FROST & SULLIVAN



2018 North American Programmable Communications Competitive Strategy Innovation and Leadership Award



2018
BEST PRACTICES
AWARDS

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Background and Company Performance

Industry Challenges

There is a seismic shift happening within businesses that is having a profound impact on the enterprise communications market. Digital transformation, the process of using digital technologies, including advanced communications, to remove cumbersome obstacles to growth that have built up in an organization over time, is finding its way into the strategic plans of all-size businesses. As these efforts within businesses progress, it becomes clear that the enterprise's ability to customize the way they communicate with customers is a requirement to improving the customer journey through unique experiences and achieving tangible business outcomes.

The challenge for many voice services providers is that many of their legacy communications platforms and services lack the necessary integrations and programmable capabilities to effectively support their customers' efforts. Cloud-based communications services and the application programming interfaces (APIs) of communications platform-as-a-service (CPaaS) solutions are fast becoming a key digital transformation enabler and a major disruptor in the business communications landscape.

In addition, many of the pure-play CPaaS providers, who service providers once considered partners, are moving to offer a full range of communications services including SIP trunking and contact center as service (CCaaS) and becoming competitors in the process. Finally, consolidation is rampant throughout the business communications marketplace, with UCaaS, collaboration, conferencing, and CPaaS solution providers merging to deliver comprehensive communications clouds that enable one-stop shopping for customers' diverse technology needs.

With intensifying competition on all fronts, being a narrowly-focused communications provider is going to be an increasingly risky proposition going forward. Leaders in the enterprise communications market are quick to tune their product strategies to focus on delivering business communications solutions that meet exact customer expectations. Likewise, leaders in the communications market with a focus on competitive strategy are seeking opportunities through M&A to quickly broaden the scope of their offerings, and ideally, increase the value of existing products with expanded capabilities. Finally, a strong competitive strategy in the enterprise communications market incorporates API-driven communications and deeply-rooted business application integration throughout their solution portfolios, enabling customers to consume communications services in a way that is ideally tailored to their workflows and business processes.

Strategy Innovation and Customer Impact

Strategy Execution and Effectiveness

Through organic growth and innovation, as well as a thoughtful acquisition strategy, Vonage has made the transition from a provider of residential Internet telephony services to one of the leading UCaaS providers for businesses of all sizes. Within just five years, Vonage rose from zero market penetration in the North American UCaaS market to one of the top three providers in terms of both the number of users on their platform and revenue generation. Revenue from the faster growing business segment exceeded Consumer in the third-quarter of 2017 and exited the year with \$499 million in revenue. Business revenues have continued to outpace Consumer in 2018.

Building on its reputation for technology innovation and foresight into evolving market trends, Vonage set forth to address the growing digital transformation efforts among businesses. The visionary provider recognized early that a programmable communications cloud that incorporates both UCaaS and CPaaS could provide greater value to its customers, regardless of the scale and scope of their digital transformation initiatives. Vonage's UCaaS solutions offer certain critical integrations to the most popular business applications that can address many of its customers' needs. However, for businesses that are looking to innovate in the way they engage with their customers, a closely-tied CPaaS solution, supported by a partner ecosystem, offers a compelling and complementary approach to businesses' communications needs.

To deliver more powerful benefits to its customers, in June 2016, the provider extended its reach into the emerging programmable communications market with the acquisition of Nexmo, a strong contender in the pure-play CPaaS market. To best capitalize on the purchase, Vonage began in earnest to integrate and ultimately rearchitect all its business communications services around the global network reach and API-driven platform provided by Nexmo. The provider's primary UCaaS offering, Vonage Business Cloud, has been reimagined to leverage the same core communications elements that Nexmo delivers to developers, offering a new level of scale and reach for the solution that Vonage might not have achieved on its own.

In August 2018, Vonage acquired TokBox, the leader in the programmable video market. TokBox's platform enables developers and enterprise customers to leverage WebRTC to deliver video solutions worldwide. Incorporating video elements into Nexmo, Vonage's API platform, will position the provider to offer CPaaS elements in all key communications modalities.

While businesses can leverage UCaaS and CPaaS solutions from discrete providers, Vonage's unified platform that allows CPaaS programmatic access to UCaaS resources, including users, business telephone numbers, and customer endpoints, offers tighter integration, more flexibility, and a unique value proposition for customers.

Furthermore, Vonage's competitive strategy is effectively bringing both business users and developers to the provider, as well as putting the company on the short list in corporate evaluations. Vonage claims approximately 2.2 million subscribers to its consumer and business services worldwide, 696,000 registered developers on its CPaaS platform (as of September 30, 2018), as well as over 2,300 customers. Unifying the diverse groups together on a single global platform will position Vonage very well for future growth and success.

Competitive Differentiation

As a fully integrated platform based on a programmable communications cloud, the One Vonage Platform is a clear differentiator for the service provider. Vonage is one of very few market participants that offer a holistic communications cloud, delivering a full suite of userfacing UCaaS and CCaaS applications that can be built on top of a highly programmable communications platform residing on a global network. By thoughtfully integrating three best-of-breed solutions (Vonage Business Cloud, Nexmo, and TokBox), Vonage has created an all-encompassing and extensible communications portfolio that is greater than the sum of its parts and enables the provider to effectively compete on all fronts. While traditional UCaaS competitors work to incorporate CPaaS into their existing solution sets, Vonage can focus its efforts on developing innovative communications and collaboration applications. Likewise, Vonage can continue to compete directly with pure-play CPaaS providers by adding new capabilities to their API platform that both third-party and in-house development teams can leverage.

The competitive differentiation of the One Vonage Platform cannot be understated: Vonage has reinvented itself by rearchitecting its core products to leverage a highly programmable communications cloud. The provider has not only positioned itself to effectively compete across currently segmented markets (UCaaS, CPaaS, CCaaS), but has also created a path to innovation for years to come. This differentiates Vonage's diversified communications portfolio from other solutions, which typically address a more limited set of use cases.

Stakeholder integration

Vonage's stakeholders, including employees, executives, partners, customers and investors, benefit from the One Vonage Platform strategy. The unified platform, which includes the underlying Nexmo API platform, delivering voice, messaging, and video services to its UCaaS and contact center application offerings, is a modern and largely unique approach in each of the markets that it serves.

Customers will benefit from an agile development cycle of innovation. Because these application services are no longer directly tied to the underlying call control platform, Vonage can update these applications faster, offering new features and capabilities more frequently than competitors with monolithic UC platforms. In addition, this approach allows Vonage to provide API-enabled business numbers. For example, each business or direct inward dial (DID) number that a Vonage customer uses can now be used for external SMS

messaging, through either Vonage Flow, the provider's team messaging application, or CPaaS-enabled applications.

For developers, Vonage still offers Nexmo as a stand-alone CPaaS solution, delivering a full range of API-driven communications elements, including WebRTC and PSTN voice calling, SMS and social media messaging (WhatsApp, Facebook Messenger, and Viber), as well as two-factor authentication, across its global network. The 2018 acquisition of TokBox further extends the One Vonage Platform, enabling highly-scalable programmable video into the suite of core communications services that both Vonage and its developer community can leverage in their applications. Developers also benefit from a greater reach and can refine their applications to closely integrate with the technologies and solutions that Vonage's business customers are deploying.

Finally, Vonage itself benefits from the One Vonage Platform. Previously, the provider had to negotiate and maintain separate contracts with network carriers and partners, one set for its UCaaS services and another for its CPaaS network. Under a unified platform, Vonage can leverage its higher volumes and economy of scale to negotiate the best wholesale rates and thus lower its operating costs. In addition, One Vonage Platform is an opportunity for accelerated innovation throughout Vonage, empowering employees and partners to develop and bring new products to market faster.

Customer Ownership Experience

The One Vonage platform enables Vonage customers, including SMBs, enterprises and third-party developers to consume communications services in a way that is tailored to their needs. Businesses can start by rolling out Vonage's full line of communications and collaboration services, then leverage APIs to automate, embed, and integrate communications elements to enhance their business applications and workflows at their own pace. Businesses that buy into the larger Vonage ecosystem are rewarded by gaining programmable access to the business numbers they already own. Competing standalone CPaaS solutions require various overlays and coding to multiple platforms. Likewise, many use cases that previously required a dedicated CPaaS solution, such as SMS-enabled business lines, are now merely features that can be incorporated within the Vonage Flow team collaboration application.

Conversely, third-party developers will find a competitive set of voice, messaging and video APIs to leverage to embed communications features within their applications. Unlike competing CPaaS offerings, Vonage offers developers and ISVs a way to reach the provider's UCaaS users. Under the One Vonage Platform, third-party developers have the opportunity to take their wares up market beyond consumers and deliver innovative applications to businesses.



Brand Equity

Vonage has a rich history and has successfully transitioned from a residential VoIP provider brand into a well-respected and recognized provider of business-class communications services. As it moves into the new territory of programmable communications, the provider has embraced and leveraged the capabilities of Nexmo and TokBox , both viewed as early leaders in their respective voice, messaging and video API markets. In this way, Vonage is making it clear to the market that it is both a strong UCaaS contender as well as continues to serve the needs of the developer community. While competitors in the communications market have acquired and buried CPaaS solutions within their portfolios, Vonage continues to promote its solutions across a broad customer spectrum.

Conclusion

Vonage offers a forward-thinking approach to enterprise communications with its One Vonage Platform strategy. The provider offers businesses a competitive suite of UCaaS solutions built on top of a future-proof API platform. As digital transformation efforts change how businesses interact and engage with their customers, Vonage's platform will provide the flexibility to deliver the exact future services needed for success.

With its strong overall performance, Vonage has earned Frost & Sullivan's 2018 Competitive Strategy Innovation and Leadership Award.

Significance of Competitive Strategy Innovation and Leadership

Any successful approach to achieving top-line growth must (1) take into account what competitors are, and are not, doing; (2) meet customer demand with a comprehensive, value-driven product or service portfolio; and (3) establish a brand that resonates deeply with customers and stands apart from other providers. Companies must succeed in these three areas—brand, demand, and positioning—to achieve best-practice levels in competitive strategy.



Understanding Competitive Strategy Innovation and Leadership

As discussed above, driving demand, brand strength, and competitive differentiation all play a critical role in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on Strategy Innovation and Customer Impact.



Key Benchmarking Criteria

For the Competitive Strategy Innovation and Leadership Award, Frost & Sullivan analysts independently evaluated two key factors—Strategy Innovation and Customer Impact—according to the criteria identified below.

Strategy Innovation

Criterion 1: Strategy Effectiveness

Requirement: Strategy effectively balances short-term performance needs with long-term aspirations and vision for the company.

Criterion 2: Strategy Execution

Requirement: Adoption of best-in-class processes supports the efficient and consistent implementation of business strategy.

Criterion 3: Competitive Differentiation

Requirement: Unique competitive advantages with regard to solution or product are clearly articulated and well accepted within the industry.

Criterion 4: Executive Team Alignment

Requirement: The executive team is aligned along the organization's mission, vision, strategy, and execution.

Criterion 5: Stakeholder Integration

Requirement: Strategy reflects the needs or circumstances of all industry stakeholders, including competitors, customers, investors, and employees.

Customer Impact

Criterion 1: Price/Performance Value

Requirement: Products or services offer the best value for the price, compared to similar offerings in the market.

Criterion 2: Customer Purchase Experience

Requirement: Customers feel they are buying the most optimal solution that addresses both their unique needs and their unique constraints.

Criterion 3: Customer Ownership Experience

Requirement: Customers are proud to own the company's product or service and have a positive experience throughout the life of the product or service.

Criterion 4: Customer Service Experience

Requirement: Customer service is accessible, fast, stress-free, and of high quality.

Criterion 5: Brand Equity

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate Award candidates and assess their fit with select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

	STEP	OBJECTIVE	KEY ACTIVITIES	ОИТРИТ
1	Monitor, target, and screen	Identify Award recipient candidates from around the globe	 Conduct in-depth industry research Identify emerging sectors Scan multiple geographies 	Pipeline of candidates who potentially meet all best-practice criteria
2	Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	 Interview thought leaders and industry practitioners Assess candidates' fit with best-practice criteria Rank all candidates 	Matrix positioning all candidates' performance relative to one another
3	Invite thought leadership in best practices	Perform in-depth examination of all candidates	 Confirm best-practice criteria Examine eligibility of all candidates Identify any information gaps 	Detailed profiles of all ranked candidates
4	Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	 Brainstorm ranking options Invite multiple perspectives on candidates' performance Update candidate profiles 	Final prioritization of all eligible candidates and companion best-practice positioning paper
5	Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	Share findingsStrengthen cases for candidate eligibilityPrioritize candidates	Refined list of prioritized Award candidates
6	Conduct global industry review	Build consensus on Award candidates' eligibility	 Hold global team meeting to review all candidates Pressure-test fit with criteria Confirm inclusion of all eligible candidates 	Final list of eligible Award candidates, representing success stories worldwide
7	Perform quality check	Develop official Award consideration materials	 Perform final performance benchmarking activities Write nominations Perform quality review 	High-quality, accurate, and creative presentation of nominees' successes
8	Reconnect with panel of industry experts	Finalize the selection of the best-practice Award recipient	Review analysis with panelBuild consensusSelect recipient	Decision on which company performs best against all best-practice criteria
9	Communicate recognition	Inform Award recipient of Award recognition	 Present Award to the CEO Inspire the organization for continued success Celebrate the recipient's performance 	Announcement of Award and plan for how recipient can use the Award to enhance the brand
10	Take strategic action	Upon licensing, company may share Award news with stakeholders and customers	 Coordinate media outreach Design a marketing plan Assess Award's role in future strategic planning 	Widespread awareness of recipient's Award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often, companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry



participants and for identifying those performing at best-in-class levels.

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best in class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages more than 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 45 offices on six continents. To join our Growth Partnership, please visit http://www.frost.com.