

# Top 10 Reasons to Move Your Contact Center to the Cloud

Five9 White Paper

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The contact center infrastructure market is undergoing a major revolution, moving from complex, on premise, multi-vendor technology to easy to use, all in one software suites in the cloud. But is moving your contact center to the cloud right for your business? Find out more about the top 10 reasons why business like yours are moving to the cloud.

## Introduction

The contact center technology market is undergoing a sea change. Cloud contact center software has steadily gained mindshare and wallet share among IT departments, contact center executives, and CFOs. The rising tide of deployments provides ample proof points of concrete business value and encourages further adoption. Consequently, rapid growth is taking place in all segments of the contact center market. Faced with two distinct deployment options, end users are increasingly voting with their feet and shifting to the cloud.

In recent years growth has consistently outpaced expectations. Adoption began to accelerate during the heart of the Great Recession, as executives requiring a technology refresh avoided the risk of large upfront capital expenses and opted for a rented model rather than a purchase model. As the technology matured, the average deal size for cloud contact center software continued to grow, and by the end of 2012 reached 250 seats, while continuing to move upward.<sup>1</sup>

This development is not a transient trend, but rather a fundamental market transformation. According to Art Schoeller, Principal Analyst at Forrester Research, the shift is “on par with the move from analog to digital and TDM to IP.”<sup>2</sup> As we reveal later in this paper, the scale and scope of changes ushered in by the cloud alters how technology vendors create value for enterprise customers.

Cloud-based solutions provide compelling business value and are growing rapidly. But how, precisely, do we define this segment? Hosted contact center options have been available for the past 10 years, yet most cloud-based solutions currently on the market differ from these earlier offerings in that they include multitenant architectures, where a single instance of a software application services multiple customers. Each customer tenant may have the ability to customize certain parts of the application, such as business rules, but not the applications code. As we explain later in this paper, this capability allows cloud software service customers to retain control over the business while gaining flexibility and cost efficiencies. The core attributes of cloud contact center software, as defined by DMG Consulting, are:

Rented technology/application (hardware and software) solutions are delivered as shared computing resources, applications and services that are hosted at a service provider’s data center and delivered to a client organization’s computers and devices from the provider’s centralized contact center environment via a public or private network. Users pay a monthly, annual or multiyear fee to use the application. The user is responsible for managing the use of the application on an ongoing basis. Since the vendor owns and maintains the software and hardware, maintenance and software upgrades are included at no additional charge.<sup>3</sup>

It’s important to note that the most successful cloud-based solutions vendors offer more than just an alternative way to host software. In addition to delivering a product, they leverage their software capabilities to solve specific customer problems. This involves a transformation in performance where the focus becomes defining what success means for customers (in terms of metrics, service level agreements (SLAs), etc.) and making that happen. When problems get solved, departments such as sales and professional services can focus not so much on billing or upfront revenue but on concrete client business success.

<sup>1</sup> Ibid, p.4

<sup>2</sup> Art Schoeller, personal communication, March 27, 2013

<sup>3</sup> DMG Consulting, LLC, 2012-2013 Cloud Based Contact Center Infrastructure Report Market, (2013) :10

As revealed by J.B Wood, Todd Hewlin, and Thomas Lah, best-selling authors of Consumption Economics, this is a major shift in how technology vendors provide value for enterprise customers. Cloud-based software delivery involves a risk shift from customers to software vendors who now become responsible for business results, measured on an incremental basis.<sup>4</sup> This transformation in risk structure plays a role in each of the top 10 reasons for adoption, which are listed below and explained in the following section.

- 1 Reduced Upfront Costs
- 2 Shorten Startup and Integration Timelines
- 3 Access to Features and Functions
- 4 At Home Agents and Virtual Contact Centers Simplified
- 5 Unexpected Peaks and Valleys
- 6 Ease of Integration and Customization
- 7 Control in the Hands of the Business User
- 8 IT Freed Up to Focus on Strategic Matters
- 9 Security Expertise
- 10 Catch the Next Wave of Business Process Innovation

### 1 Reduced Upfront Costs

Cloud contact center software allows enterprise customers to avoid risks by dramatically reducing the up-front expenses of acquiring a solution. By renting on a monthly, yearly, or annual basis, users avoid the large capital investments of a premise-based solution, along with the associated risk of not recouping these costs. Cloud solutions involve no capital expenditure of equipment and software and are paid for out of OPEX rather than CAPEX budgets. A further component is the absence of hidden costs, those not contained in a technology vendor agreement but required to set up and maintain a premise-based solution. For contact center solutions these include: Data center, real estate, power, database administration, IT resources, etc. All of these add significantly to the total price tag of a solution.

Under the premise-based model, enterprise customers sign a contract worth perhaps millions of dollars. One portion of this investment goes towards up-front capital investment expenditures, while another portion goes towards the professional services required to make the solution perform as promised. Yet, as illustrated in Consumption Economics, customers have no guarantee of achieving the business results they desire, or even that the solution will function as expected. In fact, only 14% of enterprise software deployments are rated as “very successful” by IT, so the risks can be significant.<sup>5</sup> By contrast, cloud-based contact centers operate on a consumption-based pricing model. After paying a modest initial fee, the customer pays only for the features they use, on a monthly subscription or transactional basis, and continues to pay as long as they are satisfied with applications performance and business results.

Without up-front sunken costs, contact-center executives find the decision to move to the cloud highly attractive. Absent vendor lock in, users are able to try out new features, functions, capabilities, and indeed entire solutions, with minimal risk.

### 2 Shorten Startup and Integration Timelines

While premise-based solutions often require months to deploy, cloud-based solutions can be deployed in as little as one day, and at most a few weeks. This model dramatically reduces risks for contact center executives. Rather than requiring customers to pay for implementation, integration, and maintenance upfront with the hope and expectation that the solution will perform as promised, cloud providers offer services built into software provisioning. In effect, it looks more like the outsourcing industry than the current premise-based enterprise software model.<sup>6</sup> Users are even able to “test drive” cloud contact center software in a free trial period in order to determine if the solution fits their needs.

<sup>4</sup> JB Wood, Todd Hewlin, and Thomas Lah, Consumption Economics: The New Rules of Tech

<sup>5</sup> Ibid

<sup>6</sup> Ibid

All these points provide a compelling incentive for contact-center executives to upgrade their aging infrastructure. But executives often choose to sweat out their aging assets, rather than risk a lengthy implementation and associated downtime in handling customer interactions. In so doing, they lose out on the advantages of newer technologies. With cloud-based solutions, enterprise customers are able to get the technology up and running quickly and reap business benefits. This replacement cycle, coupled with rapid deployment, is a strong incentive for cloud adoption.

### 3 Access to Features and Functions

In the past 18 months, providers have attained near parity with premise-based solutions, and now offer a wide array of features and functions at a fixed monthly price. These include core infrastructure (queuing, routing, and reporting) as well as productivity-enhancing applications (such as Workforce Optimization (WFO), advanced Integrated Voice Response (IVR), and outbound dialers and integration capabilities to third-party software. Access to these deep and broad applications at an affordable price is a key driver of adoption. Additionally, because cloud-based suites can easily be “right sized” to fit the needs and budget of any size contact center, they are attractive across a wide spectrum of the market.

For smaller contact centers, cloud software options are enabling access to efficiency enhancing applications that were previously only feasible for larger organizations. For example, applications such as quality monitoring and workforce management are proving key incentives to cloud adoption, since these offer compelling business benefits, but can be complex to implement.

The increasingly broad and deep array of applications available are also compelling drivers of adoption for larger contact centers with complex and sophisticated technology needs. Recently, analyst house Ovum conducted an ROI analysis for cloud-based contact centers across various size bands, and found that the wider the range of features and complexity a large contact center requires, the more compelling the ROI for a cloud approach.<sup>7</sup> With each new capability released, cloud contact center software becomes more attractive to this segment of the market.

Across all size bands, a cloud based approach makes it more likely that customers use the features they've purchased. Because enterprise customers pay only for what they consume, vendors have a compelling incentive to ensure users gain maximum value from their software.<sup>8</sup> And since most cloud solution vendors use the Agile development method, based upon short-sprint development cycles in response to specific user feedback, features are tailored to customer needs. Finally, since cloud based solutions offer automatic upgrades multiple times a year, users can be assured they are always on the latest version.

### 4 At-Home Agents and Virtual Contact Centers Simplified

Demand for solutions supporting virtual contact centers and at-home agents has been steadily increasing for the past 10 years, and shows no signs of abating. A virtual contact center can be defined as network and agent resources located at multiple physical sites which perform as if all resources were located at a single site. Of contact centers operating in the United States today, 53% have some percentage of their agent population functioning from a home office. More than 70% of those currently supporting at-home agents plan on increasing the number of their at-home agents in 2013.<sup>9</sup> Supporting work-at-home agents delivers multiple benefits, including expanding the pool of qualified agents and allowing access to highly skilled employees.

Setting up at-home or branch offices also allows contact centers to incorporate qualified knowledge workers regardless of their geographic location. This supports improved customer service while reducing costs. Most companies which have started work-at-home agent programs find that their agents greatly prefer the flexibility, and will actually chose less costly payment packages to be able to work from home. Ultimately, agent costs can be reduced by 10-15%, while a variety of case studies have found that agent retention improves by as much as 30%.

7 Keith Dawson, The Total Cost of Ownership of Cloud and Premise Based Contact Center Systems, A Five Year Cost Comparison for the Deployment of Contact Center Technology Infrastructure, Ovum Research, January 21, 2013

8 J.B Wood, Todd Hewlin, and Thomas Lah, Consumption Economics, The New Rules of Technology, 2011

9 Source: National Association of Call Centers, Statistic cited in Amanda Marsh, 40 Stats Shaping the Future of Contact Centers, <http://blog.vpicorp.com/blog/performance-optimization-2/40-stats-shaping-the-future-of-contact-centers> accessed, March 22, 2013

While virtual contact centers have been available through premise-based solutions for many years, the solutions are costly and complex to set up and administer via this method, as it requires that the core infrastructure technology reside at a single location and be extended via a data network or SIP trunk. By contrast, a cloud based solution is truly virtual — no (or little) incremental network costs and application expertise are required to set up a single routing logic over multiple geographic locations, and agents are able to log in from anywhere. All agents need is an internet connection, a computer, and a headset.

These advantages make adopting a cloud-based solution not only compelling but almost irresistible for organizations with the need to support remote sites and at-home agents. Industries such as business process outsourcing (BPO), which require access to qualified and cost-effective labor in order to operate profitably, have moved to the cloud on a massive scale. The same applies to industries requiring specialized labor such as technical support, financial services, and insurance claims processing.

## 5 Unexpected Peaks and Valleys

Contact centers can experience intraday and seasonal peaks and valleys in interaction handling beyond the capacity for purchasing additional premise-based licenses. For example, the BPO, retail, sports-promotions, and tax-preparation industries all experience fluctuations according to client needs. Because these industries require the ability to rapidly scale contact-center infrastructure capacity with demand, they have moved massively to the cloud. With a premise-based solution, adding capacity to handle demand fluctuations is costly and time intensive. What's more, incurring delays and large costs can generate business failure. Cloud software delivery avoids all of these pitfalls while delivering the benefit of not being required to purchase extra capacity, which is often wasted outside of peak demand periods.

Natural disasters provide some of the most vivid examples of cloud contact center software making the difference between service success and failure. For example, when Hurricane Sandy struck, New Jersey 2-1-1 was flooded with nearly 90,000 calls for assistance with information regarding shelter, food assistance, and affordable housing during the storm.

Having a cloud contact center solution in place made all the difference. First, the storm knocked out the T-1 for 3 weeks, therefore calls would not have been possible to take had NJ 2-1-1 not adopted a virtual contact center via Five9 the year before. In fact, the Five9 system performed flawlessly. On the second day of the hurricane, NJ 2-1-1 decided to dispatch 30 percent of inbound calls to Palm Beach 2-1-1 in Florida, then increase or decrease the flow as needed. In the following days, it also routed calls to Vermont 2-1-1, a second NJ 2-1-1 center, and the 2-1-1 service in Houston.

To meet demand, additional software licenses and phone lines were also needed. The contact center manager was able to call Five9 and add the additional capacity within hours. With the previous premise-based technology, acquiring this capacity could have taken weeks.<sup>10</sup> Success stories such as this are motivating an ever growing number of contact centers to move to the cloud.

## 6 Ease of Integration and Customization

In the initial years of the cloud contact center software market integration and customization, capabilities were limited, and this served as an inhibitor to adoption. In the past two to three years, this capability has improved dramatically, as cloud-based solutions are installed in larger and more complex environments and vendors now support integration with third-party and client applications. Additionally, integration to cloud-based Customer Relationship Management (CRM) applications such as Salesforce.com and Netsuite is commonplace for vendors in the segment. Currently, cloud contact center software vendors offer standards based Application Programming Interfaces (APIs) and robust web-based interfaces, which make it simpler to integrate with third-party applications than via a premise-based solution, which may have a complex Computer Telephony Integration (CTI) interface.

<sup>10</sup> Mae Kowalke, Five9's Virtual Contact Center Saves the Day in NJ During Hurricane Sandy, TMC Net. <http://cloud-based-contact-center.tmcnet.com/articles/320674>, Retrieved March 22, 2013

## 7 Control in the Hands of the Business User

A common myth about cloud-based services is that users give up control of their operations in favor of the technology vendor. This is not the case. Cloud-based contact center services were designed with the business user in mind, in sharp contrast to premise-based solutions where IT was the initial target user, with the needs of functional business managers being added on after years of trial and error.

The model for successful cloud-based vendors is Salesforce.com, where the software offered proved so attractive to business users they request the Software as a Service (SaaS) contract be initiated and continuously renewed. This has shaped the way vendors in the space design interfaces. Cloud-based contact center solutions allow functional managers the ability to administer across different product modules. Hence, they are able to set up and alter IVR, call flows, and routing strategies without turning to IT, as is often the case with premise-based solutions. These self-service capabilities allow contact center managers the ability to more precisely monitor the business.

## 8 IT Freed Up to Focus on Strategic Matters

Another common misconception about moving to the cloud is that IT will resist it, since the shift may put their jobs in jeopardy. Yet this assumption is also proving to be a myth. As with most new technologies, cloud computing doesn't promote a destruction of IT jobs, but rather a change in their nature. According to a survey conducted by CA Technology involving 685 CIOs, a 54% majority responded that cloud computing is allowing them to spend more time on business strategy and innovation.<sup>11</sup> Cloud-based contact center vendors report that their IT department customers find that moving to the cloud allows them to focus on how to support business goal instead of monitoring the infrastructure.

Freeing IT managers up from routine system maintenance allows them to focus on strategic issues, and this, in turn, elevates the role of IT. According to the CA study, "Approximately 71% who have adopted cloud computing see their position as a viable path to pursue other management roles, compared to only 44% of non-cloud adopting CIOs."<sup>12</sup> The end result is a tighter partnership between business and IT. IT executives are able to show their more business-savvy side while business executives are becoming more tech savvy. Plus, functional managers are empowered to handle day-to-day contact center operations.

## 9 Security Expertise

Some have expressed concerns that cloud-based solutions offer less security for sensitive customer data, such as credit card numbers, call recordings, financial records, and health care data. While security breaches in the public cloud have received ample media attention, the truth of the matter is customer data is not 100% safe on an enterprise premise either. In fact, there is significant evidence that it is actually safer to retain data with a cloud vendor since they specialize in providing security and are able to devote significant resources to the goal.

A cloud-based software service has executives specifically focused on monitoring security, and has trained its staff in security protocols and best practices. This allows cloud-based software providers to offer security skills beyond what any single end user, save all but the largest and most resource rich companies can possess. The results are impressive. In fact, "57% of cloud computing users feel that it actually increased their security when compared to traditional methods for computing and data backup."<sup>13</sup> For an increasingly large portion of the market, security serves as a driver, not an inhibitor.

<sup>11</sup> Joe McKendrick, "The Future Role of the CIO, Becoming the Boss," CA Technologies, October 2011, cited in, Forbes.com: Cloud Computing Ticket to the Corner Office? Retrieved March 22, 2013

<sup>12</sup> Ibid

<sup>13</sup> Source: Mimecast: Statistic cited in Amanda Marsh, "40 Stats Shaping the Future of Contact Centers," VPI Corp. Tuesday, March 5, 2013 <http://blog.vpi-corp.com/blog/performance-optimization-2/40-stats-shaping-the-future-of-contact-centers> Retrieved March 22, 2013

## 10 Catch the Next Wave of Business Process Innovation

Adoption of contact center solutions is driven by their ability to contain costs while enabling business processes that improve customer service. As stated earlier in this paper and supported by “Consumption Economics,” the cloud-based delivery model forces solutions vendors to ensure that end users make use of their software capabilities to the fullest and gain maximum business benefits. With cloud software the vendor assumes responsibility for business results, measured on an incremental basis. As a result, vendors must service customers and provide ongoing support as well as partnership in addressing business process problems.<sup>14</sup> Failure to do this means an immediate loss in revenue.

These incentives alter the current suboptimal situation where (in what is known as a “dirty little secret of the market,”) only 54% of the capabilities of an enterprise software application are used on average.<sup>15</sup> The trend toward using the full capabilities of software solutions is enabling the next wave of business process innovation, and this advantage is widely available to those who shift to the cloud.

The passage to the cloud is now well underway. As mentioned at the outset of this paper, cloud contact center software is growing in the high double digits, while adoption of premise-based solutions is declining. Improved business processes resulting from the cloud-based business model contribute to superior customer interactions that create brand advocates. End users that have moved to the cloud are already reaping the benefits of cost containment and improved customer satisfaction, which in turn drives customer loyalty and higher revenues. As cloud contact center software enters the phase of early mainstream adoption, those enterprises that make the shift will gain competitive advantage, while those that hesitate will lose ground.

<sup>14</sup> Todd Hewlin, *Consumption Economics*, Keynote, Technology Services Industry Association, uploaded October 25, 2011, accessed March 22, 2013

<sup>15</sup> J.B Wood, Todd Hewlin and Thomas Lah , *Consumption Economics, The New Rules of Tech*, 2011

### About Five9

Five9 is the leading provider of cloud contact center solutions, bringing the power of the cloud to more than 1,800 customers worldwide and facilitating more than three billion customer interactions annually. Since 2001, Five9 has pioneered the cloud delivery model, helping contact centers of every size transition from premise-based solutions to the cloud. With unparalleled expertise, technology, and ecosystem of partners, Five9 helps businesses take advantage of a secure, reliable, scalable cloud contact center solution to create exceptional customer experiences, increase productivity and boost revenue. For more information visit [www.five9.com](http://www.five9.com).



# **The Hidden ROI of a Cloud-based Contact Center**

January 2013

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January 2013

## The Hidden ROI of a Cloud-based Contact Center

Between March and July of 2012, Aberdeen surveyed 487 contact center executives to determine key trends and best practices that impact the customer care executives' agenda in 2012. One of these trends is the deployment of cloud-based infrastructure used to host contact center activities. Findings revealed that 34% of businesses currently use a cloud-based contact center (see sidebar). An additional 28% of organizations indicated plans to deploy a similar infrastructure within the next 12 months — indicating that six out of 10 contact centers plan to have cloud-based deployment by the end of 2013.

Subsequent to the study noted above, in December 2012 Aberdeen surveyed 101 contact center executives regarding their contact center infrastructure and 2013 plans. This Aberdeen Analyst Insight utilizes the results from this survey to demonstrate the top factors driving businesses to invest in a cloud-based contact center as well as the post-deployment benefits they gained through improved scalability. Additional findings included within this report show that cloud-based contact centers are more likely than traditional internal contact centers to deploy business activities and technologies that help them realize quantifiable results while improving overall customer experience.

### Customer Satisfaction is the Real Source of ROI

Aberdeen's June 2011 *The Business Value of a Cloud-based Contact Center* study revealed that 64% of organizations investing in a cloud-based contact center infrastructure were driven by the need to address rapidly changing customer demand by making optimal use of their existing resources (i.e. agents). Table 1 below highlights the value of a cloud-based deployment in helping customer care executives accomplish this objective. Research shows that cloud-based contact centers enjoy **27% lower annual costs** (\$112.5 million vs. \$155.0 million) associated with customer turnover, compared to their peers.

**Table 1: Better Customer Experience = Better Results**

Data Summary (in \$ thousands)	Cloud-based Contact Centers	Traditional Internal Contact Centers
Annual Cost of Customer Turnover	\$112,500	\$155,000

### Analyst Insight

Aberdeen's Insights provide the analyst's perspective on the research as drawn from an aggregated view of research surveys, interviews, and data analysis

### Definition

For the purposes of this study, Aberdeen defines "**Cloud-based Contact Center**" as a deployment model that allows businesses to host their contact center in a remote, third-party's data center. The host, rather than the business, handles activities such as maintenance, data backup, and hardware and software upgrade.

### Survey Demographics

The average size of contact centers participating within this study is 252 seats. As such, the ROI findings presented within this research report are representative of the cost structure of mid-size to large contact centers. While the research findings are applicable to all contact centers, it's important to note that cost figures will vary based on contact center size.

Data Summary (in \$ thousands)	Cloud-based Contact Centers	Traditional Internal Contact Centers
Annual IT Staff Costs related to Contact Center Activities	\$503	\$259

Source: Aberdeen Group, December 2012

In order to determine the annual cost of customer turnover, Aberdeen used a mix of key variables that impact customer turnover within a contact center. Findings from the November 2012 [\*Multi-Channel Contact Center: Delight Customers where they Live\*](#) study shows that an average contact center receives approximately 2.5 million customer contacts each year. This number has been used in conjunction with the average customer contact abandonment rate for both cloud-based contact centers and their peers (4.5% vs. 6.2% respectively). Assuming that one out of 10 unaddressed customer contacts result in customer turnover and each lost customer costs \$10,000 for the business, this equation (2.5 million times 4% times 1/10 times \$10,000 equals \$112.5 million — for Cloud-based Contact Centers) indicates that the value of addressing customer traffic in a timely manner (and reducing abandonment rates) helps cloud-based contact centers deliver quantifiable ROI.

Interestingly enough, contrary to their cost advantage driven by better customer experience — cloud-based contact centers incurred greater IT staff costs compared to traditional deployment models. Survey results indicate that these businesses require twice as many (14 vs. 7) dedicated IT staff to manage their contact center activities, compared to others. Average call volume in both categories is similar. Upon further analysis and direct end-user interviews, research shows that **cloud-based contact centers are far more likely to implement and monitor crucial processes and technologies that drive improved performance, compared to their peers**. This focus on utilizing differentiating business processes and technologies means that cloud-based contact centers require more IT staff time in order to successfully implement and support the activities that are further illustrated within the "Key Differentiators" section of this paper. The source for greater IT staff costs incurred by cloud-based contact centers is thus associated with these building blocks.

It's important to note that, while IT support in establishing and / or managing mission-critical activities results in greater IT staff costs for cloud-based contact centers, it helps these businesses enjoy **36% less time (2.4 hours vs. 3.7 hours) in contact center activity interruption**, compared to other companies. By reducing contact center downtime, businesses reduce unaddressed customer inquiries that can result in abandoned contacts (i.e. calls) and lost clients. The delta between the cost of customer churn incurred by cloud-based contact centers versus traditional internal contact centers as well as the difference in IT staff costs validates the value of investing in top-notch processes that help companies deliver quantifiable results (see Table I above).

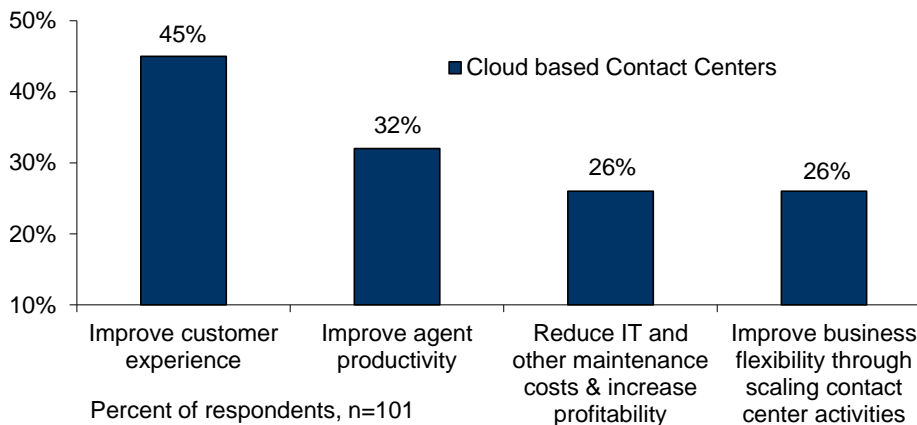
#### Fast Fact

Thirty-one percent (31%) of cloud-based contact centers update their disaster recovery plan at least on a quarterly basis, compared to 15% of other contact centers.

## Business Context

Findings in Figure 1 affirm that delivering customer delight outweighs other key objectives such as increased agent productivity and reduced IT costs when it comes to why contact centers invest in a cloud-based infrastructure.

**Figure 1: Customer Experience Drives Cloud-based Deployments**



Source: Aberdeen Group, December 2012

This focus on improving overall customer experience results also puts the ROI calculations in Table 1 into context. One of the primary advantages of a cloud-based contact center is the ability to scale computing resources up and down as needed (see sidebar). Aberdeen's June 2012 [\*Workforce Management in the Contact Center: Optimizing Agent Scheduling and Productivity to Improve Customer Experience Results\*](#) study shows that unpredictable customer traffic is the top challenge impacting how contact centers utilize their existing resources to address customer needs. Scalability helps companies address this challenge by providing adequate computing resources required to operate contact centers at different traffic volumes. As a result of this greater availability, contact centers can address a larger portion of customer contacts, which helps them reduce abandonment rates and ultimately drive down the cost of customer churn tied to unaddressed customer needs. Such **reduction in cost of customer churn is the "hidden ROI" associated with scalability benefits cloud-based contact centers provide to organizations.**

Despite the clear benefits of a cloud-based contact center, the results noted above are not solely accomplished by deploying a cloud-based infrastructure overnight. As noted above, cloud-based contact centers are more likely than their traditional internal contact center counterparts to deploy a series of business activities and technologies that help them accomplish the results illustrated in Table 2 below.

"Deploying a cloud-based contact center infrastructure helped our business improve agent staffing and productivity through better aligning customer needs with our contact center workforce management activities."

~ CEO of a U.S.-based Company with a Mid-size Contact Center

### Definition: Scalability

Scaling allows allocating more servers and storage devices to support a hosted contact center during peak demand. As demand drops, these increased resources are removed and the contact center no longer has to pay for them — a key advantage of cloud-based

**Table 2: Better Performing Contact Centers are more Likely to be Deployed on the Cloud**

	Average Performance
<b>Cloud-based Contact Center Users</b>	<ul style="list-style-type: none"> <li>▪ 51% first contact resolution rate</li> <li>▪ 13.1% average year-over-year improvement in annual company revenue</li> <li>▪ 3.2% average year-over-year improvement (decrease) in non-compliance frequency</li> </ul>
<b>Traditional Internal Contact Center</b>	<ul style="list-style-type: none"> <li>▪ 30% first contact resolution rate</li> <li>▪ 4.0% average year-over-year improvement in annual company revenue</li> <li>▪ 1.2% average year-over-year worsening (<u>increase</u>) in non-compliance frequency</li> </ul>

Source: Aberdeen Group, December 2012

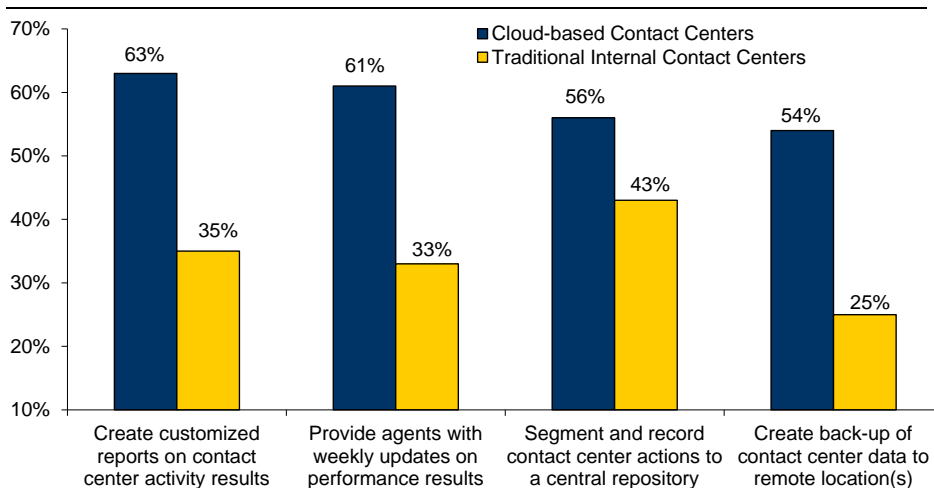
The next section highlights the key "steps to success" that are more widely adopted by cloud-based contact centers, compared to traditional internal contact centers.

## Key Differentiators

### Business Activities

Figure 2 below demonstrates the key business activities cloud-based contact centers deploy in order to differentiate from their peers.

**Figure 2: Performance Measurement is Critical**



Percent of respondents, n=101

Source: Aberdeen Group, December 2012

"One of the key activities we use to support our [cloud-based] contact center activities is facilitating access to information. Agents and supervisors can access crucial information needed to perform their jobs better on a timely basis. This results in improved customer experience results and enhanced loyalty by our clients."

~ President of an International Education Company with a Mid-size Contact Center

Aberdeen's July 2012 [Contact Center Analytics: How the Best-in-Class Reduce Operational Costs through Contact Center Data](#) study shows that Best-in-Class

contact centers are 92% more likely to have the ability to **generate customized reports** on their activity results, compared to Laggard businesses (see sidebar). The ability to generate tailored reports that provide granular insights on specific activity results helps companies determine the sources of inefficiencies as well as other general trends that impact their contact center activities. Cloud-based contact centers are 80% more likely (63% vs. 35%) than traditional internal contact centers to deploy this process. This activity helps them analyze historical and recent customer traffic information to determine patterns that influence customer traffic across numerous channels as well as predict future agent demand — a capability that's critical in helping companies scale up and down based on variable agent demand.

In addition to forecasting future agent demand, customized reports on activity results also help companies track and measure agent performance results. Organizations with this process can customize these reports by the specific measures (e.g. first contact resolution and average handle time) they use to **assess agent performance and provide agents with visibility into their performance for coaching and training purposes**. To this point, cloud-based contact centers are 30% more likely (56% vs. 43%) than their peers to **store activity information and analysis within a centralized repository**. This allows them the ability to plan their future activities (i.e. agent scheduling) by utilizing the wealth of information stored within this database. Business intelligence tools are a critical enabler helping companies effectively analyze this information.

As noted above, despite incurring greater IT staff costs, cloud-based contact centers enjoy 36% less downtime and as a result, greater customer responsiveness. The primary source of this advantage is their laser-focus on ensuring security and business continuity. Indeed, data indicates that cloud-based contact centers are far more likely (54% vs. 25%) to have a formal process to **regularly back-up contact center data to remote locations**, compared to other businesses (see sidebar). Research shows that 50% of cloud-based contact center users prefer a hybrid model where they integrate their internal customer databases with their cloud-based contact center infrastructure to back-up information within company systems. Considering the sensitivity of customer data security in industries such as financial services, insurance, and healthcare, this provides another alternative to these firms in managing their information security.

## Technology Enablers

Figure 3 below illustrates the crucial technology tools that cloud-based contact centers are far more likely to utilize to outperform traditional internal contact centers in order to achieve the results noted thus far.

### Maturity Class Definitions

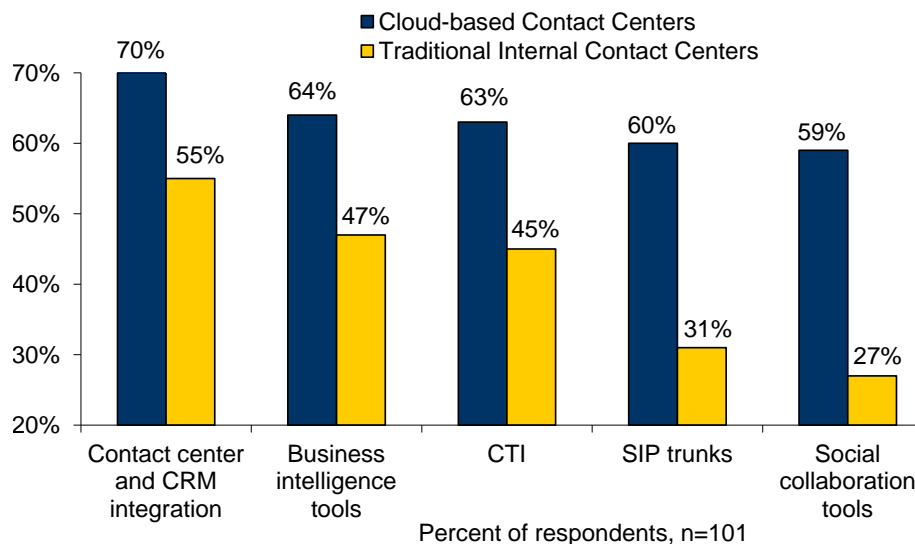
The following Key Performance Indicators (KPIs) were used to determine the Best-in-Class for the [Contact Center Analytics: How the Best-in-Class Reduce Operational Costs through Contact Center Data](#) report:

- ✓ First call resolution: Best-in-Class: 81% vs. Laggards: 31%
- ✓ Year-over-year improvement in agent utilization rate: Best-in-Class: 18.4% vs. Laggards: 4.3%
- ✓ Year-over-year improvement in cost per customer contact: Best-in-Class: 16.5% vs. Laggards: 1.6%

### Fast Fact

Thirty-two percent (32%) of cloud-based contact centers back-up their data at least on an hourly basis, compared to 26% of traditional internal contact centers.

**Figure 3: Technology Facilitates Better Customer Experience**



Source: Aberdeen Group, December 2012

As depicted above, contact centers that use a cloud-based infrastructure are 27% more likely (70% vs. 55%) than their peers to be integrated with the CRM system. Aberdeen's research into the 2013 Customer Care Executive's Agenda shows that only 25% of contact centers are currently satisfied with their ability to **integrate contact center with other enterprise applications (i.e. CRM)** for a unified view of customer data. This activity helps contact centers reduce this challenge and empower their agents with crucial information needed to serve customers in a timely and personalized manner.

Figure 2 highlighted that measurement is a key competency differentiating cloud-based contact centers from traditional internal contact centers.

**Business intelligence tools** help companies analyze large amounts of information to determine insights such as factors that drive increase in agent demand or inefficient processes that result in increased customer care costs. When utilized in conjunction with **computer telephony integration (CTI)**, enabling companies to incorporate their telephone and computer activities, business intelligence tools deliver enhanced reporting and personalization capabilities for contact centers.

Another technology tool that is far more widely (60% vs. 31%) adopted by cloud-based contact centers versus traditional internal contact centers is **Session Initiation Protocol (SIP) trunks**. This technology helps companies integrate multi-channel interactions (e.g. voice and video) taking place within the organization (i.e. agent-to-agent conversations) with interactions taking place with entities (i.e. customers) outside the business. One of the primary advantages of SIP trunks is added flexibility in helping contact centers address variable customer traffic through numerous channels. It also allows companies to re-route sessions (i.e. customer



interactions) through specific facilities (i.e. contact center sites) and / or equipment in issues of business continuity, enabling continuous service.

## **Key Takeaways**

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With six out of 10 contact centers projected to have a cloud-based contact center deployment by the end of 2013, it's critical for businesses to understand the real value of a cloud-based infrastructure and how to optimize their activities to achieve maximum results. Findings reveal that cloud-based contact centers indeed deliver quantifiable business results. However, companies need to adopt a broader perspective to understand its true benefits.

Cloud-based contact centers are laser-focused on implementing business processes and technologies that positively distinguish their performance compared to traditional internal contact centers. Furthermore, they successfully utilize the scalability benefits associated with a cloud-based infrastructure. Despite the challenges in predicting agent demand across numerous interaction channels, cloud-based contact centers have the ability to rapidly accommodate sudden changes in customer traffic by adding and subtracting computing resources on-demand. This flexible infrastructure helps them improve overall responsiveness to their customers' needs. Ultimately, it is this close relationship between customer responsiveness and reducing costs resulting from unaddressed client needs that is the source of hidden ROI for cloud-based contact center initiatives.

For more information on this or other research topics, please visit [www.aberdeen.com](http://www.aberdeen.com).

### Related Research

[Multi-Channel Contact Center: Delight Customers where they Live](#); November 2012

[Agent Desktop Optimization: Agents can Finally Focus on the Customer](#); October 2012

[Virtual Contact Center Agents: Break the Boundaries](#); September 2012

[Speech Analytics: Listen to your Customers](#); September 2012

[Contact Center Analytics: How the Best-in-Class Reduce Operational Costs through Contact Center Data](#); July 2012

[Workforce Management in the Contact Center: Optimizing Agent Scheduling and Productivity to Improve Customer Experience Results](#); June 2012

[Customer Experience Management: Using the Power of Analytics to Optimize Customer Delight](#); January 2012

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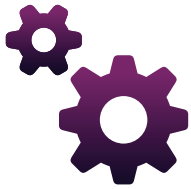
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# Inside the Five9 Cloud

## A Technical Overview of the Five9 System



To manage millions of calls every day, Five9 relies on a combination of redundant data centers, state-of-the-art server architecture, 24/7 traffic monitoring, and security measures that far exceed industry standards. The result—powerful, scalable, and secure cloud solutions that some of the biggest names in business trust to run their contact center.

### About Five9 Data Centers

- Geographically dispersed for maximum disaster preparedness
- State-of-the-art server technology
- Failover within minutes (after diagnosis)

### Networking/Connectivity Options

- Public Switched Telephone Network (PSTN)
- Voice over Internet Protocol (VoIP)
- Virtual Private Network (VPN)
- Internet Protocol Security (IPSec) tunnel
- Session Internet Protocol (SIP) trunks
- Private Connection via Ethernet, Multiprotocol Label Switching (MPLS), or Direct Connect
- Secure Realtime Transport Protocol (SRTP) encryption
- SIP gateway

### Introduction

The Five9 service runs in state-of-the-art data centers guided by a fully staffed, 24/7 network operations center and the strongest security protocols in the contact center industry.

By leveraging our cloud technology, Five9 data centers are able to handle an enormous amount of applications and information much faster and more safely than centralized, premise-based contact center systems—many of which frequently experience capacity issues and are prone to disaster.

With scalability on demand, the Five9 system eliminates the need to upgrade hardware or software or hire dedicated IT staff. The platform is safely guarded in the cloud and constantly monitored with multiple layers of protection to offer clients strong defense from disasters, large or small.

Five9 also makes it easy to get started by offering a variety of options that fit your network and connectivity needs. Whether it's working with your existing carriers or utilizing new toll-free numbers by Five9, we give you the flexibility you need to stay focused on your business.

### Five9 Data Centers

For organizations that rely on high-volume contacts, nothing is more important than uptime. For years, Five9 has relentlessly upgraded its data centers to process billions of inbound and outbound calls for some of the biggest names in the financial services, insurance, healthcare, consumer, and government services industries—companies that cannot afford interruptions in service, let alone system failure.

Five9 data centers are designed to provide contact center solutions that are available when you need them, with sophisticated architecture that is fast, secure, and infinitely scalable. Geographically dispersed on opposite US coasts, our data centers operate 24/7 and provide the architecture to support any organization's specific connectivity and application needs—including integration with third-party customer relationship management (CRM) programs, sales and marketing software, accounting tools, and more.

Five9 clients have the option of utilizing more than one data center to ensure access to its contact center operations and maintain their own redundant and failover requirements. Our fault-tolerant data centers continue operating even in the event of a partial failure, while enabling incoming and outgoing calls to be intelligently routed to a separate facility.

### Speed and Scalability

Five9 utilizes the latest server technology in its data centers from the most trusted names in cloud infrastructure and technology. By employing only proven, state-of-the-art solutions, Five9 data centers keep contact centers running smoothly and seamlessly, with no interruptions.

Five9 data centers deliver unlimited application and storage capacity. Utilizing the latest server technology, Five9 can scale its architecture rapidly on demand and nimbly shift resources in response to an outage or disaster.

Because we only run Five9 software and hardware our data centers, and because our data centers are accessible at any time of day or night with only an Internet connection, a PC, and USB headset, Five9 clients can

scale operations as quickly as necessary. Five9 gives any organization the power to create a virtual contact center on short notice from anywhere in the world, with tremendous flexibility in the number of locations and number of agents.

### Five9 Network Operations Center (NOC)

The Five9 NOC serves as the information hub of the entire Five9 platform. Enhanced in 2012 to adjust to a 24-hour, “follow the sun” strategy, our NOC provides detailed visibility into the volume and distribution of billions of calls traveling through the cloud. As a result, Five9 clients get real-time network reporting tools when they need them and potential problems are resolved before they become real.

#### **‘See’ What’s Happening**

The Five9 NOC is powered by a leading provider in the field of network monitoring and delivers advanced surveillance of all Five9 systems, servers, and applications. Visual and audible alarms automatically alert specific NOC personnel to specific issues as they occur.

Additional monitoring and reporting tools provide short- and long-term trending data in a visual format. With these solutions in place, NOC team members can literally “see” network activity as it happens and remedy problems before they develop.

These tools are not just available to Five9. Our NOC provides client with a view of the network connectivity, giving them a 360-degree window into their network through the cloud, with no software installations or maintenance involved.

Other features of the Five9 NOC include:

- Incident management
- Root cause analysis and reason for incident reporting
- Issue escalation and resolution
- Carrier management
- Alarm monitoring
- Trouble reporting
- Escalation and SLA adherence
- Software defect reviews and tracking to resolution

If there is an issue within the Five9 system, our NOC not only knows where and why—as it happens—but it knows what to do about the issue. Ensuring first-level response 24/7, our NOC gives clients the knowledge and peace of mind that someone is always at the controls.

### Five9 Security and Privacy

Before organizations place their contact center operations in the cloud, they need the confidence that comes with knowing their business is in safe hands. Five9 is committed to the confidentiality, integrity, and availability of our client’s data and uses best-in-class solutions, processes, and people to make certain the trust our clients place in us is well-earned.

That commitment begins with the Five9 Cloud Security Office, which delivers peace of mind by constantly guarding, monitoring, and maintaining the Five9 services so clients have the tools to run their business—anywhere, anytime.

Every Five9 business process has a security component. The Five9 platform itself consists of a three-tiered network architecture complete with firewalls, intrusion prevention, and a vulnerability-management system designed to protect your data. Five9 Information Security is managed based on ISO 27001 standards and adheres to Cloud Security Alliance and PCI DSS standards.

#### **Privacy**

As a result of our heavy lifting, Five9 clients gain operational efficiency and the ability to satisfy many more specific privacy directives than if they did the work themselves.

Five9 strives for the highest levels of privacy for our customer data. We always seek to collect the minimum amount of information required to fulfill the specific business purpose. Formal approval by the Privacy Officer is required before any information is collected. Five9 privacy policy always takes into the account the privacy regulations and laws applicable to the jurisdictions we serve.

### System Requirements

Engage with Five9 and it takes very little to put your contact center in the cloud. At the minimum, clients need:

- PC Workstation with fairly conventional configuration (minimum Pentium IV processor, 1500Mhz)
- High-speed Internet connection
- USB headset with DSP

Five9 provides everything else, virtually eliminating any client investments in hardware and software.

For technical questions and more information on operating your call center through the Five9 cloud, Give us a call at **1-800-553-8159**.



# Medical Alert Success Story

## Making the Connection



When it needed a more robust contact center solution, emergency monitoring device provider Medical Alert looked to the cloud. Now it has smarter sales campaigns, forecasting tools, and the ability to integrate with other applications—all thanks to Five9.



### Customer Profile

Medical Alert, a Connect America company, provides emergency monitoring devices to seniors that allow them to contact 9-1-1 personnel in the event of an emergency.

- 24/7 contact center with 350 agents
- 90,000 inbound calls monthly
- Outbound sales return calls

### Industry

- Medical alert devices

### Website

- [www.MedicalAlert.com](http://www.MedicalAlert.com)

### Challenges

- Outdated, premise-based phone system
- Prone to weather-related outages
- No reporting tools
- Inability to integrate with Salesforce or other applications and databases

### Solution

- Blended inbound/outbound solution from Five9
- 69% increase in agent productivity
- Ability to integrate with Salesforce and other systems
- Active blending of inbound and outbound calls
- Call reporting and forecasting
- Agents can work from anywhere—even from home

### Company Background

Founded in 1977, Medical Alert, a Connect America company, provides personal emergency monitoring devices that give seniors access to emergency support services at the touch of a button. Customers wear pendants that can activate two-way communication speakers in their homes that automatically connect to 9-1-1 certified agents. When a caller encounters a life-threatening emergency, Medical Alert sends for help and notifies the caller's family. The company also provides mobile devices that give customers the ability to get help outside of the home.

Medical Alert handles roughly 90,000 inbound calls a month, including 60,000 sales calls and 30,000 support calls. It also makes a significant number of outbound calls for up-selling and cross-selling purposes. The company is based out of Broomall, Pennsylvania and has a total of 350 agents.

### Rapid Growth at Risk

According to CIO Scott Blau, Medical Alert had begun to experience rapid growth shortly before he and Director of Telecommunications Joe Huffnagle arrived in February 2012. The problem was the company's phone system.

"It was the most basic PBX system you could have," Huffnagle said. "Except for ACD and round robin call distribution, it had no functionality. There was a whispering coach, but no supervisor line. And there were no reporting capabilities."

Worse, the system was susceptible to trouble. Medical Alert uses a separate, disaster-proof emergency contact center to get customers the 9-1-1 help they need. But its internal phone system for handling sales and service contacts was located on-site and had no backup, and it frequently went down during bad weather.

"It's a perception issue," Blau says. "If we can't handle their billing questions, how are we going to respond when there's an emergency?"

### Looking for the No-Brainer

There were several must-haves Medical Alert needed in a new contact center solution. But Blau and Huffnagle knew from the start that their search would begin in the cloud.

"We're not a tech company, so leveraging the cloud made sense for us," Blau said. "If we chose a premise-based system, we knew we'd have to bring in half a dozen people to support it around the clock. But with a hosted solution, we could push everything to the cloud and focus on our business—instead of having to scale up hardware and infrastructure."

Huffnagle added that it was also important to have a system that integrated with Salesforce, which Medical Alert agents use to manage campaigns and handle customer support. "We looked not only at vendors that integrate with Salesforce, but ones that allowed the easiest integration—and ones that would allow us to grow our business."

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*"If you truly want to be in the programmable web, and if you want to get more data in front of your agents so they can make more informed decisions, you need Five9."*

Joe Huffnagle  
Director of Telecommunications

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## Going with Five9

After extensive research, Blau and Huffnagle discovered the Five9® Blended Contact Center would provide everything they needed. Medical Alert implemented Five9 in May 2012 and integrated its new contact center with Salesforce in July 2012. Immediately, they began to see results.

Since implementation, agent productivity—measured by the decrease in call length times and increased sales—has risen 69 percent, says Huffnagle. And there were savings, too. For example, Medical Alert owns 2,400 toll free numbers, which it uses in sales campaigns. According to Huffnagle, Medical Alert saved \$500,000 a year by switching its toll free numbers to Five9.

And when Medical Alert needed assistance, Five9 and its experienced technical support staff were at their call. "They made dealing with any support situation pleasant," Blau said. "It's like they are an extension of our IT and telephony departments, not a vendor."

## Enhanced Customer Service

Through Active Blending, Medical Alert agents can handle and switch between inbound and outbound calls depending on call volume, thereby increasing agent efficiency and productivity.

With Five9, managers also have new reporting tools that let them forecast call volume and plan accordingly, based on agent availability. "The greatest thing is we don't have to pay for workforce management," says Huffnagle. "We just look at the numbers and we're able to make informed business decisions internally."

Ultimately, Active Blending and enhanced reporting features from Five9 are helping Medical Alert improve customer service. For example, the company recently noticed some callers got transferred to too many departments on the same call. "The data doesn't lie," says Blau. "The reporting tools within Five9 proved to us that this was happening, and that ignited our thinking to make changes to create a truly differentiated customer experience."

## Advanced Application Integration

Five9 is also helping Medical Alert make intelligent decisions on how to route and handle calls. "Because we can link campaigns to Salesforce, the agent knows where the customer got the number and whether that customer is calling during a national or local commercial, so we can be intelligent about the sales pitch," Huffnagle says.

An even bigger benefit, says Huffnagle, is that Medical Alert can integrate other applications—not just Salesforce—into the Five9 environment. "Five9 allows us to tap into other databases and bring back relevant information for our agents, so we can make intelligent and informed decisions about the customer," he says.

Recently, Medical Alert began beta testing an API that shows call stats and wait times on its website. "If the wait time is longer than 10 minutes, the customer has the option to email us and we'll get back to them," Huffnagle said. "Five9 really is the backbone to the multichannel contact center solution we are providing for our customers."

## Seamless Environment

With its new virtual contact center, Medical Alert can allow its agents to work from anywhere, even from home. All they need is a high-speed Internet connection and a phone headset.

"When customers call, they may be talking to an agent who's at home," Huffnagle says, "but it's as if we're all in the same phone center—it's totally seamless."

## The Bottom Line

For a company growing as fast as Medical Alert, moving to the cloud was a no-brainer. But while there are many hosted providers, only Five9 had the tools it needed to give agents the freedom and power to excel, while giving Medical Alert the scalability it needed to manage its growth.

"With Five9, I don't worry about the telephony side of our business," says Blau. "We have full, feature-rich capabilities, and we can scale on a moment's notice. That's just the situation you want to be in."

Adds Huffnagle: "If you truly want to be in the programmable web, and if you want to get more data in front of your agents so they can make more informed decisions, you need Five9."





# NJ 2-1-1 Success Story

## Passing the Ultimate Test



### NJ 2-1-1 Partnership

NJ 2-1-1 is a statewide network of local 2-1-1 information and referral providers for New Jersey and a five-county area of Philadelphia.

### Customer Profile

- Headquartered in Whippany, NJ
- Two call centers and 58 staff
- Available 24/7, 365 days a year

### Industry

- Referral Resources, Disaster Response
- [www.nj211.org](http://www.nj211.org)

### Challenges

- Lacked secure, cloud software capable of handling tens of thousands of calls during major disasters without interruption
- Required ability to quickly add staff and outsource calls to partners during periods of high volume
- Needed automated messages to relay critical information to callers

### Solution

- Five9 Virtual Contact Center
- Fast, flexible call routing and integration with other providers
- Ability to quickly add licenses during emergencies

When Hurricane Sandy slammed into New Jersey, the Five9 Virtual Contact Center preserved access to critical information and resources for residents that needed them most.

### Company Background

NJ 2-1-1 is a free phone number and online database that connects New Jersey residents quickly and effectively to community resources and emergency information. It is part of a growing national model that provides 190 million Americans in all 50 states, the District of Columbia, and Puerto Rico with free information ranging from affordable housing, shelters, food assistance, employment training programs, senior services, medical insurance, and much more simply by dialing 2-1-1. The NJ 2-1-1 system was launched in 2005 and is managed by the NJ 2-1-1 Partnership, a subsidiary of the United Ways of New Jersey.

During natural disasters, the staff at NJ 2-1-1 works with government officials, voluntary organizations, and 2-1-1 centers in other areas to deliver information to affected residents and relay calls to government agencies and first responders who can help. "We have many different lines of business," says Laura Zink Marx, executive director of the NJ 2-1-1 Partnership. "During a disaster, our challenge is balancing the volume and flow of our inbound calls, so that we're giving the best attention to every single person."

### Choosing Five9

In August 2011, Hurricane Irene slammed into New Jersey, causing the flooding of many rivers, roads, and rail lines, displacing thousands of residents from their homes, and causing an estimated \$1 billion in damages. Due to the extraordinary call volume that took place during and after Irene, NJ 2-1-1 decided to upgrade its inbound contact center to a virtual, cloud-based system.

After a rigorous selection process, NJ 2-1-1 chose the award-winning Five9 Virtual Contact Center (VCC) Platform, which enables information and referral agencies such as NJ 2-1-1 to run and manage their entire contact center operation in the cloud. With Five9, agencies can route calls based on priority and type of request, as well as provide important information through recorded messages and point callers to other resource hotlines.

### Weathering the Storm

Eight months after being installed, the Five9 system was put through the ultimate test. In late October 2012, Hurricane Sandy struck the Atlantic coast, eventually causing billions of dollars in damages and costing the lives of more than 250 people in seven countries.

New Jersey was among the hardest hit. "Quite honestly, I don't think anyone anticipated what this storm was capable of doing," Marx recalled. "Even though you knew it was big and it was 900 miles wide, you never really believed it was going to cause the destruction that it did."

As Sandy hit, NJ 2-1-1 left its former call center system in place as a backup solution. But the old system relied on three T-1 lines, each of which went down during the hurricane and remained down for three weeks. If NJ 2-1-1 had not upgraded its system to Five9, says Marx, "The situation would have been really bad."

The Five9 solution, on the other hand, worked perfectly, handling nearly 90,000 calls during and in the weeks after the hurricane. "With the quantity of calls that were coming in, I was really concerned about the quality of service," Marx said. "But I don't think it flickered once. It was very impressive."

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*“With Five9, we got exactly what we wanted in terms of the phone system features, the flexibility, and how easy it was to manage the ebb and flow of calls with our partners. It was flawless.”*

Laura Zink Marx  
Executive Director

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## Managing the Flow

However, NJ 2-1-1's goal was not just to have a contact center that could stand up to Mother Nature. It also needed help when call volume became too high for NJ 2-1-1's specialists to handle.

By choosing the Five9 VCC Platform, all of NJ 2-1-1's hurricane resources were now web-based, which allowed other 2-1-1 partners to access the same information as NJ 2-1-1's staff, in real time.

On the second day of the hurricane, the decision was made to dispatch 30 percent of inbound calls to Palm Beach 2-1-1 in Florida, then increase or decrease that flow as needed. “All day, we monitored it to see how many calls were coming in and if they could handle it,” Marx said.

During the next several days, NJ 2-1-1 directed thousands of calls to other partners, eventually sending a percentage flow of inbound calls to four different locations—Palm Beach 2-1-1, Houston 2-1-1, Vermont 2-1-1, and a second NJ 2-1-1 call center. The routing was handled by Bill Kay, NJ 2-1-1's telecommunications manager, who was trained by Five9 on managing call distribution.

“Five9 allowed me to do everything so fast—I was able to make any kind of change within minutes,” Kay said. “We had calls going out to other places, like a portal, and I could split up the traffic based on how busy they were and how busy we were.”

“It was very simple,” he added. “For almost anything that came up, I was able to figure it out and do what we needed to get done.”

## Flexible and Fast

While NJ 2-1-1 was able to offset the high number of calls by leveraging its partners, it needed extra staff and additional software licenses due to the severity of the storm. According to Kay, Five9 made that easy, too.

As 211 calls reached the tens of thousands, “I called Five9 and asked for 15 more licenses,” Kay said. “I got them within hours—and along with the licenses, we received extra line capacity. It was all built in; there was nothing hidden, and it was fast. In a situation like that, it was everything you could ask for.”

Without the help of Five9, Kay says, NJ 2-1-1 would have had to install extra phones, a process that could have taken weeks. But instead of a busy signal, 2-1-1 callers got the resources they needed.

## No Call Left Behind

The Five9 VCC Platform had other valuable benefits. It enabled NJ 2-1-1 to set up a voicemail box for calls that could not be immediately addressed, and allowed its Vermont 2-1-1 partner to retrieve and return about 800 voicemails. It also allowed NJ 2-1-1 to route additional calls to specialists who were working from home. And it was able to set up an unlimited number of recorded messages relaying important information based on the prompts that callers selected.

This last benefit proved very handy for countering rumors and misinformation. For example, says Marx, in the days after the storm, NJ 2-1-1 received 35,000 calls about the Disaster SNAP/Food Stamp Program. But the food stamps did not arrive until three weeks after the hurricane.

“If we had to answer all of those calls, I don't know what would have happened,” Marx said. “So we added an automated message and gave callers the option to leave a voicemail or go to a website for help, such as where to find the closest mobile kitchen.”

The Five9 system also enabled about 3,000 callers who had health concerns—whether it was sewage problems, drinking water, or bad food—to be sent directly to the New Jersey Department of Health's telephone hotline. Says Marx, “All they had to do was dial 2-1-1 and there was a prompt saying that, ‘If you would like to speak to a medical professional about a health concern, press here,’ and the caller was sent right to that call center.”

## A ‘Flawless’ Performance

Marx, who is also chair of the 2-1-1 U.S. Steering Committee, has been preparing for disasters and managing referral providers for years. She says NJ 2-1-1 knew what it needed in a cloud contact center solution, and got it with Five9.

“The beauty of the Five9 system is that you can always be ready,” she said. “With Five9, we got exactly what we wanted in terms of the phone system features, the flexibility, and how easy it was to manage the ebb and flow of calls with our partners. It was flawless.”

