

# North American Contact Center Systems Market

NAEB-76

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# I

## North American Market for Contact Center Systems

### SUMMARY OF MAJOR FINDINGS

#### Executive Summary

The total market for Contact Center Systems is broken into six segments, which performed as follows in 2011:

- Inbound Contact Routing (ICR) Systems: Although essentially flat, the market increased 0.3 percent, from \$849.9 million in 2010 to \$852.4 million in 2011, reversing two years of decline
- IVR and Voice Portal Systems: After recovering in 2010 to \$227.6 million, fell to \$199.8 million in 2011, a 12.2 percent decline
- Outbound Dialer Systems: Went from \$105.1 million in 2010 to \$92.7 million in 2011, the third consecutive year of decline
- Quality Monitoring Systems: Increased 11.5 percent, from \$208.1 million in 2010 to \$232.0 million in 2011
- Workforce Management Software: Grew 7.2 percent from 2010 to \$116.7 million in 2011
- Contact Center Analytics: Went from \$115.7 million in 2010 to \$130.7 in 2011, growing 13.0 percent

In 2011, the total contact center systems market generated a revenue of \$1,624.3 million, a marginal increase of 0.6 percent over 2010. Inbound routing still represents the single largest segment of the market, more than three times the size of any other segment. The fastest growing segment is Analytics, which demonstrated healthy growth for the second year in a row, up 13 percent.



Despite having a difficult year in North America, Avaya is again the largest vendor in the contact center systems market, with 19.6 percent of the revenue. Cisco Systems is the second largest vendor, with 13.1 percent of the market share. Genesys, which was part of Alcatel-Lucent for almost all of 2011, held the number three spot with 6.9 percent of the share. Together, the top three vendors accounted for only 39.6 percent of the market, which is pretty much unchanged from 2010.

## Scope and Methodology

This research study presents a supply and demand-side market analysis of the six components of the overall Contact Center Systems market for premises-based tools in North America. This study also outlines the key trends, drivers, and restraints observed in these markets in 2011, along with Frost & Sullivan strategic recommendations. For market size, market forecasts, and market share reporting, the base year is 2011.

Revenue estimates and forecasts in this report are based on product license revenues. This means:

- Revenues associated with services and maintenance are excluded from the study
- Revenues derived from hosted solutions are excluded from the study
- All revenues are denominated in U.S. dollars
- All revenues are based on manufacturer level sales

The following research methodology was employed:

- Frost & Sullivan primary interviews. Frost & Sullivan conducted extensive interviews with key market players in all six North American systems markets to understand dynamics and other information required for a comprehensive overall analysis.
- Secondary research. Secondary research consisted of extensive reviews of press releases issued by market participants, industry publications, SEC filings, as well as Frost & Sullivan's in-house databases.

## Product Definitions

There are six segments to the overall Contact Center Systems market. They are defined as follows:

**Inbound Contact Routing (ICR).** These systems are defined as software-only or a combination of software and hardware solutions that facilitate the automated handling of inbound customer interactions. ICR systems constitute the core inbound contact routing functionality of contact center application suites, including ACD, CTI, SIP, multimedia contact routing, system administration/management, and reporting.

**Interactive Voice Response (IVR) and Voice Portals.** IVR systems are application platforms with telephony interfaces. Typically, an IVR system includes an application development environment for creating and maintaining business applications, a run-time engine for operating the applications, and the proprietary telephony access circuit boards to connect with telephone systems and networks. In some cases, one or more of these components are based on proprietary technologies. Voice Portals are also applications platforms with telephony interfaces and as such are similar to IVR systems. Where the voice portal differs from IVR is in the design, which is based on Internet application architectures and standards-based operating systems and hardware. While often bundled and sold with application development and run-time environments, these components can be operated separately from voice portal platforms.

**Outbound Dialers.** Outbound dialer systems are defined as software-only or a combination of software and hardware solutions that facilitate the automated placement of outbound telephone calls from contact centers. For the purpose of this study, contact center outbound dialing systems are defined as products that offer any combination of outbound dialing capabilities, including: predictive dialing, preview, or power dialing.

**Quality Monitoring (QM).** This software allows users to record, retrieve, analyze, and improve agent/customer interactions via PSTN, VoIP, email, and web self-service channels. More and more, customer agent interaction recordings are being used to glean intelligence that is of interest to users at various levels, both within the contact center as well as the enterprise. This intelligence provides greater insight into customer behavior and the means of improving the customer experience.

**Workforce Management Software (WFM).** Software forecasting tools used to estimate call volume based on historical patterns. It uses data from ACD and CTI statistics servers to maintain and monitor appropriate levels of customer interaction processing by optimizing staffing schedules.

Contact Center Analytics. Analytics is generically defined as a system that gathers data from dispersed sources and finds patterns in it. Inside the contact center, that can mean patterns in the behavior of a particular customer or customers. It can also be patterns in how agents respond to a type of problem or incident. Contact Center Analytics itself is made up of two separate sectors: Customer Interaction Analytics and Performance Analytics.

- Customer Interaction Analytics. Looks at the content of interactions in an attempt to decipher customer intentions and behavior patterns. It looks at voice calls, chats, emails (or any other interaction type) and reports in KPIs that are business- and outcome-oriented. Applications that search for root causes of customer churn are examples of Customer Interaction Analytics.
- Performance Analytics. Attempts to use call content information to express metrics that are efficiency-based and operational. Systems that identify agents who need training in particular skills or call types fall under this category. What we know as Performance Management and Workforce Optimization falls within this category.

## Market and Technology Trends

Trends affecting the specific sectors will be addressed in the individual sections of this research service. As reported in 2011, there are some common themes that cut across all segments and reflect what is happening in the contact center market in general. They are as follows:

### APPLICATION FUNCTIONALITY BEING ABSORBED INTO THE CONTACT CENTER SUITE

The trend towards fuller, richer suites of applications continued in 2011. The increasing demand for operational efficiencies and to support excellent customer experiences is driving enterprises of all sizes to require all contact center applications be more tightly integrated and interoperable. This includes applications that are based on IVR and voice portals, as well as the spectrum of workforce optimization and analytic tools. This demand will drive increased support for interoperability standards and perpetuate proprietary linkages by some contact center application suite vendors.

## MULTI-MODAL CUSTOMER EXPERIENCE MANAGEMENT

As enterprises have offered their customers ever more channels for interaction (telephone, Web, email, social media, and SMS), the need to coordinate service across these channels for consistency of experience, accuracy of information provided, and management of the customer experience has grown. In addition, the integration of multiple forms of media within an interaction, such as text and voice, or the use of video, is growing as well. This challenge will require IVR and voice portal solutions to be more tightly integrated with other customer contact and business applications in order to effectively manage the growing use of multi-modal customer contacts.

## CUSTOMER SUPPORT ALTERNATIVES

ICR systems that support telephone-based customer contacts have been the norm. However, new channels of contact have grown, and newer channels are emerging. For example, the use of social networking peer-to-peer support continues to grow, particularly in B2C industries and among younger customers. Contact center vendors will be challenged to support these new channels and behaviors. Companies need to break down their current organizational structure to allow for a customer service strategy that is independent of the channel. In this way, the focus on customer interaction can be centralized, and IT can focus on the technology aspects of channel support, with customer interaction being managed centrally rather than in silos.

## EASE OF USE

Whereas ease of use has always been a requirement for SMB-focused contact center applications, large enterprises and contact centers often accept complexity as a necessary by-product of increased functionality. Increasingly however, businesses of all sizes are looking for ease of configuration, installation, and use in their contact center systems to increase their speed and flexibility in addressing business opportunities and challenges as well as lower total cost of ownership.

## ECONOMIC UNCERTAINTY

We continued to see the effects of the economic downturn in 2011. Even with fits and starts of improvement in different parts of the economy, there are still clouds over the larger economic situation, causing delayed purchasing decisions across all technology segments, and shifting buying to value-added applications rather than ICR system sales.

## Market Drivers

Figure 1-1 shows the market drivers ranked in order of impact for the total North American contact center systems market from 2012 to 2017.

FIGURE 1-1

Total Contact Center Systems Market: Market Drivers Ranked in Order of Impact (North America), 2012-2017

Rank	Driver	1-2 Years	3-4 Years	5-6 Years
1	Increased application functionality and technology refresh	High	High	High
2	Customer retention and experience	High	High	Medium
3	Migration to IP and SIP	High	Medium	Medium
4	Virtualization of contact centers	High	Medium	Medium
5	Addition of new customer contact channels and channel integration	Medium	High	High
6	Proactive customer contact	Medium	High	High
7	Increased need for enhanced analytics	Medium	High	High
8	Application interoperability	Medium	Medium	High
9	Social networking for customer contact	Medium	Medium	High
10	Automation of routine customer interactions	Medium	Medium	High

Source: Frost & Sullivan analysis.

### INCREASED APPLICATION FUNCTIONALITY AND TECHNOLOGY REFRESH

The most important driver for purchases of new or upgrades to contact center systems continues to be the acquisition of new functionality or replacement of systems that are fully depreciated or no longer delivering sufficient value. Many companies upgraded or replaced their ICR systems to avoid Y2K problems during 1998-1999, and those systems are now fully depreciated. The latest (and upcoming) generation of tools incorporates the transition from voice to multichannel/multimodal interactions. This is the most significant transition since that of TDM to IP and closed-systems to CTI. It will affect every one of the segments covered in this research service, most especially ICR, IVR, and contact center analytics.

## CUSTOMER RETENTION AND EXPERIENCE

New functionality purchases are also being driven by the need for more personalized services, and higher customer loyalty and retention. These can be achieved through the adoption of new technology features, and the leveraging of things like customer interaction analytics, voice of the customer (VoC) efforts, and proactive outreach. In essence, there is a new premium on planning and analytics tools, ways to manage agents, and the infrastructure capable of handling more complex multichannel interactions. At the same time, there is a need for tighter integration of tools that reside outside the contact center (like CRM and ERP systems), so that information can be leveraged effectively.

## MIGRATION TO IP AND SIP

The migration from TDM to IP network transport in North American contact centers is at its peak, but it will take 1-3 more years to be completed. While the number of contact centers supporting SIP is still relatively low, many more are evaluating and moving to support SIP-VoIP and SIP trunking. This movement to IP support in contact centers is one of the drivers for IVR system upgrades and purchase of new voice portal solutions. The transition in the IVR and switching infrastructures also paves the way for new applications inside the center, in the form of workforce optimization and analytics tools that ride along with the switching upgrades, or new application functionality such as the use of video.

## VIRTUALIZATION OF CONTACT CENTERS

From an IT standpoint, the consolidation of contact centers from multi-site to single-site, IP-enabled environments, is gaining steam. What is driving this trend? In many cases, it stems from: the need to recruit geographically dispersed talent, and then have those agents able to work remotely; the addition of new locations that often result in the wake of mergers and acquisitions; and the addition of locations meant to support business continuity plans. Meanwhile, as enterprises centralize their contact center infrastructure, the need for differentiated services is creating momentum behind things like partitioning and multi-tenancy. Finally, there also is the need for software applications that can manage a dispersed workforce, from call recording, to quality evaluation, scheduling and adherence, and even basic worker communications.

## ADDITION OF NEW CUSTOMER CONTACT CHANNELS AND CHANNEL INTEGRATION

The pursuit of a superior customer experience is also driving sales of new contact center functionality, often new media. But as contact centers expand their interaction channels beyond telephony, email, and the Web, it can be a challenge to achieve true channel integration and the resultant "holistic view" of the customer.

## PROACTIVE CUSTOMER CONTACT

Proactive Customer Contact (PCC) continues to be a means for organizations to pursue two goals: increased customer loyalty and reduced costs. After mining customer and product information from across the enterprise, companies can then reach out proactively to customers with new offers or services that seek to improve the customer relationship by giving customers what they want or need before they contact the organization to ask for it. The majority of proactive customer contact programs supplement/complement inbound customer support, help balance contact center workloads, and also balance customer contact strategies. This is true even for traditionally outbound-centric debt collection contact centers. In addition to driving growth in traditional outbound IVR- and voice portal-based applications, new channels of customer contact are being used proactively, from social media and text to SMS and multimodal applications.

## INCREASED NEED FOR ENHANCED ANALYTICS

Contact centers are seeking better ways to measure their overall performance, going beyond traditional telephony metrics such as average handle time that have been the cornerstone of reports for years. As call logging and recording matures and becomes less expensive, the incumbent WFO suite vendors will derive a greater portion of their revenues from the performance analytics applications that they install on top of the loggers. In order to gain additional visibility into customer behaviors, more centers will deploy speech and text analytics applications.

## APPLICATION INTEROPERABILITY

As the number of customer contact channels grow, ICR systems are moving away from their proprietary technology heritage to a more standards-based future. Even though standards rarely seem to fully deliver on their promise, many enterprises are purchasing new systems and functionality to support the latest interoperability standards to enable faster, less expensive, and more flexible linkages to third-party contact center applications as well as non-contact center business applications. The increasing complexity of the overall contact center environment, including the agent desktop interface, has placed a premium on usability and manageability in applications. Vendors will need to streamline their tools across a spectrum of applications.

## SOCIAL NETWORKING FOR CUSTOMER CONTACT

Enterprises are engaging in social networking for customer service in three primary areas: first, through the establishment of online customer forums where customers and enthusiasts can ask questions of each other and share their experiences with various products and services; second, through the use of listening platforms (applications for monitoring social conversations on the Internet and elsewhere) to head off potential customer service issues, as well as to find brand advocates; third, through building contact center application support for processing inbound and outbound customer contacts through social media, such as Twitter messages or Facebook postings.

Although interest is growing for social media applications and implementation programs, uptake is lagging the hype. Still, social media adoption should increase as vendors produce clear business cases, make organizational changes to support enterprise-wide adoption, and develop best practices for implementation.

### Automation of Routine Customer Interactions

The cost savings provided by automated customer service will continue to drive IVR and voice portal sales. Voice portal replacements and upgrades should increase as these automated systems adapt to multi-modal applications, more personalized interactions, better UI designs, and the use of speech technologies.

Vendors of core infrastructure (ICR, outbound, and IVR tools) are very much aware of this trend and are working to coordinate the data that their systems produce with analytics tools. Some vendors are also active in creating (or integrating) their own analytics applications into infrastructure suites, with a focus on achieving a complete picture of the customer and agent through end-to-end analytics across platforms.

## Market Restraints

Figure 1-2 shows the market restraints ranked in order of impact for the total North American contact center systems market from 2012 to 2017.



FIGURE 1 - 2

Total Contact Center Systems Market: Market Restraints Ranked in Order of Impact (North America), 2012-2017

Rank	Restraint	1-2 Years	3-4 Years	5-6 Years
1	Slowly recovering economies and tight budgets	High	High	High
2	Changing purchaser dynamics	High	Medium	Medium
3	Vendor viability	High	Medium	Low
4	Proliferation of cloud-based options	Medium	High	High
5	Increasing operational complexity	Medium	Medium	Medium
6	Complex and expensive application integrations	Medium	Medium	Medium
7	Diversion of budgets from agent applications to customer applications	Medium	Medium	Low
8	Partner programs - recruitment and management	Medium	Medium	Low
9	Vertical industry solutions and expertise	Low	Medium	High
10	View of contact center as a cost center	Low	Low	Low

Source: Frost & Sullivan analysis.

#### SLOWLY RECOVERING ECONOMIES AND TIGHT BUDGETS

In 2011, we continued to see the effect of the economic downturn on purchases in all contact center technology segments. Although some industries have shown signs of recovery, enterprises still held back on replacements and additions. Many companies, including ones which had planned to replace legacy inbound contact routing systems and buy new IP contact center solutions, have those plans on hold as capital budgets remain very tight. End-user budget constraints will continue for the sales of inbound contact routing systems. This is particularly true for companies which view their customer service groups and contact centers primarily as a cost centers.

#### CHANGING PURCHASER DYNAMICS

The economic downturn has lengthened purchasing timelines and meant that purchaser decisions are sometimes being made from outside the contact center organization. Purchasers now often include line-of-business managers, financial managers, and other stakeholders. This creates longer sales cycles and puts vendors with a strong call center bias in the position of having to learn new sales languages and create different kinds of ROI arguments and business cases. In addition, new channels, such as social media, also have created a situation in which multiple stakeholders across business units need to be consulted before purchases are made, further slowing down sign-off.

## VENDOR VIABILITY

Concerns about vendor viability in an ever-changing and consolidating contact center systems market is causing some enterprises to defer new system purchases and system expansions. For example, uncertainty about the future roadmap for Nortel switch owners held down purchases of Avaya switches in 2010 and 2011. Similar effects were seen in 2011 with the uncertainty of what would happen with the sale of Genesys by Alcatel-Lucent. These dynamics are symptomatic of an industry going through a prolonged period of consolidation.

## PROLIFERATION OF CLOUD-BASED OPTIONS

Hosted contact center services are increasingly in competition with premise-based solutions as hosted offerings are emerging in inbound, outbound, IVR and APO tools. This is true across all sizes of enterprises and contact centers. At the same time, the uncertain economy has encouraged many contact centers to experiment with limited or pilot cloud-based programs, and many have come away convinced that hosting is as viable a deployment option as on-premise.

The majority of vendors in this report have introduced, or will introduce, cloud-based options, and a few are making it easy to move between premise- and hosted, creating hybrid options for customers. Soon enough, the purchasing decision for any particular product will probably focus more on features and TCO/price than on deployment mode.

## INCREASING OPERATIONAL COMPLEXITY

Contact centers may decide to hold off on any infrastructure upgrades due to the explosive growth of technology in service delivery. Without a clear sense of what contact channels will be popular with customers, or how to organizationally support multiple channels, for the next few years it may seem safer to retreat to a minimalist stance, handling just voice or email instead of leveraging social media or new channels.

## COMPLEX AND EXPENSIVE APPLICATION INTEGRATIONS

As the complexity of applications goes up, so do costs. A good portion of the more complicated PCC solutions, for example, have been custom implementations with a lot of professional services overhead. Until vendors add more of the complex application functionality into each of the product segments, cost will still be an issue. In addition, when customers choose applications from different vendors, for example, call recording and WFM, costs of integrating these disparate vendor solutions will still remain a deterrent. Vendor support for interoperability standards has sometimes been more marketing than anything.

## DIVERSION OF BUDGETS FROM AGENT APPLICATIONS TO CUSTOMER APPLICATIONS

Responding to the explosive growth of social media, many companies are eschewing investment in their agent-facing applications in favor of experiments involving customer forums, mobile applications, and other emerging customer channels. In addition, the more diverse customer options available today make even traditional infrastructure deployments more difficult and costly.

## PARTNER PROGRAMS - RECRUITMENT AND MANAGEMENT

Over the last several years a large portion of contact center vendors are indicating that they will be moving to a more partner-centric model, and are backing those statements with re-vamped partner programs. As such, recruiting and retaining good inbound contact routing go-to-market and application partners is and will continue to be one of the most challenging efforts vendors face. As the industry consolidates in all of its segments, finding effective partners (for technology, marketing, and sales) will become more important.

## VERTICAL INDUSTRY SOLUTIONS AND EXPERTISE

As contact center solutions become more tightly linked with other business applications, enterprises will look for these solutions to support their unique business requirements. Contact center vendors will therefore be compelled to tailor their applications to increasing industry-specific requirements. Some vendors have responded with hiring industry-specific solutions managers and sales teams. Others have developed industry-specific features, such as outbound dialing systems that are tailored to support regulations in the Accounts Receivables Management (ARM) industry, but the need for more vendors to follow suit is increasing.

## VIEW OF CONTACT CENTER AS A COST CENTER

The majority of enterprises continue to view their customer service organization and their contact centers as cost centers. This can result in a reluctance to invest in technology refreshes for anything related to customer service until absolutely necessary. There are negative implications to this "non-strategic view" for sales of routing systems, IVR, and voice portal solutions, as well as newer applications like analytics, quality monitoring, and multichannel self-service.

## Market Overview

With minor signs of an economic recovery in 2011, sales of new and add-on inbound contact routing (ICR) systems remained weak. Still, the market rose from \$849.9 million in 2010 to \$852.4 million in 2011, an increase of 0.3 percent, reversing two years of decline. This past year, contact center organizations continued to put off their system upgrade plans for another year, using what budgets they had to supplement their contact center operations with applications and tools to improve contact center performance as best they could. Increasingly, those companies making the decision to upgrade tested out the cloud, further hampering growth in ICR systems sales.

Due to the economy, end users have been hesitant about buying or upgrading the single most expensive and important part of their core technology infrastructure. So whereas the contact center market is still healthy, and enterprises are still investigating plans to implement new, more complex solutions, purchasing behavior is still skewed towards saving on costs. For example, the migration to support IP networking and SIP trunking in contact centers continues, as enterprises converge their voice and data networks. Most enterprises operate on hybrid (part TDM, part IP) networks, and complete migration to IP will take several more years.

In 2011, Avaya retained its number one position in the ICR systems market with a 33 percent share, but declined by 1.6 percent from 2010. Avaya made a significant number of contact center announcements in 2011, essentially delivering on the product roadmap the company developed after the 2009 acquisition of Nortel. However, while we had expected an increase in market share for Avaya (considering the sales to Avaya's existing and Nortel-acquired installed base) in North America that didn't materialize. Even so, sales in EMEA and CALA showed strong growth.

In second place was Cisco, which increased its market share for the third consecutive year by capturing 21.6 percent. Cisco's multi-year focus on improving the company's contact center business, integrating it into the UC/collaboration portfolio has been paying off. In addition, the company's contact center products are part of the rising tide of enterprises moving to IP, the core of Cisco's business. Considering the potential cost and complexity of the contact center, economic malaise has made even small purchases more difficult, affecting the dynamics of sales cycles in a number of key ways.

First, we continue to see the majority of contact center vendors move toward an indirect sales model. This started a few years ago with proclamations from vendors such as Siemens and Avaya that they were moving from direct sales to "high-touch, partner-led sales programs".

We continued to see it in 2011 from other vendors such as Genesys, Mitel, and others. Both partner portals for support and accreditation programs were part of these efforts.

Secondly, vendors are now compelled to target a different sort of buyer within the organization – not just the telecommunications or call center manager, but the CIO, the IT manager, the line of business manager. After all, companies are expanding the channels they use to reach out and interact with customers and prospects. Whereas the majority of contact centers support more than one channel now (voice, email, Web), the addition of new channels such as chat, text, and social has been growing. This has forced vendors and partners to become adept at crafting business-oriented value cases, including ROI that goes beyond typical call center cost-control and revenue focus.

Targeting a broad range of people in the organization for sales is a good thing for future contact center expansion for the following reasons:

- Takes the conversation beyond cost, to the value the contact center can provide to the entire organization. For example, to support multiple channels, the contact center draws data from across the organization, and provides feedback across the organization in turn, adding value to the business. Marketing might gain customer and product feedback, back office issues might come to light, product development and planning might receive better data to feed product roadmaps.
- It highlights the contact center as the focus of voice of the customer (VOC) initiatives, which can drive customer attraction and retention.
- It will subsequently speed up the adoption and integration of multiple channels to support VOC initiatives, because these channels are supported by multiple areas of the organization.

In addition, awareness of the impact the contact center can have across the organization is particularly important in light of the trends we are seeing around the addition of social media, proactive customer contact, and mobility. Consider that:

- In 2011, almost all vendors we spoke to either had, or planned to have, social networking/engagement capabilities built into their solution sets. Social media monitoring, routing, and tracking products abound. But despite early adoption, the big inhibitor remains lack of best practices, lack of integration with other channels, and a lack of cross organizational awareness and support for their use. While interest will continue to grow, wide-scale adoption will lag until these issues are ironed out. Hence the need for engaging a broader set of organizational stakeholders.
- Proactive customer contact remains a big topic of conversation as it addresses customer retention and reduced costs, and has the capacity to draw together all the assets of the contact center.
- Mobility continues to be a focal point in the contact center as more consumers transition away from landlines. Because these devices are personal, and not typically shared, this allows for personalization of interactions, and a set of identifiable data about each caller. As a separate channel not typically supported in the contact center, it is imperative that multiple stakeholders be brought together to support the addition of mobile applications. In 2011, and even more thus far in 2012, we've seen the emergence of smart phone applications for customer service, and expect to see many more.

## Market Engineering Measurements

Chart 1.1 shows the Market Engineering measurements for the North American inbound contact routing systems market in 2011.

CHART 1.1

Inbound Contact Routing Systems Market: Market Engineering Measurements (North America), 2011

Market Engineering Drives Market Strategy and Planning



Measurement Name	Measurement	Trend
Market age	Growth	--
Revenue	\$852.4 million	Increasing
Potential revenue (maximum future market size)	\$1,125.0 million	Increasing
Base year market growth rate	0.3%	Increasing
Compound annual growth rate	4.7%	--
Price range	\$750 to \$2,500	Decreasing
Customer price sensitivity	5	Stable
Number of competitors	More than 20	Decreasing
Degree of competition	6	Increasing
Degree of technical change	5	Increasing
Market concentration (percent of base year market controlled by top three competitors)	61.9%	Increasing

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

## Revenue Forecast

Figure 1-3 and Chart 1.2 show the revenue forecast for the North American ICR systems market from 2010 to 2017.

FIGURE 1-3

Inbound Contact Routing Systems Market: Revenue Forecast (North America), 2010-2017

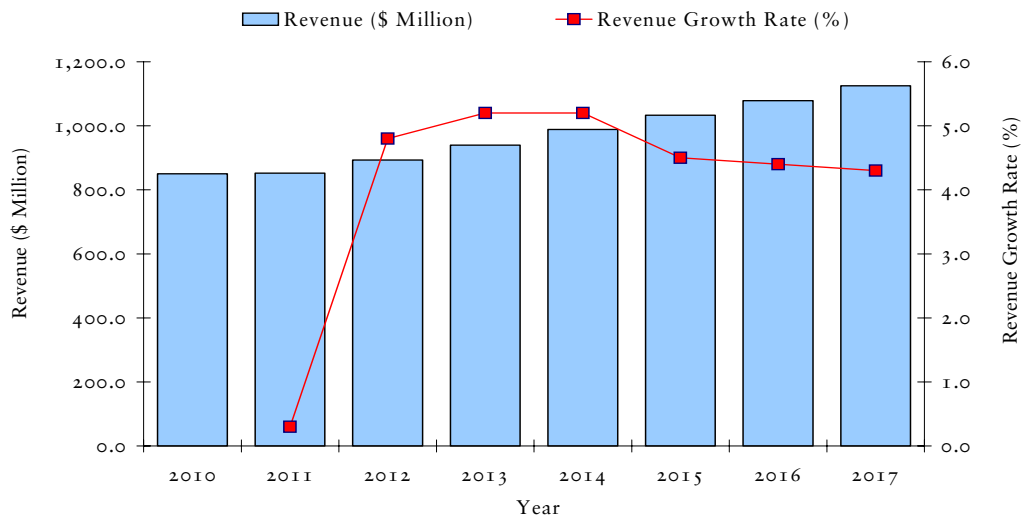
Year	Revenue (\$ Million)	Revenue Growth Rate (%)
2010	849.9	---
2011	852.4	0.3
2012	893.3	4.8
2013	939.8	5.2
2014	988.6	5.2
2015	1,033.1	4.5
2016	1,078.6	4.4
2017	1,125.0	4.3

Compound Annual Growth Rate (2011-2017): 4.7%

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.2

Inbound Contact Routing Systems Market: Revenue Forecast (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.



The market had been in decline for two years, due to a number of factors including the economic downturn, uncertainty about how contact centers should cope with new interaction channels and questions about vendor viability as we continued to see consolidation and changes of ownership.

End users have felt hesitation about buying or upgrading the single most expensive and important part of their core technology infrastructure. Instead, contact center budgets were skewed toward improvements beyond core routing, and more towards agent performance optimization. In addition, the wave of vendors in all technology segments that have offered hosted alternatives drove some end-users to test different deployment methodologies.

However, 2011 while flat also saw the reversal of a downward trend. With the consolidation of Avaya and Nortel, Genesys an independent company once more, and less big ICR consolidation targets, decisions to upgrade technology should come quicker, including plans to add additional channels. We therefore believe that the market will continue to improve in the forecast period from 2010 to 2017.

## Breakdown by Industry Vertical

Figure 1-4 and Chart 1.3 show the percent of revenue by industry vertical for the North American Inbound Contact Routing Systems market from 2010 to 2017.

FIGURE 1-4

Inbound Contact Routing Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017

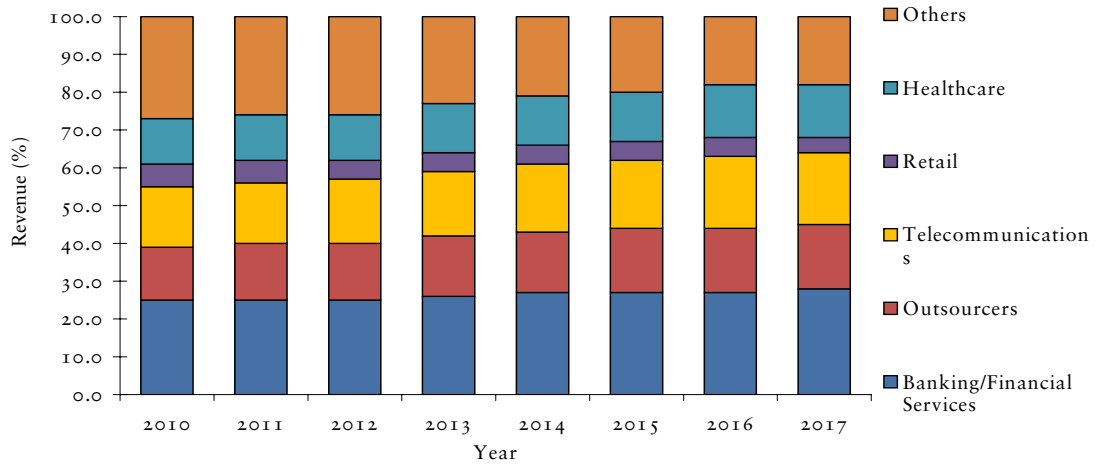
Year	Banking/Financial Services (%)	Outsourcers (%)	Telecommunications (%)	Retail (%)	Healthcare (%)	Others (%)
2010	25.0	14.0	16.0	6.0	12.0	27.0
2011	25.0	15.0	16.0	6.0	12.0	26.0
2012	25.0	15.0	17.0	5.0	12.0	26.0
2013	26.0	16.0	17.0	5.0	13.0	23.0
2014	27.0	16.0	18.0	5.0	13.0	21.0
2015	27.0	17.0	18.0	5.0	13.0	20.0
2016	27.0	17.0	19.0	5.0	14.0	18.0
2017	28.0	17.0	19.0	4.0	14.0	18.0

Note: Others include Government, Higher Education, Utilities, and Travel/Hospitality

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.3

Inbound Contact Routing Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

Banking/financial services and telecommunication will continue to be in the forefront of upgrading or replacing their ICR systems. All verticals and outsourcers will look for a competitive edge that adding new solutions, such as mobility applications, or new channels, such as social media, will fulfill. Advanced ICR systems will play an important role in acquiring and keeping customers and maximizing revenue.

### Breakdown by Contact Center Size

Figure 1-5 and Chart 1.4 show the percent of revenue by contact center size for the North American Inbound Contract Routing systems market from 2010 to 2017.

FIGURE 1-5

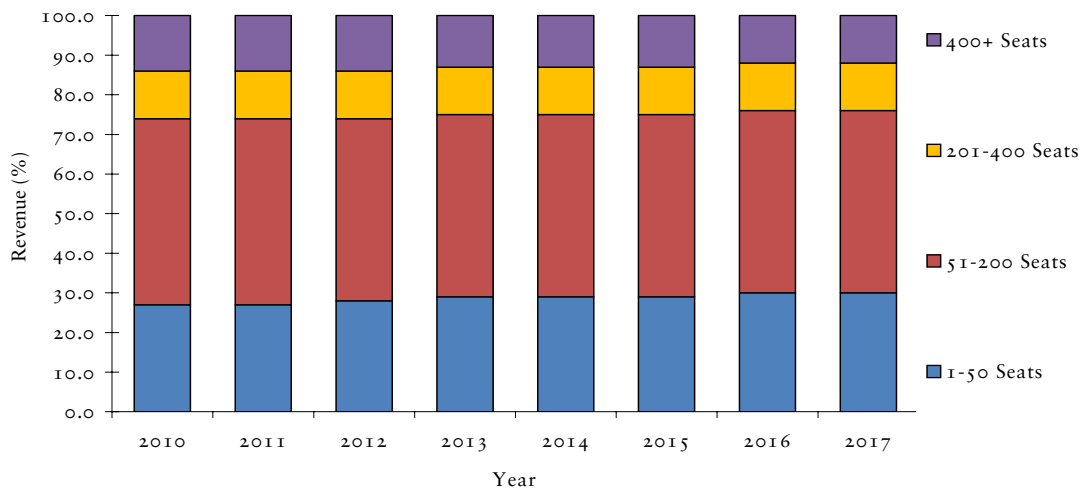
Inbound Contact Routing Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017

Year	1-50 Seats (%)	51-200 Seats (%)	201-400 Seats (%)	400+ Seats (%)
2010	27.0	47.0	12.0	14.0
2011	27.0	47.0	12.0	14.0
2012	28.0	46.0	12.0	14.0
2013	29.0	46.0	12.0	13.0
2014	29.0	46.0	12.0	13.0
2015	29.0	46.0	12.0	13.0
2016	30.0	46.0	12.0	12.0
2017	30.0	46.0	12.0	12.0

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.4

Inbound Contact Routing Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

The sweet spot for revenues in ICR is centers in the 51-200 seat range. The market divides roughly into three buckets: small centers (sub-50 seats) that generate about one-fourth of the revenue; mid-sized centers (50-200 seats) that account for half of the market; and large centers that account for another quarter of the market.

## Market Share Analysis

Figure 1-6 and Chart 1.5 show the company market share by revenue for the North American Inbound Contract Routing systems market from 2010 to 2011.

FIGURE 1-6

Inbound Contact Routing Systems Market: Company Market Share by Revenue (North America), 2010-2011

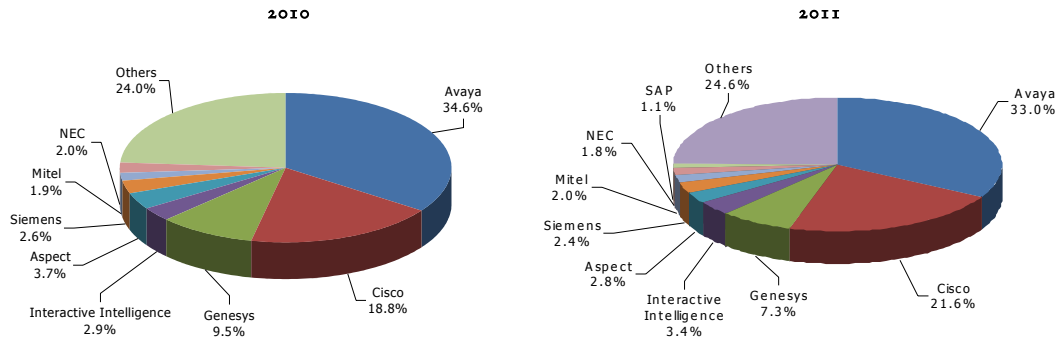
Company	2010 (%)	2011 (%)
Avaya	34.6	33.0
Cisco	18.8	21.6
Genesys	9.5	7.3
Interactive Intelligence	2.9	3.4
Aspect	3.7	2.8
Siemens	2.6	2.4
Mitel	1.9	2.0
NEC	2.0	1.8
SAP	---	1.1
Others	24.0	24.6
TOTAL	100.0	100.0

Note: Others include Aastra, AltiGen, Altitude Software, BroadSoft, ComputerTalk, Convergys, Enghouse Interactive, Fujitsu, Hitachi, Noble Systems, Oracle, Panasonic, Tadiran, Voice4Net, VPI, and Zeacom. Nortel has been absorbed into Avaya. Genesys was spun off from Alcatel-Lucent, but includes the 2011 portion of Alcatel-Lucent's sales. Syntellect became Enghouse Interactive, and had previously acquired CosmoCom.

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.5

Inbound Contact Routing Systems Market: Company Market Share by Revenue (North America), 2010 and 2011



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

As mentioned earlier, the uncertainty around Avaya and Genesys did not help their market share or system sales in general, essentially leaving system sales almost flat. Only a few vendors managed to raise their market share, including Cisco, Interactive Intelligence, and SAP. The latter saw strong system sales in 2011, bringing SAP up out of the "others" category.

The uncertainty around the plans of Nortel buyers did not necessarily help any of the other vendors in the space. No vendor other than Avaya or Cisco managed to raise their market share by more than a fraction of a percent; the two leaders each garnered a mere 2+ percent increase, despite Nortel's having had 8 percent of the market.

IVR AND VOICE PORTAL SYSTEMS MARKET

Market Overview

The IVR and voice portal systems market, after making a bit of a recovery in 2010 at \$227.6 million, fell to \$199.8 million in 2011, a 12.2 percent decline.

## MARKET PERFORMANCE

There are two tales to be told about the IVR and voice portal market in 2011. Although showing strong performance in other areas of the world, such as APAC, with global YOY growth, Avaya saw a steep decline in North America, losing 7 percent of market share. A few vendors did gain in market share, however. These included Cisco, growing from 8 to 11.8 percent, Genesys from 10.5 percent to 12.3 percent, and Interactive Intelligence from 2.2. to 3.2 percent. If we take out Avaya's numbers and compare YOY growth for the rest of the market, we actually have 8 percent growth in the IVR market, matching our forecast.

What happened with Avaya and how does this impact the rest of the market? Just as with ICR system sales, we believe that pent up demand by Nortel customers waiting to see what would happen with Avaya's product roadmap didn't occur in the first half of 2011, although indications are that the second half improved considerably. Some customers may be waiting and will make the move to Avaya's "Experience Portal". Others may have moved to the cloud. Naturally, some share was taken by other vendors.

The fundamentals of the voice portal market remain strong, however. Voice portals are typically sold as software-only, are based on open and Web-based architectures which operate on industry-standard hardware and operating systems. Increasingly, they also support the emerging and evolving industry standards for application development, such as VXML (voice extensible mark-up language), and CCXML (call control extensible mark-up language) as well as standards for interoperability, such as SIP (session initiation protocol). In addition, many new voice portal software releases include as standard or optional support multi-tenancy, high-reliability, and new media, including video and social media, increasing the opportunities to engage with customers.

Across the entire North American market, sales of IVR platforms still exceed sales of voice portal platforms. But, sales of voice portals now lead IVR sales in some market segments, and with some vendors. For example, Avaya had close to 100 percent voice portal sales. We expect this shift to continue as sales of voice portals will increase at a faster rate than sales of IVR systems over the forecast period.

## THE IMPACT OF MULTI-CHANNEL AND PROACTIVE CUSTOMER CONTACT

As voice portal systems continue to develop and gain market acceptance, we expect the majority to be deployed as fully-integrated with suites of contact center applications, such as from market leaders Avaya, Cisco, Aspect, and Genesys. Further, as proactive customer contact initiatives come to fruition, voice portals will be incorporated into the mix, as interactive options to respond to outbound will include self-service. The usual complement of development and support tools will also be provided, including: reporting, analytics, development work benches, and administration/management.

The basic value proposition of IVR is still pretty clear: it is cost-containment that drives call center purchasing, and there's no cost-containment like keeping callers away from agents. It costs about ten times more to handle a caller with an agent than with IVR and voice portal based applications. But the value increases when the IVR experience is enhanced. Vendors are doing a better job of integrating their IVR applications with other customer contact channels, such as Web, chat, and social media, such that there is a seamless transition as customers transition from one to another. Because of advances in leveraging data as a tool, when callers choose IVR, interactions tend to be more personalized and not static. When back end databases are updated, customers can have the same experience no matter what channel they chose. As more vendors accomplish these things, make them easier to deploy and less custom, more sales of IVR systems should result.

There has been an increasing use of IVR for decades mainly due to the economics around providing self-service versus live agents, particularly on a 24-hour basis. For equally as long, there has been a fundamental backlash by some consumers at the IVR and voice portal systems and applications industry for what consumers view as insensitive treatment by companies deploying self-service applications that are difficult to navigate, or have processes driving the wrong customers into IVR at the wrong time. This has held back many companies from using their systems effectively. Many organizations also made the mistake of not regularly updating their applications.

But a lot of that is changing. As consumers become accustomed to self-service applications, and a whole new generation of consumers get used to self-service in forms other than IVR, such as the web, or speech-enabled phone applications, companies are upgrading their existing IVR applications.

Companies are still counting on IVR for the same operational performance improvement that they've always sought, including cost control and call deflection, but they're now also looking to improve the customer experience and general perception of these systems. As these systems evolve into integrated cross-channel suites, we expect system sales to remain strong.

## Market Engineering Measurements

Chart 1.6 shows the Market Engineering measurements for the North American IVR and voice portal systems market in 2011.

CHART 1.6

IVR and Voice Portal Systems Market: Market Engineering Measurements (North America), 2011

### Market Engineering Drives Market Strategy and Planning



Measurement Name	Measurement	Trend
Market age	Growth	--
Revenue	\$199.8 million	Increasing
Potential revenue (maximum future market size)	\$289.1 million	Increasing
Base year market growth rate	(12.2%)	Increasing
Compound annual growth rate	6.3%	--
Price range (per port)	\$250 to \$2,600	Decreasing
Custom price sensitivity	5	Stable
Number of competitors	More than 20	Decreasing
Degree of competition	6	Increasing
Degree of technical change	5	Increasing
Market concentration (percent of base year market controlled by top three competitors)	37.1%	Increasing

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*



## Revenue Forecast

Figure 1-7 and Chart 1.7 show the revenue forecast for the North American IVR and voice portal systems market from 2010 to 2017.

FIGURE 1-7

IVR and Voice Portal Systems Market: Revenue Forecast (North America), 2010-2017

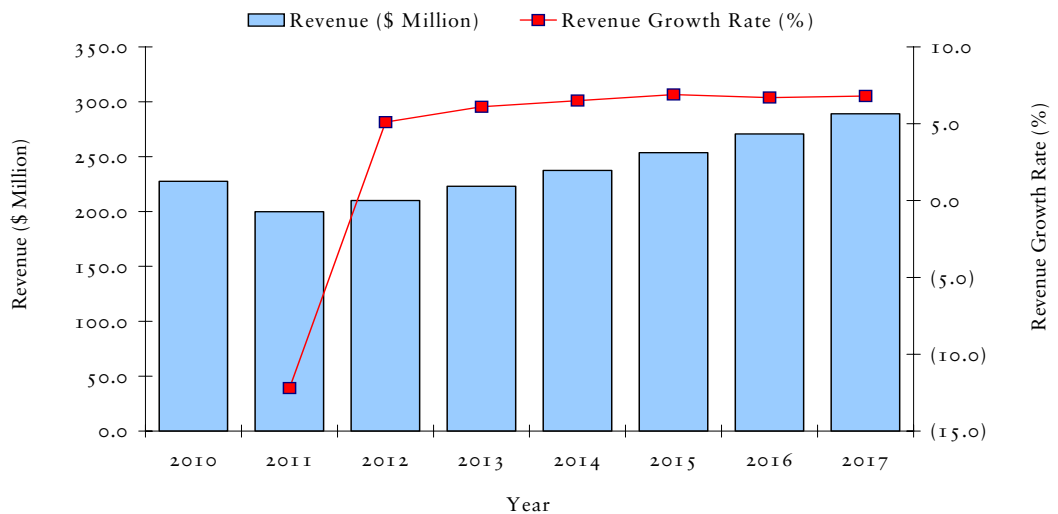
Year	Revenue (\$ Million)	Revenue Growth Rate (%)
2010	227.6	---
2011	199.8	(12.2)
2012	210.0	5.1
2013	222.9	6.1
2014	237.3	6.5
2015	253.7	6.9
2016	270.7	6.7
2017	289.1	6.8

Compound Annual Growth Rate (2011-2017): 6.3%

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.7

IVR and Voice Portal Systems Market: Revenue Forecast (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

The market for IVR systems is still strong, despite the dip we saw, due in part to Avaya. Whereas we wouldn't expect a complete opposite swing for Avaya in one year, IVR sales globally for Avaya grew in 2011, so we don't expect a repeat of 2011 in North America.

What is less clear is the degree to which those more advanced self-service applications will be more widely adopted via hosted service providers. This is a very real possibility and a risk for traditional premise-based IVR vendors.

## Breakdown by Industry Vertical

Figure 1-8 and Chart 1.8 show the percent of revenue by industry vertical for the North American IVR and voice portal systems market from 2010 to 2017.

FIGURE 1-8

IVR and Voice Portal Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017

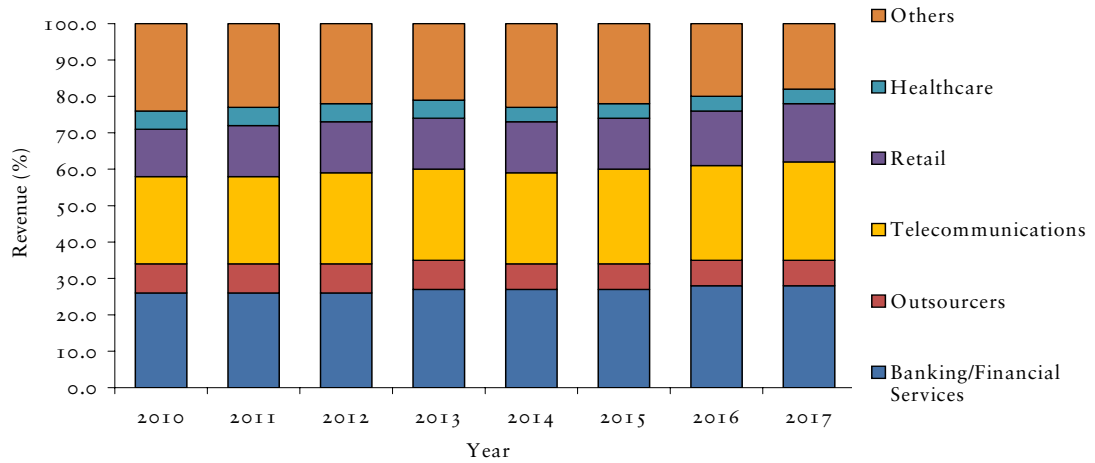
Year	Banking/Financial Services (%)	Outsourcers (%)	Telecommunications (%)	Retail (%)	Healthcare (%)	Others (%)
2010	26.0	8.0	24.0	13.0	5.0	24.0
2011	26.0	8.0	24.0	14.0	5.0	23.0
2012	26.0	8.0	25.0	14.0	5.0	22.0
2013	27.0	8.0	25.0	14.0	5.0	21.0
2014	27.0	7.0	25.0	14.0	4.0	23.0
2015	27.0	7.0	26.0	14.0	4.0	22.0
2016	28.0	7.0	26.0	15.0	4.0	20.0
2017	28.0	7.0	27.0	16.0	4.0	18.0

Note: Others include Government, Higher Education, Utilities, and Travel/Hospitality

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.8

IVR and Voice Portal Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

As with ICR systems, telecommunications and financial services are still the biggest consumers of IVR solutions; they have been traditionally the earliest to adopt new technology within the IVR market, and to add new channels. For example, telecommunications was one of the first to add mobility solutions for self-service, finance to add video kiosks within brick and mortar branches, and finance to add personalization to IVR applications, presenting individualized menus to customers as they call. In both these competitive markets we continue to see growth during the forecast period.

### Breakdown by Contact Center Size

Figure 1-9 and Chart 1.9 show the percent of revenue by contact center size for the North American IVR and voice portal systems market from 2010 to 2017.

FIGURE 1-9

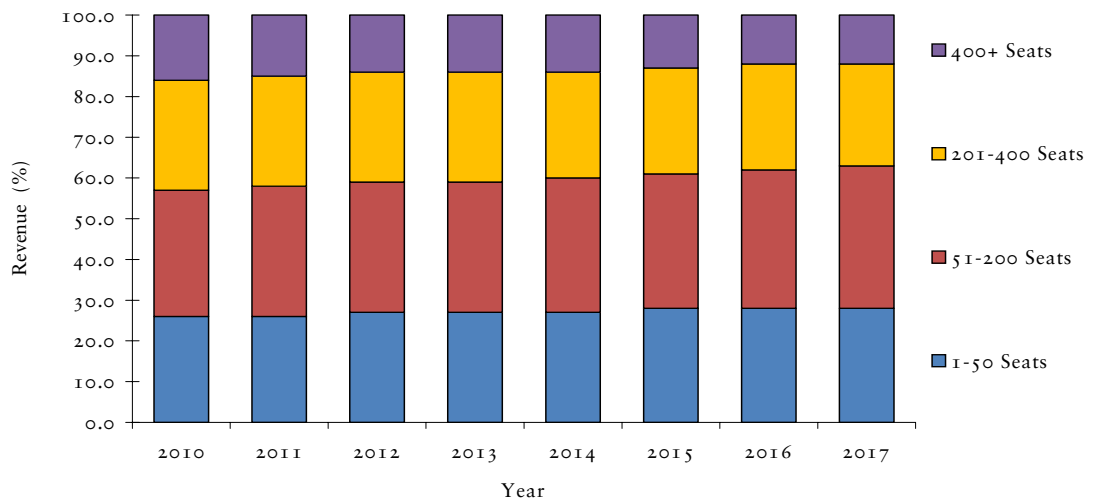
IVR and Voice Portal Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017

Year	1-50 Seats (%)	51-200 Seats (%)	201-400 Seats (%)	400+ Seats (%)
2010	26.0	31.0	27.0	16.0
2011	26.0	32.0	27.0	15.0
2012	27.0	32.0	27.0	14.0
2013	27.0	32.0	27.0	14.0
2014	27.0	33.0	26.0	14.0
2015	28.0	33.0	26.0	13.0
2016	28.0	34.0	26.0	12.0
2017	28.0	35.0	25.0	12.0

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.9

IVR and Voice Portal Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

## Market Share Analysis

Figure 1-10 and Chart 1.10 show the company market share by revenue for the North American IVR and voice portal systems market from 2010 to 2011.

FIGURE 1-10

IVR and Voice Portal Systems Market: Company Market Share by Revenue (North America), 2010-2011

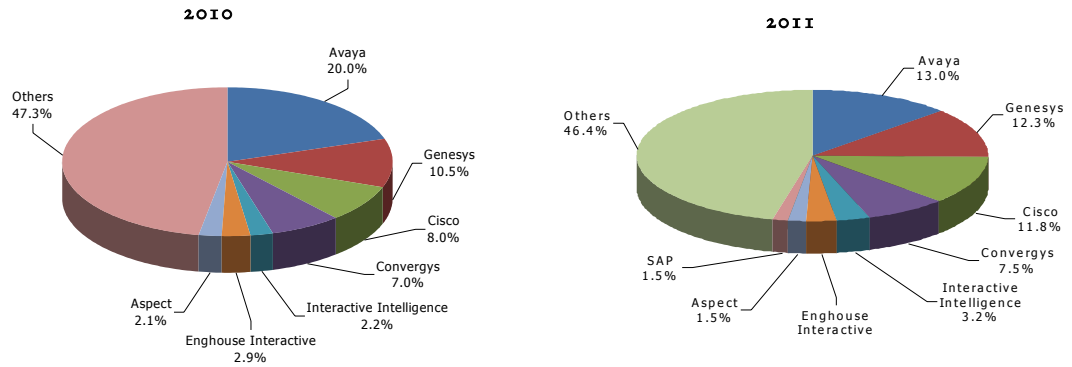
Company	2010 (%)	2011 (%)
Avaya	20.0	13.0
Genesys	10.5	12.3
Cisco	8.0	11.8
Convergys	7.0	7.5
Interactive Intelligence	2.2	3.2
Enghouse Interactive	2.9	2.8
Aspect	2.1	1.5
SAP	---	1.5
Others	47.3	46.4
TOTAL	100.0	100.0

Note: Others include Aastra, Altitude Software, BroadSoft, ComputerTalk, Hewlett-Packard, IBM, Mitel, NEC, Noble Systems, Oracle, PlumVoice, ShoreTel, Siemens Enterprise Communications, Voxeo, VPI, West Interactive, and Zeacom.

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.10

IVR and Voice Portal Systems Market: Company Market Share by Revenue (North America), 2010 and 2011



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

OUTBOUND DIALER SYSTEMS MARKET

Market Overview

The 2011 market for outbound dialers declined 11.8 percent from \$105.1 million in 2010 to \$92.7 million, the third straight year the market went down. Although the economy was a factor as it was in the ICR and IVR segments, that wasn't the whole story. The use of outbound dialers is certainly not declining. Still, outbound seems to be the segment most likely to benefit from cloud deployments due to the bursting capacity that cloud provides. Indeed, outbound notifications for a number of vertical market segments are all ripe for utilizing on-demand capacity. Consider utilities (power outage notifications), travel (flight cancellation and delay notifications) or any vertical where there are bursts of activity and then lag. In fact, most vendors in the premise systems space are or will be offering cloud based options for their customers (Interactive Intelligence, that gained market share in the dialer space in 2011, is an example).

At the same time, one trend we reported last year was the move toward proactive customer contact (PCC) – that is, placing outbound calls to engage with a customer to deliver information, offer services, or initiate a transaction, without having the customer call into the contact center. It's about engaging the customer and cementing the relationship with them by anticipating their needs, precluding customers from calling into the contact center, thereby reducing costs. PCC might take the form of text messages, emails or even automated recorded voice calls, but they are designed to be informative and bi-directional, encouraging return calls where warranted. This allows companies to control the inbound volume (improving efficiency) and response rates. However, a lot of the more complex proactive outbound solutions have been custom deployments. Frost & Sullivan believes that in 2011, many of these were cloud deployments, and that as multi-channel and proactive customer contact initiatives evolve, this will drive new sales of premise-based deployments in the forecast period.

In 2011, debt collections, telesales, and telemarketing, drove much of PCC. In addition, companies that had existing dialers were doing custom work to add new applications where needed, rather than replacing what they had. We expect this to change as the economy improves, with new system sales increasing. Companies such as Interactive Intelligence and Aspect, which have a solutions focus on the Accounts Receivables Management (ARM) sector, should continue to benefit from this. Further sales will be driven by pending regulations, such as whether or not customers can be contacted on mobile phones by voice or text.

Will established vendors rebound from the relatively commoditized dialer hardware to offer more profitable and innovative applications in PCC? If not, then it's possible that premise solutions will continue to be overtaken by hosted and outsourced systems.

## Market Engineering Measurements

Chart 1.11 shows the Market Engineering measurements for the North American outbound dialer systems market in 2011.

CHART 1.11

Outbound Dialer Systems Market: Market Engineering Measurements (North America), 2011

Market Engineering Drives Market Strategy and Planning



Measurement Name	Measurement	Trend
Market age	Mature	--
Revenue.	\$92.7 million	Stable
Potential revenue (maximum future market size)	\$115.7 million	Increasing
Base year market growth rate	(11.8%)	Decreasing
Compound annual growth rate	3.8%	--
Saturation (current/potential users)	7	Decreasing
Price range	\$325 to \$1900	Decreasing
Customer price sensitivity	5	Stable
Number of Competitors	More than 20	Decreasing
Degree of competition	7	Increasing
Market concentration (percent of base year market controlled by top three competitors)	52.2%	Increasing

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

Revenue Forecast

Figure 1-11 and Chart 1.12 show the revenue forecast for the North American outbound dialer systems market from 2010 to 2017.



FIGURE I - I I

Outbound Dialer Systems Market: Revenue Forecast (North America), 2010-2017

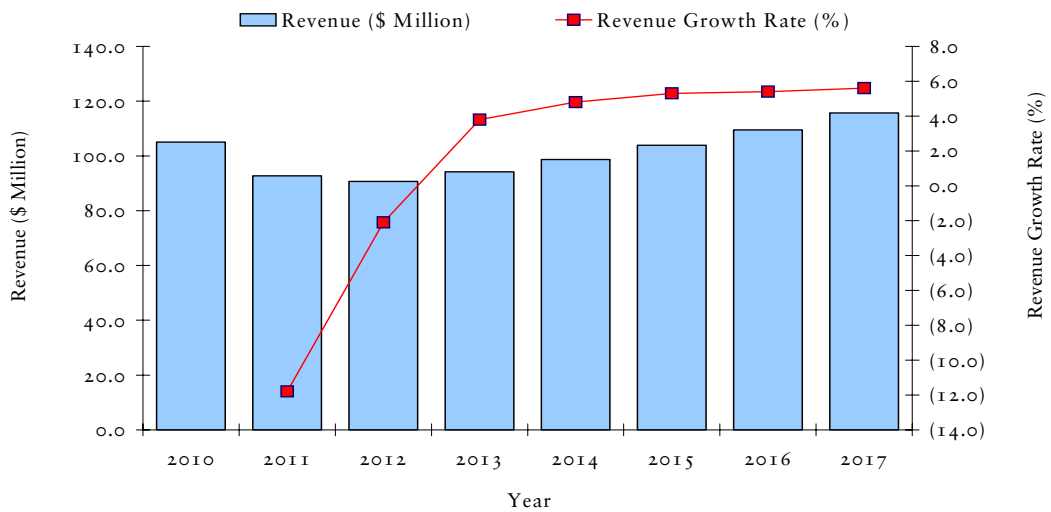
Year	Revenue (\$ Million)	Revenue Growth Rate (%)
2010	105.1	---
2011	92.7	(11.8)
2012	90.7	(2.1)
2013	94.2	3.8
2014	98.7	4.8
2015	103.9	5.3
2016	109.5	5.4
2017	115.7	5.6

Compound Annual Growth Rate (2011-2017): 3.8%

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART I . I 2

Outbound Dialer Systems Market: Revenue Forecast (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

As with the ICR market, the market for outbound dialers declined in 2011, particularly as ICR systems sales have a pull-through or halo effect on outbound sales. But also, as this is a mature market, much potential growth was lost to hosted vendors, many of which have full out-of-the-box suite capabilities, and so many complex applications moved to hosted.

However, we do see recovery in the premise-based outbound dialer market as vendors develop more products with pre-built tools and more functionality to compete with their hosted counterparts.

## Breakdown by Industry Vertical

Figure 1-12 and Chart 1.13 show the percent of revenue by industry vertical for the North American outbound dialer systems market from 2010 to 2017.

FIGURE 1-12

Outbound Dialer Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017

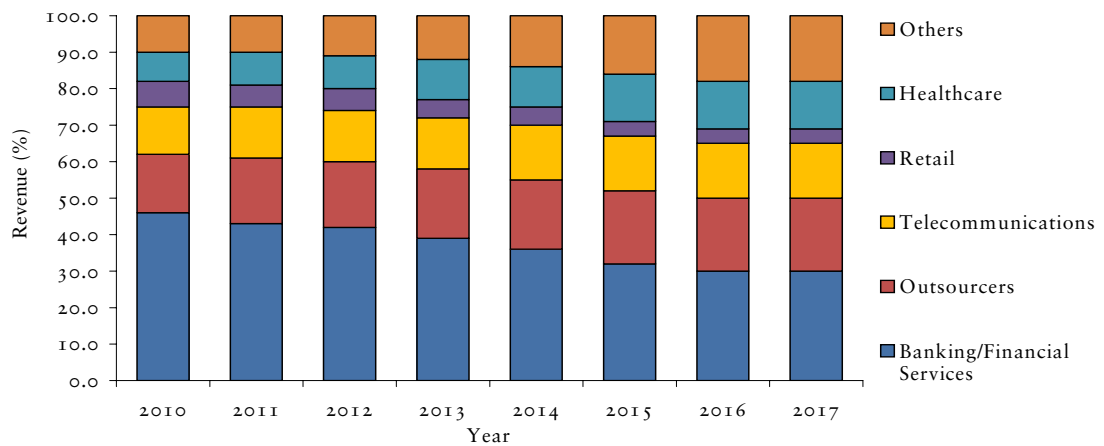
Year	Banking/Financial Services (%)	Outsourcers (%)	Telecommunications (%)	Retail (%)	Healthcare (%)	Others (%)
2010	46.0	16.0	13.0	7.0	8.0	10.0
2011	43.0	18.0	14.0	6.0	9.0	10.0
2012	42.0	18.0	14.0	6.0	9.0	11.0
2013	39.0	19.0	14.0	5.0	11.0	12.0
2014	36.0	19.0	15.0	5.0	11.0	14.0
2015	32.0	20.0	15.0	4.0	13.0	16.0
2016	30.0	20.0	15.0	4.0	13.0	18.0
2017	30.0	20.0	15.0	4.0	13.0	18.0

Note: Others include Government, Higher Education, Utilities, and Travel/Hospitality

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.13

Outbound Dialer Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

Despite the economy, financial services still leads in the outbound dialer market because of activity in the accounts receivables market (ARM). Telecommunications companies will continue to use outbound as a way of proactively contacting customers, as will utilities and healthcare, even more so as dialers add capabilities that will allow for more complex interactions. As such, business from outsourcers also will grow because many of the new outbound applications that are being created are complex and potentially capital-intensive, leading end users to test such solutions by using providers' infrastructure.

### Breakdown by Contact Center Size

Figure 1-13 and Chart 1.14 show the percent of revenue by contact center size for the North American outbound dialer systems market from 2010 to 2017.

FIGURE I - I 3

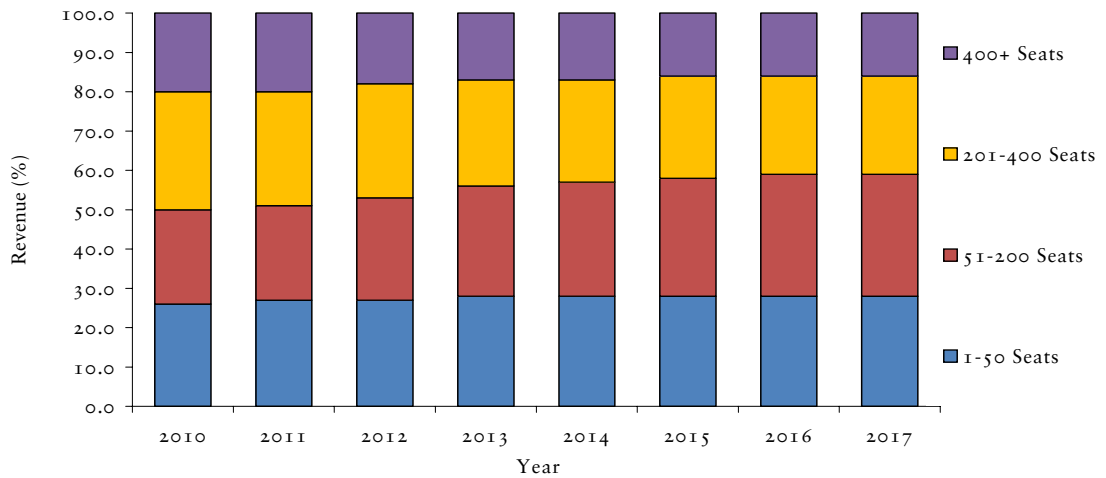
Outbound Dialer Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017

Year	1-50 Seats (%)	51-200 Seats (%)	201-400 Seats (%)	400+ Seats (%)
2010	26.0	24.0	30.0	20.0
2011	27.0	24.0	29.0	20.0
2012	27.0	26.0	29.0	18.0
2013	28.0	28.0	27.0	17.0
2014	28.0	29.0	26.0	17.0
2015	28.0	30.0	26.0	16.0
2016	28.0	31.0	25.0	16.0
2017	28.0	31.0	25.0	16.0

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART I . I 4

Outbound Dialer Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

The distribution of revenue among the size segments is expected to remain relatively stable over the forecast period. Usage of dialers is common among all sizes of centers, large and small, although in the long term price pressure might make systems at the low end more attractive to buyers in that range.

## Market Share Analysis

Figure 1-14 and Chart 1.15 show the company market share by revenue for the North American outbound dialer systems market from 2010 to 2011.

FIGURE 1-14

Outbound Dialer Systems Market: Company Market Share by Revenue (North America), 2010-2011

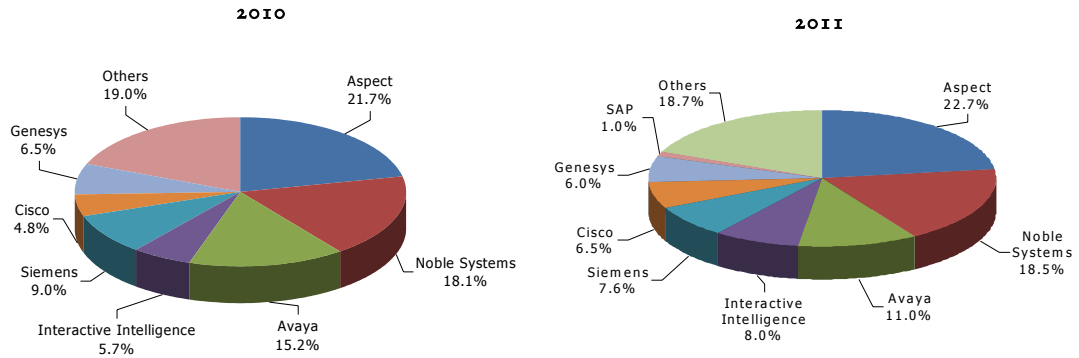
Company	2010 (%)	2011 (%)
Aspect	21.7	22.7
Noble Systems	18.1	18.5
Avaya	15.2	11.0
Interactive Intelligence	5.7	8.0
Siemens	9.0	7.6
Cisco	4.8	6.5
Genesys	6.5	6.0
SAP	---	1.0
Others	19.0	18.7
TOTAL	100.0	100.0

Note: Others include Aastra, Altitude Software, Castel, Enghouse Interactive, MarkeTel Systems, Mitel, NEC Corporation of America, ShoreTel, Voice4Net, VPI, and Zeacom.

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.15

Outbound Dialer Systems Market: Company Market Share by Revenue (North America), 2010 and 2011



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

Aspect's strength in the debt collections sector contributed to a rise in its market share over the past year. The maturity of the overall dialer market is evident by the concentration in the hands of the top three vendors, which together accounted for 52.2 percent of the total revenues.

## QUALITY MONITORING SYSTEMS MARKET

### Market Overview

The quality monitoring (QM) market grew from \$208.1 million in 2010 to \$232 million in 2011, an increase of 11.5 percent. The contact center big systems market declined this year, but budgets were diverted to APO, as sales in that realm increased.

The key drivers for QM purchases continue to be the need to: reduce costs, improve agent performance, verify customer-agent interactions, comply with regulations, and protect against litigation. Recording for compliance purposes remains strong.

QM software allows users to record, retrieve, analyze, and improve agent/customer interactions via PSTN, VoIP, email and web self-service channels. More and more, customer-agent interaction recordings are being used to glean intelligence that is of interest to users at various levels both within the contact center as well as within the enterprise. This intelligence provides greater insight into customer behavior and the means of improving the customer experience.

QM software records calls either randomly or as triggered by business rules/events at the agent desktop, or in some cases by the agent on an ad hoc basis. This is often referred to as selective recording. Full recording or call logging refers to 100 percent recording of all customer interactions. In the majority of new deployments, companies are choosing to record all calls, rather than a select, random few.

The move to full recording has paved the way for vendors to differentiate their QM tools through the sophisticated analyses in tools like speech analytics and performance management. There also is a growing trend of companies wanting to monitor and track "the voice of the customer" (VoC), further pushing QM vendors to improve their QM and analytics tools.

Strong sales of analytics tools had a "pull-through effect" on QM as companies upgraded their QM systems to access better analytics. Not only did NICE, Verint, and Autonomy, grow in 2011, but so too did all of the Tier 2 vendors.

Most of the vendors of the more sophisticated QM software that leverages call recording have migrated to more value-added applications that embed the quality process into a sweeping WFO process. It is increasingly rare to find deployments of stand-alone QM separate from the larger WFO suite, though there are still deployments of stand-alone call recording, especially for compliance purposes and in the small and mid-sized market. These suites are an excellent deal for APO vendors as they increase sales of all segments at the same time.

The largest vendors, particularly NICE and Verint, also have sought out markets for call recording and QM outside the traditional contact center, especially in recording and evaluating the interactions of workers who touch customers on an ad hoc basis, but are not formally part of the contact center.

Frost & Sullivan feels that the next key growth opportunity for core recording and QM is going to be in the small and mid-sized market. There are still many centers in that size band that have minimal or outdated call recording and quality assurance systems. The largest vendors like NICE and Verint have tailored their offerings specifically to those centers. Tier 2 vendors, which saw growth despite these efforts, have been actively expanding their reseller networks to solidify their mid-market position in the face of competition from their large product rivals.

## Market Engineering Measurements

Chart 1.16 shows the Market Engineering measurements for the North American quality monitoring systems market in 2011.

CHART 1.16

Quality Monitoring Systems Market: Market Engineering Measurements (North America), 2011

## Market Engineering Drives Market Strategy and Planning



Measurement Name	Measurement	Trend
Market age	Growth	--
Revenue	\$232.0 million	Increasing
Potential revenue (maximum future market size)	\$339.4 million	Increasing
Base year market growth rate	11.5%	Increasing
Compound annual growth rate	6.5%	--
Replacement rate (average period of unit replacement)	5-7 Years	Stable
Customer price sensitivity	8	Increasing
Average product development time	12 months	Stable
Number of Competitors	More than 20	Decreasing
Degree of competition	8	Increasing
Degree of technical change	5	Decreasing
Market concentration (percent of base year market controlled by top three competitors)	67.5%	Decreasing

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

## Revenue Forecast

Figure 1-15 and Chart 1.17 show the revenue forecast for the North American quality monitoring systems market from 2010 to 2017.



FIGURE I - I 5

Quality Monitoring Systems Market: Revenue Forecast (North America), 2010-2017

Year	Revenue (\$ Million)	Revenue Growth Rate (%)
2010*	208.1	---
2011	232.0	11.5
2012	250.6	8.0
2013	268.9	7.3
2014	286.6	6.6
2015	304.7	6.3
2016	322.3	5.8
2017	339.4	5.3

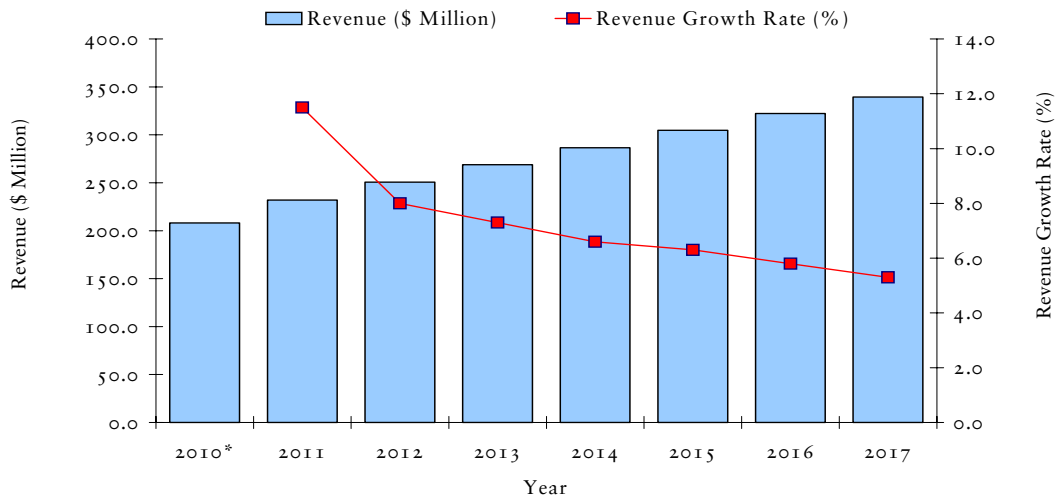
Compound Annual Growth Rate (2011-2017): 6.5%

\*Note: 2010 market size restated based on revised revenue estimates for some vendors

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART I . I 7

Quality Monitoring Systems Market: Revenue Forecast (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

Although a mature market, Frost & Sullivan sees growth over the forecast period of 2010-2017. Initially this growth will be due to system replacements as a result of a pull-through effect from sales of WFM suites and analytics, but also growth attributable to replacement of an aging installed base. Over time, however, QM systems will become more and more of a commodity product.

## Breakdown by Industry Vertical

Figure 1-16 and Chart 1.18 show the percent of revenue by industry vertical for the North American quality monitoring systems market from 2010 to 2017.

FIGURE 1-16

Quality Monitoring Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017

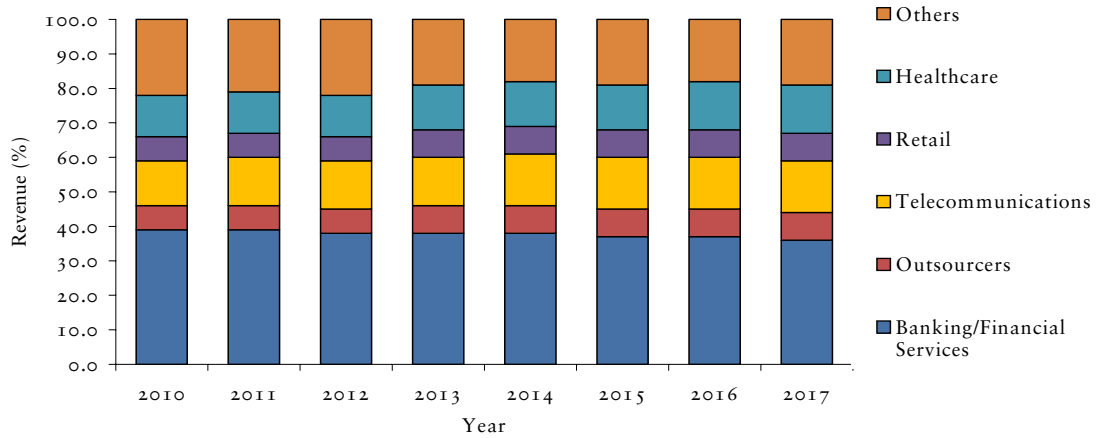
Year	Banking/Financial Services (%)	Outsourcers (%)	Telecommunications (%)	Retail (%)	Healthcare (%)	Others (%)
2010	39.0	7.0	13.0	7.0	12.0	22.0
2011	39.0	7.0	14.0	7.0	12.0	21.0
2012	38.0	7.0	14.0	7.0	12.0	22.0
2013	38.0	8.0	14.0	8.0	13.0	19.0
2014	38.0	8.0	15.0	8.0	13.0	18.0
2015	37.0	8.0	15.0	8.0	13.0	19.0
2016	37.0	8.0	15.0	8.0	14.0	18.0
2017	36.0	8.0	15.0	8.0	14.0	19.0

Note: Others include Government, Higher Education, Utilities, and Travel/Hospitality

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART I.18

Quality Monitoring Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

Banking and financial services companies have always been at the forefront in deploying call recording, due to the many regulatory strictures in place that require compliance recording. Healthcare will remain strong for compliance regulation and due to privacy rules as well.

### Breakdown by Contact Center Size

Figure I-17 and Chart I.19 show the percent of revenue by contact center size for the North American quality monitoring systems market from 2010 to 2017.

FIGURE I-17

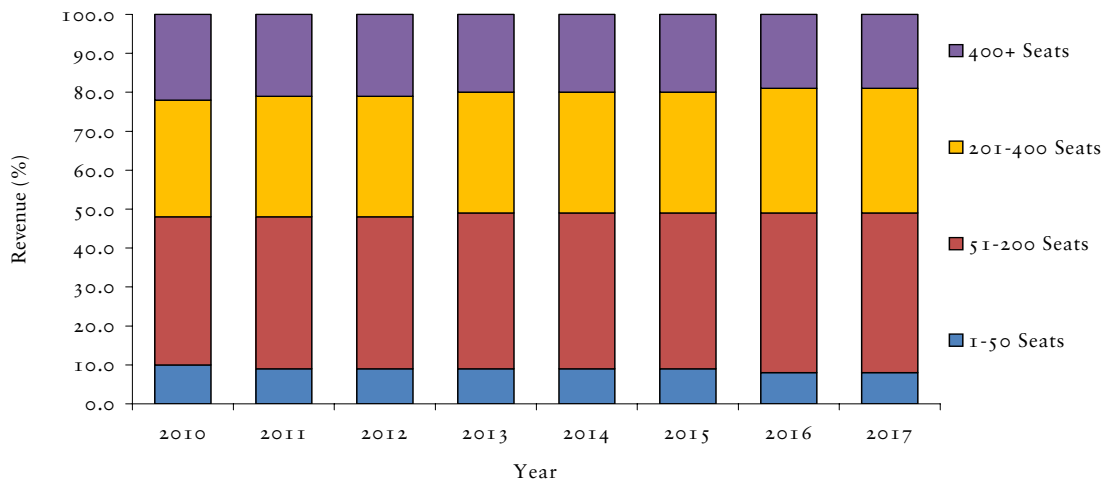
Quality Monitoring Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017

Year	1-50 Seats (%)	51-200 Seats (%)	201-400 Seats (%)	400+ Seats (%)
2010	10.0	38.0	30.0	22.0
2011	9.0	39.0	31.0	21.0
2012	9.0	39.0	31.0	21.0
2013	9.0	40.0	31.0	20.0
2014	9.0	40.0	31.0	20.0
2015	9.0	40.0	31.0	20.0
2016	8.0	41.0	32.0	19.0
2017	8.0	41.0	32.0	19.0

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART I.19

Quality Monitoring Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

The lowest end of the market, centers with fewer than 50 seats, has relatively low penetration, but also accounts for low revenue because of the commoditized nature of recording tools. These are also the centers most likely to be using manual QM processes, rather than automated ones. It's likely there will be a rise in the penetration rate among smaller centers, and penetration will rise faster than revenue among smaller centers. There also will be a decline in revenue among the largest centers, as vendors move their customers to more advanced, value-added applications in the analytics family.

## Market Share Analysis

Figure 1-18 and Chart 1.20 show the company market share by revenue for the North American quality monitoring systems market from 2010 to 2011.

FIGURE 1-18

Quality Monitoring Systems Market: Company Market Share by Revenue (North America), 2010-2011

Company	2010* (%)	2011 (%)
NICE Systems	26.7	26.1
Verint Systems	26.1	25.5
Autonomy	16.3	15.9
Envision Telephony	5.9	5.7
Calabrio	3.8	4.5
Interactive Intelligence	2.9	2.8
CallCopy	2.3	2.5
VPI	1.9	2.0
Genesys	1.9	1.9
Higher Ground	1.8	1.7
Others	10.4	11.4
TOTAL	100.0	100.0

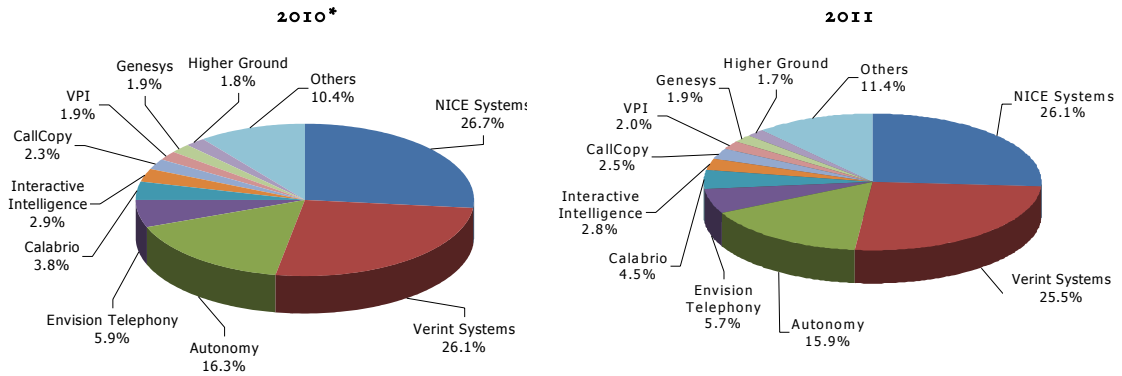
Note: Others include ASC Telecom, Aspect, Astute Solutions, Cacti, CyberTech International, Knoahsoft, LiveOps, Magnetic North, OASYS, OnviSource, TantaComm, Telrex, VirtualLogger, and Voice4Net.

\*Note: 2010 market shares restated based on revised revenue estimates for some vendors

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.20

Quality Monitoring Systems Market: Company Market Share by Revenue (North America), 2010 and 2011



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

NICE and Verint together make up more than half of the North American market. Contact center buyers have shown a distinct preference for bundling their QM and call recording with more sophisticated applications that form a coherent workforce optimization suite. They are less likely to buy a standalone recorder unless they are in a vertical market with strong ties to particular vendors (like VPI and HigherGround in public safety centers), or at the very small end of the market.

## WORKFORCE MANAGEMENT SOFTWARE MARKET

### Market Overview

The North American market for workforce management (WFM) solutions grew 7.2 percent over 2010, and stood at \$116.7 million in 2011.

WFM is a forecasting tool used to estimate call volume based on historical patterns. It uses data from ACD and CTI statistics servers to maintain and monitor appropriate levels of customer interaction processing by optimizing staffing schedules.

It is a fairly mature market, with not as much room for innovation as others. In response, a number of WFM vendors have adapted their tools to help forecast and schedule both the back office, as well as "expert agents", subject matter experts that often get tapped to help agents on particular subjects, when an agent "gets stuck" or needs more information.

In the mature North American market, vendors have been more aggressive in the last two years in trying to displace their competitors, though this remains challenging. Contact center management professionals who grow comfortable with a WFM brand often seek to stay with that brand throughout their careers. Many still use Excel spreadsheets to manually forecast and schedule their workforce.

There have been other pockets of innovation. For example, Bay Bridge Decision Technologies, which bridges WFM and analytics, has a tool that quickly allows contact center managers to create "what if" staffing scenarios, on every aspect of workforce planning. What might take days on an Excel spreadsheet can be done in minutes on the company's "Center-Bridge" product. A few others have similar tools, but there is still room for innovation, which will drive further growth in the market.

As with quality monitoring, analytics sales helped buoy the WFM market. And despite the historical impression that Tier 2 vendors have had a more difficult time selling WFM because smaller companies tend to do WFM with spreadsheets, all reported good growth for the year. We attribute this to increased market awareness for WFM, and the fact that WFM ties into aspects of analytics around agent performance management.

## Market Engineering Measurements

Chart 1.21 shows the Market Engineering measurements for the North American workforce management software market in 2011.

CHART 1.21

Workforce Management Software Market: Market Engineering Measurements (North America), 2011

Market Engineering Drives Market Strategy and Planning



Measurement Name	Measurement	Trend
Market age	Growth	--
Revenue	\$116.7 million	Increasing
Potential revenue (maximum future market size)	\$163.8 million	Increasing
Base year market growth rate	7.2%	Increasing
Compound annual growth rate	5.8%	--
Replacement rate (average period of unit replacement)	5-7 years or longer	Stable
Customer price sensitivity	8	Increasing
Average product development time	More than 12 months	Stable
Number of Competitors	More than 20	Decreasing
Degree of competition	6	Stable
Degree of technical change	5	Stable
Market concentration (percent of base year market controlled by top three competitors)	49.7%	Decreasing

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

Revenue Forecast

Figure 1-19 and Chart 1.22 show the revenue forecast for the North American workforce management software market from 2010 to 2017.



FIGURE 1-19

Workforce Management Software Market: Revenue Forecast (North America), 2010-2017

Year	Revenue	Growth Rate (%)
	Revenue (\$ Million)	
2010*	108.8	---
2011	116.7	7.2
2012	124.6	6.8
2013	132.6	6.4
2014	140.4	5.9
2015	148.4	5.7
2016	156.1	5.2
2017	163.8	4.9

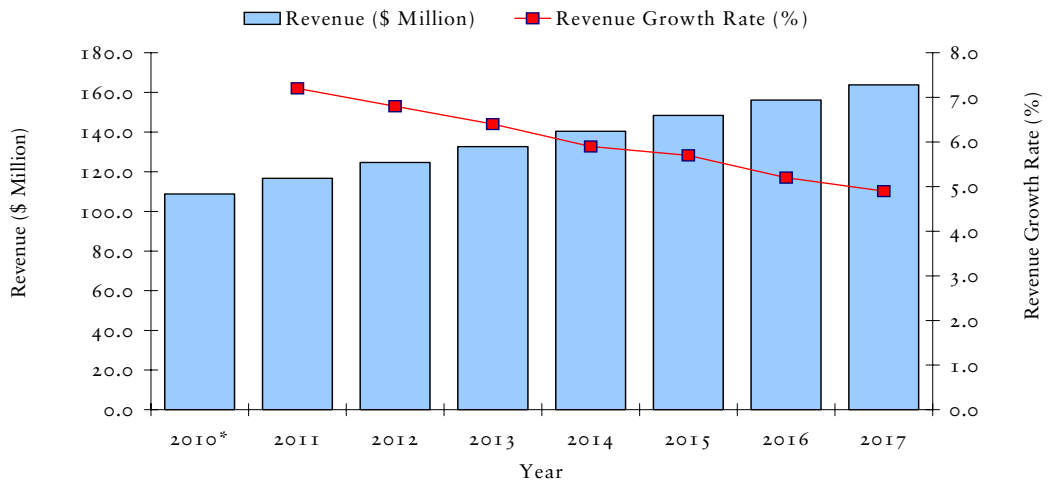
Compound Annual Growth Rate (2011-2017): 5.8%

\*Note: 2010 market size restated based on revised revenue estimates for some vendors

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.22

Workforce Management Software Market: Revenue Forecast (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

Despite its maturity, there is still ample opportunity for growth in the call center WFM sector. A Frost & Sullivan end user survey conducted in 2010 found that 42 percent of North American centers were not using automated WFM systems. As expected, centers under 100 seats are the biggest non-users (54 percent are not using it). But even at the highest levels of the industry, in centers of more than 1,000 seats, a surprisingly high 34 percent of the respondents said that they were not using automated WFM. We thoroughly expect that WFM will continue to experience growth throughout the forecast period.

## Breakdown by Industry Vertical

Figure 1-20 and Chart 1.23 show the percent of revenue by industry vertical for the North American workforce management software market from 2010 to 2017.

FIGURE 1-20

Workforce Management Software Market: Percent of Revenue by Industry Vertical (North America), 2010-2017

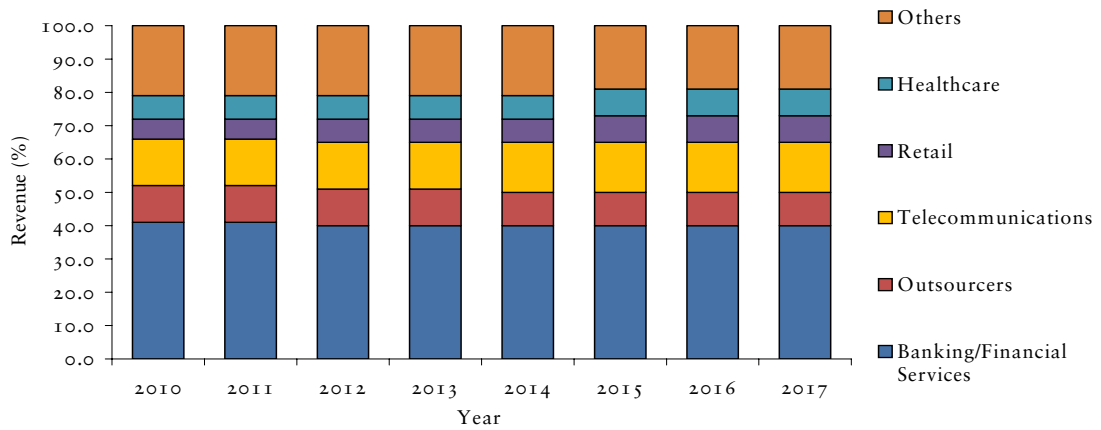
Year	Banking/Financial Services (%)	Outsourcers (%)	Telecommunications (%)	Retail (%)	Healthcare (%)	Others (%)
2010	41.0	11.0	14.0	6.0	7.0	21.0
2011	41.0	11.0	14.0	6.0	7.0	21.0
2012	40.0	11.0	14.0	7.0	7.0	21.0
2013	40.0	11.0	14.0	7.0	7.0	21.0
2014	40.0	10.0	15.0	7.0	7.0	21.0
2015	40.0	10.0	15.0	8.0	8.0	19.0
2016	40.0	10.0	15.0	8.0	8.0	19.0
2017	40.0	10.0	15.0	8.0	8.0	19.0

Note: Others include Government, Higher Education, Utilities, and Travel/Hospitality

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.23

Workforce Management Software Market: Percent of Revenue by Industry Vertical (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

The finance sector still has the lion's share of vertical market penetration for WFM systems, due to this sector being high in the early adopter range, both in customer service channels, and in tracking, monitoring, and improving the performance of agents.

Healthcare is a large growth opportunity for WFM. Whereas healthcare is quick to adopt QM to remain compliant with all of the regulations in that sector, they still lag behind in optimizing their workforce to provide more efficient customer service. Frost & Sullivan therefore sees growth opportunities for healthcare in the forecast period. Outsourcers will also continue to be a strong industry as they try to differentiate their services for customers.

### Breakdown by Contact Center Size

Figure 1-21 and Chart 1.24 show the percent of revenue by contact center size for the North American workforce management software market from 2010 to 2017.

FIGURE 1-21

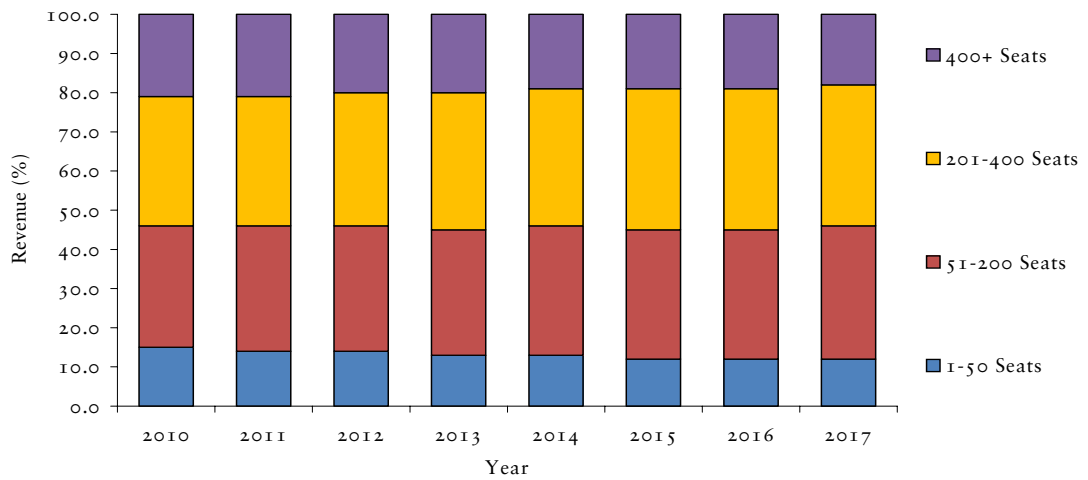
Workforce Management Software Market: Percent of Revenue by Contact Center Size (North America), 2010-2017

Year	1-50 Seats (%)	51-200 Seats (%)	201-400 Seats (%)	400+ Seats (%)
2010	15.0	31.0	33.0	21.0
2011	14.0	32.0	33.0	21.0
2012	14.0	32.0	34.0	20.0
2013	13.0	32.0	35.0	20.0
2014	13.0	33.0	35.0	19.0
2015	12.0	33.0	36.0	19.0
2016	12.0	33.0	36.0	19.0
2017	12.0	34.0	36.0	18.0

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.24

Workforce Management Software Market: Percent of Revenue by Contact Center Size (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

As we noted in last year's report, workforce planners tend to regard their relationship with a WFM tool as "stickier" than other call center tools. They are slow to displace, and often seek to continue the use of a particular vendor's software over the course of a career, as they move from center to center. Change comes slowly across the contact center industry.

Despite proof of the benefits of WFM, there are still many large centers that have not yet adopted the packaged automated applications on the market. This is partly due to the aforementioned "stickiness" of home grown (largely spreadsheet-based) tools.

## Market Share Analysis

Figure 1-22 and Chart 1.25 show the company market share by revenue for the North American workforce management software market from 2010 to 2011.

FIGURE 1-22

Workforce Management Software Market: Company Market Share by Revenue (North America), 2010-2011

Company	2010* (%)	2011 (%)
NICE Systems	20.5	19.9
Verint Systems	15.8	15.2
Aspect	18.1	14.6
Calabrio	7.4	8.3
Genesys	6.0	6.7
Envision Telephony	1.7	3.1
Interactive Intelligence	1.2	1.8
Noble Systems	---	1.7
Others	29.3	28.7
TOTAL	100.0	100.0

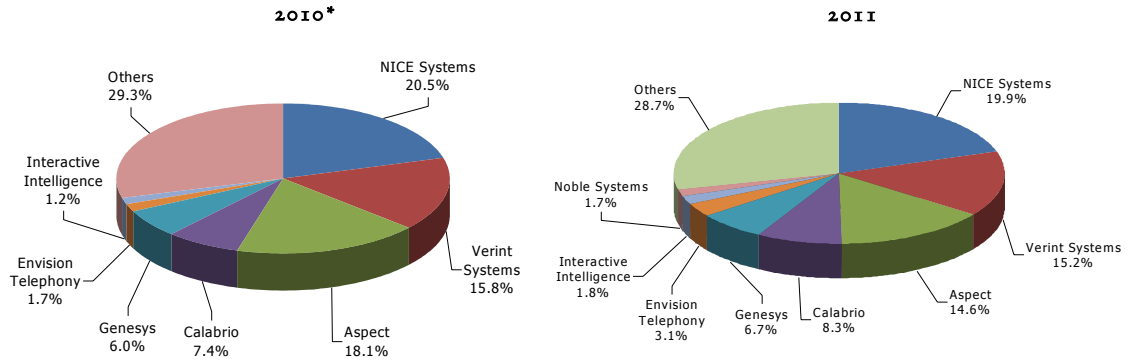
Note: Others include ac2, Bay Bridge Decision Technologies, ESI, injixo, InVision, ISC, Monet, Pipkins, Portage Communications, Upstream Works, WFMSG, and XLScheduler.

\*Note: 2010 market shares restated based on revised revenue estimates for some vendors

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.25

Workforce Management Software Market: Company Market Share by Revenue (North America), 2010 and 2011



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

NICE, Verint, and Aspect lead the pack in market share in 2011, with success being driven by selling WFM suites. However, it wasn't just those three that had suites containing WFM, as Tier 2 vendors also saw signs of growth, and all benefited from the "pull-through effect" of analytics on the APO market.

CONTACT CENTER ANALYTICS MARKET

Market Overview

Prior to 2009, Frost & Sullivan considered Contact center analytics to be a sub-sector of the market for Quality Monitoring systems. Analytics historically was used primarily for agent performance improvement, and was predominantly sold as an add-on to new or existing QM deployments. Even though analytics can be found in all segments, such as reporting on activity within IVR, since 2009 we have been reporting analytics as its own category.

As we reported last year, findings of the Frost & Sullivan End-User Contact Center survey in 2010 found that 65 percent of centers were currently using Performance Management software (one form of analytics), with 44 percent expressing intent to purchase performance management over the next 12-18 months. Speech analytics was in use in 20 percent of centers, with 27 percent expressing intent to purchase. And perhaps most telling, 40 percent of centers were using analytics to measure activity in "alternate" contact channels, notably SMS, chat and email, with 44 percent expressing an intent to purchase for that use. Purchasing behavior in analytics certainly followed suit as we saw 13 percent growth in the analytics market from \$115.7 million in 2010 to \$130.7 in 2011.

Contact center analytics is made up of two separate sectors: Customer interaction analytics and performance analytics.

- **Customer Interaction Analytics (CIA).** Customer interaction analytics looks at the content of interactions in an attempt to decipher customer intentions and behavior patterns. It examines voice calls, chats, emails (or any other interaction type) and reports KPIs that are business- and outcome-oriented. Applications that search for root causes of customer churn, for example, are examples of customer interaction analytics.
- **Performance Analytics (PA).** Performance analytics uses call content information to express metrics that are efficiency-based and operational. Systems that identify agents who need training in particular skills or call types, for example, fall under this category. What is termed performance management and workforce optimization falls under this category.

In the actual marketplace there is considerable overlap in individual products between CIA and PA. Vendors of contact center analytics are still in an innovative stage, working out ways to sift through enormous volumes of data. Organizations are still looking at ways to best disseminate contact center analytics to different stakeholders across the organization, and it only gets more difficult as we add new customer contact channels. Frost & Sullivan is looking at the category of contact center analytics as a way to capture the nuances of a burgeoning movement in centers to express their operational results in terms of overall business objectives.

Large incumbent workforce optimization vendors invariably offer some portion of the PA feature set in their suites. Smaller, niche vendors also offer contact centers the PA components as standalone deployments. However, increasingly, Tier 2 vendors are offering suites as well.

Since performance and cost control is paramount in this environment, analytics that involve data, web, and speech processing, and event notification, are gaining in importance across contact centers. Most of the suite vendors and niche providers have been enhancing the baseline analytics products in their portfolios through development and acquisition.

In 2011, Interactive Intelligence added real-time speech analytics to its portfolio through internal development, and Avaya acquired speech analytics vendor, Aurix, and is now developing that product further. Verint added onto its portfolio as well. In July, 2011, the company acquired Vovici, an industry leader in enterprise feedback management (EFM) solutions, adding onto Verint's VoC solution capabilities. Verint also acquired Global Management Technologies Corporation (GMT), an Atlanta-based leading provider of workforce management (WFM) solutions. NICE, similarly added onto its portfolio by acquiring two companies, Fizzback for VoC solutions, and Merced Systems for performance management. The enhanced suite integrates these new capabilities with workforce optimization, real-time analytics, and real-time guidance.

Analytics has been deeply linked to the tools in the performance optimization space, particularly quality monitoring, call recording, and workforce management software. As noted, the main use case for analytics has been rooted in agent performance optimization. And at the same time, the core APO tools have been maturing, dropping in price and becoming effectively commoditized purchases. This has forced vendors to look at more innovative applications to push contact center productivity higher.

The overarching trend has been to combine data from all sources, inside and outside of the contact center, to create a holistic picture of customer through voice of the customer (VoC) and performance analytics. At the same time, it's important to look at factors outside of the contact center that might affect agent performance, such as back office issues. Companies such as ClickFox, for example, can absorb data from any system across the entire enterprise, and analyze the end-to-end cross channel customer experience.

Autonomy is a key participant in this market. Its products are built on the Intelligent Data Operating Layer (IDOL), which is Autonomy's meaning-based computing platform. IDOL allows computers to understand information that is still in "human-friendly form" (such as phone calls, social media, email) by using mathematical concepts to derive meaning. This allows for automated and intelligent classification, conceptual matching, and visualizations for business users to identify patterns and trends and take action.

Outside the major APO suites there also exists a rich community of companies making specialized best-of-breed analytics systems. Speech analytics, for example, is offered by a trio of companies with close ties to the contact center field: CallMiner, Nexidia, and Utopy, and as speech analytics is rapidly being added to RFPs, analytics vendors are also adding their own homegrown solutions, in addition to partnering with these vendors. For example, Interactive Intelligence added "Interaction Analyzer" to its arsenal and has seen increased interest in deploying the product along with other analytics in its solution set.

In general, with the convergence of diverse data sources and analytics tools to mine those sources, Frost & Sullivan views analytics as a strong growth segment throughout the forecast period.

## Market Engineering Measurements

Chart 1.26 shows the Market Engineering measurements for the North American contact center analytics market in 2011.



CHART 1.26

Contact Center Analytics Market: Market Engineering Measurements (North America), 2011

## Market Engineering Drives Market Strategy and Planning



Measurement Name.	Measurement	Trend
Market age	Growth	--
Revenue	\$130.7 million	Increasing
Potential revenue (maximum future market size)	\$255.2 million	Increasing
Base year market growth rate	13.0%	Increasing
Compound annual growth rate	11.8%	Increasing
Replacement rate (average period of unit replacement)	3-5 years	Decreasing
Customer price sensitivity	Medium	Increasing
Number of Competitors	More than 20	Stable
Degree of competition	5	Increasing
Degree of technical change	9	Increasing
Market concentration (percent of base year market controlled by top three competitors)	42.7%	Decreasing

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

## Revenue Forecast

Figure 1-23 and Chart 1.27 show the revenue forecast for the North American contact center analytics market from 2010 to 2017.

FIGURE 1-23

Contact Center Analytics Market: Revenue Forecast (North America), 2010-2017

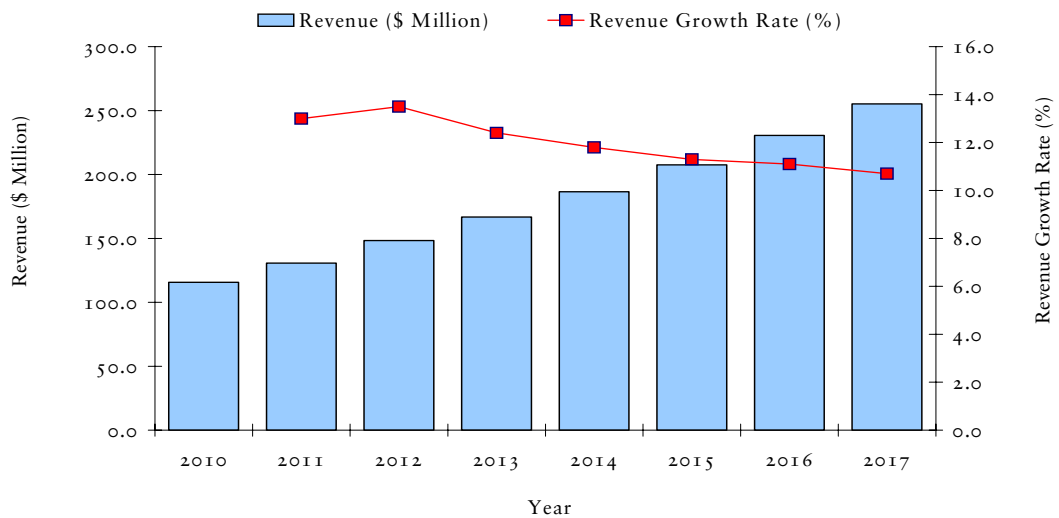
Year	Revenue (\$ Million)	Revenue Growth Rate (%)
2010	115.7	---
2011	130.7	13.0
2012	148.4	13.5
2013	166.8	12.4
2014	186.5	11.8
2015	207.5	11.3
2016	230.6	11.1
2017	255.2	10.7

Compound Annual Growth Rate (2011-2017): 11.8%

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.27

Contact Center Analytics Market: Revenue Forecast (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

It is no surprise that during the economic downturn that effected the buying patterns in the ICR, IVR, and outbound markets, that all APO segments (in particular analytics) saw growth. What budgets were available in part were used to purchase analytics tools that would in turn help business save money, decrease churn, and improve customer relationships; all classic contact center drivers.

As such, as budgets begin to improve over the forecast period, Frost & Sullivan sees continued healthy growth in the analytics market over the forecast period.

## Breakdown by Industry Vertical

Figure 1-24 and Chart 1.28 show the percent of revenue by industry vertical for the North American contact center analytics market from 2010 to 2017.

FIGURE 1-24

Contact Center Analytics Market: Percent of Revenue by Industry Vertical (North America), 2010-2017

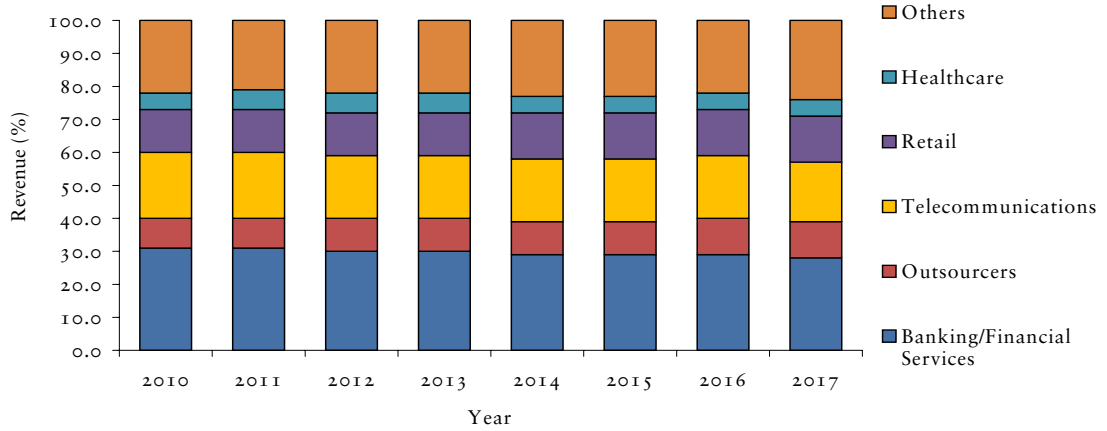
Year	Banking/Financial Services (%)	Outsourcers (%)	Telecommunications (%)	Retail (%)	Healthcare (%)	Others (%)
2010	31.0	9.0	20.0	13.0	5.0	22.0
2011	31.0	9.0	20.0	13.0	6.0	21.0
2012	30.0	10.0	19.0	13.0	6.0	22.0
2013	30.0	10.0	19.0	13.0	6.0	22.0
2014	29.0	10.0	19.0	14.0	5.0	23.0
2015	29.0	10.0	19.0	14.0	5.0	23.0
2016	29.0	11.0	19.0	14.0	5.0	22.0
2017	28.0	11.0	18.0	14.0	5.0	24.0

Note: Others include Government, Higher Education, Utilities, and Travel/Hospitality

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.28

Contact Center Analytics Market: Percent of Revenue by Industry Vertical (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

In 2011, financial services again led the pack in applying analytics to their contact center data, followed by telecommunications, as we saw with the other APO segments. For the forecast period, those two will remain the leaders in analytics deployment. Retail, that stands to gain significantly by mining data on customer sentiment and buying patterns, in addition to utilizing tools to reduce customer churn, will also remain strong during the forecast period.

### Breakdown by Contact Center Size

Figure 1-25 and Chart 1.29 show the percent of revenue by contact center size for the North American contact center analytics market from 2010 to 2017.

FIGURE I - 2 5

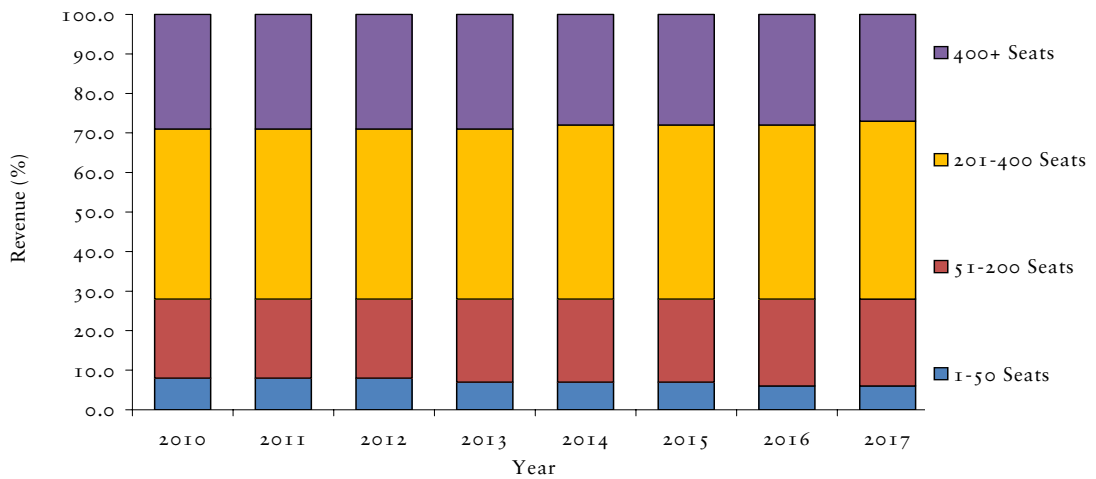
Contact Center Analytics Market: Percent of Revenue by Contact Center Size (North America), 2010-2017

Year	1-50 Seats (%)	51-200 Seats (%)	201-400 Seats (%)	400+ Seats (%)
2010	8.0	20.0	43.0	29.0
2011	8.0	20.0	43.0	29.0
2012	8.0	20.0	43.0	29.0
2013	7.0	21.0	43.0	29.0
2014	7.0	21.0	44.0	28.0
2015	7.0	21.0	44.0	28.0
2016	6.0	22.0	44.0	28.0
2017	6.0	22.0	45.0	27.0

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART I . 2 9

Contact Center Analytics Market: Percent of Revenue by Contact Center Size (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

Analytics is most heavily deployed in systems of 200 seats and above. Over the forecast period it is expected that some mid-market penetration will be achieved, slightly raising the portion of revenues derived from the 50-200 seat segment.

## Market Share Analysis

Figure 1-26 and Chart 1.30 show the company market share by revenue for the North American contact center analytics market from 2010 to 2011.

FIGURE 1-26

Contact Center Analytics Market: Company Market Share by Revenue (North America), 2010-2011

Company	2010* (%)	2011 (%)
Verint Systems	16.4	16.6
NICE Systems	12.8	13.2
Autonomy	12.1	12.9
Nexidia	8.0	8.9
ClickFox	6.9	7.6
CallMiner	6.1	6.3
UTOPY	5.2	6.3
Genesys	---	5.1
CallCopy	1.7	1.7
Envision Telephony	2.8	1.6
Interactive Intelligence	1.3	1.2
VPI	1.0	1.1
Upstream Works	1.1	1.0
Others	24.6	16.5
TOTAL	100.0	100.0

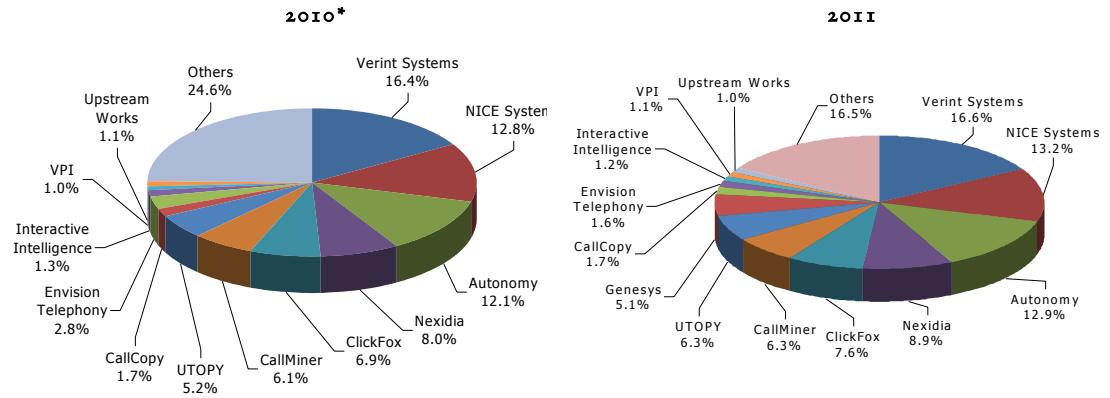
Note: Others include ac2, Bay Bridge Decision Technologies, BroadSoft, ESI, InVision, ISC, Monet, Pipkins, Portage Communications, Upstream Works, WFMSG, and XLScheduler.

\*Note: 2010 market shares restated based on revised revenue estimates for some vendors

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.30

Contact Center Analytics Market: Company Market Share by Revenue (North America), 2010 and 2011



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

The two market leaders from last year have made analytics a core focus for their marketing efforts, and have expanded the scope of analytics capabilities as well as niche focus areas, such as the back office and pockets outside of the contact center. But the market is getting crowded at the top. Autonomy is neck and neck with Verint and NICE, and the Tier 2 vendors are still holding their own.

TOTAL CONTACT CENTER SYSTEMS MARKET

Revenue Forecast

Figure 1-27 and Chart 1.31 show the revenue forecast for the total North American contact center systems market from 2010 to 2017.

FIGURE 1-27

Total Contact Center Systems Market: Revenue Forecast (North America), 2010-2017

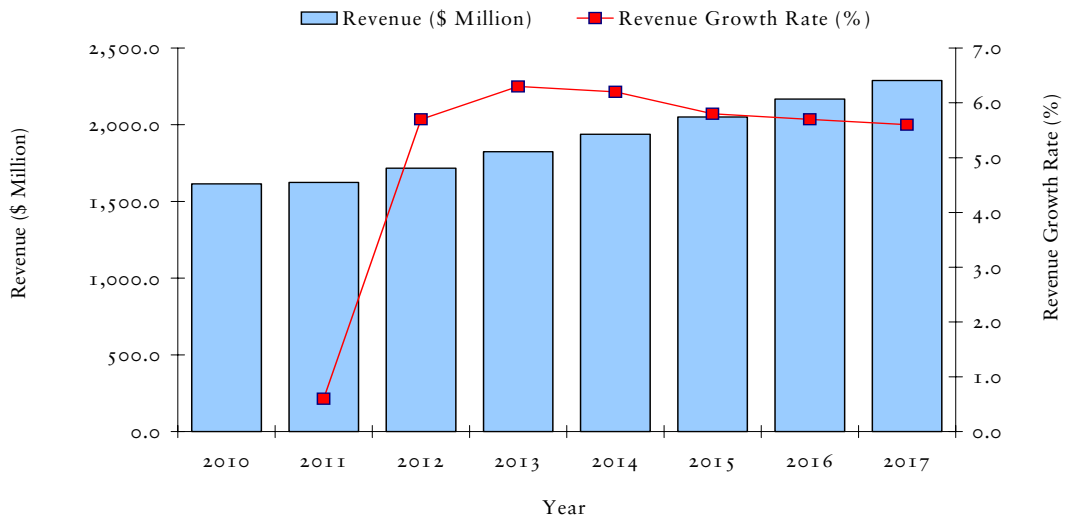
Year	Revenue (\$ Million)	Revenue Growth Rate (%)
2010	1,615.2	---
2011	1,624.3	0.6
2012	1,717.6	5.7
2013	1,825.0	6.3
2014	1,938.1	6.2
2015	2,051.4	5.8
2016	2,167.8	5.7
2017	2,288.2	5.6

Compound Annual Growth Rate (2011-2017): 5.9%

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.31

Contact Center Analytics Market: Company Market Share by Revenue (North America), 2010-2011



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.



## Breakdown by Industry Vertical

Figure 1-28 and Chart 1.32 show the percent of revenue by industry vertical in the total North American contact center systems market from 2010 to 2017.

FIGURE 1-28

Total Contact Center Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017

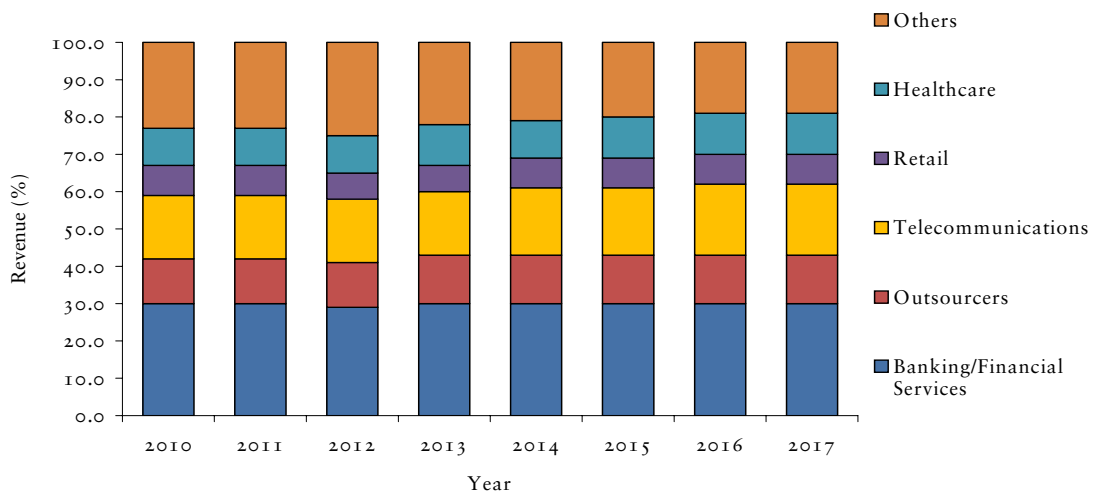
Year	Banking/Financial Services (%)	Outsourcers (%)	Telecommunications (%)	Retail (%)	Healthcare (%)	Others (%)
2010	30.0	12.0	17.0	8.0	10.0	23.0
2011	30.0	12.0	17.0	8.0	10.0	23.0
2012	29.0	12.0	17.0	7.0	10.0	25.0
2013	30.0	13.0	17.0	7.0	11.0	22.0
2014	30.0	13.0	18.0	8.0	10.0	21.0
2015	30.0	13.0	18.0	8.0	11.0	20.0
2016	30.0	13.0	19.0	8.0	11.0	19.0
2017	30.0	13.0	19.0	8.0	11.0	19.0

Note: Others include Government, Higher Education, Utilities, and Travel/Hospitality

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.32

Total Contact Center Systems Market: Percent of Revenue by Industry Vertical (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

## Breakdown by Contact Center Size

Figure 1-29 and Chart 1.33 show the percent of revenue by contact center size in the total North American contact center systems market from 2011 to 2017.

FIGURE 1-29

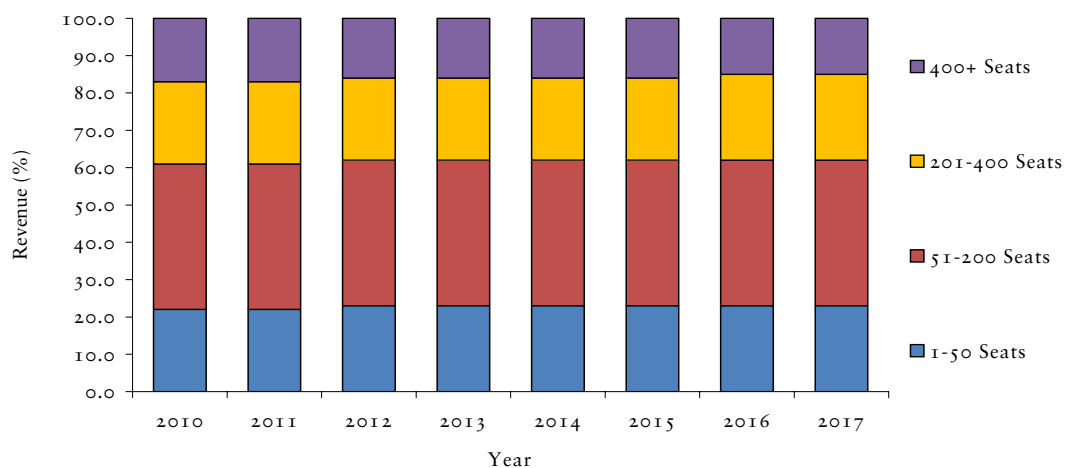
Total Contact Center Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017

Year	1-50 Seats (%)	51-200 Seats (%)	201-400 Seats (%)	400+ Seats (%)
2010	22.0	39.0	22.0	17.0
2011	22.0	39.0	22.0	17.0
2012	23.0	39.0	22.0	16.0
2013	23.0	39.0	22.0	16.0
2014	23.0	39.0	22.0	16.0
2015	23.0	39.0	22.0	16.0
2016	23.0	39.0	23.0	15.0
2017	23.0	39.0	23.0	15.0

Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

CHART 1.33

Total Contact Center Systems Market: Percent of Revenue by Contact Center Size (North America), 2010-2017



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

## Market Share Analysis

Figure 1-30 and Chart 1.34 show the company market share by revenue in the total North American contact center systems market in 2011. This includes restatements of the market from 2010.

FIGURE 1-30

Total Contact Center Systems Market: Company Market Share by Revenue (North America), 2010-2011

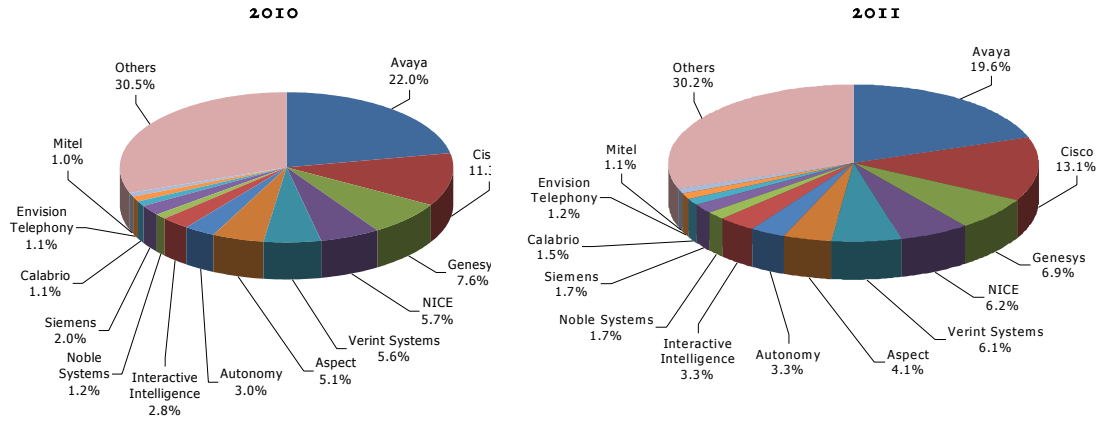
Company	2010 (%)	2011 (%)
Avaya	22.0	19.6
Cisco	11.3	13.1
Genesys	7.6	6.9
NICE	5.7	6.2
Verint Systems	5.6	6.1
Aspect	5.1	4.1
Autonomy	3.0	3.3
Interactive Intelligence	2.8	3.3
Noble Systems	1.2	1.7
Siemens	2.0	1.7
Calabrio	1.1	1.5
Envision Telephony	1.1	1.2
Mitel	1.0	1.1
Others	30.5	30.2
TOTAL	100.0	100.0

Note: Others include Aastra, Altitude Software, Bay Bridge Decision Technologies, BroadSoft, CallCopy, CallMiner, ClickFox, Convergys, Enghouse Interactive, HigherGround, injixo, NEC, Nexidia, Oracle, SAP, ShoreTel, Upstream Works, UTOPIA, Voice4Net, VPI, and Zeacom.

*Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.*

CHART 1.34

Total Contact Center Systems Market: Company Market Share by Revenue (North America), 2010 and 2011



Note: All figures are rounded; the base year is 2011. Source: Frost & Sullivan analysis.

This chart shows the combined revenues of all six segments. Not surprisingly, those that played in the most segments have the highest market share. This mix should change over time as more of the analytics companies expand their offerings, and smaller ICR and IVR companies add on analytics capabilities of their own.

### Products Offered by Leading Vendors

Figure 1-31 shows the products offered by leading vendors in the total North American contact center systems market in 2011.

FIGURE 1-31

Total Contact Center Systems Market: Products Offered by Leading Vendors (North America), 2011

Company	Primary Products
Aastra	Solidus eCare v8; Solidus eCare Lite
Altitude Software	Altitude Unified Customer Interactions (uCI); Altitude vBox 4.0; Unified Dialer; Altitude Voice Portal; Altitude Unified Desktop; Altitude Fast Script Builder
Aspect	Aspect Unified IP7; Productive Workforce 7.4; Seamless Customer Service; Blended Interaction; Streamlined Collections; Optimized Collections
Autonomy	Autonomy Qfiniti (suite) ; Autonomy Explore; Autonomy Interaction Control Element (ICE)

FIGURE 1-31 (CONTINUED)

Total Contact Center Systems Market: Products Offered by Leading Vendors (North America), 2011

Company	Primary Products
Avaya	Avaya Aura Call Center Elite 6.2; Avaya Aura Contact Center (AACC) 6.2; Avaya Interaction Center (IC) 7.3; Avaya Intelligent Customer Routing; Avaya Aura Experience Portal 6.0; Avaya Aura Orchestration Designer 6.0; Avaya Voice Portal 5.1; Avaya Proactive Contact 5.0; Avaya Proactive Outreach Manager 2.0; Avaya Aura WFO 10.1; Avaya IQ 5.1
Bay Bridge Decision Technologies	CenterBridge 3.8
Broadsoft	BroadWorks™; BroadCloud™; BroadTouch™
Calabrio	Calabrio ONE Suite; Calabrio Call Recording 8.8; Calabrio Workforce Management 8.8; Calabrio Quality Management 8.8; Calabrio Speech Analytics 2.2
CallCopy	cc: Discover Workforce Optimization Suite V5.0
CallMiner	Eureka Enterprise R8
Cisco	Cisco Unified Intelligent Contact Management Enterprise; Cisco Unified Contact Center Enterprise; Cisco Unified Contact Center Express; Cisco Unified Customer Voice Portal; Cisco Unified IP Interactive Voice Response; Cisco Unified Contact Center Enterprise (UCCE) Outbound Option; Cisco Media Sense; Cisco SocialMiner; Cisco Finesse
Clickfox	ClickFox CEA; CEA for Operational Efficiency; CEA for Customer Retention; CEA for Customer Satisfaction
Convergys	Dynamic Decisioning Solution; Intelligent Voice Portal; Intelligent Notification Solution; Mobile Customer Care Solution
Enghouse Interactive	Syntellect Customer Interaction Management (CIM); Syntellect Communications Portal 8.0; CT Connect™; Syntellect CT Application Development Environment; Voiyager, CallRex Workforce Management 4.0; CallRex Quality Management Suite 4.2
Envision	Envision Centricity v10.1; Envision Click2Coach; Envision Quality Monitoring; Envision eLearning; Envision Performance Analytics; Envision InteractionIQ; Envision Workforce Management
Genesys	Genesys CIM; Genesys Outbound 8.1.1; Genesys Voice Platform (GVP) R8.1.4; Integration with Conversation Manager; Administrator; Genesys Outbound V8.1; Genesys QM; Genesys Performance Management (GPM); Genesys Info Mart; Genesys Interactive Insights; Genesys Advisor R8.1; Intelligent Workload Distribution (iWD); Workforce Optimization: Genesys Training Manager, Genesys Skills Assessor; Genesys Social Engagement (GSE)

FIGURE 1-31 (CONTINUED)

Total Contact Center Systems Market: Products Offered by Leading Vendors (North America), 2011

Company	Primary Products
HigherGround	Fusion Series 7 Suite; Praetorian Voice Recorder; Mentor QA Suite; Telecom Business Intelligence
Injixo	Injixo WFM
Interactive Intelligence	Customer Interaction Center (CIC) 4.0; Interaction Monitor; Interaction Recorder, Interaction Tracker; Interaction Process Automation; Interaction Supervisor; Interaction Mobilizer; Interaction Dialer, Interaction Analyzer; Interaction Web Portal; Interaction Feedback
Mitel	Mitel Contact Center Enterprise Edition 6.0; Mitel Contact Center Business Edition 6.0; Mitel Customer Service Manager
NEC	UC for Business (UCB) and UC for Enterprise (UCE); Enterprise Automatic Call Distribution (CallCenterWorX-ACD)
Nexidia	Enterprise Speech Intelligence (ESI) Suite 9.1; Nexidia Discover, Nexidia Analyze, Nexidia Evaluate, Nexidia Capture, Nexidia Scan
NICE Systems	NICE Interaction Management 4.1; NICE Quality Management 4.1; NICE Performance Management 4.1; NICE Fizzback 5.2; NICE Interaction Analytics 4.1; NICE IEX Workforce Management 4.5; NICE Real Time Impact Solution 4.8.1; NICE Back Office Suite
Noble Systems	Noble Composer Web Agent v2010.2.2.03; Noble Composer v2009.4.1.1.11; Noble Maestro v2010.1.1.4; Noble TouchStar v6.0; Noble Liberation v7.0; Noble CCS v2010.1.4.4
Oaisys	Talkumet 7.2; Tracer 7.2
SAP	SAP Business Communications Management (BCM) Version 6.0
Siemens	OpenScape Contact Center Agile V8.2; OpenScape Contact Center Enterprise V8.2; OpenScape Contact Center Campaign Director V6.2; OpenScape Contact Center Voice Portal V7.3; OpenScape Workforce Optimization Solutions; OpenScape Contact Center Collaboration Suite; OpenScape Social Media Solution
Upstream Works	Business Interaction Manager (BIM); UpStart Interaction Hub for Contact Center; UpStart Contact Center Agent R3
UTOPY	SpeechMiner; UTOPY Intelligent QM; UTOPY Intelligent Coaching; UTOPY Intelligent Script Adherence; UTOPY First Call Resolution; UTOPY Customer Satisfaction; UTOPY Customer Retention

FIGURE I-31 (CONTINUED)

Total Contact Center Systems Market: Products Offered by Leading Vendors (North America), 2011

Company	Primary Products
Verint	Impact 360 Workforce Optimization Suite; Impact 360 Speech Analytics; Impact 360 Text Analytics; Verint Enterprise Feedback Management; Impact 360 Customer Feedback
Voice4Net	Contact Center HD
Voxeo	Prophecy; Prophecy Commander; VoiceObjects Designer; VoiceObjects; PRISM
VPI	VPI Empower Suite 5.3; VPI Capture Pro (recording); VPI Quality Pro (QM); VPI Performance; VPI Coaching
Zeacom	Unified Contact Center

Source: Frost & Sullivan analysis.

VENDOR PROFILES A - H

Aastra Technologies

Product Segments: ICR, Outbound, IVR, QM

Aastra Technologies, Ltd, (Aastra) headquartered in Concord, Ontario, Canada, is a publicly held IP and hybrid communications products company with over thirty-five years experience in contact centers. Aastra has country sales units in thirty-eight countries, and sells through thousands of partners in over 100 countries. With sales in more than sixty countries, Aastra has targeted and found the most success in Europe, the Middle East, and Africa (EMEA), and it is gaining traction in North America and Asia. About seventy percent of Aastra "Solidus eCare's" customers are in Western Europe.

Aastra has products in ICR (universal queuing, SIP, multi-media, CTI), outbound dialing, IVR, and QM, as well as integrations with top-tier third-party providers. In addition, they have IP-PBX and unified communications solutions, integrated mobility, terminals and high definition video that integrate with their contact center offerings, providing solutions such as presence and expert agent capability.

Aastra differentiates itself by customers receiving a complete and integrated unified communication and collaboration contact center suite in one installation. This all-on-one suite contains advanced multimedia skill based routing, a built-in auto attendant, desktop solution with embedded soft phone and IP recording. Unique to Aastra's architecture, the IVR is integrated with analytics and reporting for all parts of the system. The openness of the solution, along with APIs, offers possibilities to integrate to other systems such as WFM, CRM, or other business applications.

Key verticals include finance, emergency, healthcare, government, utilities, and higher education. Key US partners are Black Box and D&S Communications and Catech in Canada.

#### A A S T R A P R O D U C T S

Aastra "Solidus eCare v7" packages:

- "Solidus eCare Lite" pre-installed/pre-configured on Aastra 700 (SMB)
- "Solidus eCare Lite for the SMB market"
- "Solidus eCare Multimedia Contact Center" for the large enterprise market

Solidus eCare is a suite of integrated UC and contact center applications that aim to create efficiencies and peak management in contact centers. Solidus eCare provides analytics and administration, occasional and expert agents, both stationary and mobile, and native presence management, IM, directory support, conferencing, and collaboration functionality.

Solidus eCare employs a modular architecture with component licensing and operates on standard operating systems and off-the-shelf server hardware (including virtual machines). Solidus eCare's monitoring, reporting and analytics applications enable customers to increase visibility into workflows. Integration to appointment management, scheduling and self-service (i.e., IVR) applications enable customers to automate repetitive, routine tasks. To help the customer meet compliance stipulations and service level agreements Aastra incorporates recording, archiving, and scheduling applications into the solutions. Conferencing, team spaces, content management, and other collaborative tools seek to enhance the utilization of business process automation.

#### M A R K E T H I G H L I G H T S F O R A A S T R A

- New Agent Desktop – BluStar Agent application
- Simplified deployment
- Configuration web service API
- Improvements to Web Callback
- Solidus eCare integration with BluStar 8000i video terminal



## Altitude Software

Product Segments: ICR, Outbound, IVR, QM

Altitude Software (Altitude), headquartered in Portugal, is a privately held contact center solutions company. The company primarily sells direct, with sixteen regional offices to serve its more than 1100 customers, spread across sixty countries. Although historically Spain and Latin America have been strongest in sales for Altitude, the company is increasing sales in North America. Key vertical markets include: finance, debt collection, telesales, customer care, help desk operations, hospitality, and entertainment.

Altitude Software pricing is based on simultaneous log in and license type (voice and email, for example). However, they also provide a hosted pricing model for on-premise solutions as well "pay as service", based on "high water usage" per month, giving customers hosted pricing options.

Although Altitude has its own soft switch, the company is switch-agnostic, and its solutions can ride on top of a dozen or more vendor infrastructures. The company provides a unified desktop and agent scripting capability, which allows Altitude to offer an alternative to incumbent vendor solutions, without having to replace the whole system.

### ALTITUDE PRODUCTS

- "Altitude uCI" (Unified Customer Interactions) is an IP-based, unified, but modular, contact center application suite. It has an all-in-one design, scales to support 15-5,000 agents, can be configured for various levels of multi-tenancy, and is transport and switch agnostic (supporting all of the leading vendors' PBXs).
- "vBox 4.0" is an Asterisk-based SIP Server that can be integrated with Altitude uCI, supporting up to 2000 agents, with centralized configuration and management.
- "Altitude Unified Dialer" supports preview, power/progressive, and predictive dialing, provides multitenancy, and is switch agnostic.
- "Altitude Voice Portal" is a speech enabled IVR for inbound and outbound interactions.
- "Altitude Unified Desktop" is a desktop with all the suite capabilities built in so that the look and feel is the same no matter what channel the agent is working in.
- "Altitude Fast Script Builder".

## MARKET HIGHLIGHTS FOR ALTITUDE SOFTWARE

- Strong in the outsourcing vertical, globally and in North America
- Launched a branded, hosted offering in Brazil, and one in Sweden, with expansion plans over time
- Moving towards providing integrated business analytics to facilitate workflow across media types

## Aspect

Product Segments: ICR, Outbound, IVR, QM, WFM, Analytics

Aspect, headquartered in Chelmsford, Massachusetts, is a provider of customer contact and Microsoft platform solutions. Aspect positions Aspect Unified IP as "a scalable, reliable, all-in-one application suite design, supporting broad and deep functionality, based on open and industry-standard hardware and software that is also switch and transport agnostic". Aspect, through a strategic alliance with Microsoft, was one of the first vendors to integrate UC and the contact center by enabling collaboration between the contact center and the enterprise, and letting "knowledge agents/workers" handle non contact center calls from Microsoft's Lync platform within the same desktop application.

One of Aspect's strengths is the company's outbound dialing capability. Aspect positions its outbound dialing functions as integrated with its own contact center capabilities, as well as being integrated with other vendors' contact center and business applications, due to the architecture being switch and transport agnostic and based on openness and industry-standard hardware and software. Aspect's dialer supports various dialing modes, including: predictive, precision, preview, blaster, manual, agent-less, goal-based quota control, and manual. The "Unified Outreach" application is designed to automate early-stage collections, and provide for more effective delinquent account targeting.

In addition to the core dialing functionality, Aspect offers capabilities and professional services to design, optimize, and manage outbound campaigns. Aspect targets enterprises across the spectrum of industries, with its outbound dialing systems, as well as the traditional outbound application sectors—collections, telemarketing, and telesales.

Aspect Unified IP ports are universal, meaning they can be used for inbound or outbound. Thus, Aspect Unified IP can support up to 2,000 concurrent outbound/inbound agents per system and tens of thousands of agents in an enterprise, multi-node deployment. Aspect provides packaged solutions for "Seamless Customer Service" and "Blended Interaction" which take advantage of its multi-channel capabilities. Blended Interaction focuses on the blending of outbound campaigns with inbound customer contacts. Seamless Customer Service unites inbound routing and voice portal capabilities to reduce the cost-per-customer inquiry by coordinating self-service with live agent assistance, seeking to create a consistent experience across channels. Aspect's customers use Aspect Unified IP for inbound, outbound, and blended environments.

Aspect also offers solutions for workforce optimization, including: WFM, performance management, and QM, all seeking to reduce the cost per interaction and improve the customer experience by enabling organizations to evaluate multiple staffing plans, align performance with corporate strategy, and facilitate internal collaboration among employees and across departments by incorporating presence and click-to-communicate functionality. Workforce optimization capabilities are fully integrated with the Aspect Unified IP platform and applications such as Blended Interaction and "Optimized Collections" aim to take advantage of those synergies. Blended Interaction includes forecasting, planning, and scheduling capabilities that are particularly suited to the blended environment. Optimized Collections use performance and workforce management functionality to support calling strategies for lowering staff costs while seeking to improve the effectiveness of collections.

Aspect sells both direct and indirect. Aspect's key go-to-market partner is Microsoft, and its partner ecosystem also includes: Dell, Black Box Networking, Call Design, Premiere Technologies, and USAN.

#### ASPECT PRODUCTS

- "Aspect Unified IP 7" includes data-directed and skills-based routing, queue optimization, abandoned call recovery, and contextual enterprise routing. This includes auto-attendant and voice portal capabilities.
- "Productive Workforce 7.4" includes WFM, quality and performance management, recording, surveying, coaching, eLearning, and analytics.

#### MARKET HIGHLIGHTS

Aspect introduced Aspect Unified IP 7, which included:

- "Contextual Enterprise Routing" to resources no matter where they are in the enterprise, so that a customer is more likely to be connected to the best person to meet their needs.
- "IM within the Contact Center", through integration with Microsoft Lync 2010.
- "Ask an Expert", which enables agents to tap into the enterprise using IM, presence, and collaboration to assist them in finding experts to help resolve the customer request on the first call.
- "Unified Command and Control": provides a unified environment to manage contact center operations.

Aspect introduced Productive Workforce 7.4, which included new capabilities to enable companies to optimize the scheduling and performance of employees in the contact center and back office, including:

- Back Office workforce optimization. Offers the ability to monitor activities of employees working on back office tasks and forecast and schedule resources to achieve business objectives.
- Schedule access within Microsoft Outlook. Agent schedules and assigned tasks, such as training sessions, breaks, and vacations are published in Microsoft Outlook to provide better visibility to agents on their work schedules and activities.
- Recording for IP based agents. Quality management capabilities of Productive Workforce have been extended to record and monitor agents using SIP based connectivity.

## Autonomy

Product Segments: QM, Analytics

Autonomy, an HP company, was founded in 1996. Throughout the years it developed and used a product called Autonomy "Intelligent Data Operating Layer" (IDOL), which is a meaning-based computing engine, the foundation for understanding unstructured data. Autonomy acquired Zantaz for email archiving and Interwoven for the company's web content and document management capabilities. Autonomy also acquired eTalk for contact center recording and speech analytics. Autonomy then put IDOL into these applications. Eventually, HP acquired Autonomy to bring unstructured data into their applications. Autonomy now makes up the bulk of Information Management at HP, but is run as a separate company.

Autonomy is focused on the largest contact centers, 200 agents and above, and has an installed base with many in the thousand or more range. It sells directly to large customers, but has more than 300 partners that are trained to implement technology, and deliver value-added services. Financial services, technology, and telecommunications are the company's biggest verticals, but they also do well in travel, healthcare, and contact center customer service groups.

#### AUTONOMY PRODUCTS

- "Autonomy Qfiniti". Autonomy's solution for managing contact center performance is integrated with Autonomy's core technology platform, IDOL, for managing enterprise data. The company's customer interaction solutions include tools for providing real time agent support, knowledge base search, and interaction analysis tools for voice and other communication channels such as IM, email, social media, and chat. The IDOL platform allows Autonomy to gather, interpret, and propagate customer interactions and share the information with other key parts of the organization.
- "Autonomy Explore". A multichannel customer interaction analytics tool that analyzes customer interactions inside and beyond the enterprise. Built on Autonomy's IDOL "meaning-based" computing platform, Explore takes all interactions and evaluates their meaning within the context of customer interactions data. This capability aims to let businesses understand, link up, and identify patterns within all customer interactions, including telephone conversations, website visits, product reviews, email, blog posts, tweets, and social media status updates.
- "Autonomy ICE". The company's desktop integration tool. It can control agent interactions on the desktop or back office employee desktop. It can control what agents and supervisors see for PCI compliance, not just on the screen, but stopping and starting recordings of voice, so that sensitive data is not recorded.

#### MARKET HIGHLIGHTS FOR AUTONOMY

- HP finalized the acquisition of Autonomy in October 2011.
- Announced "IDOL 10", a single platform to better understand structured and unstructured information and to extract meaning from that, and then act on the information.

## Avaya

Product Segments: ICR, Outbound, IVR, QM, WFM, Analytics

Avaya, a global company headquartered in Basking Ridge, New Jersey, is one of the legacy vendors in the contact center market. Avaya products span the entire range of contact center offerings, playing in all six areas that Frost & Sullivan uses to differentiate the contact center, either on its own, or with additional solutions through partners. Globally Avaya sells best in the 100-250 agent range, but in North America it also does well in 1000+ employee enterprises.

Avaya contact center solutions are primarily sold through channel partners (70%), with a partner program to back it. Key North American partners include Relational Technology Services, North America Communications Resources (NACR), Cross, Strategic Products and Services (SPS), Carousel Industries, Cincinnati Bell, BT, IBM, and Accenture. Key verticals include: finance, outsourcers, retail, healthcare, hospitality, and the public sector.

### AVAYA PRODUCTS

Avaya's inbound routing solutions include the following:

- "Avaya Aura Call Center Elite 6.2": runs over any combination of TDM, VoIP, and SIP, enabling a migration to IP telephony and SIP. Key features include:
  - the solution is embedded within Avaya "Aura Communication Manager"
  - contains "Business Advocate", a routing and agent selection capability that helps companies meet service levels across their business
  - provides virtual routing to find the best resource and shortest wait time across multiple contact centers
- "Avaya One-X Agent", an agent desktop designed to maximize productivity.
- "Avaya Aura Contact Center (AACC) 6.2": a SIP based multi-channel contact center solution which can be used with Avaya Aura Communication Manager to provide full voice and multi-channel routing, or integrated with Call Center Elite as a multi-channel add-on. It has a context-sensitive workflow engine for voice, email, web chat, fax, instant messaging, SMS, and social media contacts.
- "Avaya Interaction Center 7.3" (IC): a CTI-based large enterprise multimedia contact center solution. IC unifies integration and handling of multiple media across multiple sites and locations.
- "Avaya Intelligent Customer Routing": software application that orchestrates self service, advanced wait treatment applications, and real-time routing information from multiple ACDs to optimize delivery of caller experience.

Avaya outbound products include:

- "Proactive Contact 5.0": an agent based predictive dialing platform. Priced on a "per concurrent agent" and "per concurrent supervisor" basis for new systems, add-on agents, and upgrades. Software-only CTI-based preview dialing is also a deployment option.
- "Proactive Outreach Manager 2.0": an automated multichannel outbound platform. Priced on a "per port" basis for new outbound voice systems, add-on ports and upgrades. Email and SMS channels are priced on a per media channel, per system basis. The majority of sales are for proactive automated customer care applications.
- "Avaya Notification Solution 1.0": automates mass notifications for incident warnings or alerts and business process oriented notifications systems for the enterprise.

Avaya IVR/Voice Portal products include:

- "Avaya Aura Experience Portal 6.0": a platform for coordination of all inbound and outbound customer automation across all media channels and resources. Release 6.0 includes integration with Avaya Aura Contact Center, and incorporates Avaya Intelligent Customer Routing (ICR) capabilities as a core feature. ICR uses SIP, and eliminates the requirement for a duplicate, parallel CTI network. ICR handles incoming traffic as a first entry point, and can deliver self-service and automation before calls get to the ACD. The enhanced wait treatment keeps the customer on Experience Portal while preserving their position in queue.
- "Avaya Aura Orchestration Designer 6.0": is a unified application service creation environment for design, simulation, and management of applications for the Avaya Aura Contact Center suite. "Orchestration Designer" is the newest generation of Avaya "Dialog Designer" and the "Service Creation Environment for Contact Center".
- "Avaya Media Processing Server 3.5": supports advanced speech, VoiceXML, SIP, multiple version ISDN and SS7 support, enabling integration with many CTI applications.

"Avaya Aura Workforce Optimization" (Contact Recording, Quality Monitoring, Workforce Management, and Analytics solutions) include:

- "Avaya IQ": provides unified reporting and analytics to help companies map contact center performance to business results. Avaya IQ reports on multi-media contacts through Avaya Aura Contact Center, as well as voice calls from Call Center Elite, time spent in self-service through Voice Portal or Experience Portal, and outbound calls via Proactive Contact.
- "Avaya Aura WFO 10.1": helps businesses understand what happened in each interaction, act upon it, establish repeatable best practices and set correct expectations before the next interaction. Release 10.1 unifies contact recording, quality monitoring, eLearning, workforce management, speech and desktop analytics, and customer feedback under one platform that provides a single user interface and centralized system administration and reporting. The Avaya Aura WFO solution includes the following primary applications:
  - Avaya Contact Recording (CR)
  - Avaya Quality Monitoring (QM)
  - Avaya Workforce Management (WFM)

In addition, there are Speech Analytics (SA) and Customer Feedback (CF) applications closely integrated with the WFO offering that are available as optional add-ons to WFO.

#### MARKET HIGHLIGHTS FOR AVAYA

- AACC became one of the most successful product introductions in Avaya's history with over 2000 booked orders since its introduction in July 2010, driven by customers interested in multi-channel, multi-media implementations, including the benefits of integrating a social media strategy into the contact center with "Avaya Social Media Manager".
- Avaya added a unified agent desktop for "Elite Voice" and AACC multimedia, so agents can manage multi-channel contacts.
- Avaya delivered two key new features: (i)'Sphere' search engine and (ii) central license tracker with the newest release of Avaya Contact Center Control Manager. This solution enables centralized administration across Avaya's entire contact center suite, including Avaya Aura Call Center Elite, Avaya Aura Contact Center (AACC).
- Avaya introduced unified reporting and analytics with Avaya IQ for Elite Voice and AACC.



- Customers using presence services (Avaya Aura Session Manager) for UC can now display "expert agent presence" status on the agent desktop.
- Avaya introduced specially-priced mid-market solution bundles (AACC-M).
- Introduced "Experience Portal" and "Orchestration Designer": enabling platform and tools for unifying inbound and outbound automation and customer interactions across all media channels and resources.
- Avaya introduced "Proactive Contact 5.0" (March 2011) which included agent blending, enhanced cell phone detection, enhanced skills based routing, enhanced telecom regulation support, and enhanced IP support.
- Avaya announced Release 10 of their WFO suite, which added single recorder for both heritage Avaya and NES environments, SIP recording for AACC, full time screen recording, and new supervisor and agent desktop applications.
- Avaya acquired Aurix, for speech analytics (November 2011).

## Bay Bridge Decision Technologies

Product Segments: WFM, Analytics

Bay Bridge Decision Technologies, headquartered in Annapolis, Maryland, is a company that straddles the line between providing analytics and WFO solutions. The company's "CenterBridge" family of products facilitates customer contact channel strategic and capacity planning. The company claims to be the first purveyor of a contact center capacity planning system, introduced over a decade ago, and since then has provided contact channel forecasting, capacity planning, staff planning, and strategic analysis for the world's top brands.

The company targets Fortune 500 companies, 200 – 5000 agents, across North America and Canada, and are industry non-specific. They sell directly, and also through partnerships with NICE and Aspect.

### BAY BRIDGE DECISION TECHNOLOGIES PRODUCTS

The CenterBridge family of products is designed to support the analytic and strategic performance needs of customer contact centers, branch locations, and processing organizations, aiming to drive more efficient staffing strategies, improved capital investment allocation, comprehensive performance planning, and improved risk management. Bay Bridge Decision Technologies differentiates itself through enterprise analytics (ie, "answering bigger picture questions for executives"), rather than analyzing what is happening in calls.

Bay Bridge Decision Technologies claims that CenterBridge is the only contact center solution designed specifically for long-term planning. It uses simulation modeling that is both fast and accurate. Users of CenterBridge benefit from its automation, analysis, and enterprise-wide view.

For example, a manager could do a "what if I add five people"? The system then spits out different service levels, depending upon what information is entered, and then looks at the effect on every hour of the day where those five extra people are working. Users can change attrition, add overtime or send people home early, or play with shrinkage. Users can forecast sick time, week over week for a year, as well as take into account differences in location. Consider that agents are known to call in sick at different times in one location versus another (think of what happens the first week of spring after a long winter in Chicago versus San Diego, or what happens to the labor pool during spring break at colleges).

What CenterBridge can provide is a very fast and accurate "what if" engine for the contact center. The value of the system is in answering questions and the producing a budget. Whereas it might normally take four days to produce a budget, CenterBridge can do that in minutes.

CenterBridge is a decision making tool that allows a manager to enter "what ifs", then see the implications of changing that factor for any time period - day month, week, year, etc. For example, a hiring freeze scenario might mean adding part time employees and a short term spike in calls; the tool would then show impacts on metric such as revenue, staffing needs, and service levels New features in "CenterBridge 3.8" include:

Sensitivity Analyses: graphs the relationship between key performance drivers and expected financial and operational performance. Version 3.8 also allows for:

- The ability to select multiple contact types/groups/weeks/months
- The ability to roll-up multiple selections at different levels
- Saving templates allows the customer to tailor charts and then be able to reproduce it every month or for different groups
- Multiple charts can be loaded at the same time, allowing for more detailed analysis
- Multiple series can be plotted on the same chart (Multiple Weeks/Months or Center Staff/Contact/Groups)
- Requirements can be displayed on the Y-axis based on the goals that were entered

MultiSkill Enhancements: supports hiring, planning, staff optimization, service quality performance prediction, overflow and backup routing forecasting and sensitivity analysis for the multi-skilled contact center. In version 3.8, the company examined the components of MultiSkill, increased the speed of the linear program, and reassigned some penalty values to better fit the case where capture rates constraints are not being met.

AutoSim In DataLoad: offers the ability to create larger models in a shorter timeframe, than the prior release.

## Broadsoft

Product Segments: ICR, IVR, Analytics

BroadSoft, Inc. (NASDAQ: BSFT), headquartered in Gaithersburg, Maryland, is a global provider of software that enables mobile, fixed-line, and cable service providers to deliver Unified Communications (UC), voice and multimedia services over IP-based networks. BroadSoft's IP communications software is utilized by more than 500 telecommunications service providers, and aims to empower the delivery of personalized communications and entertainment services to businesses and residential subscribers. BroadSoft has customers in more than sixty-five countries, employees in twenty-one countries, R&D centers in four countries, and technical support centers in seven locations around the world.

BroadSoft's "BroadWorks" platform scales to support enterprise customers and call center environments of many sizes, from queuing calls for a single employee to high volume centers with thousands of agents. Because of the platform flexibility, service providers deploying "BroadWorks Call Center" applications may focus on different target markets, including the following:

- SMBs. For which BroadSoft can bundle ACD capabilities with hosted PBX service.
- BPOs/high volume 'outsource' call centers. For which BroadSoft offers bundled end-to-end service with business voice service, advanced ACD, and customer data integration.
- Distributed call centers. Offers centralized call distribution for highly distributed enterprises, such as insurance and retail.
- "High-touch" call centers. For example, technical support groups that leverage the UC capabilities from BroadSoft (presence, chat, web collaboration) to resolve complex issues from customers in real time.
- Overlay to Enterprise PBX. Offers ACD service as an overlay to a SIP trunk from the Service Provider to an Enterprise PBX.

## BROADSOFT PRODUCTS

BroadSoft is different from most vendors in their space in that it sells applications to service providers, who then deploy the applications in their networks and sell a bundled service to end users. The three elements of BroadSoft's UC portfolio are:

- "BroadWorks". The VoIP communications application server that aims to deliver unified communications services, including business voice services and ACD functionality. The BroadWorks platform provides a set of business voice features, plus services like ACD functionality, reporting, conferencing, messaging, and open, web-based APIs, aiming to help service providers meet the demands of many call center environments. Additional functionality is provided through technology partnerships using the BroadWorks web-based APIs, such as call recording, outbound dialers, and chat/email integration.
- "BroadCloud". A set of cloud-based communications applications that are hosted by BroadSoft and resold to end users through service providers, including web collaboration, video conferencing, text messaging, and IM&P. BroadCloud provides IM&P infrastructure, web collaboration, and other services that are often part of a collaborative call center environment.
- "BroadTouch". A line of end user clients, including call center agent and supervisor clients and mobile clients.

The BroadSoft call center application includes all three elements of BroadSoft's portfolio, but the call center solution includes:

- Business voice services
- Automatic Call Distribution (ACD)
- IVR/Auto Attendant
- Queuing
- UC services
- Agent Virtualization
- Monitoring and reporting
- Agent and supervisor clients
- IM&P

## MARKET HIGHLIGHTS FOR BROADSOFT

- In September, BroadSoft announced the latest release of its contact center solution, with the following enhancements:
- Reporting Engine. Enhanced set of real-time and historical performance metrics that aim to enable call centers to optimize their workforce, with the use of new pre-configured, scheduled and customizable reports.
- Web-based call center clients. Redesigned to be more user-friendly, web-based client seeks to enable agents to more efficiently handle calls and improve a supervisor's ability to monitor local and remote activity in order to better manage the call center and ensure high customer satisfaction.
- Web-based API. "BroadWorks Xtended Services Interface" (XSI) aims to enable more integration of BroadWorks ACD functionality with 3rd party applications and platforms.

## Calabrio

Product Segments: QM, WFM, Analytics

Calabrio Inc., headquartered in Minneapolis, Minnesota, develops and markets Calabrio ONE, a suite of contact center workforce optimization software, in a Web 2.0 framework, that includes call recording, quality assurance, workforce management, speech analytics, and performance-based dashboards and reporting. Calabrio ONE can be purchased as an entire suite, or in product bundles and add-ons.

The company sells globally through channel partners. Calabrio has achieved the highest status of Preferred Solution Developer in the Cisco Developer Network (CDN), and is a 'gold member' of Avaya's DevConnect program. Other key channel partners include CDW Logistics, Dimension Data, eLoyalty, Insight Networking, Nexus IS, Presidio Networked Solutions, Servion, and Shoregroup. Key verticals include: finance, insurance, distribution, manufacturing, government, and retail.

Calabrio offers the Calabrio ONE dashboard, which is presented as a series of widgets in an OpenSocial framework embraced by popular social media sites. Each user can choose from the widget library of performance graphs and activities, then position and configure the dashboard according to their own needs and preferences. Calabrio ONE is designed for a more personalized user experience with intuitive navigation and a consistent look and feel between all applications.

## CALABRIO PRODUCTS

Calabrio ONE 8.8: includes new features for Calabrio Call Recording, Calabrio Quality Management and Calabrio Workforce Management, including:

- Expansion of the supervisor role
- A new agent schedule view for supervisors, which provides agent and team schedules, adherence and coverage views on a single unified screen
- Drag and drop schedule editing, which allows supervisors to make scheduling changes, preview the performance impact, and put the changes into production
- Additional dashboard widgets for supervisors, including schedule, service level and adherence tracking for a named agent or group of agents
- The ability to evaluate, score and report on the quality of customer interactions through any channel (chat, email, social media)
- Expanded evaluation calibration capabilities enabling contact center managers to benchmark evaluators

## MARKET HIGHLIGHTS FOR CALABRIO

- Customers range from twenty-five to thousands of agents
- Sales are through partners for enterprise installations with 200 seats and above and through an OEM relationship with Cisco for enterprise installations with 300 seats and below
- Calabrio announced in 2011 that Calabrio Call Recording and Calabrio Quality Management products now support Cisco MediaSense version 8.5.3, an open-standards, network-based recording platform that offers multimedia recording options for the enterprise

## CallCopy

Product Segments: QM, WFM, Analytics

CallCopy, headquartered in Columbus, Ohio, is a privately held, workforce optimization vendor. The company's solution suite scales from small centers up to enterprise deployments, but is typically sold in the 150-1,500 range to companies needing to integrate distributed architectures and disparate application systems, to fulfill business requirements, such as regulatory compliance, at-home agents, or liability risk management. The company has a full roster of applications, including QM, screen capture, speech analytics, coaching, training, performance management, customer surveys, and security/PCI compliance.

CallCopy has 900+ installations in thirty-seven countries around the globe, with about half of sales direct, and the balance of sales coming through channel partners. Key channel partners include: NACR, Altura, Carousel, and Arrow S3 (formerly Cross Telecom). CallCopy has strong relationships with Avaya, Cisco, and ShoreTel. The majority of its sales are said to be competitive replacements of other workforce optimization systems. Although CallCopy doesn't target specific verticals, it has strong sales in BPO, healthcare, insurance, and education.

CallCopy attempts to differentiate itself by providing full functionality out of the box, along with a focus on quality customer support. CallCopy hires PMP certified project managers with experience managing contact centers, trainers with contact center management experience, and support technicians with contact center IT infrastructure support experience. CallCopy also provides an online portal that includes online live training and community forums.

### CALL COPY PRODUCTS

"cc: Discover Workforce Optimization Suite v5.0", which includes:

- Call recording ("cc: Voice") works in VoIP, TDM, and blended environments
- Screen recording ("cc: Screen")
- Quality management ("cc: Quality")
- Speech analytics ("cc: Analytics")
- Desktop analytics ("cc:Fusion")
- Workforce Management ("cc: Clarity")
- Agent coaching ("cc: Agent")
- Performance management ("cc: Insight")
- Feedback Management ("cc: Survey")

## MARKET HIGHLIGHTS FOR CALL COPY

- Introduced cc: Fusion (February 2011). Desktop analytics which integrates with employee desktop workstations to extract relevant data from Web browsers and other utilities, and store that data within cc: Discover suite for further use. cc: Fusion helps with information such as PCI compliance, identify verification, etc.
- Introduced cc: Clarity (September 2011). Workforce management, which provides forecasting and scheduling, intraday management, agent empowerment, dashboards and wallboards, data integrations and mobile tools. cc: Clarity is integrated into the cc: Discover WFO suite.
- Saw increased adoption of speech analytics.

## CallMiner

Product Segments: QM, Analytics

CallMiner, founded in 2002, and headquartered in Waltham, Massachusetts, is a venture-backed producer of enterprise speech analytics systems. The company's "Eureka Enterprise" was developed for large enterprises or multi-site contact centers. CallMiner's Enterprise product automates the process improving agent performance through analytics across all channels, monitoring information from 100 percent of interactions – calls/audio, chat, email, surveys, and social – to uncover information about agent performance.

Eureka interfaces with all recorder types, including those from NICE, Verint, and Aspect.

The system supports mixed environments with multiple recording systems, rolling them together for a single organizational view. CallMiner also offers an "Essentials" version for smaller deployments that do not require the infrastructure commitment of the Enterprise system, and a Managed Services offering for companies looking to get up and running quickly, and ultimately transition to a fuller system. They also offer a hosted version.

CallMiner primarily sells direct, but also partners with recording vendors. Aspect is a major channel partner, using Eureka as the speech analytics engine for its APO suite. CallMiner has a growing indirect channel, which includes several cloud contact center solution providers (infrastructure, recording, CEM, EFM, performance management). CallMiner primarily targets technology companies, financial services and collections, and Internet marketing/e-commerce.



## CALLMINER PRODUCTS

"CallMiner Eureka 8":

- **Unified Mining.** The Eureka conversation mining platform has direct integrations with all the major communications platforms for ingestion of call recordings, chat transcripts, email, social media, and associated contact metadata. Conversations and data can be extracted from multiple sites whether remote, premise based or hosted. During ingestion sensitive data such as PCI data can be redacted to allow customers to retain compliance.
- **Search & Analysis.** Core analysis of conversations is conducted through web-like search interface. Search allows for the selection of contacts (calls, emails, chats) that match criteria, including: sophisticated word and phrase language patterns, categories, attributes or metadata (agents, groups, etc.), and measure values. Results are returned as either a document list or any number of visualizations, including a tag cloud view that automatically identifies topics extracted from the transcripts or around specific events such as silence, categories, or words.
- **Automated Quality Monitoring.** Eureka automatically scores every contact according to user customizable criteria for expected language or measure characteristics. Agent quality scores can be visually compared across groups and agents using "Agent Explorer", to identify people or competencies that require coaching. The Score Card feature allows for review with individuals during coaching sessions.
- **Instant Insights.** A package of predefined generic language categories tracking behaviors, and scores for Agent Quality, Customer Satisfaction, and Emotion
- **Content Independence.** Category development tools and "Score Builder" allow customers to manage customization and configuration for various business initiatives without having to rely on CallMiner or third party services.

## MARKET HIGHLIGHTS FOR CALLMINER

CallMiner released Eureka 8 in 2011, which introduced Automated Quality Monitoring features and multi-channel (voice, text, social) analytics. The firm also launched its hosted offering through a partnership with AcmePacket, which supplied the recording technology behind "Interceptor".

## Cisco Systems

Product Segments: ICR, Outbound, IVR, WFM, QM

Cisco, founded in 1984 and headquartered in San Jose, California, is publicly held; it employs more than 63,000 people worldwide with annual revenues in excess of \$40 billion. Contact center offerings are part of the Collaboration Technology Group (CTG). Cisco added contact center to the Collaboration Business Applications Business Unit. Other application areas in CTG include unified communications, collaboration applications, and Telepresence.

In North America, Cisco primarily targets mid- to large-sized enterprises across all industries with its inbound contact routing systems. The company also targets service providers with its incoming contact routing systems for their internal use and provides hosted contact center services. Cisco sells its inbound contact routing systems through its channel of distributors, VARs, and systems integrators. Cisco also offers an outbound option as part of its contact center portfolio. Key channel partners include: IBM Global Services, Verizon, Dimension Data, Spanlink, eLoyalty, and CDW.

The company prices its contact routing systems on the basis of agent licenses. Cisco positions its contact routing systems as being scalable (up to about 30,000 agents), reliable, secure, multichannel, interoperable with third-party systems, and capable of making use of other Cisco UC applications. In addition, Cisco provides infrastructure and capabilities for customers' networks, which can sometimes give them an advantage given Cisco's position in enterprise networking.

Given the breadth of offerings Cisco provides, from networking, unified communications and collaboration and video, Cisco probably has one of the most comprehensive roadmaps for disruptive technology in the contact center. Efforts include: social media customer care, multi-media capture, enterprise social software, virtualization, video, and mobility.

### C I S C O   P R O D U C T S

Cisco Contact Center Products include:

- "Cisco Unified Contact Center Express" (Unified CCX) 8.X. Positioned as contact center in a box with integrated ACD, reporting, IVR, self-service, email, desktop, outbound, presence, workforce optimization and administration. Unified CCX can support 400 agents on a single server. It also includes WFO tools and SocialMiner for social media customer care.
- "Cisco Unified Communications Manager Business Edition 6000". For 100-1,000 users on a single server. Includes voice, unified messaging, mobility, presence, contact center, and video.

- "Cisco Unified Contact Center Enterprise" (Unified CCE). Scalable (12,000 agents per queue = 1 system), multichannel platform. Includes embedded CTI, virtualization, and data center deployment model, integrated reporting, outbound dialing, email management, web collaboration, universal queuing, skills-based routing, reporting, and third-party integrations.
- "Cisco Unified Customer Voice Portal" (Unified CVP). Recently-added capabilities include:
  - Mid-call codec renegotiation, support for Cisco ASR 1000, read/write SIP headers
  - Courtesy callback
  - Post-call survey
  - Whisper announcement
  - Agent greeting
- "Cisco Unified Intelligence Center". A reporting platform that is a replacement for Webview and old reporting. It is a customizable presentation layer across Cisco products. It employs a wizard-based interface to extend reporting capabilities to non-Cisco data sources in and out of the contact center. Cisco also has an app-store for stock and enhanced reports.
- "Cisco Finesse". Customizable agent/supervisor desktop/dashboard with web 2.0 extensibility, and social media integration. Thin client architecture can integrate with SocialMiner, Unified Intelligence Center, and MediaSense as gadgets on the desktop. Cisco employs partners to differentiate Finesse through horizontal and vertical specific applications.
- Cisco provides agent desktop virtualization using Citrix and VMware.
- "Cisco SocialMiner" A social media customer care solution that helps customers proactively respond to customers and prospects communicating through public social media networks like Twitter, Facebook, or other public forums or blogging sites.
- "MediaSense". Voice, video, and desktop recording.
- Video Contact Center.
- Hosted Collaboration Service offers multi-tenancy running individual virtual machines for virtual customers.

## MARKET HIGHLIGHTS FOR CISCO

- Packaged CCE for the mass market with simplified ordering, and simplified packaging.
- Added hosted collaboration for contact center.

## ClickFox

### Product Segments: Analytics

Clickfox, headquartered in Atlanta, Georgia, is a cross channel experience analytics company that tracks customer behavior across the enterprise, identifying and modeling the path taken for every customer interaction. It aggregates this data, assigning behavioral codes to each interaction across all customers and all touch points, aiming to produce a holistic view of the entire customer experience. ClickFox has evolved from tapping traditional data sources like IVR, call routing, agent desktop, and customer surveys to incorporating emerging channels such as Web sites, e-commerce, mobile applications, and social media. The company claims that it is the only one that can quickly absorb any data from any system across the entire enterprise and analyze the end-to-end cross-channel customer experience.

ClickFox sells through a combination of direct and indirect channels, mostly to the Fortune 2000, focusing on large companies with lots of customers that have multiple ways to interact with them. Key partners include Accenture, Amdocs, Teradata, and EMC Greenplum. Key vertical industries include: financial services, telecommunications, utilities, cable, and healthcare.

## CLICKFOX PRODUCTS

ClickFox's core product is ClickFox "Customer Experience Analytics" (CEA). CEA is a SaaS platform that identifies the root cause of business issues, revealing correlations and trends "across customer journeys". It allows executives and business analysts to highlight opportunities for improved alignment between customer expectations and company goals, as well as methods for handling each type of inquiry or interaction. ClickFox CEA is platform, channel, and technology independent and delivers a customer experience view within and across self-service, contact center, retail, and other channels. ClickFox takes standard system logs from various interaction channels as well as other sources such as customer data warehouses, churn data, and CSAT surveys, and using patented technology, reconstructs the original customer sessions and creates an interactions database. This database is the basis for the ClickFox analytics process and is used to create a visual blueprint of customer behavior.

ClickFox CEA provides:

- Cross-channel "experience visualization capabilities" at a granular level
- The ability to track high-level completed task paths
- Behavioral mapping ("traffic viewer"), which shows a visual display of customer experiences
- Analysis of user behavior based on speech input
- The ability to identify and analyze repeat customer behavior
- "Dominant path analysis" across multiple channels
- The capability to "understand and improve" first contact resolution
- ClickFox Pulse, a tailored dashboard for daily management review

Leveraging ClickFox's CEA platform, "ClickFox Pulse" features customizable executive dashboard reports that visually display customer experience trends and key performance metrics across channels so that users can monitor and track the metrics that are most important to their role or business. Executives can monitor changes in business drivers like self-service containment, first contact resolution, customer satisfaction, and customer churn against internal goals and thresholds over time.

## Convergys

Product Segments: ICR, Outbound, IVR, QM

Convergys Corporation (NYSE: CVG) is a global provider of customer management. Convergys solutions focus on customer management through agent, technology, and analytics solutions, with the goal of being the voice and technology behind superior service experiences. Convergys acts as a traditional BPO, sells solutions to other service providers, and provides premise-based solutions to enterprises.

Headquartered in Cincinnati, Ohio, Convergys has approximately 75,000 employees in sixty-nine customer contact centers and other facilities in the United States, Canada, Latin America, Europe, and Asia. Convergys sells its products through direct and indirect sales. Its key technology partners include: Nuance, Omniture, Nexidia, Dialogic, and RightNow Technologies. Although Convergys sells into all markets, they have had particular success in communications, financial services, technology, healthcare, retail, government, and collections.

## CONVERGYS PRODUCTS

The Convergys technology portfolio is comprised of solutions and component technologies that seek to facilitate better communication between clients and their customers. Convergys' solutions address pain points of the customer lifecycles that result from the integration of customer communications channels and back-office systems. Convergys also provides channel-specific technology.

## LIFECYCLE SOLUTIONS

Convergys' lifecycle solutions aim to improve cross-sell/upsell, retention, and service quality by applying real-time intelligence to interactions with customers. Convergys' real-time decisioning engine uses rules-based analysis of historically successful interactions to "intelligently guide" agent desktops, direct conversations in the IVR, and steer customer conversations in other channels. The objective is to increase revenue, decrease cost, improve the customer experience, or mitigate risk. Current lifecycle solutions include:

- **Cross-sell/Upsell.** Service calls can be converted to sales through personalized cross-sell and upsell offers to customers based on sales propensity modeling and customer data, such as demographics, purchase history, and recent events in the customer accounts.
- **Retention.** Similar to cross-sell/upsell, analytical models are tuned to detect possible attrition and to optimize retention via offers.
- **Personalized Care.** Enables agents and automated channels to "know the customer" using a consolidated 360° degree view that guides responses tailored to known customer preferences.
- **Credits.** Designed primarily for wireless telecommunications companies, automates the complex policies and rules about granting credits to customers who feel that they are due a refund. Also incorporates churn risk and customer value in determining the best credit to offer.

## CHANNEL SOLUTIONS

- **Intelligent Self-Service.** Uses real-time intelligence and customer data to guide complex automated conversations in the IVR, Web, and other channels.
- **Intelligent Call Routing.** Uses customer and agent data to route calls to specific agent groups to achieve higher sales, better customer experiences, and higher occupancy.
- **Campaign Management.** Designed primarily for international prepaid wireless telecommunications companies, permits the provider to mount single or multistage marketing campaigns that are focused on micro-segments or that are triggered by specific events (e.g., cell phone usage patterns).
- **Chat and Email.** Enables agents to communicate efficiently with customers using case tools and knowledge bases to facilitate the conversations.
- **Social Interaction.** Uses real-time decisioning to filter through high volumes of posts, blogs, and tweets to identify and prioritize social comments and then route these to the most qualified agent or staff member for response.

## TECHNOLOGY INFRASTRUCTURE COMPONENTS

- **"Agent Interaction Framework".** This agent desktop tool permits non-obtrusive integration with existing desktop applications, access to on-screen customer data, and provides a way to create new screens that allow agents to interact with the Convergys solution set described above.
- **"Dynamic Decision Solution" (DDS).** Real-time decisioning engine that is used with analytics-based rules, access to customer data, and integration with customer channels to apply intelligence to customer interactions.
- **"Intelligent Voice Portal" (IVP).** A commonly used IVR in the marketplace that has had hundreds of implementations and years of invested research and development. Integrates with DDS.
- **"Advanced Notification Gateway".** Outbound notification solution that facilitates the transmission of messages in high volumes.

- "Intelligent Notification". Segments the customer base, sends personalized messages to each segment, and runs outbound campaigns to millions of customers, passing the history of the automated interaction to the agent if there is a need for agent transfer.
- "Mobile Customer Care". Provides a smartphone application framework that supports connection to an agent, voice-enabled applications, and biometrics-based voice authentication.
- "Contact Center Applications". Convergys supports many types of contact center applications including quality management, workforce management, and hosted contact center infrastructure.

#### MARKET HIGHLIGHTS FOR CONVERGYS

In March 2012, Convergys signed a definitive agreement to sell its Information Management (IM) business for \$449 million in cash to NEC Corporation.

## Enghouse Interactive

Product Segments: ICR, Outbound, IVR, QM, WFM, Analytics

Syntellect was founded in 1984 and was listed as a division of Enghouse Systems Limited in the equivalent 2010 Frost & Sullivan report. In mid-2011, the Syntellect brand became part of the larger Enghouse Interactive portfolio of interaction management products. Enghouse Interactive, headquartered in Phoenix, AZ, is a subsidiary of Enghouse Systems Limited, a software and services company traded on the Toronto Stock Exchange (TSX) under the symbol "ESL". Founded in 1984, Enghouse Systems is a consistently profitable company, which has grown both organically and through acquisitions, including Arc Solutions, CosmoCom, Datapulse, Telrex, Trio, and Syntellect.

Enghouse Interactive delivers technology and expertise with the aim of maximizing the value of every customer interaction. The company has a broad portfolio of interaction management solutions, spanning structured, unstructured, and self-service interactions. Core technologies include: contact center, attendant console, IVR, and call recording solutions that support any telephony environment, on premise or in the cloud. Enghouse Interactive has thousands of customers worldwide, supported by a global network of partners and more than 600 dedicated staff across the company's sixteen international operations.



## ENGHOUSE CONTACT CENTER PRODUCTS

Enghouse Interactive provides solutions that cover a spectrum of interactions. The Syntellect product suite consists of solutions for inbound, outbound, self-service, and analytics for mid-to large-size companies. "CallRex" products provide solutions for quality monitoring, and WFM for companies from 5-500 seats. Products include:

- "Syntellect Communications Portal (SCP) R8.0". IVR/Self service portal, which is an open, standards-based platform with integrated application development and management components.
- "Syntellect CIM R8.0". A premise-based contact center that contains an advanced management engine that enables customers to control a universal queue of customer interactions of all types, including telephone and Interactive Voice Response (IVR), voice mail, email, web chat, web transactions, fax and agent tasks.
- "Syntellect CT Connect". Standards-based CTI software that allows application developers and systems integrators to create voice self-service, contact center, and unified communications solutions for IP and TDM networks, at lower cost, by providing out-of-the-box integration with all major communications systems.
  - "CT Connect for Salesforce.com" is a CTI application that allows service and support organizations to make use of the data from their Salesforce.com CRM solution in their outbound dialing initiatives and to help them quickly resolve customer issues.
  - "CT Connect for Siebel" is a CTI application that includes the "PhoneLink" adapter to provide Siebel CRM users with screen pop and click-to-dial functionality while maintaining the same familiar user experience
- "VoiceXML Studio". A graphical development environment that aims to accelerate the creation of VoiceXML-based voice solutions by 50% so users can quickly assemble applications from pre-built "functional blocks" for voice user interface management, call control, application logic, and database integration instead of writing VoiceXML code.
- "Syntellect CT Application Development Environment" (Syntellect CT ADE). Designed to accelerate the development of voice and video communication solutions. CT ADE is a rapid application development (RAD) toolkit that provides a set of program building blocks that aim to be easier to use and faster to learn than traditional APIs.
- "Voiyager". A VoiceXML testing tool, that produces "Dynamic Automatic Application Discovery" a patent-pending technology that seeks to redefine how VoiceXML applications are developed, tested, deployed, and ultimately maintained. Voiyager is designed to provide 100% call flow analysis.

- "CallRex Quality Management Suite 4.2". A quality monitoring and quality management suite that combines "CallRex Call Recording", "CallRex Computer Recording", and "CallRex Agent Evaluation" to provide VoIP recording and monitoring software to small- and medium- sized businesses. CallRex software integrates with many softswitch and IP-PBX platforms, including: Cisco, Microsoft,3 ShoreTel, Mitel, 3Com/HP, Avaya, Digium, Asterisk, BroadSoft.
- "CallRex Workforce Management 4.0". Automates the workforce management experience. The CallRex Workforce Management solution features a simulator scheduling engine that incorporates all types of calls and routing policies to generate staffing schedules and monitor schedule adherence.

## ENGHOUSE MARKET HIGHLIGHTS

The Enghouse Interactive portfolio includes additional contact center systems that address specific regional markets (like Trio Enterprise in the Nordics) or delivery models (like the CosmoCall Universe cloud-based platform). Since the scope of this report is North American premise-based technology, the details in this profile have been weighted toward CIM/SCP. However, it is Enghouse's goal to leverage future development (such as improved UI's and certain new functionality) across product lines to make it easier for customers to work between multiple elements in their portfolio.

## Envision

Product Segments: QM, WFM, WFO

Seattle, Washington-based Envision has offered contact center call recording, quality monitoring, workforce management, workforce optimization (WFO), and coaching since 1994. The company's heritage is based on its focus on agent effectiveness and coaching via its flagship "Click2Coach" product. Envision expresses its mission as being to "help customer-centric organizations maximize the effectiveness of every customer contact". Through its "Centricity Team Optimization Suite", Envision aims to help companies align and integrate people, processes, and technologies within the contact center and drive better customer service.

Envision sells its products primarily through direct channels in North America and through partners in Central and South America and EMEA. The company markets its products to companies of all sizes from mid-size to large contact center operations with multiple sites. Key verticals for Envision include: travel and transportation, healthcare, finance, and retail.

Envision states that it is the only WFO application provider with an emphasis on agent effectiveness and coaching, with solutions that address current issues like right-size speech analytics and social media quality monitoring.

## ENVISION PRODUCTS

The company believes that agent coaching should include: evaluations integrated with customer interaction records; verbal and written feedback; and training content and centralized information about the enterprise, contact center and customers.

The objective is helping agents be better informed. This can improve performance and lead to increased revenues. Because agents can learn at their own pace and in their workstations, job satisfaction tends to increase and operating costs tend to be reduced by minimizing time spent away from customers. For example, the use of coaching "subscriptions" enables supervisors to address issues they discover when reviewing recorded interactions for both groups and individuals.

Coaching packages contain an evaluated customer interaction along with appropriate coaching and training. Envision intends for coaching packages to be more powerful than evaluations alone, as they may well enable agents to improve performance more quickly. The agent desktop also includes personal performance graphs and incentive program information like "Agent of the Month".

- "Envision Centricity" is the company's complete WFO suite to aggregate, monitor, and analyze data and performance at the agent, center, and enterprise levels. It is comprised of multiple applications including:
  - "Click2Coach". The company's "premier product" launched it into agent performance improvement, and allows companies to deliver targeted coaching. Highlights include:
    - Recorded customer interactions, available for review
    - Agent skills evaluation
    - Training content integrated with agent evaluations
    - Aims at improved contact center performance
    - Reduced ramp-up times and decreased handle times
- "Envision Workforce Management". A web-based scheduling, forecasting, and staffing adherence solution designed to simplify the complexities of managing contact center personnel and activities. It includes applications for quality monitoring, identity protection and compliance, and analytics.

Envision backs these solutions with its "Performance Assurance Review" (PAR), an on-site process in which Envision will work with the customer to assess and make best-practice recommendations aimed at better aligning the people, process, and technology within the contact center with the customer's corporate objectives.

#### ENVISION RECENT MARKET HIGHLIGHTS

- In 2011, the company announced the "Envision Performance Assured Program".
- Released applications for right-size speech analytics, social media quality monitoring.
- Released major upgrade of its "Centricity Workforce Optimization" suite.

## Genesys

Product Segments: ICR, Outbound, IVR, QM, WFM, Analytics

Genesys, a global company, headquartered in Daly City, California, develops and markets solutions in all six of the areas that Frost & Sullivan uses to define the contact center. A key item of note in 2011 was that Genesys, which had been part of Alcatel-Lucent for a number of years, and was listed as Alcatel-Lucent in our 2010 report, became a stand-alone company again, backed by Permira funds and Technology Crossover Ventures. The company entered 2012 with a new mission focus on customer service.

The core customer service offering for Genesys is the Genesys "Customer Interaction Management" (CIM) platform that aims to help companies align any customer interaction with the ideal resource to meet business objectives, from voice and email, to social media, and workflow items. The Genesys CIM platform is designed for larger contact centers. Genesys also markets the Genesys "Express" platform for mid and small sized contact centers. Genesys also offers the Genesys "Hosted Provider Edition" (HPE) to deliver SaaS services to SMB customers, delivered through channel partners.

Genesys uses a combination of direct and indirect sales models, with the majority being through channel partners in all regions of the world. Key partners include: Alcatel-Lucent, Nextira One, Siemens, Dimension Data, and IBM. Although designed for all verticals, Genesys products do particularly well in Finance, Telecommunications, Retail, and Utilities.

## GENESYS PRODUCTS

The Genesys CIM platform is currently on Release 8.1, introduced in 2011. The latest release includes:

- "Genesys CIM"
- "Genesys Outbound 8.1.1"
- "Genesys Voice Platform (GVP) R8.1.4"
  - Integration with "Conversation Manager"
  - "Composer". An integrated development environment for premise and hosted systems
  - "Administrator". An integrated administration environment
  - "Genesys Outbound V8"
- "Genesys QM"
- "Genesys Performance Management (GPM)"
  - "Genesys Info Mart"
  - "Genesys Interactive Insights"
  - "Genesys Advisor R8.1"
- "Intelligent Workload Distribution (iWD)"
- Workforce Optimization
- "Genesys Training Manager". Automatically builds, schedules, and manages multiple agent training plans.
- "Genesys Skills Assessor". Provides a range of online skills assessment, integration to QM systems, and observational feedback.
- "Genesys Social Engagement (GSE)". Social media monitoring, routing, and response.
- "Genesys Conversation Manager". Cross channel conversation that aims to track the entire conversation, no matter where it is.

## MARKET HIGHLIGHTS FOR GENESYS

In 2011 Genesys introduced Release 8.1, which included:

- Conversation Management, which includes Conversation Manager, the Orchestration Platform, and Composer improvements.
- Introduction of the Orchestration platform, which along with Composer and Conversation Manager, make up the Conversation Management capabilities of "Genesys 8".
- Updates to Composer including support for eServices and Conversation Manager, including Business Rules, a SIP offering that includes SIP server supports with 99.999% availability; SIP voice mail; SIP business continuity and disaster recovery; and support for an active recording application.
- "Interaction Workspace" application that supports all communication channels including social media.
- Campaign scheduling for automated outbound campaign control.
- The addition of real-time performance management for mobility with "Contact Center Advisor" Mobile Edition.
- Improved ability to customize business-centric metrics, such as adding customer satisfaction or contact resolution.
- Increased agent efficiency in "Genesys Outbound", allowing agents to be automatically assigned other work when the agent is idle.
- Support for Broadsoft Broadworks, Avaya Aura, Cisco Unified Communications Manager (UCM), and Unified Contact Center Enterprise (UCCE).

## HigherGround

Product Segments: QM

HigherGround Inc., headquartered in Canoga Park, California, was founded in 1973 for the purpose of providing quality monitoring, and added call recording to the mix in 1993. HigherGround's strategy has been to leverage key alliances in the contact center systems market to augment pieces of the agent optimization suite that are too expensive to build, such as speech analytics. As such, HigherGround targets primarily the smaller- to mid-sized marketplace, aiming at centers under 500 seats, and does so at an affordable price point. The company has been moving to increase its sales channel with more reseller agreements to boost its non-contact center business. Although the company doesn't target specific vertical markets, HigherGround is a key player in selling recording technology to public safety centers.

## PRODUCTS OFFERED

HigherGround offers QM and recording tools under the umbrella of the "Fusion Series 7" suite, comprised of the "Praetorian Voice Recorder", "Mentor QA" suite, and "Telecom Business Intelligence" (BI) suite. The Telecom BI suite is an analytics solution that offers insight into agent as well as contact center performance metrics. It integrates data from multiple sources such as the PBX, ACD, voice recordings, customer databases, and agent evaluation forms into a single interface. The major components can be used separately or bundled together as a holistic suite.

The recording engine features easy access to recorded calls, including the ability to attach a call or grading to a new email. It also allows supervisors to listen in on calls in real time across multiple channels to provide feedback on the call center floor. The most recent version of the suite includes a stand-alone version of the Higher Ground's Mentor QA product. Mentor QA can now be used in conjunction with HigherGround's Praetorian Voice Recorder or as a stand-alone application with any other call recording software to measure and seek to improve agent performance.

## VENDOR PROFILES I - Z

### injixo

Product Segments: WFM

Injixo, Inc. is headquartered in Naperville, Illinois and provides hosted-only (which it refers to as 'cloud') WFM to the Americas market. It is owned by InVision Software AG of Ratingen, Germany, which delivers its WFM solutions to other geographic markets via hosted and premises licenses.

Injixo sees the midmarket where the greatest opportunity lies as many contact centers of this size are still using spreadsheets. Its solution has been proven across a wide range of verticals including: financial services, telecommunications, BPOs, manufacturing, retail, transportation, and utilities. The firm principally sells direct but is growing its partner program.

## PRODUCT HIGHLIGHTS

Injixo WFM, which scales from less than 100 seats to any size operation, has several signature features. Injixo WFM:

- has been engineered to factor in complicated scheduling rules and employee agreements with unique work rules due to its having been designed in Germany and written for that country's complex workplace regulations. This makes injixo WFM suitable for unionized workplaces.
- has an absence planner feature that supplies monthly views of scheduled absences for teams and centers and annual views for individual employees.
- offers the "injixo Report Server", which is based on the REST web services API for custom integration. Data can be used with standard business intelligence tools such as Business Objects, Crystal Reports, Excel, or BIRT for custom reports.
- is available with "injixo Learn", which is a comprehensive education package. This is a curriculum of courses powered by The Call Center School, which is a long-established industry professional development company.
- has a vendor-neutral strategic labor consulting expertise. The consultants perform a high level labor strategy view.
- is offered at \$9 per agent per month.
- is hosted on the Amazon Elastic Cloud Computing platform and data centers. The application is multi-tenant, and is upgraded every two weeks for short maintenance periods, typically two or three hours, as opposed to the longer takedowns for major upgrades required with premise-based solutions. injixo's data centers are SSAE 16 SOC2 Type II (formerly SAS70)-certified.

Injixo stresses user education and commitment because of the complexity of the tasks WFM software addresses. As part of this philosophy, injixo provides "injixo Community", which is a social network for searching and sharing information, and participating with other WFM and contact center professionals.

## MARKET HIGHLIGHTS

- InVision launched injixo for the North American market in April, 2011. It combined its existing solution and its North American customer base and the purchase of The Call Center School in June to comprise the injixo brand.
- injixo has several enhancements planned. These include: "injixo Libraries", "injixo Me" (employee portal for scheduling), and "injixo Forecasting".



## Interactive Intelligence

Product Segments: ICR, Outbound, IVR, QM, WFM, Analytics

Interactive Intelligence, founded in 1994 and publicly held, is headquartered in Indianapolis, Indiana, develops a line of unified IP business communications solutions for mid- to large-sized contact centers and enterprises, including enterprise IP telephony, unified communications, contact center, and business process automation.

A global company, Interactive Intelligence sells direct and through channel partners to contacts centers of all sizes ranging from 100-5000+ seats. Key partners include ACS (now Xerox), Arvato (a division of Bertelsmann), Atea, Computer Sciences Corp., Hitachi, IBM, Iwatsu, MTS Allstream, KPN Corporate Market B.V., and TietoEnator. Whereas they sell into all verticals, key verticals include: Insurance, Collections, Banks and Credit Unions, Outsourcers, and Utilities. Interactive Intelligence backs these vertical market sales up with dedicated sales and solutions managers.

Interactive Intelligence differentiates itself with the "Customer Interaction Center" (CIC) being an open-standards-based, software only, all-in-one communications platform. CIC is transport and switch agnostic, making it widely deployable in almost any environment. CIC is priced on the basis of a server software license plus agent and session licenses depending on the configuration. CIC solutions are also available as a hosted service as part of Interactive Intelligence's Communications-as-a-Service (CaaS), allowing customers to deploy on-premise, in the cloud or a hybrid mix.

### INTERACTIVE INTELLIGENCE PRODUCTS

"Customer Interaction Center (CIC) 4.0": an all-in-one communications software suite that provides multichannel contact center automation, unified communications, and business process automation. Functionality includes SIP-based switching; multichannel routing and queuing; outbound/blended dialing; presence management; multichannel quality monitoring and scoring; workforce management; interactive voice response; unified messaging; Web self-service; email response and knowledge management; and business process automation. Application modules include:

- "Interaction Dialer V4.0": outbound dialing and campaign management supporting predictive, power, precise, preview and agent-less dialing. It also supports skills-based dialing, which determines the availability of the best fit resources for outbound calls before they are launched, as well as just-in-time DNC scrubbing.
- "Interaction Recorder V 4.0": quality monitoring and recording.
- "Interaction Optimizer V4.0": workforce management.
- "Interaction Feedback V4.0": customer feedback surveys.

- "Interaction Analyzer V4.0": real-time speech analytics.
- "Interaction Tracker": multichannel interaction tracking and reporting.
- "Interaction Web Portal": browser-based access to real-time tracking and statistics, remote live call monitoring, historical reporting, streaming call recordings designed for clients of outsourced contact centers, and internal stakeholders.

## MARKET HIGHLIGHTS FOR INTERACTIVE INTELLIGENCE

Interactive Intelligence introduced CIC 4.0 in 2011. Highlights include:

- CIC became a pure application server and audio processing was moved to the Interaction Media Server.
- Increased scalability and reliability.
- Secure IVR sessions to assist PCI compliance.
- Offered a private "cloud" deployment option.
- Enhanced web client.
- Upgraded email handling, including support for threaded discussions.
- New Interaction Web Portal for outsourcers to provide clients with branded access and real-time performance visibility.
- New Interaction Analyzer – real time speech analytics.
- Enhanced recording and monitoring – screen recording outside of ACD-initiated interactions.
- Improved Administration through a re-write of Interaction Supervisor.

## Mitel

Product Segments: ICR, Outbound, IVR, QM, WFM, Analytics

Mitel is a public company (NASDAQ: MITL), headquartered in Ottawa, Canada. Mitel targets small- and mid-sized enterprises with its inbound contact routing systems. Mitel contact center solutions are available globally, and can scale from small, single site contact centers up to large, multi-site contact centers with hundreds of agents, with support for up to 800 simultaneous agents. Mitel does not have any specific vertical focus for contact center solutions, but instead positions it as a horizontal solution.

In 2011, Mitel evolved its go-to-market strategy with the implementation of a channel centric delivery model. As a result, approximately 95 percent of Mitel sales are now conducted through channel partners, with the balance resulting from direct sales. In North America, Mitel's channel strategy includes a direct touch sales organization designed to prospect for new business opportunities for Mitel channel partners. In this model, direct touch reps work with end customers to develop the optimum solution and deliver this opportunity to the partner for fulfillment. Partners are also given access to sales, engineering, training, and marketing resources.

In addition, there are opportunities for Mitel's North American channel partners to augment their service revenues by joining the "Mitel Authorized Partner Services Program" (APSP) which allows authorized partners to support Mitel service requests which can be contracted to them. Finally, in order to support channel partners in introducing new technology or solution opportunities (such as data center virtualization skills), Mitel makes available its suite of professional services offerings to provide skilled resources to support partners in new focus areas.

#### MITEL PRODUCTS

Mitel's inbound contact routing systems include:

- "Mitel Contact Center Enterprise Edition": targets multi-site, multi-media, and up to 800 agent contact centers.
- "Mitel Contact Center Business Edition": targets single-site, up to fifty active agent contact centers.
- "Mitel Customer Service Manager": a communications solution for small- and medium-sized businesses. It provides entry-level contact center functionality for effectively sharing calls in a team. It extends general business telephony to include "hunt-group" and longest idle call routing, email routing, and historical and real-time reporting for up to 100 agents.

#### MARKET HIGHLIGHTS FOR MITEL

The 6.0 release, announced in December 2011 included:

- Contact center softphone integration with the VMware View desktop virtualization solution. This enables contact center managers to deploy and manage agents as part of their virtual desktop infrastructure anywhere in the world on almost any device, at a lower cost.
- Increased scale from 350 to 800 active agents, expanding Mitel's addressable market.

## NEC

Product Segments: ICR, Outbound, IVR, QM

NEC Corporation of America (NEC) is the North American enterprise communications provider and integration arm of NEC Corporation. NEC targets companies of all sizes, with a particular focus on hospitality, education, government, and healthcare. For large enterprises, NEC sells primarily through its direct sales force; for small and mid-sized businesses, it sells primarily through partners.

### NEC PRODUCTS

NEC offers two inbound contact routing systems:

- "UC for Business" (UCB). Designed to operate behind NEC's "UNIVERGE" SV8100 or SV8300 communication servers, as well as the "UNIVERGE Spherical" software-based platform, it primarily targets small- and mid-sized businesses.
- "UC for Enterprise" (UCE). Designed to operate behind NEC's UNIVERGE SV8500, it primarily targets mid- and large-sized enterprises.
- The routing component of UCE is the "Enterprise Automatic Call Distribution" (CallCenterWorX ACD). For tracking contact center statistics, UCE ACD works with either "CallCenterWorX-MIS" or "Global Navigator/Network ACD".

"CCDesign" is NEC's suite of products and services that addresses the development of quality responsiveness and fulfillment within the contact center. These products are geared to provide contact centers with a framework that closely corresponds to the way organizations build proficiency.

CCDesign provides modular functionality and scalability for customers. Each module, priced separately, allows customers to add capacity and/or functionality to meet their specific needs. Advantages of the solution are scalability over a wide range of line sizes and the ability to provide a reliable product with an ample feature set at an attractive price point. Thus, customers may purchase the product for small call center needs and scale up as the organization grows. Similarly, customers may purchase basic functionality and add capabilities as their needs evolve.

- Contact Routing products, "CallCenterWorX" and "ContactWorX", are geared toward establishing flexible, accurate contact direction based on the customer's business rules and other input.
- Management Information System (MIS) products, CallCenterWorX MIS and Global Navigator, gather and analyze real-time and historical statistical data.

- Geographic distribution and networking products, "Network ACD" and "Agent Anywhere", are designed to create a network of contact center systems or to define a single contact center system across a network of PBX systems. They also includes products that enable single agents and small groups of agents to work remotely from the contact center.
- "Ancillary Applications", under the heading of "QueWorX", enhance contact center productivity and customer service. Computer telephony integration adds third-party call control that enables advanced contact center applications.

## Nexidia

Product Segments: QM, Analytics

Nexidia is a privately held corporation headquartered in Atlanta, Georgia. Nexidia has developed and patented a phonetic approach to indexing and analyzing audio content as well as applications that integrate with legacy call recording platforms to transform contact center data into business intelligence. The company offers a range of solutions for audio, video, and interaction search, and delivers a platform that taps into unstructured audio, video, and textual content.

Nexidia sales are approximately 90% direct, to medium to large contact centers, and contact center outsourcers, with the remainder being sold through partners, including Nuance, Noble Systems, Avaya, Accenture, and MicroAutomation. Initially sales were in North America and the UK, but Nexidia has expanded its coverage to EMEA, Latin America, and APAC. Key customers include Comcast, Verizon, Intercontinental Hotels Group, Sempra, and several of the Blue Cross Blue Shield plans. Key verticals include Communications, Financial Services, Healthcare, and Technology. Nexidia offers its speech analytic solutions as a hosted service as well as on-premise.

### PRODUCT HIGHLIGHTS

Nexidia's primary technology solution is its "Enterprise Speech Intelligence" (ESI) suite. These products enable companies to use speech and customer interaction analytics throughout their lifecycle--from automatic discovery, which identifies interaction trends and critical focus areas, to analysis and agent performance optimization which provides a quantitative assessment of an entire organization. Nexidia's speech analytics (phonetic search) technology supports performance management and quality monitoring by allowing customers to analyze intelligence gathered from relevant calls to identify and track trends for key performance indicators.

Nexidia's ESI 9.1, includes:

- "Nexidia Discover": simplifies speech and customer interaction analytics implementation by providing automated topic discovery and trend analysis from call center data.
- "Nexidia Search": performs ad-hoc searches across large volumes of audio and allows users to drill down and listen to any call at any time.
- "Nexidia Analyze": mines caller intent, provides advanced reporting and delivers root cause analysis to develop quantitative business intelligence, such as First Call Resolution analysis which target the most common repeat call topics.
- "Nexidia Evaluate": applies the speech analytics intelligence to measure agents, teams, and sites against strategic corporate objectives.
- "Nexidia Capture": records and stores calls and meta-data from the switching environment, integrates with TDM and VoIP-based networks, and has an optional screen capture module.
- "Nexidia Scan": integrates with CRM systems and knowledge bases to provide real-time information through alert triggers and screen prompts.
- "Universal Language Pack 8.1"

#### MARKET HIGHLIGHTS

- Nexidia announced "Enterprise Analytics in 2011", which integrates customer contact data from any source into a single analytical set. Nexidia has also enhanced the ESI phonetic index to provide a greater than 300 percent increase in search speeds. The new phonetic index format is also 50 percent smaller, which reduces storage requirements and lowers the total cost of operations.
- Nexidia released the "Nexidia Search GRID", a software development environment that enables developers to integrate Nexidia technology into their own applications using web-services interfaces.

## NICE Systems

Product Segments: QM, WFM, Analytics

NICE Systems, Inc., (NICE), is a publicly-held company, headquartered in Ra'anana, Israel. NICE serves three main market segments: Customer Service; Financial Crime, Risk & Compliance; and Security, Safety and Intelligence. A global company, NICE sells primarily direct in North America, through a network of channel partners. Key partners include: Cisco, Avaya, Amdocs, IBM, Verizon, IPC, Bell Canada, NACR and SPS. NICE sells into all verticals, but has particular strength in financial services and telecommunications.

NICE sells solutions aimed at full agent performance optimization. The company brings these capabilities to the market as end-to-end packaged business solutions, providing out-of-the-box capabilities for addressing the entire agent-management environment and key enterprise business issues. The NICE offering provides call recording, QM, WFM, real-time process optimization, e-coaching, performance management, incentive compensation management, voice of the customer, and customer feedback measurement. Core to the suite is real-time, cross-channel Interaction Analytics, a platform that uses speech analytics, call flow analytics, desktop analytics, application usage analysis, email and online chat analysis, and emotion detection with the aim of providing a holistic view of customer interactions across communication channels.

In 2011, NICE continued the company's strategy to both develop and acquire new capabilities, and then integrate workforce optimization tools into one portal, unifying the data threads of its component applications. In 2010, it acquired eglue, bringing real-time decisioning and agent guidance capabilities into the suite, features that allow for a variety of information to be pushed to the agent's attention during an interaction, including details of cross-channel communications that have happened before the current call. This real-time capability is personalized to the agent, providing guidance when needed, a key element in making the agent's process through an interaction a more consistent one.

In 2011, NICE acquired two companies, Fizzback for voice of the customer solutions, and Merced Systems for performance management. The suite integrates these new capabilities with workforce optimization, real-time analytics, and real-time guidance. It uses the integrated capabilities to "shape interactions as they occur and prepare the workforce to handle every interaction". It also uses the insights gained from the Voice of the Customer as well as the data collected from the interaction with the goal of driving improvements across the enterprise.

## NICE PRODUCTS

The company focuses analytics applications on specific business problems, offering them to the marketplace as packaged, targeted applications for issues such as improving first call resolution, fighting customer churn, reducing average handle time, or improving sales effectiveness. NICE markets its products as a suite, or as fully-featured standalone modules, which include:

- "NICE Interaction Management 4.1" – recording
- "NICE Quality Management 4.1" – quality monitoring and management
- "NICE Performance Management 4.1" (from the 2011 acquisition of Merced solution)
- "NICE Fizzback 5.2" survey solution (from the 2011 acquisition of Fizzback)
- "NICE Interaction Analytics 4.1" – cross-channel analytics, including Real-Time Speech, Desktop, Text, Web, Chat, Email, and Call Flow analytics
- "NICE IEX Workforce Management 4.5"
- "NICE Real Time Impact Solution 4.8.1" – Real-Time Decisioning, Real-Time Agent Guidance, Real-Time Automation
- "NICE Back Office Suite"

In 2011, new additions to the products included:

- Real-time customer feedback, through the Fizzback acquisition. Helps companies collect, analyze, and act in real-time in regards to customers' comments and issues. Feedback captured (retail store, contact center, branch, web) is analyzed, driving responses, prompting company action, and providing insight into the VoC.
- Enhanced Support for a Unified Cross-Channel Interactions Hub.
- Enhanced support for capture and analysis of cross-channel interactions. Added ability to analyze Web and social media interactions, within NICE's unified cross-channel platform.
- Enhanced Service-to-Sales solution (previously marketed as Sales Effectiveness) seeks to maximize sales potential from inbound interactions and aims to bridge the gap between marketing and customer service.



Workforce management enhancements including:

- New scheduling algorithms and preference options to balance agents' needs for consistency and the enterprise's needs for optimal schedules
- New web services APIs for integrating with 3rd party systems
- New date range schedule views for contact center and back office operations
- New work rule validations during manual schedule modifications
- New capacity and forecast abandon data on intraday views
- Staffing parameters for automatic scheduling of meetings and other events
- Seat limit parameters to manage seat usage

Back-office offering

- Recording approach for process and task configuration
- Real-time activity monitoring reports
- Business feature templates
- Mapping application and web page display names
- Ability to assign a unique process ID

Real-Time Impact offering:

- Real-time speech analytics integration, providing contextual guidance based on the actual content of an interaction
- WFM integration, correlating agent metrics, such as seniority and expertise, from NICE IEX WFM, with efficiency metrics from NICE Real-Time Activity Monitoring (RTAM)
- Process path analysis report - presents the most common paths of task performance as part of the agent/employee process
- Application path analysis report – presents the most common application usage paths as part of a process
- Enhancements to the platform
  - Advanced disaster recovery capabilities, including single-click failover
  - Further improved system scalability
- Branch and SMB WFO offering
- Launched "NICE Recording eXpress" and "NICE Quality eXpress" – low cost call recording and quality management solutions, tailored for SMB needs

## MARKET HIGHLIGHTS FOR NICE

- Acquired Fizzback in September 2011, a SaaS-based VOC platform.
- Acquired Merced Systems in December of 2011. The performance management solution is being offered as a standalone product or integrated into the NICE suite.

## Noble Systems

Segments: ICR, Outbound, IVR, QM, WFM

Noble Systems is a global provider of unified contact center solutions. Founded in 1989 and headquartered in Atlanta, Georgia, the company is privately-held. It offers its products on premise as well as hosted.

Noble Systems maintains offices on six continents and sells in more than thirty countries worldwide. In North America, the company sells primarily through its direct sales force. The company's strategy is to align itself with its customers' revenue goals, thereby competing on the business impact of its solutions and services rather than price. More than 75% of its customer base relies on the company for a blended contact center environment, including outbound, inbound, IVR, and digital recording. Target markets include: financial services (including collections), retail, BPO, and healthcare.

## PRODUCT HIGHLIGHTS FOR NOBLE SYSTEMS

Noble Systems markets two premise-based solutions. These are "Noble Enterprise", aimed at mid-sized/larger companies, and "Noble Express", primarily targeted to SMBs. The Noble Enterprise lines offer IVR, ACD, chat, full dialing (preview, progressive, and predictive), and APO, plus inbound and outbound SMS/text and social media support. The company integrates its solutions in back offices through CRM, ERP, and more.

Noble Systems also offers "Noble Enterprise Hosted", which has the same features and functionality as the premise-installed product in a CaaS environment. Noble Enterprise Hosted offers a path to a premise-based platform or to the creation of a unified cloud/premise hybrid that aims to "look and feel identical on agent and management screens".

Noble Systems' solutions encompass feature sets such as WFM and advanced analytics. The applications are linked via its "Maestro" common management interface.

With this architecture, customers can split and shift their applications between hosted and on-premise. Marketed as "Noble Cloud EC", this architecture also allows for the integration of software from other vendors with its solution. Customers can move between premise and hosted depending upon need.

Noble Systems also uses multi-instance, running on VMware virtual machines and multi-tenant hosting, offering both options to customers. The company reports that the multi-instance method is more secure, stable, and resilient, and permits easier replication and transfer to disaster recovery sites for business continuity. The company also provides telco services as part of hosted solutions.

In order to support the company's CaaS and hybrid customer base, Noble Systems maintains multiple data centers in 100 percent SIP environments. Its applications run in a bladeless environment, which has fewer points of failure and requires less hardware. It is completing SSAE 16 SOC Type II certification and maintains PCI DSS compliance across multiple product groups.

#### MARKET HIGHLIGHTS

- In 2011, Noble Systems acquired Melbourne, Australia-based Open Wave, a WFM software and solutions specialist. The transaction included all assets and intellectual property including Open Wave's ShiftTrack WFM solution. ShiftTrack is now Noble Systems global WFM solution and is among its fastest growing product segments.
- Noble launched Noble Enterprise Hosted, Noble Cloud EC, and Noble EC Messenger in 2011. The company is focusing on selling longer-term (three-to-five year) contracts that then enable integration into customers' businesses as well as improved business continuity.
- New and upgraded applications are being planned for Noble's lines, including enhanced skills-based routing and Enhanced SMS. They will be offered via hosted at the same time as the premise-based solution.

## SAP

Product Segments: ICR, Outbound, IVR, QM, Analytics

A subsidiary of SAP AG, SAP America oversees all business operations in North America and is headquartered in Newtown Square, PA. Forty years old in April 2012, SAP has about 15,473 employees in the America's region. In contact centers, SAP offers SAP "Business Communications Management" (SAP BCM) software, which provides an all-IP based solution including the functionality of multi-channel contact center solutions, PBX systems, directory and presence services, IVR, voicemail, call recording, and real-time monitoring, reporting and quality analysis tools.

SAP BCM is a global product available through SAP directly (large enterprises) and through the SAP Partner Ecosystem (small and mid size enterprises). Customer contact center sizes scales from ten users to 10,000 users, with premise-based deployments typically in the 100-1000 agent range, and on-demand deployments between 10-10,000 agents per virtual customer environment. Due to its all-software and all-IP based product nature, SAP BCM is strongest in virtual contact center environments where contact center agents are physically distributed to multiple sites /regions but managed, monitored, and reported as one operation. Key North American partners include HCL Axon, CapGemini, and Deloitte.

SAP BCM stand-alone functionality is a horizontal contact center solution. SAP BCM is out-of-the-box integrated to SAP CRM, SAP ERP, and SAP "BusinessByDesign" solutions.

## S A P P R O D U C T S

- SAP Business Communications Management software version 6.0 (SAP BCM 6)
- SAP Business Communications Management software version 7 (SAP BCM 7)

In addition, SAP provides SAP BCM as a "Rapid Deployment Solution". The idea is to deploy predefined contact center functionality within five weeks at fixed deployment cost for the customer production use (including optional integration with SAP's CRM solution).

## M A R K E T H I G H L I G H T S F O R S A P

In June 2011, SAP BCM version 7 was released with the following new capabilities based on the company's goal of making the products easier to deploy, use and manage:

- Easy to deploy and manage:
  - The administration tools and access control model were renewed to enable efficient role-based administration according to given rights.
  - The software architecture was renewed to enable "uninterruptible" contact center operations (including software version upgrades). With new load balancing and multi-database deployment models, BCM 7 scales up to large on-demand and on-premise customer needs. SAP also reports that SAP BCM platform security has been improved.
  - The IVR application generator was renewed to support VoiceXML- based IVR applications.

- Easy to consume:
  - The contact center agent and supervisor tools and functionalities were consolidated into one user interface to increase agent productivity.
  - The inbound and outbound contact center monitoring and reporting tools were consolidated to enable real-time control and adjustments and long-term improvements through consolidated reporting and analysis tools.
  - The call recording capabilities were enhanced to support agent, queue, campaign, or scripting-specific recording scenarios, including detailed access rights to search and listen to recorded calls.
  - SAP CRM integration functionality was extended to cover SAP CRM's Telesales Campaign/BCM outbound dialer integration, multiple simultaneous contacts handling support with SAP CRM Interaction Center agent user interface, and direct access to SAP BCM presence profiles via SAP CRM Interaction Center UI.

## Siemens Enterprise Communications

Product Segments: ICR, Outbound, IVR, QM, WFM, Analytics

Siemens Enterprise Communications (SEN) was created as a joint venture between Siemens AG and The Gores Group. SEN provides end-to-end enterprise solutions that use open, standards-based architectures to unify communications and business applications and aims for a seamless collaboration experience. Siemens was one of the first of the legacy telecommunications providers to move toward using open-standards to develop their solutions, along with an Agile Development environment. As such, the company has been able to develop a complement of integrated unified communications and contact center solutions that are easy to deploy, and that work within existing IT environments, delivering operational efficiencies.

SEN has a direct and indirect presence in over ninety countries, with more than 12,000 staff. The company targets enterprises of all sizes and in all industries, but it has found particular success in the 50-200 agent range and in banking/finance, healthcare, and government/education. SEN sells primarily (75 percent) through its direct sales force in North America, but it has been working diligently to expand its indirect channel sales model. Key partners include: Blackbox, Shared Technologies, IBM, and Verizon.

## SIEMENS ENTERPRISE COMMUNICATIONS PRODUCTS

- "OpenScape Contact Center Enterprise V8.2" and "OpenScape Contact Center Agile V8.2". Include a base software package charge per system, a per concurrent agent software feature licensing charge, and per manager software licenses. Optional system features like networking and multi-tenancy are also available and priced on a per system basis. The company also offers subscription based licensing where there is no base package price; instead customers pay only for the high-water mark per month for telephony agents, multimedia agents, managers, and call director IVR licenses.
- SEN's outbound dialing systems include "OpenScape Contact Center Campaign Director 6.2", which integrates with Aspect, Avaya, Cisco, Nortel, and NEC, among other communication platforms. It includes: predictive dialing, campaign management, and proactive contact. The "Campaign Director" software application has a base software package charge which includes ten agent licenses/sessions, one administrator, and one supervisor license. Additional agent user licenses and sessions are purchased as needed. Chat user licenses, IVR ports/sessions, manager, and supervisor licenses are also available.
- SEN's voice portal systems include "OpenScape Contact Center Voice Portal V7 R3". Voice Portal includes software that's priced per port, plus modular software licenses for additional applications such as ASR & TTS. Pre-built applications as well as professional services for custom applications are priced on a per project basis.
- "OpenScape Workforce Optimization Solutions". Quality monitoring, workforce management, and recording.
- "OpenScape Contact Center Collaboration Suite". Screen sharing, web support, and collaboration.
- "OpenScape Social Media Solution". Social media listening, Twitter, and Facebook integration.

## MARKET HIGHLIGHTS FOR SIEMENS ENTERPRISE COMMUNICATIONS

- SEN launched an all-in-one hosted contact center offering, "OpenScape Cloud Contact Center" in June 2011, based on an OEM relationship with inContact. The agreement between the two companies included an equity investment in inContact to fund acceleration and development and go-to-market initiatives.

## Upstream Works

Product Segments: WFM, Analytics

Upstream Works Software (Upstream), headquartered in Vaughan, Ontario, Canada, produces an analytics and productivity suite used to improve agent performance and customer experience by simplifying and correlating the measurement of the two. Upstream has grown its client base by going through contact center-focused resellers and direct sales. The company's systems are used by contact center professionals and business analysts in call centers with fifty agents and above, but typically in the 1,000 agent range. Although the products are a broad base play, Upstream has had success in healthcare, utilities, and insurance.

### U P S T R E A M W O R K S P R O D U C T S

Upstream Works has two solutions to improve the contact center:

- "Business Interaction Manager" (BIM) provides accountability and control across customer-facing interactions. By capturing interactions live, BIM provides built-in first contact resolution (FCR) measurement along with deployable tools aiming to help increase management and agent effectiveness. BIM tracks interactions across channels, giving an end-to-end view of customer interactions and allowing managers to compare performance of email, phone, and chat interactions, and measure performance when the interaction touches more than one channel. BIM's multi-site support lets users compare results from multiple contact centers, including outsourced centers, without requiring a homogeneous ACD or switch environment. BIM's out-of-the-box interaction analysis aims to simplify the task of identifying cause-and-effect relationships by tying together all customer contacts about the same issue and delivering a complete picture of which issues are resolved the first time. BIM includes a real-time data mart, pre-built, drillable "best practices" reports, and customized operational/tactical/ strategic dashboards, all of which can indicate the areas that need improvement.
- "UpStart Contact Center Agent" (CCA) is an agent desktop solution that automates and coordinate multi-application agent desktops and workflows based on the customer's prior experiences and current needs. CCA acts as an interaction assistant for the agent, by providing customer call information, control, tools and ready access to knowledge.

CCA seeks to bridge the gap between single application agent desktops from telephony vendors and "unified desktop" solutions. UpStart Contact Center Agent technology is also available for integration into existing purpose-built unified applications. Features include:

- Multi-application automation of any number/type of existing desktop applications
- Blended phone/email/chat support, with identical workflow and automation for all channels
- Knowledge base for secure access to local and partner information
- Interaction history shows agents all previous contacts across channels, including abandons
- One click transfer of all customer fields from one application to another
- Agent to supervisor/agent chat for in call assistance
- Set of agent tools to cut handle time and solve real world interaction problems
- Multisite support preserves information collected at first site for automation at the second site
- Aims at being intuitive to use, with minimal required training
- Identical operation in Cisco, Avaya, Nortel environments

#### MARKET HIGHLIGHTS FOR UPSTREAM WORKS

- In March 2012, Upstream Works announced Release 3 of the company's contact center agent desktop, with new features, including a "scratch pad" to eliminate paper, reminders for off line activities, manual activity tracking, and improved data capture for business intelligence.

## UTOPY

UTOPY, one of the pioneers in Speech Analytics, is headquartered in San Francisco, CA. However, UTOPY has evolved beyond Speech Analytics, with solutions that aim to help organizations improve their customer experience and contact center performance by analyzing customer interactions over multiple channels, including: telephone, email, chat, and social media. UTOPY's solutions deliver end-to-end analysis of the customer interaction and feedback lifecycle, regardless of the mode of communication used by the customer.

UTOPY sells direct and through channel partners in North America and EMEA, targeting enterprises with more than 100 agents. Key go-to-market partners are: IBM Global Services, Genesys, Sykes, TantaComm, and Applied Business Technologies.



UTOPY typically prices software licenses based upon the number of concurrent agent seats. The number of agents serves as a proxy for the volume of interactions to be analyzed, but do not impose any limits on the number of end-users of the applications. Pricing options include yearly or perpetual licenses and either on-premise or hosted deployments.

## UTOPY PRODUCTS

UTOPY's core product is "SpeechMiner", a Customer Interaction Analytics platform which includes a Speech Analytics engine that works with any of the industry's standard call recording systems. It also includes integrated Text Analytics and Social Media Analytics engines which enable unified analysis of all interactions, regardless of the mode of communication used by the customer. Other optional products include:

- "Intelligent QM"
- "Intelligent Coaching"
- "Intelligent Script Adherence"

The company also offers several packaged Key Performance Indicator (KPI) solutions:

- "UTOPY Customer Satisfaction" predicts customer satisfaction levels, uncovers the cause of customer dissatisfaction, and prescribes resolutions.
- "UTOPY Customer Retention" identifies conversation metrics that correlate with customer churn behavior and predicts potential at-risk customers for proactive retention efforts.

New features in SpeechMiner release 8.0 include:

- Unified Customer Interaction Analytics. The integrated Text Analytics engine enables unified analysis of customer interactions (including interactions via telephone, email, chat, and social media), regardless of the mode of communication used by the customer.
- New Interaction Exploration Tools and Automatic Discovery Analytics. Aims for "intuitive exploration of conversation content and automatic uncovering of current trends or events that occur during conversations, based on frequency and clustering algorithms".
- Speaker Separation. Offers the ability to distinguish between what the customer said and what the agent said during a call and then analyze accordingly.
- Cisco Certification. Integration with Cisco Media Sense enables real-time Speech Analytics.

## MARKET HIGHLIGHTS FOR UTOPIA

- Launched SpeechMiner version 8.0 in April 2012
- Launched "SpeechMiner SaaS Express" in September 2011
- Launched "SpeechMiner SaaS Enterprise" in February 2011

## Verint

Product Segments: QM, WFM, Analytics

Verint Systems Inc. is a publicly held provider of "Actionable Intelligence®" solutions and services for enterprise and security intelligence. "Verint Enterprise Intelligence Solutions", is the division of the company that provides an enterprise workforce optimization (WFO) suite, including QM, WFM, performance management, eLearning, coaching, desktop and process analytics, voice of the customer analytics for contact centers, and branch and back-office operations. A global organization, headquartered in Melville, NY, Verint sells in over 150 countries worldwide, and has an installed base of over 10,000 organizations, including more than 85 percent of the Fortune 100.

Verint sells the company's solutions directly and through a global network of channel partners, including several OEM relationships. For example, Avaya bundled its own version of Verint's WFO suite into its own contact center offering as an Avaya-branded, sold and supported solution. In addition, "Impact 360 Workforce Optimization" is an SAP-endorsed business solution. Verint worked closely with SAP to deliver out-of-the-box integration between its solutions and SAP's, eliminating the need for custom integration. As part of the agreement between Verint and SAP, both companies will share technology and product roadmaps. BT is also a key partner for Verint in the realm of financial trading floors, as well as inContact for cloud-based computing.

Although sold into every market, key verticals for Verint include: financial services, telecommunications, and government.

## VERINT PRODUCTS

Verint has built out a suite of WFO and Voice of the Customer (VoC) solutions, through internal development and the integration of some acquisitions. In 2010, it acquired Iontas, a developer of desktop and process analytics solutions, which measure application usage and analyze workflows to help improve staff performance and refine business processes in contact center, branch, and back-office operations environments. This bolstered Verint's enterprise push by melding contact center performance analytics with visibility into what processes are at work in managing customer service operations.

In 2011, Verint had two key acquisitions. In July, it acquired Vovici, an enterprise feedback management (EFM) solutions company. This combination helped create a Voice of the Customer analytics platform available for collecting, analyzing, and acting on customer insights. In September, Verint acquired Global Management Technologies (GMT), an Atlanta-based provider of workforce management (WFM) solutions. GMT's software and services were used particularly in retail branch banking environments. The addition of GMT helped Verint enhance its WFM capabilities, by incorporating differentiating functionality, such as GMT's technology "value optimization and sales effectiveness" tools. These capabilities helped retail financial services institutions improve teller productivity by seeking to optimize the use of branch automation technology, such as cash recyclers, and improving sales productivity by seeking to optimize the positioning and activities of branch sales staff.

Verint's solution portfolio includes:

Impact 360 Workforce Optimization:

- Verint's core offering to contact center, branch and back-office operations, is "Impact 360", an analytics-driven, enterprise workforce optimization solution. It incorporates call recording, quality monitoring (QM), workforce management (WFM), performance management, desktop and process analytics, eLearning and coaching, and Voice of the Customer (VoC) analytics (speech analytics, text analytics, customer feedback surveys, and enterprise feedback management) into a single unified suite.
- End-to-end encryption is a strength for Verint. Verint's recording and QM software provides security options to help contact centers achieve compliance with the Payment Card Industry Data Security Standards (PCI DSS). It allows users to pause and resume recording via user-defined triggers activated based on activities on the agent's screen, enabling seamless real-time avoidance of the capture of sensitive information, such as the entire payment transaction or just the CVV2 code.

Voice of the Customer (VoC) analytics:

A solution meant to centralize customer feedback across channels, interpret it in the context of business objectives, get a holistic view of the customer, then act to drive change. The solution set includes:

- "Impact 360 Speech Analytics": mines recorded customer interactions, whether as part of a contact center interaction or voice-based (IVR) feedback program, to surface the intelligence essential for building effective cost containment and customer service strategies.
- "Impact 360 Text Analytics": uses natural language processing to analyze customer communications from a variety of internal and external text-based sources, including chat, email, social media, and customer feedback surveys.

- "Verint Enterprise Feedback Management": provides an enterprise-wide customer feedback capability, enabling organizations to capture targeted, segmented customer feedback and sentiment as part of—or independent from—contact center feedback.
- "Impact 360 Customer Feedback": applies short, context-sensitive surveys to capture customer feedback in real-time, after customer service interactions are completed, often through an IVR as an extension of a conversation with an agent.

#### MARKET HIGHLIGHTS FOR VERINT

- On the heels of Verint's 2010 acquisition of Iontas, providing the company with desktop and process analytics, Verint acquired two additional companies in 2011:
  - Vovici in July 2011
  - GMT in September 2011
- Verint also announced a new release of the Vovici "Enterprise Feedback Management" (EFM) solution, which included integrations to Verint's Impact 360 Text Analytics, which analyzes customer interactions and feedback from a variety of internal and external sources such as blogs, chat, email, social media channels, surveys.

## Voice4Net

Product Segments: ICR, Outbound, IVR, QM

Founded in 1996, Voice4Net is headquartered in Dallas, Texas. Voice4Net is a provider of contact center software and management solutions for enterprise and SMB users with a product portfolio that ranges from IVR to full-featured customer interaction suites customized to fit customer business needs.

Voice4net markets to enterprises that operate mid-size to large contact centers. Target markets include: insurance, retail, healthcare, real estate, financial services, education, utilities, oil & gas, trucking and logistics, and government and public sector. Voice4net sells through channel partners, including systems integrators and VARs. Key partners include: Avaya, Mitel, Cisco, ShoreTel, Toshiba, and Aastra.

## VOICE 4 NET PRODUCTS

### "Contact Center HD":

A contact center solution built on a customizable IVR/ACD platform that incorporates multiple data types for bidirectional interaction with customers. The solution provides a single agent interface for all customer contact types, including voice, live web chat and call-back, email, SMS/text, and social media. In addition, many supervisory capabilities are managed using a touch-screen interface on a workstation or tablet, providing supervisors with flexibility in operational management from a desk or while moving around the contact center. CCHD's flexible architecture makes it suitable for both premise and hosted environments.

Contact Center HD provides:

- Intelligent call routing
- Inbound and outbound automation
- Multi-media communication channels
- Integrated customer records
- Predictive customer profiles
- Call and agent management
- Real time monitoring
- Historical reports

The solution also aims to provide:

- "Flexible fabric" to engage any contact type
- SQL-based data engines to create and manage customer information from any input
- Easy-to-customize agent and supervisor screens to match business flow and processes
- A reliable service model
- Site and cloud infrastructure resiliency
- Physical and virtual disaster recovery center

"Screen Pop Pro Server" (SPPS):

A software system that integrates information from multiple sources to provide agents with timely access to caller data. SPPS works as an integral element of CCHD as well as a stand-alone product that easily integrates with most PBX and contact center solutions in the market to deliver screen-pop functionality without the need for a complete system replacement. SPPS aims for reduced call duration and increased caller satisfaction by having information accompany the caller through the entire transaction.

"Custom IVR":

Integrates multiple database and Internet functionalities over analog-, digital- or SIP-based lines. Custom IVR is available as a component of CCHD or as an integrated solution with existing PBX platforms.

"Event Broadcasting System" (EBS):

A database-driven outbound contact center solution that enables contact centers and public agencies to broadcast time critical information to response teams via the telephone. The use of Web-based management tools enables simple integration of unlimited calling lists for customized outbound calling for campaigns, reminders, and other notifications as well as specialized emergency response functions. The EBS system may also be upgraded to a predictive dialer platform with dedicated outbound agent tools and call progress algorithms that aim for fast, easy and scalable outbound campaigns.

#### MARKET HIGHLIGHTS FOR VOICE4NET

- Avaya DevConnect certification for SPPS and EBS solutions was completed in March 2012
- CCHD was launched in April 2012

## Voxeo

Segments: IVR, Analytics

Voxeo, headquartered in Orlando, Florida, and privately-owned, develops inbound and outbound IVR, call control, proactive customer contact, and automated multichannel self-service solutions. Voxeo's implementation model is "one platform ("Prophecy") three clouds", which allows it to offer customers on-premise, hosted, or hybrid deployment options. This model is further supported by the company's philosophy, backed by a common development environment, which allows developers to "design once, deploy anywhere".

The company's customers include more than half of the Fortune 100 firms and dozens of leading service providers globally. Its sales are almost all through partners, which it supports through a comprehensive "Voxeo Connect Partner Portal". In 2011, it also launched a certification program to further advance and support partners, which include: Digital DataVoice, Waterfield, IBM, IVS, MicroAutomation, and Avtex.

## VOXEO PRODUCTS

Voxeo's products include:

- Prophecy. Voxeo's headline product, it powers customer voice portals, outbound notification services, order tracking systems, marketing campaigns, plus multi-channel voice, text messaging (SMS), chat, and social media. It is natively SIP-based and can scale up and down. It supports over 6,000 concurrent calls per server and technologies such as wideband audio and IPv6.
- Prophecy's operations, administration, maintenance, and provisioning interface brings the capabilities of Voxeo's patented, multi-tenant IVR virtualization and distribution technology to any Prophecy solution. This aims to make it easy to deploy and manage telephony applications on a single server, single-site or multi-site cluster of servers.
- "Prophecy Commander". Built on web technologies, including Adobe Flex, AJAX, and "dynamic HTML", Commander is an Internet application that "combines the flexibility of web access with the usability and performance of desktop applications".
- "PRISM", which is Voxeo's unified communications server.
- "VoiceObjects" is Voxeo's unified self service/application life cycle management solution that manages the full application lifecycle (development, deployment, analytics, tuning, change management) and it includes cross-channel analytics along with the ability to integrate with business intelligence systems such as IBM Cognos, MicroStrategy, Oracle, and SAP Business Objects. The company also possesses the ability to speech-enable self service applications. Currently applications can be developed in over twenty languages.

Prophecy customers can use "Prophecy Hosted" for business continuity and failover. The Voxeo hosted platforms are carried on seven global data centers: Atlanta, Georgia; Las Vegas, Nevada; Orlando, Florida; Beijing, China; Frankfurt, Germany; Hong Kong; London, U.K.; and Singapore. There is a network operations center in Orlando. Voxeo recently became PCI-DSS Level 1 certified.

## MARKET HIGHLIGHTS FOR VOXEO

- In 2011 Voxeo added support for wideband voice and inbound and outbound fax in its "Prophecy 11" release. It recently incorporated location-based services into Prophecy as well. The application identifies a caller's location without having that caller enter their locale or download an application.
- Launched "Voxeo Connect Partner Program".
- Achieved PCI Level 1 compliance.

## VPI

Product Segments: ICR, Outbound, IVR, QM

Founded in 1994, and still run by the founder, VPI (Voice Print International) has a suite with tools across the APO spectrum. The main APO offering is "VPI Empower", a fully integrated suite of performance optimization applications, which makes processing of structured and unstructured information accessible and affordable for any-size organization, regardless of the selection of modules they purchase.

VPI provides companies with unified insight into interactions across platforms. The products help managers simplify decisions by providing a universal application (database) that can run on virtually any platform, with one window into everything from one database. The products provide unified recording and processing of all data and audio from TDM and VoIP sources, with flexible deployment options and no hidden professional services fees.

While the majority of VPI sales are in North America, VPI has an installed base of customers in over 50 countries. Key strategic partners include Avaya, Avtec, Cisco, Mitel, Pipkins, and Siemens. VPI targets collections, contact center services, energy and utilities, financial services and trading, government, healthcare, outsourced teleservices, public safety, security, and transportation.

## VPI PRODUCTS

- "VPI 5.3 Empower" is the company's core workforce optimization product suite, which includes:
- "VPI Capture 5.3": call and desktop screen recording module with a "VPI Fact Finder" module for tagging calls with data and events from employee desktop screens or 3rd party databases to help automatically identify and classify high-value interactions and ensure PCI Compliance.



- "VPI Capture Essential 5.3": is a voice recording application with a smaller feature set than that of VPI Capture, but still includes tools like data encryption, file watermarking for assurance of integrity, and customizable reporting.
- "VPI Quality 5.3" and "Quality Pro 5.3": an application for the QM process with analytics-driven call selection, targeted evaluation, and coaching, and actionable insights. VPI Quality Pro now also includes: "Smart Evaluations", which enables non-technical users to assign automated actions to evaluation questions to trigger desktop eLearning, coaching, e-mails, and actionable alerts and notifications to front-line employees and managers according to question, skill, or form-level QA scores. To increase the speed and accuracy of performing evaluations, some or all evaluation questions can be automatically scored with agent performance metrics related to the interaction being evaluated.
- "VPI Performance 5.3": enables organizations to collect facts about and run real-time reports and alerts on how interactions are handled, how they are classified and evaluated, how coaching sessions are taken, employee skills, their performance over time, and how actual performance relates to goals and thresholds. VPI has more than 160 built-in contact center performance metrics, and it includes standardized data collectors for popular PBXs, ACDs, WFM, and CRM solutions.
- "VPI Coaching 5.3": delivers training, reminders and notifications to agents' desktops based on pre-defined performance metrics thresholds, on-demand or scheduled by workforce management. Training content can be in the form of training flashes, quizzes, eLearning courses, educational tips, examples of best practices calls, compliance bulletins, or pre-shift announcements.

The company's products make use of analytics and are designed as "out-of-the-box" applications that can be installed remotely on customer-provided hardware and customized directly by business users. Additionally, VPI includes first contact resolution and handle time optimization monitoring with metrics and reports as part of its standard offering. VPI software modules can be implemented within days, seeking to deliver tangible value immediately after implementation. VPI emphasizes the fact that its suite does not require extensive tuning and custom development as part of the standard implementation process.

Each of VPI's call recording offerings can use Amazon.com's Hosted, Cloud Simple Storage Service (S3) for disaster recovery and enhanced business continuity planning.

## MARKET HIGHLIGHTS FOR VPI

- The company announced the release 5.3 of VPI Empower, which included:
  - Proactive workflow automation
  - New report distribution and design options
  - Redaction of call and screen recordings
  - Increased efficiency and recording channel density
  - New hosted options for recording storage
  - Recording redundancy with failover server system and automated data consolidation for unified access
- In 2012 VPI announced "VPI VirtualSource" – a hosted, pay-as-you-go contact center solution that uses conversational, on-demand virtual agents powered by artificial intelligence to automate a variety of inbound and outbound call types.

## Zeacom

Product Segments: ICR, Outbound, IVR, QM

Founded in 1994, and still led by the company's founder, Zeacom is headquartered in Auckland, NZ. It is a global company, covering thirty countries, with offices in the US, UK, Australia, and New Zealand. Zeacom develops and markets products in three areas: contact centers, business process automation, and plug-ins for unified communications. In North America, Zeacom has had success in the credit union, utilities, healthcare, insurance, banking, IT Helpdesk, and local government sectors.

Zeacom targets small- and mid-sized enterprises. The products are integrated with switches from Avaya, Cisco, NEC (OEM), and Microsoft. Other key partners include: Blackbox, Carousel, Mecca, Quagga, NACR, Source Telecom, and Cross Telecom. Zeacom has over thirty partners worldwide, and is in the process of revamping its partner program to make it based on competency accreditation, in part due to the company's migration to the Microsoft Lync platform. After initial hesitancy by customers around Lync, the adoption cycle for Zeacom has been ramping up rapidly, and it is gaining traction, particularly driven around help desk and customer service.

## Z E A C O M P R O D U C T S

"Zeacom Communication Center 6.1" is the company's ICR system, supporting agents with 5-500 seats. Zeacom positions its Unified Contact Center as easy and intuitive to use, with many features, including multimedia support. The core platform includes the following modules:

- Workflow Engine
- Business Intelligence
- Voice Interaction (IVR)
- Outbound Contact
- Multimedia Interaction
- Presence

Because it is a single database design, the product has skills-based routing, workforce management, and analytics in one package, including 200 out of the box reports. It also has the ability to stream data into third party databases so customers can run their own queries. It also provides standard dashboard functionality on an Android device, so that supervisors can see and respond to exception reporting in real-time.

In addition, Zeacom has myriad UC plug-ins, and fully functional operator consoles. Depending on requirements, customers can start with UC and extend out into the contact center or vice versa.

## M A R K E T H I G H L I G H T S

- Moved ZCC 6.0 to the Microsoft Lync platform in January 2012.
- Zeacom was acquired by Enghouse Interactive in May 2012.

## S T R A T E G I C G R O W T H R E C O M M E N D A T I O N S

## Strategic Growth Recommendations for Vendors

### CONTINUE TO ENHANCE CORE FUNCTIONALITY

As the economic constraints that squeezed budgets and shifted them towards agent productivity solutions ease, contact center managers will continue to plan and buy APO solutions to get the most out of their agents, and continue to build customer relationships. However, end users will once again look toward upgrading or replacing their existing ICR, IVR, and outbound systems as well. While not necessary to shift R&D budgets to get to "the last mile" of feature development, it is still imperative to develop functionality on core systems to support the trends of unified applications, multi-channel capabilities, and integration with other parts of the business.

### TACKLE INTEGRATION AND EASE OF USE

Frost & Sullivan tracks six segments within contact centers. All segments can be sold and added on separately as customer needs develop, and these markets also had different starting points. For example, we had ACD before IVR, which came about before Outbound. As with many markets, there are vendors that historically have specialized in just one segment, and then over time expanded to more.

The issue of disparate systems, both from a functional integration level to different user interfaces for administration, management, and reporting, has been an age old problem that has grown with the industry. And customers want solutions, not cost and complexity. Customers want unified platforms in which to develop comprehensive inbound and outbound solutions, or manage the performance of their contact center. It is therefore imperative to continue to make integration between existing products within solution sets and with other vendor solutions (and common and intuitive user-interfaces) a priority.

### BUILD OUT SUITES

As we saw in 2011, suites are important for vendors in the APO space, pushing end users to replace aging systems in QM, WFM, and Analytics. Vendors in the APO space should continue to add functionality to existing suites, particularly in the analytics space, and those vendors specializing in just one or two areas, or that have separate product offerings not tightly integrated, should develop tightly integrated product suites in order to capture sales of end users that may be in need of upgrading older systems in any one segment. As products such as recording and quality monitoring systems get commoditized over time, end users will be looking to replace them with systems that provide more functionality. Feature-rich and attractively priced suites, particularly in the less tapped small- to mid-sized market, will be a good draw for customers.

## HELP END USERS BUILD THE ONGOING BUSINESS CASE

With the increasing interest in bringing on new customer contact channels, the drive for proactive customer contact, and the desire to use new tools to drive agent productivity and improve customer relationships, it is more imperative than ever to help customers justify these purchases. Vendors should partner with their contact center customers to build solid business cases for each solution they provide.

Particularly with the newer channels and tools, vendors should create flexible ROI calculation models to support business cases that will allow the addition of one solution. With the economy still an issue, it's important to help customers develop self-funding budgets so that one addition helps to pay for the addition of another, and so on. For example, the cost savings from upgrading an ICR platform to a SIP-based one can generate cost savings that will then allow purchase of another system or application that in turn will generate revenue, and so forth, creating a rolling business case and long term plan for customers. These cases should take into account the budgets of varying stakeholders within the organization impacted (marketing, finance, legal, etc.).

## DEVELOP BEST PRACTICES IN MULTI-CHANNEL DEPLOYMENT

The majority of contact centers are interested in multi-channel functionality, even as they might not own the budget to deploy a new channel. This reality has come to the fore in a significant way with the addition of social media as a new channel. As vendors of social media engagement solutions have found, interest in harnessing social media as a customer contact avenue is high, but implementing it is something else. Typically the addition of social media into a company doesn't come from or reside in the contact center, but starts somewhere else in the organization, such as in Marketing, which has the mission of handling brand awareness for a company. The result is often that the contact center is brought in when social media interactions are shown to be customer service related; an approach that can lack cohesion when there is no overall social media deployment strategy in advance.

Companies have been quick to embrace social media, but slow to implement it as social media crosses many areas of the business. The issues are the same across all contact points, from social media, to web, chat, SMS, and mobile. Vendors should develop best practices for deployment in order to help customers with all customer contact channels they support.

## BE PROACTIVE ABOUT CUSTOMER SUPPORT

In 2011, the outbound market declined, due in part to customers moving to more fully-featured outbound dialing solutions in the cloud that enabled them to create more complex, proactive customer care applications. The premise market for outbound dialers has a large installed base of older systems. As these systems are ripe for replacement, vendors should enhance their solutions with a richer set of capabilities such as social and mobile support, customer feedback, inbound notification, customer preferences, and better campaign management. In addition, vendors should continue their efforts to educate the market on the business value of these enhanced dialers, and how they can be used to engage with customers and change customer perception of dialers from "Robocall" to wanted call.

## BUILD VERTICAL MARKET EXPERTISE

Frost & Sullivan has found that vendors that have had good success within a vertical market have made an investment to develop and market "deep vertical market expertise", as well as sales and solutions support to back it. Vendors that want to develop market share within a vertical need to follow suit by hiring people within an industry to act as solutions marketing managers, as well as sales and marketing support for the needs of a particular vertical. Not only do these key resources understand the differing needs of the vertical they support, they are invaluable in providing guidance to product development and technical support.

## EDUCATE THE FIELD REGARDING THE TARGET AUDIENCE

The Contact Center manager is not always the target for the solution. The challenge of multi-channel deployments has made this issue salient in that the business solution that each different channel provides may benefit and be the responsibility of one part of the organization more than another. For example, the addition of a web portal for sales, more than likely is the bailiwick of IT, not the contact center. IT might also want to make unilateral decisions about all enabling technology. The contact center might want to add social media, but doesn't own the brand image responsibility, or understand the legalities of an agent responding back to a customer in a public forum.

Although we are moving towards a more centralized way of thinking, with a management position responsible for the overall customer experience, with cross-organizational responsibilities, we aren't there yet. In addition, the recent economic downturn has also moved decision making up to a higher level, and often it takes the involvement of multiple levels of management to sign off on a new technology purchase. Vendors need to train their sales force on how to determine which business solution fits in which area of every organization they approach.

## PROVIDE DEPLOYMENT OPTIONS - CLOUD IS HERE TO STAY

Cloud is no longer a blue sky phenomenon. It is here to stay. New companies are springing up with SaaS-based solutions and existing vendors are developing hosted options. Vendors that haven't gone down this path, take note. If you don't provide a hosted option, others will. We have already seen market share lost to hosted providers from premise-based ones. But this shouldn't be an either/or option. Savvy vendors have started to provide hosted offerings that make it easy to move between premise and hosted solutions, giving flexibility in deployment options to customers. This allows customers to have premise-based solutions and utilize hosted for any reason from business continuity and seasonal fluctuations in call volume, to unexpected spikes in traffic.

## PARTNER PROGRAMS RISE IN IMPORTANCE

It's no surprise that the last five years has produced a big move toward selling solutions through partners. Partners can provide vertical market, technical, and geographical expertise to an implementation. However, as this trend has grown, so has the competition as vendors vie for partner production and loyalty. As such, vendors need to beef up their partner programs through education and accreditation programs, web portals for support, and partner events. Vendors also should pay attention to targeted industry events as a means of recruitment for the specific verticals they want to support.