CX representatives was the ability for companies already familiar with and using the Twilio platform to port previously developed applications to optimize task completion. Once Twilio Flex was implemented, Lyft easily moved its proprietary sophisticated Lyft-developed task-routing solution to Flex to optimize call routing on the CCaaS platform. It became very apparent that this is a natural path for application transitions for those already familiar with the Twilio PaaS offering. Clearly this capability allows these enterprises to more easily make a "build or buy" decision on most required applications going forward. Users can customize Flex to build feature sets enhancing CX proactivity, first-contact resolution, employee satisfaction, and functionality.

The advantages of the modern PCC can be numerous, in both the short and long term, for a business willing to participate in the ongoing evolution of its own contact center. As with several cloud-based contact centers available in the marketplace today, the initial out-of-the-box contact center deployment can take place within the range of a few hours to a couple of days, depending on the requirements of the particular enterprise. But beyond that, the ongoing evolution of the system to

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meet changing customer needs and expectations can continue without the high level of expense normally associated with system customization using the professional services arm of a contact center vendor.

The use of internal IT staff familiar with development on a PaaS system or certified developers of the PCC vendor, which can be paid for on an as-needed basis, can be less costly for incremental customization through the product lifecycle. Independence from vendor release schedules can be an added benefit of a PCC, because enterprises can implement upgrades on their own schedules as needs arise. This allows for enhanced and faster CX customization, differentiation, and branding as custom development takes place over time because the enterprise can benefit from immediate feature deployment, easy upgrades, and potentially improved agent workflows. This can occur as the enterprise develops new applications and interfaces with back-office systems using available and preintegrated APIs and ports over applications from other enterprise platforms to the contact center.



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# Programmable contact center economics

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It has been common to evaluate the economics of a contact center or customer engagement solution by comparing upfront acquisition costs and ongoing maintenance and upgrade expenditures with their payback period. It is now becoming apparent that the overall economic considerations, including the price, added-value, flexibility, and agent-concurrency capabilities of the considered system, is a much more meaningful evaluation than previously realized. The economic benefits of the PCC can be more meaningful because of its multiple previously highlighted benefits. The emphasis of customer engagement executives interviewed for this report has been focused on what the PCC system allowed them to do in order to improve workflows and facilitate new approaches to business operations that they were unable to implement and on how quickly this could be done to reach installation goals.

The CX executives Omdia spoke with at Lyft made it very clear that saving in upfront costs (seat licenses) or even ongoing costs of running the operation were secondary considerations to the abilities of the system to meet their aggressive implementation schedules and to port over existing applications on their Twilio platform to the Twilio Link system they acquired. Examples of this are as follows:

- The ability to get Twilio Flex up and running in replacement of Lyft's previous cloud contact center system by year-end 2018 was of the utmost importance in the selection of the system over other potential offerings.
- The fact that in-house developers had already developed a Lyft task-routing system on its Twilio platform service (using Twilio's Task Router) that they thought was superior to any contact center call-routing system then available made Twilio Flex ideal for rapid porting of that application to Flex in order to route the processes and interactions (such as accurately and efficiently matching customer and drivers) being handled by the new contact center to optimize customer and employee satisfaction levels.
- Employee familiarity with both the Twilio PaaS and Twilio Flex offerings made each additional set of functionality subject to a build-or-buy decision process as employees decided whether the price of buying additional app capabilities, such as workforce management, speech analytics, and service ticketing, made more sense in terms of time and dollars than developing the app on the Twilio platform.
- The use of the Twilio Flex UI improved agent concurrency by reducing handling time: chat interactions could be conducted using one computer screen tab instead of the five or more browser tabs or screens used previously for each customer interaction.

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In the last of these examples, the efficiencies realized in using Twilio Flex's UI were easily achieved through the reduction in the connection time of live agent chat sessions. Before the implementation of Twilio Flex, agents had to draw information from several tabs on their PC, and switching between these tabs cost time and created agent frustration while limiting chat interactions to one customer at a time. With concurrent agent-customer interactions, in which an agent could handle four or more customer sessions simultaneously, overall customer-handling times (as well as associated telecoms costs) were reduced per interaction by a factor of three or more.

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# Customer profile considerations

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The PCC is best suited to those companies looking for continuing customization and flexibility and those desiring strong self-development capabilities. These tend to be businesses with a desire to improve on the original out-of-the-box platform that comes with a limited standard set of features and a need for agile enhancements to meet company requirements in a timely manner, today and into the future. Although the requirements may include a list of preintegrated APIs to connect with existing company systems, there must be the ability to quickly develop APIs for systems that may be unique to each company.

In an ideal situation, the customer acquiring a PCC will have an existing IT shop with available developers to add value to the platform when required. However, Twilio has a growing ecosystem of system integrators (SIs) and global SIs that can build and manage solutions on behalf of customers. Customers are typically seeking to combine multiple backend operations or have a desire to combine disparate channels, often supplied by different vendors, into an omnichannel solution to provide a single-screen environment to multiskilled agents. In fact, many of the required applications may be already-developed applications that can be readily used on Twilio Flex at a new site.

As already specified, Omdia believes the PCC to be ideal for

- A company with a long-term mindset for implementing a build-or-buy decision process before adding new applications
- A company that may have a recurring need to modify its contact center to maintain competitive differentiation during changing business conditions

As a result of the COVID-19 pandemic, many companies now realize they need highly tailored systems that can respond rapidly to change or to a requirement to reshape their network to meet the needs of the workplace of the postpandemic future. Generally speaking, Omdia believes a growing number of forward-looking customer-focused businesses will become conscious of the need to optimize business processes by designing their own systems and not simply matching processes to fit the preconfigured customer engagement solution they are offered.

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# Conclusions

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Omdia concludes that the use of a PCC such as Twilio Flex and the ability to customize the solution and flow of customer engagement operations can create an optimized agent experience, enhance customer satisfaction levels, and minimize the overall costs of customer interactions. These benefits can be realized when operational costs are compared with those of a nonprogrammable CCaaS contact center, and savings are even more impressive than with a premises-based solution. In addition, the Twilio PCC can provide an omnichannel environment that is capable of supporting SMS, voice, WhatsApp, Facebook Messenger, web chat, and email all on a single platform while managing tasks across this multichannel environment using a single UI.

System developers, either internal or external on an ad hoc basis, can create engagement workflows, intelligent routing, and other applications tailored to a company's set of needs and requirements. The PCC can also easily be made to integrate with artificial intelligence (AI) offerings to enable more-proactive customer care and surface relevant information to quickly and efficiently recommend appropriate agent next-best-action responses focused on improving first-contact-resolution measurements.

While adding the advanced features, capabilities, and flexibility outlined above, the state-of-the-art PCC contact center can very likely be deployed in less than a week and can be free from the limitations of traditional CCaaS applications, which include vendor-managed product release schedules and expensive consulting engagements, to create a contact center that is tailored to the specific needs of the business.

# Appendix

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## Methodology

This report was developed based on information collected using the primary and secondary research materials and methods of Omdia analysts including the interviews with several customer engagement executives and contact center managers familiar with and using traditional premises-based, newer cloud-based, and programmable contact center systems.

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## About Twilio

Built on the trusted Twilio customer engagement platform that powers nearly a half-million agents today, Twilio Flex helps businesses rapidly deploy tailored cloud contact centers free from the limitations of legacy applications.

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