

Communications Platforms Give CSPs Powerful Tools

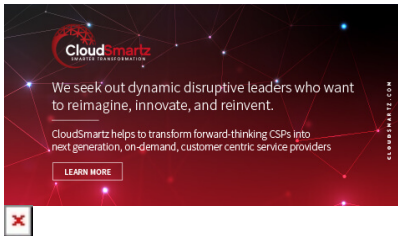


By:

For the last two decades, the same communications service providers (CSPs) that dominated voice, SMS and other communications applications have been up against incredibly popular and fast-growing OTT offerings from companies like WhatsApp, LINE, Snap, Viber, Telegram, WeChat, Kik, Tango, Twilio and Skype. Given their combination of powerful IP-based networks, CSPs can launch competitive apps with better quality of service, more security and creative features that are especially valuable to business and enterprise customers.

Communications Platforms as-a-Service (CPaaS) are making it easier, faster and less expensive to embed voice, messaging, chat and video into customer experiences. Moreover, visionary CSPs like AT&T are opening up new ways to serve their business customers while driving new revenue streams by offering low code/no code options for implementing real-time communications (RTC) features.

Let's look at the contact center industry, for example. Here, CPaaS-based applications that enable customers to get their questions answered from a specific webpage, social media site or mobile app—without having to wait for a live agent—are increasingly gaining traction. This adds up to better service at a much lower cost. Contact center business process outsourcing companies are resolving problems faster, while offering an automated path to reach a live expert, depending on the nature of each customer's inquiry. CSPs have a long history in contact center solutions. As the sale of basic infrastructure (circuits, for example) is being displaced with software defined networking (SDN) and the related SD-WAN—and SIP trunking continues to flourish—they can now offer applications that run better on their networks, given that they own and operate fiber and access solutions.



CPaaS also allows CSPs to fight back against challengers by selling CPaaS as flexible, opex “subscription” or “by the seat” services, which can be sold, implemented and managed faster than legacy solutions with onerous long-term contracts that can take six months or longer just to negotiate.

The old-world requirements of “ripping and replacing” communications stacks are being replaced with CPaaS technology and packages, including application programming interfaces (APIs) and software development kits. These attract developers—in many cases the same developers who have adopted embedded communications code from CSP challengers like Twilio. To avoid being relegated to the “plumbing,” CSPs can generate new revenue streams at much higher margin when they roll out CPaaS-based enterprise and business solutions.

Innovative add-ons

Looking to 2020 and beyond, CPaaS will get most interesting when it comes to innovations. These include developments embedding artificial intelligence (including voice recording, transcription and analytics for greater insights) and natural language processing (which make bots sound like humans and enable interactions in different languages and dialects). Another major opportunity for CSPs is to offer immersive communications solutions into existing applications, allowing companies to introduce innovations such as “communications-enabled business processes” layered into massive ERP, CRM and other enterprise productivity platforms.

The flexible nature of CPaaS and subscription-based business models means CSPs can enable their customers to start with a trial that can go live in days and grow as they become increasingly comfortable with the technology and services. Having largely transformed their legacy networks into networks based on NFV and SDN, CSPs are in an extremely advantageous position to offer premium CPaaS services that are more resilient, provide higher definition audio and video quality, and are more secure than solutions that rely on other companies’ tier-one networks.

In 2020, CPaaS will continue to grow and, with innovative add-ons, the platforms will only become more valuable. This makes them essential as enterprises continue to invest in improving customer experience and business operations through more automation and business intelligence from data analytics.

Modular and scalable

The modular nature of CPaaS allows for the addition of new features over time, while the programmability of quality platforms allows features to be developed within a short amount of time. Given the scalable nature of CPaaS, new features and services can be added as business needs dictate and can be removed or replaced with simple software steps. Services can also be ramped up as traffic grows. With CPaaS, adapting to peak times in contact centers during insurance enrollments, campaigns and seasonal online shopping means enterprises don't need to overbuy to accommodate extra traffic or ensure quality-of-service. Put simply, CPaaS provides the ultimate in flexing up and down.

Compliance solutions

Another huge trend for CPaaS in 2020 will be the emergence of compliance solutions. We are entering an era in which regulation to ensure data privacy seems to be becoming more extreme. Consider GDPR and its initial 2017 rollout, with hefty fines for violations. Because of this regulatory shift, enterprises are turning to voice recording and transcription, which generate data sets that can be easily analyzed in real time and searched in the event of an audit. Some of the most popular CPaaS add-ons enable call recording, which are mandated in some industries, such as financial services and healthcare.

Customer experience edge

Another massive growth area is extending customer experience beyond the traditional contact center definition. With CPaaS services based on data analytics, brands are able to capture and analyze data in the cloud and detect patterns and insights that can improve the fundamental nature of their offering. Data analytics also contributes to highly personalized services for each customer for those who agree that their information can be included in their records.

How CSPs can benefit

The value and benefits of CPaaS are in the mix. CPaaS has a much larger addressable market than just voice and video communications, UCaaS and embedded collaboration.

Take the Internet of Things (IoT) for example. According to Gartner, there will be [20.4 billion IoT devices](#) in use by the end of 2020. Furthermore, *Business Insider* forecasts that there will be over [64 billion IoT devices](#) by 2025.

The total economic impact of IoT could range between \$4 and \$11 trillion per year by 2025, according to the [McKinsey Global Institute](#), and by 2024 the global IoT healthcare market is expected to reach \$140 billion with devices, sensors and applications that make it possible for medical professionals to better monitor and treat patients.

While IoT devices are clearly already having an impact on the world's network infrastructure, that influence is only going to increase in the coming years. It is the blend of IoT and RTC applications—enabling humans and machines to interact seamlessly and securely—that is opening up new service and revenue opportunities for CSPs.

CPaaS marketplaces will flourish as developers from the IoT and RTC worlds work together to make something simple yet valuable possible. For an example, consider real-time alerts that are sent by a smart appliance or home security system to the homeowner. In a more industrial use case, large manufacturing plants or oil rigs, energy grids or public transportation systems will be instrumented so that expensive and mission-critical equipment can send alerts to precisely the right technician with the right skills in the closest location to immediately address problems of output and safety.

As a cloud-based solution, CSPs can stand up CPaaS services that are designed for the intersection of IoT and RTC, with real-time communications features including voice, video and messaging embedded into their own field service applications—without their customers needing to build back-end infrastructure and interfaces.

Perhaps the biggest opportunity of all will lie in the way CPaaS allows CSPs and enterprises to rapidly benefit from a robust, reliable and shared network, one that's fully programmable with web interfaces and APIs that make it easy to manage connectivity and pre-built "wrappers."

The appeal to IoT manufacturers is tremendous. CPaaS can be a secure, cloud-based platform that enables the intake, management and storage of data from multiple sources in multiple locations across multiple divisions, especially for manufacturers whose solutions are designed for interacting with human beings. Once data is stored within the CPaaS platform, the data can be integrated. Analytics can be applied either in the cloud or at the edge, and results securely accessed by privileged users or administrators from any location.

In 2020 and beyond, CPaaS can enable global, seamless connectivity across network technologies and geographical borders. This will extend to not only to the Internet of Things but also to the Internet of People and the Internet of Everything. CSPs have an opportunity in front of them, given their expertise in networking, cloud and global regulations. CPaaS offerings can include gateways, secure storage and control systems that govern data integrity, make provisioning simple and changes efficient.

The first phase of CPaaS taught us a great deal, but it is this second phase that will open up new markets for CSPs, enhancing their prospects when addressing the largest growth areas like IoT, mobility, cloud, big data analytics and more with exciting advanced offers for enterprise and business customers.