

IDC MarketScape

IDC MarketScape: Worldwide Communications Platform as a Service 2021 Vendor Assessment

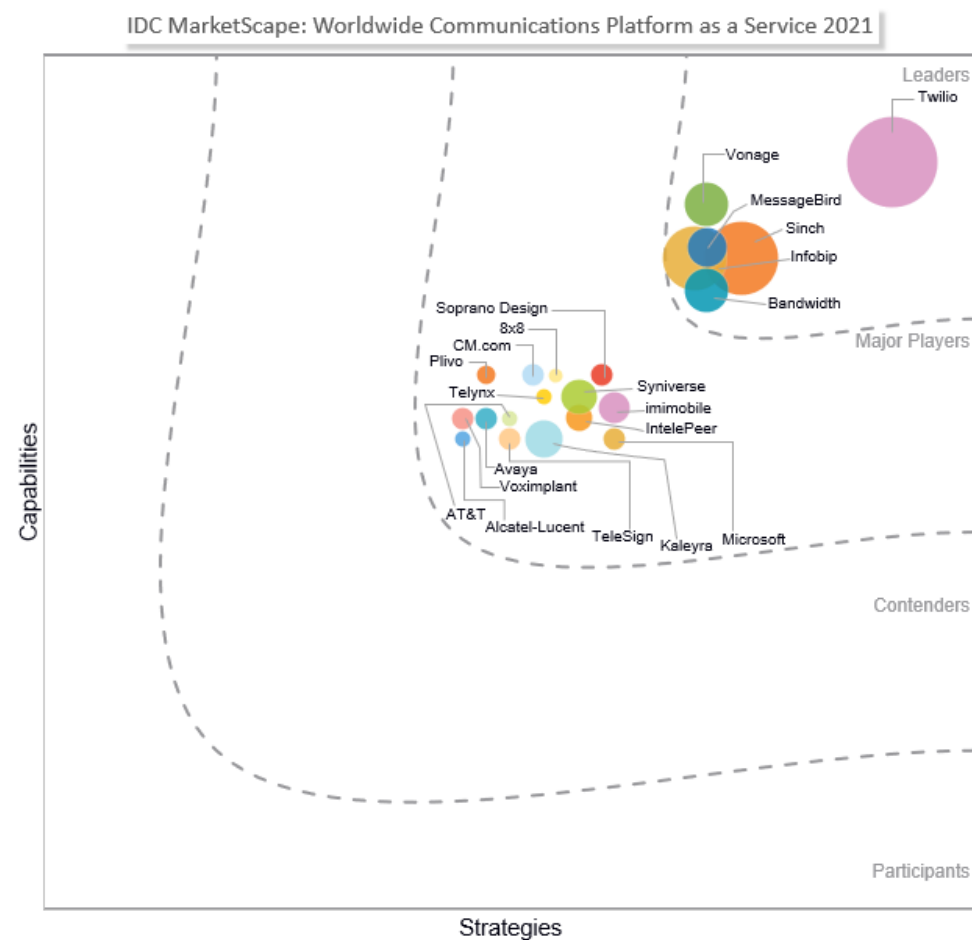
Courtney Munroe

THIS IDC MARKETSCOPE EXCERPT FEATURES BANDWIDTH

IDC MARKETSCOPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Communications Platform as a Service Vendor Assessment



Source: IDC, 2021

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IDC OPINION

The communications platform as a service (CPaaS) industry emerged from a turbulent 2020 in excellent shape, benefitting from an uptake in cloud communications driven by the need for critical digital communications and collaboration. While the industry is marked by the continued addition of new market entrants, many existing software companies are increasingly pivoting to the provision of application programming interface (API) platforms. As IDC had predicted earlier, the industry grew by over 30% YoY in 2020, to \$5.9 billion, driven by outliers Twilio, which grew revenue by 55% during 2020, and Vonage, which grew its CPaaS segment at 35% during 2020.

Despite the hype and excitement generated by the rapidly growing CPaaS segment, new entrants standing up and hosting a few SMS and voice APIs do not guarantee automatic success. CPaaS platforms require deep internetworking with carriers and distributed intellectual property (IP) and cloud assets to deliver quality voice calls and messages. They need an extensive network of developers and marketing outreach to enterprises. This all takes substantial operating costs. Start-ups and private companies will plough through tens of millions of dollars to scale and establish connectivity with network operators. Established companies must display credible QoS, onboarding, and support resources, as well as the ability to scale efficiently.

And with each additional year of successful growth, the industry is attracting attention and deep-pocketed competition that will be able to offer robust scale for enterprise customers. For example, Microsoft launched its Azure Communication platform in late 2020 and is poised to make an impact during 2021. Cisco is making its second foray into the CPaaS segment with imimobile, and other large entities, including network operators, have stepped into this segment. For example, AT&T and Lumen have established their own CPaaS platforms, while other major carriers leverage various CPaaS companies. These companies will be formidable competitors in the enterprise space over the next few years.

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

IDC included cloud communication platforms with the following capabilities or characteristics:

- Offers multiple embedded APIs, including voice, SMS, video, and related authentication and payments APIs
- Processed at least 1 billion API transactions or voice calls in 2020

ADVICE FOR TECHNOLOGY BUYERS

The CPaaS segment has progressed beyond the provision of a few voice and messaging APIs. Developers and enterprises demand a high level of reliability for phone numbers and messaging delivery, as well as vertical use case templates and tools for rapid onboarding and deployment.

The following is a list of key attributes for enterprises seeking a CPaaS provider:

- **Carrier-grade network infrastructure.** The ideal CPaaS will have interconnections with all tier 1 telecommunications operators and hundreds of mobile and wireline operators. The provider should offer at least 99.99% network guarantees and high level of message delivery.

- **Demonstrable use cases:** CPaaS providers should offer a wide range of use cases or templates, preferably by vertical markets and by type of service.
- **Software integrations:** The best CPaaS providers offer integrations with major CRM, CCaaS, and unified communications (UC) platforms and software vendors.
- **Ancillary services:** CPaaS providers should offer access to visual building tools and serverless computing, as well as the ability to facilitate the implementation of omni-channel messaging.

VENDOR SUMMARY PROFILE

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

Bandwidth

Bandwidth is positioned in the Leaders category in the 2021 IDC MarketScape for the worldwide CPaaS market.

Bandwidth has a global IP network with a cloud platform layer that delivers a portfolio of voice, messaging, phone numbers, and 911 capabilities. Bandwidth has established a reputation as a reliable scalable platform that offers a robust voice platform for a diverse array of cloud providers. The company emerged from 2020, second only to Twilio in growing its YoY organic revenue by 50%. The 2020 acquisition of Voxbone extends its capability to a global scale with the addition of another 60 countries. The company is now a national licensed operator in several markets, including most European Union (EU) countries.

Strengths

Bandwidth's key differentiator is its global IP backbone. As a tier 1 provider with its own network, Bandwidth has significant flexibility to scale and can guarantee carrier- and enterprise-grade quality as well as optimal and cost-effective routing. The merger with Voxbone provides additional scale, talent, and opportunities to gain share in new markets. In addition to its traditional portfolio of voice, 911, and phone numbers, Bandwidth offers an expanded catalog of IP services and APIs to facilitate enterprise telephony and customer engagement strategies. It offers integrations for BYOC with Microsoft Teams, Genesys, and other CCaaS platforms, and it supports several popular UCaaS companies. Looking to the future the company has initiated a wave of enhancement and new solutions. It has a video API in beta and will also introduce an authentication API and branded SMS and voice calling. Bandwidth will also introduce new billing and real-time analytical capabilities during 2021.

Challenges

Bandwidth is undergoing immense transformation and growth. It is simultaneously integrating a new entity into the company and releasing several new solutions and enhancements to its portfolio during 2021. If Bandwidth can manage a smooth integration of Voxbone and its planned enhancements, it will be poised for several years of strong growth.

Consider Bandwidth When

Your company is seeking a reliable carrier-grade voice platform with integrations into popular CCaaS and UC platform and deep trove and expertise in phone numbers. Bandwidth's global footprint and

expanding portfolio also presents a CPaaS partner that offers immense opportunities to scale and expand channels as needed.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

This IDC MarketScape assesses providers categorized as communications platform-as-a service (CPaaS) vendors. CPaaS facilitates cloud-based hosting and management of application programming interfaces (APIs). CPaaS providers offer communications APIs, which are routines, and tools that simplify the programming process required to create and implement real-time communications solutions. APIs can be embedded into enterprise applications, including mobile apps and web platforms, that enhance business process applications. CPaaS offers developers APIs in multiple coding languages that can work in the language of their choice (Node.js, Ruby, PHP, .NET, Java, Python, Perl, and ColdFusion), prototype in hours, and stand up a production run in days.

CPaaS allows developers to test/dev software in a cloud environment that can then be integrated in an on-premises environment. Usage is generally in the cloud model, with up-front hardware and software costs, no contracts or commitments, and no subscription fees. Payment is based on micro-billing tied to actual usage.

LEARN MORE

Related Research

- *CPaaS Industry Update: Industry M&A Surges Amid Intensified Competition* (IDC #US47499021, March 2021)
- *European Communications Platform-as-a-Service Forecast, 2020-2024* (IDC #EUR147206820, December 2020)
- *U.S. Enterprise Adoption of Communications Platform as a Service (CPaaS)* (IDC #US47066720, December 2020)
- *Microsoft Launches Azure Communication Services CPaaS Platform* (IDC #lcUS46900620, October 2020)

Synopsis

This IDC study assesses providers for clients to consider when looking to meet their CPaaS requirements. The CPaaS industry emerged from a turbulent 2020 in excellent shape, benefitting from an uptake in cloud communications driven by the need for critical digital communications and collaboration. The industry has experienced tremendous consolidation driven by relentless M&A, but it has witnessed a steady growth of new market entrants, many existing software companies that are increasingly pivoting to the provision of API platforms.

According to Courtney Munroe, Research VP Telecommunications, IDC, "Despite the hype and excitement generated by the rapidly growing CPaaS segment, new entrants standing up and hosting a few SMS and voice APIs do not guarantee automatic success. CPaaS platforms require deep internetworking with carriers and distributed IP and cloud assets to deliver quality voice calls and messages."

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Global Headquarters

140 Kendrick Street
Building B
Needham, MA 02494
USA
508.872.8200
Twitter: @IDC
blogs.idc.com
www.idc.com

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