

VONAGE HOLDINGS CORP  
Form 10-K  
February 12, 2016  
Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION • WASHINGTON, D.C. 20549

FORM 10-K

<input checked="" type="checkbox"/> Annual Report Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934  For the fiscal year ended December 31, 2015	or	<input type="checkbox"/> 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 (State or other jurisdiction of incorporation or organization)	11-3547680  (I.R.S. Employer Identification No.)
---	--

23 Main Street, Holmdel, New Jersey (Address of principal executive offices)	07733 (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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes  No

Edgar Filing: VONAGE HOLDINGS CORP - Form 10-K

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 or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. Check one:

Large accelerated filer  Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)  Smaller reporting company

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 30, 2015 was \$853,221,593 based on the closing price of \$4.60 per share.

The number of shares outstanding of the registrant's common stock as of January 31, 2016 was 213,978,306.

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, 2015, are incorporated by reference in Part III of this Form 10-K.

---

Table of Contents

VONAGE HOLDINGS CORP.  
 FORM 10-K  
 FOR THE FISCAL YEAR ENDED December 31, 2015

TABLE OF CONTENTS

	Page
PART I	
Item 1. <u>Business</u>	<u>2</u>
Item 1A. <u>Risk Factors</u>	<u>9</u>
Item 1B. <u>Unresolved Staff Comments</u>	<u>17</u>
Item 2. <u>Properties</u>	<u>18</u>
Item 3. <u>Legal Proceedings</u>	<u>19</u>
Item 4. <u>Mine Safety Disclosures</u>	<u>21</u>
PART II	
Item 5. <u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>22</u>
Item 6. <u>Selected Financial Data</u>	<u>24</u>
Item 7. <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>33</u>
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	<u>45</u>
Item 8. <u>Financial Statements and Supplementary Data</u>	<u>46</u>
Item 9. <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>46</u>
Item 9A. <u>Controls and Procedures</u>	<u>46</u>
Item 9B. <u>Other Information</u>	<u>47</u>
PART III	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	<u>48</u>
Item 11. <u>Executive Compensation</u>	<u>48</u>
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>48</u>
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	<u>48</u>
Item 14. <u>Principal Accountant Fees and Services</u>	<u>48</u>
PART IV	
Item 15. <u>Exhibits, Financial Statement Schedules</u>	<u>49</u>
	<u>54</u>
	<u>F-1</u>

FORWARD-LOOKING STATEMENTS

VONAGE ANNUAL REPORT 2015

---

Table of Contents

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 (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. Such factors include, but are not limited to: the competition we face; the expansion of competition in the unified communications market; our ability to adapt to rapid changes in the market for voice and messaging services; our ability to retain customers and attract new customers; the risk associated with developing and maintaining effective internal sales teams; the risk associated with developing and maintaining effective distribution channels; risks related to the acquisition or integration of future businesses; security breaches and other compromises of information security; risks associated with sales of our UCaaS services to medium-sized and enterprise customers; our dependence on third party facilities, equipment, systems and services; system disruptions or flaws in our technology and systems; our ability to scale our business and grow efficiently; our reliance on third party hardware and software; 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; intellectual property and other litigation that have been and may be brought against us; failure to protect our trademarks and internally developed software; obligations and restrictions associated with data privacy; uncertainties relating to regulation of VoIP services; results of regulatory inquiries into our business practices; fraudulent use of our name or services; our ability to establish and expand strategic alliances; risks associated with operating abroad; liability under anti-corruption laws; governmental regulation and taxes in our international operations; our dependence upon key personnel; our dependence on our customers' existing broadband connections; restrictions in our debt agreements that may limit our operating flexibility; our ability to obtain additional financing if required; any reinstatement of holdbacks by our vendors; our history of net losses and ability to achieve consistent profitability in the future; 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 Current Reports on Form 8-K.

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. All trademarks are the property of their owners.



Table of Contents

PART I

ITEM 1. Business

OVERVIEW AND STRATEGY

OVERVIEW

We are a leading provider of cloud communications services for businesses and consumers, offering a robust suite of feature-rich consumer and business communication solutions that offer flexibility, portability and ease-of-use across multiple devices.

Business Services

For our business services customers, we provide innovative, cloud-based Unified Communications as a Service, or UCaaS, solutions, comprised of integrated voice, text, video, data, collaboration, and mobile applications over our flexible, scalable Session Initiation Protocol (SIP) based Voice over Internet Protocol, or VoIP, network. Our products and services permit these 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. We have a robust set of product families tailored to serve the full range of the business market, including the small and medium business, or SMB, mid-market, and enterprise segments. We provide customers with multiple deployment options, designed to provide the reliability and quality of service they demand. Through our cloud-based middleware solution, gUnify, we provide customers the ability to integrate our cloud communications platform with many SaaS business applications, including Google for Work, Zendesk, Salesforce's Sales Cloud, Clio, and other CRM solutions.

During 2015, we organized our business solutions to support the full range of business customer, using two product families: Vonage Essentials, based on our proprietary call processing platform that is purpose-built for SMB and mid-market customers; and Vonage Premier, 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. We also organized our salesforce to address the full business market, delivering the right products to the right customer. We believe operating two platforms at scale enables us to deliver the right products and solutions to address the needs of diverse customers while maximizing our subscriber economics regardless of segment served. Revenues are generated primarily through the sale of subscriptions for our UCaaS services. Our revenue generation efforts are focused on customer acquisition and retention as well as providing additional services to existing customers as they grow and scale.

Our diverse customer base spans multiple industries, including manufacturing, automotive, legal, information technology, financial services, construction, real estate, engineering, healthcare, and non-profit.

**Vonage Essentials.** Vonage Essentials customers subscribe to our cloud-based communication services, delivered through our proprietary platform that is purpose-built for SMB and mid-market customers. Essentials provides a cost-effective, scalable, feature-rich solution, delivered over-the-top of a customer's broadband, typically month-to-month without a commitment. Vonage Essentials is sold primarily through our direct telesales and online channels, and is increasingly sold through our channel partners and field sales teams. We believe the strength of the Vonage brand directly contributes to a lower-cost customer acquisition model and provides attractive subscriber economics.

**Vonage Premier.** Our Vonage Premier offerings are tailor-made for the large mid-market and enterprise segments. Vonage Premier is a feature-rich/fully managed solution that utilizes Broadsoft

Inc.'s ("Broadsoft") enterprise-grade call processing platform, in combination with other Vonage cloud services like advanced contact center, video conferencing, speak2dial, infrastructure as a service (IaaS), and Virtual Desktop Infrastructure (VDI), and can be provided with high-level QoS, which is generally delivered over our national MPLS network, with 21 network Points of Presence (POPs) across the country. Customers value our proprietary provisioning

and feature-management tool, named Zeus, which enables the rapid deployment of solutions directly by Vonage while giving full visibility to our channel partners and our customers. Further differentiating Vonage is our robust service delivery team comprised of team members specializing in project management, voice and data provisioning, and line number porting. This team is intensely focused on providing an outstanding customer experience, and is rapidly becoming a competitive differentiator.

Our Vonage Premier offering is sold through our channel partners, and our field and enterprise sales teams, and generally requires a three-year contract. We are a preferred provider for many of the largest master agents in the country, harnessing a network of over 20,000 sub agents selling both Vonage Premier and Vonage Essentials. We believe we have one of the largest multi-channel distribution sales platforms in our industry to serve the full range of business customers. We plan to capitalize on the growing adoption of cloud-based communications and collaboration solutions by continuing to expand our salesforce, expand into new markets, and enhance our relationships with existing customers to provide additional functionality and overall business value that can be achieved with our UCaaS platform.

#### Consumer Services

For our consumer services customers, we enable users to access and utilize our UCaaS services and features, via a single “identity,” either a number or user name, regardless of how they are connected to the Internet, including over 3G, LTE, Cable, or DSL broadband networks. This technology enables us to offer our consumer services customers attractively priced voice and messaging services and other features around the world on a variety of devices.

Our consumer services strategy is focused on the continued penetration of our core North American markets, where we will continue to provide value in international long distance and target under-served ethnic segments.

International long distance. As a part of our strategy, our primary focus in our domestic markets is serving the under-served ethnic segments in the United States with international calling needs. The markets for international long distance allow us to leverage our VoIP network by providing customers a low-cost and feature-rich alternative to services offered by telecom, cable, and international calling card providers. With our Vonage World product, we have successfully grown our international calling customer base in multiple ethnic markets.

To increase the visibility of our long distance plans, we have shifted an increasing portion of our marketing budget from broad national advertising as we target attractive segments of the international long distance market. We have inside sales channels where customers can subscribe to our services on-line or through our toll-free number, as well as a retail distribution channel through regional and national retailers.

For both our North American and international customers we provide mobile capability through our patented Vonage Extensions mobile app. Our mobile applications enable consumer services customers to make and receive phone calls on their mobile devices from anywhere they have a Wi-Fi or cellular data connection. Our customers have found value in our ability to deliver high-quality voice solutions coupled with useful features and services.

## Table of Contents

We generate revenue through the acquisition and retention of consumer services customers. We are focused on optimizing the consumer services business by increasing profitability to improve the strong cash flows of the business. Our focus on operations during the past five years has led to a significantly improved cost structure. We have implemented operational efficiencies throughout our business and have substantially reduced domestic and international termination costs per minute, as well as customer care costs. We achieved these structural costs reductions while concurrently delivering significantly improved network call quality and customer service performance. These improvements in customer experience have contributed to the stabilization in churn over recent periods. During 2015, we continued our disciplined focus on marketing efficiency by shifting customer acquisition spend to our higher performing channels, improving the quality of customers we acquire and driving lower churn, all of which drive higher customer life-time value. This focus has led to a reallocation of certain marketing spend to direct response and digital platforms and away from our assisted selling channel, which utilized direct face-to-face selling across multiple retail chains and community and event venues.

The result of these initiatives has been to create a strong cash flow business which provides financial stability, as well as cost synergies and structural advantages to our business serving the UCaaS business market.

Services outside of the United States. We currently have operations in the United States, United Kingdom, and Canada and believe that our low-cost Internet based communications platform enables us to cost effectively deliver voice and messaging services to other locations throughout the world. In December 2014 we announced plans to exit the Brazilian market for residential telephony services and wind down our joint venture operations in the country. The Company completed this process at the end of the first quarter of 2015. This decision underscores the Company's focus on providing UCaaS solutions to domestic consumer services and SMB, medium and large enterprise customers, which offer higher investment return opportunities.

Information on our revenues, operating income, and identifiable assets appears in Note 1 to our consolidated financial statements included in Item 8 hereof.

We had approximately 2.5 million combined consumer subscriber lines and business seats as of December 31, 2015, of which 93% were in the United States. We also have customers in Canada and the United Kingdom.

## SERVICE OFFERINGS

### Business Services

We provide a robust feature-rich range of communication services enabling businesses to interact with their customers, prospects and partners in a more efficient and effective manner. We provide services ranging from basic dial tone to services such as call queue, conferencing, call groups, mobile functionality, CRM integration, and detailed analytics - allowing our customers a high level of visibility into their business at prices that are often significantly lower than that of traditional on premises solutions. These services can be delivered over-the-top of the customers' existing connectivity or bundled through our private MPLS connectivity service. Today more than over 514,000 business seats rely on Vonage to meet their communication needs, putting Vonage in a leading position within the UCaaS space. Our services are delivered through either proprietary networks or through trusted third parties to ensure our offerings provide all of the critical functions business needed for one of their most important business tools. Vonage Essentials. Vonage Essentials is targeted to smaller customers and utilizes our proprietary call processing platform, which is purpose built for SMB customers to deliver cloud-based communication services. It provides a cost-effective, scalable, feature-rich solution, delivered over-the-top of a customer's broadband. We

offer a number of service plans which include basic metered extensions to unlimited calling plans. Our standard lines come fully functional with numerous standard features. Unlimited Extensions is our most popular business service plan. Under this plan businesses can make flat rate, unlimited domestic calls (U.S. and Canada) each month. As of December 31, 2015, over 95% of our business customers were on an unlimited usage domestic calling plan. SMBs may also choose metered extension plans under which they are charged per-minute usage for both domestic and international calls. This plan is primarily used by customers with temporary or seasonal workers to save resources where phones are not heavily used during the workday.



Our standard features include: Admin Portal, Call Announce, Call Continuity, Call Screening, Call Waiting, Caller ID, Directory Assistance (411), Dynamic Caller ID, Emergency Assistance (911), Do Not Disturb, Multiple Devices on One Extension, Set Caller ID, Seven-Digit Dialing, Voicemail, Call Continuity, Work From Anywhere, Cell Phone Integration, Vonage Business Mobile, Never Miss a Call, Web Portal Interface, and Call Pass.

In addition to our standard functionality we have a number of add-on services for an additional monthly fee, including: Paperless Fax, Call Group, Call Queue, Conference Bridge, Main Company Number, Toll Free Number, Local or Geographic Number, Voicemail Transcription, On-Demand or Company Call Recording Service, Call Monitoring Services with Listen, Whisper and Barge, and Paging Groups.

All of our Vonage Essentials offerings allow free access to our mobile application. The mobile application allows users to choose WiFi, 3G and 4G and the extended features provide caller ID as if the user were calling from their office. 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. A virtual extension is an additional dedicated direct dial number forwarded to the employee's mobile phone number, allowing employees to be reached from anywhere.

Vonage Premier. Vonage Premier 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, nation-wide, 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 T1, NxT1, EoC and Fiber and bandwidth ranging from 1.5Mbps to 1Gbps. Services we deliver include Wide Area Networking (WAN), Internet Access, MPLS VPN, Managed Firewall, Hosted UCaaS, Hosted Video Conferencing, Web Collaboration, Secure Instant Messaging & Presence, Mobility and Fixed Mobile Convergence, and Hosted Contact Center.

Vonage Premier services include advanced 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 Session Initiation Protocol (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 Premier customers also have the ability to utilize our gUnify middleware layer to integrate communications with the core, Software-as-a-Service (SaaS)-based business applications that companies use as part of their every-day workflow, such as Google for Work, Salesforce, Zendesk, and others.

Vonage Premier 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.

## Table of Contents

### Consumer Services

Our home telephone replacement 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 have two primary consumer services offerings: Vonage World and Vonage North America. For a flat monthly fee, Vonage World customer plans include unlimited domestic calling (U.S., Canada, and Puerto Rico) and unlimited calling to landline phones in more than 60 countries, including India, Mexico, and China, and unlimited calling to mobile phones in certain of those countries. The Vonage North America plan includes unlimited calling across the U.S., Canada, Mexico and Puerto Rico. Each of our consumer services 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 in-bound 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.

Our mobile services include enhancements to our consumer services calling plans as well as mobile applications that can be initially downloaded for iPhone ® , iPad ® , iPod touch ® , and Android ® OS devices for free.

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. In order to access our SMB services, a customer need only connect through a VoIP-enabled telephone. 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 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 Premier customers, our UCaaS services are delivered over the Company’s private, nation-wide, fully redundant, secure IP MPLS network under multi-year contracts to provide the high level of interconnection quality and the ability to offer service level agreements (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. In 2015, we consolidated certain interconnection points, increasing efficiencies. 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. In 2015, we continued to enhance our call routing platform, increasing

our control over call routing which lowered costs and improved call quality.

Because Vonage's system is 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.

The following are also important in supporting our network operations:

- Network Operations Center. We currently maintain a network operations center at our headquarters with monitoring redundancies at several points within our network. The network operations center monitors and manages the status and health of our network elements, allowing us to manage our network in real time, respond to alert notifications, and re-route network traffic as needed. We pursue a multi-faceted approach to managing our network to ensure high call quality and reliable communications services to our customers. For business services customers, we have operational centers on-site to monitor and manage network access traffic. We may consolidate these network operations centers in the future if greater efficiencies can be obtained.

- Back Office Systems. In addition to our network management systems, we have developed a number of software systems that enable us to manage our network and service offerings more efficiently and effectively. Key aspects of these systems include:

- Network Quality Metrics. We have implemented a suite of advanced Big Data analysis tools that allow us to monitor and troubleshoot the performance of our calling and data network, customer premises equipment, and other associated calling elements in near real-time. This suite is proprietary and was developed specifically to address the needs that Vonage has in monitoring, analyzing, understanding, troubleshooting, maintaining, and operating a world-class consumer VoIP platform.

- Web Portal. We provide a fully functional customer Web portal that allows our customers to configure and manage almost all aspects of their service on the Internet without requiring intervention of a customer-care representative. The portal permits customers to add and change features and phone numbers, update billing information, and access call usage and billing details.

- Emergency Calling Service and Enhanced 911 Service. We have deployed E-911 service to approximately 99.99% of our U.S. consumer and small and home office customer base that is comparable to the emergency calling services provided to customers of traditional wireline telephone companies in the same area. Our E-911 service does not support the calls of our soft phone software users. The emergency calls of our soft phone software users are supported by a national call center. Not all Vonage products require 911 service capabilities, such as our mobile client products but we are fully compliant with FCC E911 requirements for VOIP Interconnected providers. To enable us to effectively deploy and provide our E-911 service, we maintain an agreement with a provider that assists us in delivering emergency calls to an emergency service dispatcher at the public safety answering point, or PSAP, in the area of the customer's registered location and terminating E-911 calls. We also contract for the national call center that operates 24 hours a day, seven days a week to receive certain emergency calls and for the maintenance of PSAP databases for the purpose of deploying and operating E-911 services. The databases include contact, technical infrastructure, boundary, and routing information for delivery of calls to a PSAP or emergency service providers in the United States.

## Table of Contents

- Local Number Portability. Our system allows our telephone replacement customers to port telephone numbers, which allows new customers to retain their existing telephone numbers when subscribing to our services. We rely on agreements with two service providers to facilitate the transfer of customer telephone numbers. In addition, we have engaged a provider that performs the third party verification of pertinent local number portability information from our subscribers prior to porting a customer from a local telephone company to us.
- Security. We have developed a service architecture and platform that uses industry-standard security techniques and allows us to remotely manage customer devices. Any Vonage-enabled device used by our customers can be securely managed by us, and these devices use authentication mechanisms to identify themselves to our service in order to place and receive calls. We regularly update our protocols and systems to protect against unauthorized access. As discussed in "Item 1A Risk Factors", security breaches and other cybersecurity or technological risks could compromise our information, systems and network and expose us to liability, which could have a material adverse effect on our business, financial condition, and operating results.
- Internet Protocol (IP) Addresses. Every machine on the Internet has a unique identifying number called an Internet Protocol address or IP address. Though there has been recent publicity surrounding the exhaustion of IP addresses under the current Internet Protocol version, we have procured a supply of addresses that we believe will cover our needs for the foreseeable future.

## MARKETING

Our marketing objective is to grow subscriber lines and seats by cost-effectively acquiring and retaining customers. We employ an integrated multi-channel approach to marketing, whereby we evaluate and focus our efforts on efficient marketing vehicles to accomplish our goals. To do this, we make use of both broad-reaching and highly-targeted media channels in the general market and for specific international long distance markets, including television, direct mail, online, alternative media, telemarketing, partner marketing, and customer referral programs. We regularly evaluate the cost per acquisition by media vehicle and reallocate budgets to identify more effective media mixes. For our business customers our primary marketing activities include: search engine marketing and advertising, user conferences and launch events, trade shows and industry events, use of social network solutions such as LinkedIn and YouTube, and field marketing events.

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 UCaaS 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.

## SALES AND DISTRIBUTION

### Inside Sales

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 Essentials and Premier services at our websites,

including <https://business.vonage.com/>, <http://www.vonagebusiness.com>, and <https://enterprise.vonage.com>, or through toll free numbers including 1-877-862-2562 and 1- 855-593-7326.

### Field Sales

We utilize our team of over 145 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 UCaaS business services. These field sales agents utilize a consistent, automated, highly-structured sales process to effectively educate prospective customers regarding our UCaaS services. We have developed a scalable model applicable to both existing and new markets. We

now have sales offices throughout the United States,.

#### 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 UCaaS business services, which helps to broaden our sales distribution. In 2015, 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.

#### Enterprise Sales

In order to continue to expand in the Enterprise segment, which we define as businesses larger than 1,000 seats, in 2015 we implemented our enterprise sales organization to directly address this growing market, as it increasingly shifts to UCaaS products and services. We are uniquely positioned to provide high quality UCaaS 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 (POPs) across the country and our own team of service delivery project managers using our proprietary provisioning tool Zeus.

We now have an experienced, skilled, team to focus exclusively on addressing this growing segment of the UCaaS market.

#### Retail Sales

In addition to our inside sales channel, we also offer our consumer services through our retail channel. In 2015, as part of our continued efforts to lowering customer acquisition costs, we shifted our retail strategy to a grab-and-go strategy within large retailers to better leverage the strength of the Vonage brand. We believe that the availability of our services through premier retailers, with well-located shelf placement increases our ability to acquire mainstream consumers by reaching them in a familiar and interactive shopping environment. National and regional retailers provide Vonage with a wide footprint to distribute our service. Concurrently, we have also reduced our use of the assisted-selling face-to-face channel, which had a higher customer acquisition cost.

#### Customer Support

**Consumer Services.** We offer our customers support 24 hours a day, seven days a week through both our comprehensive online account management website and our toll free number. Many customers use our self-service website when they have a question or problem with their service and are able to resolve their concerns online without needing to speak to a customer care representative. Our customers can manage almost all aspects of their accounts online. This capability empowers our customers through self-service and reduces our customer care expenses. Customers who cannot or do not wish to resolve their questions through our website may contact a customer care representative through our toll free number. We staff our customer care organization through a combination of our own employees and outsourced customer care representatives. All new customer care representatives are trained through an established program developed by Vonage. We also have a separate team that provides advanced

## Table of Contents

technical support for resolving customers' complex issues. We use extensive monitoring of call quality and customer satisfaction scores to determine additional training or coaching requirements for individual associates and to drive continuous improvement in our processes, policies, and technology. We offer support in English, Spanish, Tagalog and French Canadian.

**Small and Medium Businesses.** We have specialized teams of customer care representatives to work with customers in every stage of their life cycle, including porting specialists to transfer (port) existing phone numbers, an order entry team to help customers bring their new phone system online, as well as billing and product specialists. Customers can also utilize our extensive online support resources, complete with cataloged feature descriptions, how-to videos and other key resources to help them enable the many system features.

Additionally, our representatives have ready access to a full support team - from technical support pros and billing specialists, to engineers and product experts.

**Medium and Large Enterprise.** Our larger business customers benefit from a robust service delivery team comprised of team members specializing in project management, voice and data provisioning, and line number porting.

### **Billing**

All customer billing for our communication services is automated. We bill in advance for monthly recurring services and fees. We collect all fees from our customers' credit card, debit card, checks, wire transfer, ACH or electronic check payment ("ECP"). All usage related charges are billed no more than 30 days in arrears. By collecting monthly subscription fees in advance and certain other charges within the same billing cycle as they are incurred, we are able to reduce the amount of accounts receivable that we have outstanding, thus allowing us to have lower working capital requirements. Collecting in this manner also helps us mitigate bad debt exposure, which is recorded as a reduction to revenue. If a customer's payment is declined or returned we generally suspend services. Historically, in most cases, we are able to correct the problem with the customer within the current monthly billing cycle. Generally, for our consumer services, if the customer's credit card, debit card or ECP cannot be successfully processed during three billing cycles (i.e. the current and two subsequent monthly billing cycles), we terminate the account. For customers in grace or suspend status we have enabled one-time cash payments through an arrangement with MoneyGram.

Generally, for our Essentials customers, we will make several attempts to collect payment. If after approximately, fifteen days we have not successfully collected the balance due, the customer's account services are suspended. If after 30 days the account is still in a suspended status, the account is cancelled. Generally, for our Premier customers, if after 60 days we have not successfully collected the balance due, the customer's account services are suspended. If after 7 additional days the account is still in a suspended status, the account is cancelled.

### **INTELLECTUAL PROPERTY**

We believe that our technological position depends primarily on the experience, technical expertise, and creative ability of our employees. 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 file patent applications as necessary to protect our technology in the United States and internationally. Our company policies require our employees to assign their intellectual property rights to us and to treat proprietary know-how and materials as our confidential information.

In addition to developing technology and intellectual property, we evaluate for potential licensing and acquisition technology and intellectual property of third parties to identify opportunities that may provide us with a strategic or commercial advantage in exchange for royalties or other consideration. As a result of these efforts, we have

acquired multiple U.S. and foreign patents, and obtained licenses to numerous other patents. From time to time we receive letters from third parties inviting us to obtain patent licenses that might be relevant to our business. From time to time, we also have become involved in litigation alleging that our products or services infringe on third party patents or other intellectual property rights. See "Item 3. - Legal Proceedings-IP Matters."

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. Examples of our registered marks include Vonage®, Vonage

Mobile®, and Vonage Extensions®.

We endeavor to protect our internally developed systems and technologies and maintain our trademarks and service marks. Typically, we enter into confidentiality agreements with our employees, consultants, customers, and vendors in an effort to control access to and distribution of our technology, software, documentation, and other information.

#### COMPETITION

We face continued strong competition from traditional telephone companies, cable companies, wireless companies, and alternative communication 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 and mobile integration.

##### Traditional telephone and cable companies

The traditional telephone and cable companies are our primary competitors for our broadband telephone services. Traditional telephone companies in particular have historically dominated their regional markets. These competitors include AT&T, Verizon and CenturyLink, as well as rural incumbents such as Frontier Communications. Cable company competitors include companies such as Cablevision, Charter Communications, Comcast Corporation, Cox Communications, and Time Warner Cable. These traditional phone and cable company competitors are substantially larger and better capitalized than we are and have the advantage of a large existing customer base. Many of these competitors are continuing to make substantial investments in delivering broadband Internet access, VoIP phone service, and cable television to their customers and they often have larger product development and marketing budgets than us. Providing home phone, Internet access, and cable television to many of our existing and potential customers may enhance their image as trusted providers of services.

The traditional phone and cable companies own networks that include a “last mile” connection to substantially all of our existing and potential domestic customers as well as the places our customers call domestically. As a result, the vast majority of the calls placed by a Vonage customer are carried over the “last mile” by a traditional phone company, and we indirectly pay access charges to these competitors for each of these calls. In contrast, traditional wireline providers do not pay us when their customers call our customers.

Cable companies and, in many cases traditional phone companies, are also aggressively using their existing customer relationships to bundle services. For example, they bundle Internet access, cable television, and home phone service with an implied price for the phone service that may be significantly below ours. In addition, such competitors may in the future require new customers or existing customers making changes to their service to purchase voice services when purchasing high speed Internet access. Certain traditional phone companies are also able to bundle wireless telephone service. Many of

Table of Contents

these competitors are able to advertise on their local access channels with no significant out-of-pocket cost and through mailings in bills with little marginal cost. They also receive advertising time as part of their relationships with television networks and are able to use this time to promote their telephone service offerings.

Traditional phone and cable companies' ownership of Internet connections to our customers could enable them to detect and interfere with the completion of our customers' calls. While we are not aware of any such occurrence, it is unclear whether current regulations would permit these companies to degrade the quality of, give low priority to or block entirely the information packets and other data we transmit over their lines. In addition, these companies may attempt to charge their customers more for using our services.

Many traditional phone and cable companies routinely send technicians to customers' premises to initiate service. Although this is expensive, it also can be more attractive to customers than installing their own router. In addition, these technicians may install an independent source of power, which can give customers assurance that their phone service will not be interrupted during power outages.

The traditional phone and cable companies have long-standing relationships with regulators, legislators, lobbyists, and the media. This can be an advantage for them because legislative, regulatory or judicial developments in our rapidly evolving industry could have a negative impact on us.

In man