

VONAGE HOLDINGS CORP
Form 10-K
February 27, 2019
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UNITED STATES SECURITIES AND EXCHANGE COMMISSION • WASHINGTON, D.C. 20549

FORM 10-K

Annual Report Pursuant to Section 13 or 15(d)
of The Securities Exchange Act of 1934 or
For the fiscal year ended December 31, 2018

Transition Report Pursuant to Section 13 or
15(d) of The Securities Exchange Act of 1934
For the transition period from to

Commission file number 001-32887
VONAGE HOLDINGS CORP.

(Exact name of registrant as specified in its charter)

Delaware 11-3547680
(State or other jurisdiction of (I.R.S. Employer Identification No.)
incorporation or organization)
23 Main Street, Holmdel, New Jersey 07733
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (732) 528-2600

Securities registered pursuant to Section 12(b) of the Act:
Title of each class Name of each exchange on which registered
Common Stock, Par Value \$0.001 Per Share The New York Stock Exchange
Securities registered pursuant to Section 12(g) of the Act:

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulations S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated

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filer" and "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Check one:
Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting
company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant at June 29, 2018 was \$2,861,341,677 based on the closing price of \$12.89 per share.

The number of shares outstanding of the registrant's common stock as of January 31, 2019 was 239,864,125.

Documents Incorporated By Reference

Selected portions of the Vonage Holdings Corp. definitive Proxy Statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2018, are incorporated by reference in Part III of this Form 10-K.

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FOR THE FISCAL YEAR ENDED December 31, 2018

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains statements and other information which are deemed to be “forward-looking” within the meaning of the Private Securities Litigation Reform Act of 1995, or the Litigation Reform Act. These forward-looking statements and other information are based on our beliefs as well as assumptions made by us using information currently available.

The words “plan,” “anticipate,” “believe,” “estimate,” “expect,” “intend,” “will,” “should” and similar expressions, as they relate to us, are intended to identify forward-looking statements. Such statements reflect our current views with respect to future events, are subject to certain risks, uncertainties, and assumptions, and are not a guarantee of future performance. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in such forward-looking statements or information. In light of the significant uncertainties in these forward-looking statements, you should not place undue reliance on these forward-looking statements. The forward-looking statements and information contained in this Annual Report on Form 10-K relate to events and state our beliefs and the assumptions made by us only as to the date of this Annual Report on Form 10-K. We do not intend to update these forward-looking statements, except as required by law. In accordance with the provisions of the Litigation Reform Act, we are making investors aware that such forward-looking statements, because they relate to future events, are by their very nature subject to many important factors that could cause actual results to differ materially from those contemplated by the forward-looking statements contained in this Annual Report on Form 10-K, any exhibits to this Form 10-K and other public statements we make. Important factors that could cause such differences include, but are not limited to: the competition we face; the expansion of competition in the cloud communications market; risks related to the acquisition or integration of businesses we have acquired; our ability to adapt to rapid changes in the cloud communications market; the nascent state of the cloud communications for business market; our ability to retain customers and attract new customers cost-effectively; the risk associated with developing and maintaining effective internal sales teams and effective distribution channels; security breaches and other compromises of information security; risks associated with sales of our services to medium-sized and enterprise customers; our reliance on third-party hardware and software; our dependence on third-party facilities, equipment, systems and services; system disruptions or flaws in our technology and systems; our ability to comply with data privacy and related regulatory matters; our ability to scale our business and grow efficiently; our dependence on third party vendors; the impact of fluctuations in economic conditions, particularly on our small and medium business customers; our ability to obtain or maintain relevant intellectual property licenses or to protect our trademarks and internally developed software; restrictions in our debt agreements that may limit our operating flexibility; our ability to obtain additional financing if required; fraudulent use of our name or services; intellectual property and other litigation that have been and may be brought against us; reliance on third parties for our 911 services; uncertainties relating to regulation of business services; risks associated with legislative, regulatory or judicial actions regarding our business products; risks associated with operating abroad; risks associated with the taxation of our business; governmental regulation and taxes in our international operations; liability under anti-corruption laws or from governmental export controls or economic sanctions; our dependence on our customers' unimpeded access to broadband connections; foreign currency exchange risk; our history of net losses and ability to achieve consistent profitability in the future; our ability to fully realize the benefits of our net operating loss carry-forwards if an ownership change occurs; certain provisions of our charter documents; and other factors that are set forth in the “Risk Factors” section and other sections of this Annual Report on Form 10-K, as well as in our Quarterly Reports on Form 10-Q and amendments to these reports.

FINANCIAL INFORMATION PRESENTATION

For the financial information discussed in this Annual Report on Form 10-K, other than per share and per line amounts, dollar amounts are presented in thousands, except where noted.

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PART I

ITEM 1. Business

OVERVIEW AND STRATEGY

At Vonage, our strategy is to redefine business communications. True to our roots as a technology disruptor, we are embracing technology to transform how businesses communicate to create better business outcomes. Our cloud communications platform enables businesses of all sizes to collaborate more productively and engage their customers more efficiently across any device.

We believe we have a unique set of capabilities and solutions to deliver on the full business communications value chain to help enterprises use cloud communications to improve how business gets done. Vonage offers a unique combination of unified communications, programmable communications and contact center to transform the way businesses communicate all on one platform. We build integrated solutions through programmable communications, complementing and adding more value and customizations to unified communications as a service and cloud contact center solutions.

The One Vonage microservices platform creates specific tools customers need to address the unique communications challenges their businesses face. All of our cloud communications solutions are designed to provide employees with the tools they need to connect, collaborate and be more productive internally while enabling them to engage with customers externally for a better customer experience and more meaningful relationships.

We also provide a robust set of feature-rich residential communication solutions that allow consumers to connect their home phones and mobile phones on one number and we offer attractive international long distance rates that help create a loyal base of satisfied customers.

Our business is organized under two reportable segments, Business and Consumer. Additional discussion of our reportable segments is included in Note 15, Industry Segment and Geographical Information to the Consolidated Financial Statements.

EVOLUTION OF VONAGE

Founded in 2001, Vonage became a leading provider of broadband communication services using the Company's innovative Voice over Internet Protocol, or VoIP, technology platform offering feature-rich, low-cost communication services. Beginning in November 2013 and continuing through September 2015, Vonage acquired five companies: Vocalocity, Inc., Telesphere Networks Ltd., Simple Signal Inc., gUnify LLC and iCore Networks Inc. With these acquisitions, Vonage began its execution of a pivot from a solely residential communications provider to establishing the foundation of Unified Communications as a Service, or UCaaS, available to service the needs of businesses to improve how they communicate with their customers and their employees.

In June 2016, Vonage completed the acquisition of Nexmo, Inc., a global leader in the Communications Platform as a Service, or CPaaS, sector of the cloud communications market. The acquisition of Nexmo accelerated Vonage's growth strategy to provide application program interfaces, or APIs, for text messaging and voice communications, allowing developers and enterprises to embed contextual, programmable communications into mobile apps, websites and business systems.

In August 2018, Vonage acquired TokBox Inc., an industry leader in WebRTC programmable video that enables developers and enterprises to integrate live video into websites, mobile apps and IoT devices with only a few lines of code. The acquisition of TokBox meaningfully broadened Vonage's API capabilities by adding video to its existing services in voice, SMS and IP messaging.

In October 2018, Vonage completed the acquisition of NewVoiceMedia Limited, an industry-leading cloud Contact Center as a Service, or CCaaS, provider. This acquisition enabled Vonage to combine its robust UCaaS and CPaaS solutions with NewVoiceMedia's pure-play cloud contact center offerings, culminating in the Company's ability to provide an end-to-end communication experience for a company's employees and its customers.

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SERVICE OFFERINGS

Business

For our Business customers, we provide innovative, cloud-based UCaaS solutions, comprised of integrated voice, text, video, data, collaboration, contact center and mobile applications over our flexible, scalable Session Initiation Protocol based VoIP network. We also offer CPaaS solutions to developers designed to enhance the way businesses communicate with their customers by embedding communications into apps, websites and business processes. In combination, our products and services permit our business customers to communicate with their customers and employees through any cloud-connected device, in any place, at any time without the often costly investment required with on-site equipment.

Our customer base spans a wide variety of industries, including manufacturing, automotive, legal, information technology, financial services, construction, real estate, engineering, healthcare, and nonprofit organizations.

We have a robust set of product families tailored to serve the full range of the business value chain, from the small to medium-sized business, or SMB, market, through mid-market and enterprise markets. We provide customers with multiple deployment options, designed to provide the reliability and quality of service they demand. We provide customers the ability to integrate our cloud communications platform with many cloud-based productivity and customer relationship management, or CRM, solutions, including Google's G Suite, Zendesk, Salesforce's Sales Cloud, Oracle, and Clio. Vonage strives to integrate the entire business communications value chain with our ability to integrate these cloud-based workplace tools.

Our Business strategy is to support the full range of business customers, using the Company's two UCaaS product families: Vonage Business Cloud, based on our proprietary call processing platform that is purpose-built for SMB and mid-market customers; and Vonage Enterprise, based on Broadsoft's call processing platform in combination with other Vonage cloud-based solutions, which serves larger customers, from mid-market businesses through large enterprises. Our UCaaS subscription revenue generation efforts are focused on customer acquisition and retention as well as providing additional services to existing customers as they grow and scale.

With the 2018 acquisition of NewVoiceMedia, Vonage also provides customers with a robust CCaaS offering, driving intelligent interactions for customers through emerging technologies such as skills-based routing, real-time sentiment analysis and chatbots.

The following provides a more detailed description of our Business services:

Vonage Business Cloud

Vonage Business Cloud utilizes our proprietary technology platform which aims to deliver seamless, integrated cloud-based communication services. It provides a cost-effective, highly scalable, feature-rich solution, delivered over-the-top of a customer's broadband or our SmartWan solution, which provides elevated quality of service over a customer's network using SD-WAN, or software defined Wide Area Network, technology. All of our Vonage Business Cloud offerings allow free access to our mobile application. Additional features include the ability to update account profiles, manage devices, and contact call logs directly from their mobile devices. We also offer virtual extensions, which connects employees to a business phone number through their mobile phones.

Vonage Business Cloud also integrates with other third-party software applications to improve workflow and enhance productivity. Our software uses a combination of open APIs and pre-built integrations to enhance functionality with data from other third-party enterprise applications including Salesforce, Microsoft Dynamics, NetSuite, Zendesk, Oracle Sales Cloud and Hubspot. Vonage Business Cloud also provides customers with a desktop and video sharing solution with Amazon Chime. The investments we have made has enabled scalability to allow Vonage Business Cloud to serve a broader customer base.

The launch of Vonage Business Cloud was quickly followed by innovations to improve and build upon this service with new features and functionality that we believe transforms the way businesses connect, including:

- Vonage SmartWAN, which is now available to businesses using Vonage Business Cloud, optimizing the network to keep employees connected across multiple locations;
- Vonage Business Cloud Desktop Connect App, which allows employees to start their day in the redesigned Vonage Business Cloud Mobile App and switch to the desktop when they reach the office;

- Vee, our new virtual customer assistant chatbot integrated with a cloud-based unified communications solution that aids customers in managing their account services via simple natural-language text commands
- VonageFlow, our proprietary workstream collaboration solution;

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- Business Inbox, which allows customers to reply to messages sent in messaging apps like Facebook Messenger, providing the ability to respond to customers in real-time directly within the app, organizing customer requests in one unified inbox; and

- CX Cloud, an advanced omni-channel contact center product suite allowing businesses to utilize Nexmo APIs to customize their interactions with customers via real-time sentiment analysis, chatbots, and interactive voice response.

Vonage Enterprise

Vonage Enterprise is a purpose-built cloud based platform for mid-market and enterprise customers, providing a complete set of enhanced unified communication and collaboration services, including: voice, data, video, mobile and contact center services. We focus on customers for whom guaranteed quality of service and uniformity of services across all locations is critical. We deliver services to this customer base over our private, nationwide, fully redundant, secure IP MPLS network using 21 network POPs that allow us to deliver dedicated, secure and private bandwidth utilizing all forms of last mile technologies including EoC and Fiber and bandwidth ranging from 1.5Mbps to 1Gbps. Services we deliver include Wide Area Networking, or WAN, Internet Access, MPLS VPN, Managed Firewall, Hosted UCaaS, Hosted Video Conferencing, Web Collaboration, Secure Instant Messaging & Presence, Mobility and Fixed Mobile Convergence.

Vonage Enterprise services include features such as Single Number Reach, which provides each user one number, available over numerous devices including desk phones, tablets and smartphones, Shared Line Appearance, Busy Lamp Field, Phone Paging, Outlook Integration, IM, Presence, and Video. Vonage also delivers SIP Trunking, over the same network, to customers using premises PBXs, with the ability to overlay UCaaS features where the premises PBX is deficient or for disaster recovery and business continuity requirements. This product also supports a hybrid deployment where some locations may be fully hosted and others may continue to use the premises PBX. Vonage Enterprise customers also have the ability to utilize our gUnify middleware layer to integrate communications with the core, SaaS-based business applications that companies use as part of their every-day workflow, such as Google for Work, Salesforce, Zendesk, and others.

Vonage Enterprise customers also receive access to a custom-built portal through which they can fully administer all services, online bill pay, manage trouble tickets, manage bandwidth and services, access detailed Call Analytics, and execute Moves, Adds and Changes.

NewVoiceMedia, Vonage's Contact Center Solution

With the 2018 acquisition of NewVoiceMedia, Vonage also provides customers with a robust CCaaS offering, driving intelligent interactions for customers through emerging technologies such as skills-based routing, real-time sentiment analysis and chatbots. NewVoiceMedia's cloud contact center solution, combined with Vonage's offering, provides an end-to-end communications experience for enhanced customer engagement and conversation. By integrating with CRMs, NewVoiceMedia delivers better omni-channel interactions and robust analytics. We intend to integrate NewVoiceMedia's cloud contact center solutions with our Vonage Business Cloud platform as well as to capitalize on the improved functionality that programmable communications naturally brings to contact center solutions.

With NewVoiceMedia, we believe that Vonage is the only cloud communication company that can combine deep CRM integrations with the full range of programmable communications used by a business's employees and its customers.

Nexmo, The Vonage API Platform

The communications industry is undergoing a major transformation from dedicated communications applications and devices to communications embedded in other applications and devices where the communications happens within the context of those applications. For example, when calling or messaging a taxi driver, consumers can do this within the taxi app which has all the necessary context such as the pickup location and payment method, resulting in a better experience for both parties. Similarly, when contacting a company consumers can communicate within the context of the company's branded mobile app or website and agents within the context of their CRM desktop application, delivering a better experience for consumers and improving productivity for contact center agents. We call this type of communications "contextual" because it is context rich and delivers a better experience. This trend is enabled by a new category of cloud communications platforms that enable software developers to build communications capabilities such as messaging and voice calling within their applications without having to build or maintain communications

infrastructure. Programmable communications via APIs enable enterprises to improve the ways they engage their customers through personalized and contextual communications for deeper engagement and more meaningful relationships.

While innovative software companies were the early adopters of cloud communication platforms, over time virtually all companies will benefit from the new approach as part of their digital transformation journey. As more startups disrupt existing industries, established enterprises will innovate with communications APIs in order to more effectively compete with the new entrants and with their traditional competitors. Over time enterprises of all sizes will adopt contextual communications to deliver better business outcomes.

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Nexmo, the Vonage API Platform, abstracts the complexities of the global communications networks and delivers voice, messaging, and authentication capabilities in the form of APIs that developers can easily embed into their applications with a low risk, pay as you go business model that fosters innovation. Developers adopt our APIs via a low friction, self service model on our website where they start with a free trial account and pay for additional usage with a credit card using prepaid accounts. Our customers include digital native companies who are looking to disrupt an existing industry, enterprises undergoing digital transformation, and enterprise SaaS companies looking to enhance their products with embedded communications capabilities.

We are observing an increased need among businesses to provide their customers with the ability to connect and communicate by their customers' own preferred channels (chat, voice, SMS, social messaging, etc). The need for companies to jump between modes of communication is being driven by the customer. In a digital world, this is what customers have come to expect. These same businesses are therefore seeking the ability to implement these API tools quickly and without the need for in-house IT support or expertise.

Our platform includes the following products:

- Voice API: Our Voice API enables companies to deliver better and more flexible voice experiences when communicating with their customers within the context of their existing business workflow, backed by the quality, strength and reliability of the Vonage network in the United States and tier one carriers globally.
- SIP Trunking: Our SIP Trunking enables companies to rapidly connect their PBX to the global telecommunications networks using a pay as you go model and without having to negotiate lengthy carrier contracts.
- SMS API: Our SMS API enables companies to send and receive SMS messages within the context of their existing business workflows. Our direct to carrier approach and patented Adaptive Routing algorithm enables us to deliver messages reliably and with low latency, globally.
- Verify: Our Verify API enables companies to deploy two-factor-authentication for their applications to help them acquire genuine customers and to protect against fraud. With a single API call, Verify delivers messages via SMS and voice calls if required to ensure high conversion rates. In addition, customers pay only for successful authentications.
- Number Insight: Our Number Insight API enables companies to get real time intelligence on phone numbers anywhere in the world to ensure numbers are valid and reachable and to discover other insights such as carrier information, roaming status whether a landline or mobile, and caller name.
- Virtual Phone Numbers: We offer phone numbers that are local all over the world enabling our customers to have a local presence globally. We also offer toll free numbers and short codes in the United States and Canada. Our numbers can be provisioned and de-provisioned programmatically to enable maximum utilizations.
- Messages API and Dispatch API: Together they enable brands to engage with their customers wherever they prefer, elevating customer communications by meeting customers on the channels they find most engaging.
- Video API: Our programmable video enables developers, independent software vendors, and enterprises to incorporate highly scalable point-to-point and multi-party video into websites, mobile applications and IoT devices with only a few lines of code.

Our product offerings combined with the strength of our network enable us to partner closely with our customers to ensure that they are successful through a personalized account management experience, high quality support and consulting services. The Company's CPaaS products are supported through our close relationships with tier one carriers across the globe and offer local numbers in more countries along with our private MPLS network with 21 points of presence in the United States allowing us to offer high voice quality, lower costs and increased reliability. Additionally, Nexmo has office locations all over the world, including the United States, United Kingdom, France, Germany, Hong Kong, Singapore, Japan, Korea and China. Our extensive network of developers provides customers with the ability to foster rapid innovations, including extensive developer documentation, sample codes, tutorials, libraries and free online support.

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Consumer

Our home telephone services are offered to customers through several service plans with different pricing structures. The service plans include basic features such as voicemail, call waiting, and call forwarding as well as unique features such as Simulring, Visual Voicemail and Extensions. We also charge for local and international calling outside of plan limits. We also charge for local and international calling outside of plan limits.

We have two primary Consumer offerings available in the United States: Vonage World and Vonage North America. Each of our Consumer calling plans provides a number of basic features including call waiting, caller ID with name, call forwarding, and voicemail. Our plans also include unlimited Vonage Visual Voicemail, which is “readable voicemail” delivered via email or SMS text message, Vonage Extensions, which extends the plan, and inbound calling, to additional phone numbers and devices, and selective call block, which allows users to block unwanted calls. We also offer, in some cases for additional fees, features such as area code selection, virtual phone number, and web-enabled voicemail. Additionally, we also provide similar product offerings to customers in both Canada and the United Kingdom.

In order to access our consumer services, a customer need only connect a standard telephone to a broadband Internet connection through a small Vonage-enabled device. After connecting the device, our customers can use their telephone to make and receive calls. Vonage-enabled devices allow customers to use the Internet connection for their computer and telephones at the same time while ensuring a high quality calling experience. We also offer a cordless multi-phone system solution. Our plug-and-play Vonage-enabled devices permit portability as customers can take their Vonage device to different locations where broadband service is available. We generally have not charged new customers for the adapters permitting use of our service.

NETWORK OPERATIONS

The Vonage network uses our customer’s existing or Vonage procured high-speed broadband Internet service to allow calls over the Internet either from a standard telephone through a Vonage-enabled device or through soft phone software or mobile client applications. Our UCaaS services are not dependent on any specific type or provider of Internet service, and our customers are free to change their Internet service provider in response to a competitive alternative, or because they have moved to a different location. For many of our Vonage Enterprise customers, our UCaaS services are delivered over the Company’s private, nationwide, fault tolerant, secure IP MPLS network under multi-year contracts to provide the high level of interconnection quality and the ability to offer service level agreements, or SLA, guaranteeing certain levels of voice service performance.

Our network is scalable and geographically distributed for robustness, high availability, and reliability across multiple call processing sites, using regional data interconnection points, where calls to non-Vonage customers are interconnected with the public switched telephone network. We periodically assess the locations of our regional data connection points in connection with efforts to improve the quality of and efficiency in delivering our service. Our interconnections with the public switched telephone network, or IP/SIP networks, are made pursuant to commercial agreements we have with several telecommunications providers. Under these agreements, we transfer calls originated by our customers to other carriers who connect the call to the called party or connect peer to peer. We have a varying degree of settlement arrangements with our carrier partners for indirect third party or direct termination of our calls. The calls are routed from our network to other carriers’ interconnected circuits at co-location facilities in which we lease space. This method of connecting to the public switched telephone or IP/SIP networks allows us to expand capacity quickly, as necessary to meet call volume, and to provide redundancy within our network.

Because Vonage’s system is standards based and not constrained to use any specific broadband service provider to connect to our customers, we can centrally manage and share resources across our customer base to minimize capital investment when entering new markets.

MARKETING

Our marketing objective is to help drive growth and revenue across our business and consumer markets. We employ an integrated multi-channel approach to marketing, whereby we evaluate and focus our efforts on efficient marketing vehicles to accomplish our goals with the greatest return on investment. To do this, we make use of both

broad-reaching and highly-targeted media channels.

For our business customers, our primary source of lead acquisition is digital marketing in the form of search engine marketing, digital advertising, social media advertising, and affiliate programs. We also utilize database marketing and lead aggregators to source business leads. We use direct marketing and account-based marketing to help source leads and create interest in our solutions. We have a significant strategy of using third-party and proprietary events to source business leads and convert prospects. For our residential customers, we have highly optimized our acquisition approach and focus mainly on digital advertising channels.

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We make use of marketing research to gain consumer insights into brand, product, and service performance, and utilize those learnings to improve our messaging and media plans. Market research is also leveraged in the areas of testing, retention marketing, and product marketing to ensure we bring compelling products and services to market for our customers.

We believe our brand is a meaningful factor for customers as they consider business services. We invest in our brand in order to retain and expand our customer base and to position Vonage as a technology leader that delivers innovative, unified communication services, serving the full range of businesses and enterprises. We expect these investments to continue as we further establish Vonage as a leading business services brand and pivot beyond our residential brand heritage.

SALES AND DISTRIBUTION

Enterprise Sales

In order to continue to expand in the enterprise sales channel, which we define as businesses larger than 1,000 seats, our enterprise sales organization is positioned to provide high quality business services for Enterprise, through our fully managed solution, which utilizes BroadSoft's enterprise-grade call processing platform, with a broad portfolio of products delivered over our own private, national MPLS network, with 21 Points-of-Presence, or POPs, across the country and our own team of service delivery project managers using our proprietary provisioning tool Zeus, or with SmartWan, as well as our industry leading CPaaS products. Additionally, Contact Center solutions are commonly integrated into Enterprise solutions

Developer Ecosystem

Our API platform products are principally adopted and consumed by software developers all over the world. Given the nature of the business, we invest significant time and effort to build, recruit, and maintain developers and various software ecosystems. We have a large developer ecosystem worldwide with over 700,000 registered developers.

Field Sales and Inside Sales - SMB and Midmarket

We utilize our team of sales agents, primarily based in geographic territories comprising customers and prospects, which we refer to as our field sales team, to market and sell our business services. These field sales agents utilize a consistent, automated, highly-structured sales process to effectively educate prospective customers regarding our services. We have developed a scalable model applicable to both existing and new markets. We now have field sales presence in 20 markets within the United States and made significant expansion into new markets globally primarily supporting Nexmo. For customers in the SMB segment, we leverage an Inside Sales team to provide solutions across our cloud communications offerings.

Channel Sales

In addition to inside sales and our field sales team, we also have a dedicated team focused on channel sales who work with our channel partners to market and sell our business services, which helps to broaden our sales distribution. In 2017, we continued to develop and expand this channel program by adding new senior management, channel managers, and additional national master agents. We now have a broad and deep coverage of the U.S. market through a network of over 20,000 sub agents and resellers.

Self-Service

Customers can subscribe to our consumer services at our websites, <http://www.vonage.com>, <http://www.vonage.ca>, <http://www.vonage.co.uk> and several affiliate websites, or through multiple toll free numbers including 1-877-4VONAGE. Business customers can subscribe to our services at our websites, including <https://business.vonage.com/>, <http://www.vonagebusiness.com>, <https://enterprise.vonage.com>, and <https://www.nexmo.com>, or through toll free numbers including 1-877-862-2562 and 1-855-593-7326. Additionally, Nexmo's API enablement and developer focus lends itself to a self-service model. Our developers can register, sign up and test, and scale their businesses easily and quickly without having to engage with anyone at Nexmo. This allows customers to self-provision their accounts with the aim of improving the customer experience while reducing customer acquisition costs.

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INTELLECTUAL PROPERTY

We currently own over 200 issued U.S. patents as well as a number of foreign patents and pending U.S. and foreign patent applications. We routinely review our technological developments with our technology staff and business units to identify the aspects of our technology that provide us with a technological or commercial advantage and seek intellectual property and patent protection as appropriate to protect such key proprietary technology in the United States and internationally, based on our assessment in light of applicable law. Our company policies require our employees to assign intellectual property rights developed in the scope of or in relation to our business to us and to treat proprietary know-how and materials as our confidential information.

We have acquired multiple U.S. and foreign patents, and obtained licenses to numerous other patents. We are the owner of numerous United States and international trademarks and service marks and have applied for registration of our trademarks and service marks in the United States and abroad to establish and protect our brand names as part of our intellectual property strategy.

COMPETITION

In connection with our cloud communications products, we face competition from the traditional telephone and cable companies as discussed below, as well as from vendors of premises-based solutions or hosted solutions including the following:

- Independent cloud service providers;
- Premises-based business communication equipment providers;
- Hosted communication services providers;
- Traditional technology companies; and
- Emerging competitors in technology companies.

As the cloud communications market evolves, and the convergence of voice, video, messaging, mobility and data networking technologies accelerates, we may face competition in the future from companies that do not currently compete in the market, including companies that currently compete in other sectors, companies that serve consumers rather than business customers, or companies which expand their market presence to include cloud communications. We face strong competition from traditional telephone companies, cable companies, wireless companies, alternative communication providers, direct unified communications providers, legacy consumer VOIP businesses, large technology incumbents, and collaboration providers in the consumer, mobile, SMB and enterprise markets. Because most of our target customers are already purchasing communications services from one or more of these providers, our success is dependent upon our ability to attract these customers away from their existing providers. We believe that the principal competitive factors affecting our ability to attract and retain customers are price, call quality, brand awareness, customer service, network and system reliability, service features and capabilities, scalability, usability, simplicity, mobile integration and the unique ability to deliver CPaaS communications tools to business customers in addition to our UCaaS and CCaaS offerings.

There is a continuing trend toward consolidation of competitive companies, including the acquisition of alternative communication providers by Internet product and software companies with significant resources. In addition, certain of our competitors have partnered and may in the future partner with other competitors to offer products and services, leveraging their collective competitive positions. We also are subject to the risk of future disruptive technologies, which could give rise to significant new competition.

EMPLOYEES

As of December 31, 2018, we had 2,248 employees. None of our employees are subject to a collective bargaining agreement.

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AVAILABLE INFORMATION

We were incorporated in Delaware in May 2000 and changed our name to Vonage Holdings Corp. in February 2001. We maintain a website with the address www.vonage.com. References to our website are provided as a convenience, and the information contained on our website is not included as a part of, or incorporated by reference into, this Annual Report on Form 10-K. Other than an investor's own Internet access charges, we make available free of charge through our website our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to these reports, as soon as reasonably practicable after we have electronically filed such material with, or furnished such material to, the U.S. Securities and Exchange Commission, or SEC. Copies are also available, without charge, by writing to Vonage's Investor Relations Department at Vonage Holdings Corp., 23 Main Street, Holmdel, NJ 07733 or calling us at 732.365.1328 or sending an email through the Vonage Investor Relations website at <http://ir.vonage.com/>. Reports filed with the SEC may be viewed at www.sec.gov or obtained at the SEC Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information regarding the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330.

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ITEM 1A. Risk Factors

You should carefully consider the risks below, as well as all of the other information contained in this Annual Report on Form 10-K and our financial statements and the related notes included elsewhere in this Annual Report on Form 10-K, in evaluating our company and our business. Any of these risks could materially adversely affect our business, financial condition and results of operations and the trading price of our common stock.

If we are unable to compete successfully, we could lose market share and revenue.

The business cloud communications markets and consumer services market in which we participate are highly competitive. We face intense competition from a broad set of companies, including:

- software as a service companies, contact center as a service companies, other alternative communication providers, and other providers of cloud communications services; and

- traditional telephone, wireless service providers, cable companies and alternative communications providers with consumer offerings

Many of these providers are substantially larger and better capitalized than us are and have the advantage of greater name and brand name recognition and a large existing customer base. These service providers may have the ability to devote greater resources to their communications services and may be able to respond more quickly and effectively than we can to new or changing opportunities. Our competitors' financial resources may allow them to offer services at prices below cost or even for free in order to maintain and gain market share or otherwise improve their competitive positions. Some of our competitors also could use their greater financial resources to develop and market telephony and messaging services with more attractive features and more robust customer service. In addition, because of the other services our competitors provide, some of these service providers choose to offer cloud communications services as part of a bundle that includes other products, such as high speed Internet access and wireless telephone service. These bundled offers may enable our competitors to offer cloud communications services at prices with which we may not be able to compete or to offer functionality that integrates cloud communications services with their other offerings, both of which may be more desirable. As we continue the introduction of applications that integrate different forms of voice, video, and messaging services over multiple devices, we face competition from emerging competitors focused on similar integration, as well as from established alternative communication providers. Any of these competitive factors could make it more difficult for us to attract and retain customers, reduce our market share and revenues, or cause us to lower our prices or offer additional features that may result in additional costs without commensurate price increases. In order to compete with such service providers, we may have to reduce our prices, which would impair our profitability, or offer additional features that may cause us to incur additional costs without commensurate price increases. To the extent that these or other companies strengthen their offerings, we may have to reduce our prices, increase promotions, or offer additional features, which may adversely impact our revenues and profitability.

With the addition of NewVoiceMedia and our offering of cloud-based contact center services, we also compete with large legacy technology vendors that offer on-premise enterprise telephony and contact center systems and legacy on-premise software companies that come from a computer-telephony integration heritage. These companies are supplementing their traditional on-premise contact center systems with cloud offerings, either through acquisition or in-house development. Additionally, we compete with vendors that historically provided other contact center services and technologies and expanded to offer cloud contact center software. We also face competition from smaller contact center service providers with specialized contact center software offerings. Our actual and potential competitors may enjoy competitive advantages over us, including greater name recognition, longer operating histories, and larger marketing budgets, as well as greater financial or technical resources. With the introduction of new technologies and market entrants, we expect competition to intensify in the future.

In connection with our emphasis on the international long distance market for consumer customers, we face competition from low-cost international calling cards, digital calling cards and VoIP providers in addition to

traditional telephone companies, cable companies, and wireless companies. To the extent that these providers target marketing to the same ethnic segments that we target or strengthen their offerings to these segments, we may have to reduce our prices or increase promotions, which would impair our profitability, or offer additional features that may cause us to incur additional costs without commensurate price increase.

As a result of increasing competition, domestic and international telephony and messaging rates have generally decreased during the past few years, and we expect this trend to continue. Continued rate pressures or increasing cost to use our services could lessen or eliminate the pricing advantage that we maintain over certain competitors and cause customers or potential customers to select alternative providers or cause us to lower our prices, which would adversely impact our revenues and profitability.

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As the cloud communications services market evolves, and the convergence of voice, video, messaging, mobility and data networking technologies accelerates, we may face competition in the future from companies that do not currently compete in the cloud communications services market.

As the cloud communications services market evolves, combining voice, video, messaging and data networks, and information technology and communication applications, opportunity is created for new competitors to enter the cloud communications services market and offer competing products, including companies that currently compete in other sectors, companies that serve consumer rather than business customers, or companies which expand their market presence to include business communications. This new competition may take many forms, and may offer products and applications similar to ours. If these new competitors emerge, the cloud communications services mark