The US Contact Center Decision-Makers' Guide 2014

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INTRODUCTION AND METHODOLOGY

The *"US Contact Center Decision-Makers' Guide (2014 - 7th edition)"* is the major annual report studying the performance, operations, technology and HR aspects of US contact center operations.

Taking a random sample of the industry, a detailed structured questionnaire was answered by 204 contact center managers and directors between January and February 2014. Analysis of the results was carried out in March and April 2014. The result is the 7th edition of the largest and most comprehensive study of all aspects of the US contact center industry.

ContactBabel is very grateful to the support which it has received from all of the sponsors of the report. However, complete editorial independence has been insisted upon and given at all stages, and readers can be confident about the objectivity of the report's findings.

HOW TO USE THE REPORT

"The US Contact Center Decision-Makers' Guide" identifies six of the major pain points and issues that affect the contact center industry:

- Improving quality and performance
- Maximizing efficiency and agent optimization
- New media and the customer of the future
- Increasing profitability
- HR management
- Strategic directions.

Within each section, specific solutions are identified that can be used to solve these issues, along with the analysis of the primary research data that are relevant to this area, including a comprehensive statistical analysis in graphical and tabular form.

Third-party White Papers, case studies and thought leadership pieces may also be used to assist readers who may wish to look more in-depth at specific areas or gain another viewpoint.

The report also contains a Supplier Directory, of organizations which provide services, products and solutions to the US contact center industry, divided by discrete category.

SEGMENTATIONS

Looking at industry averages for contact center statistics is only so useful. Only with a clear understanding of how and why metrics differ between operations can readers see where they stand compared to their competitors. As such, key statistics have been segmented in many different ways where relevant and possible:

- by vertical market (industry sector)
- by contact center size (agent positions)
- by contact center type (e.g. inbound/outbound).

We may also segment data along other lines (e.g. sales / service) where possible and relevant.

VERTICAL MARKETS

Where possible, we have segmented and analyzed data along vertical market (business sector) lines, to highlight the specific issues and environments particular to that vertical industry. Below are the ten vertical markets studied within this report which had sufficient respondents to justify inclusion.

Figure 1: Vertical market definitions

Vertical market	Sub-sectors
Entertainment & Leisure	Hotels, resorts, gambling, sports
Finance	Banks, credit cards, loans, debt collection, credit checking, corporate
Insurance	Insurance for medical, life, motor, house, corporate, reinsurance, etc.
Manufacturing	Mainly B2B sales and support, along with customer helplines
Medical	Hospitals, pharmaceuticals, medical supplies
Outsourcing	Large full-service outsourcers/BPOs and telemarketing firms
Public Sector	Government (federal, state and city) agencies, emergency services/911
Retail & Distribution	Retailers, home shopping, mail order, parcel carriers, logistics
Services	Non-physical service offerings to public and business
Technology, Media and Telecoms (TMT)	Technology sales and service; Cell and fixed line telco, TV, satellite and cable providers; Broadband/ISP; triple/quad play

SIZE BAND

Almost every survey question is considered from the size aspect, as differences in resources, management techniques and technology vary greatly between size bands.

Contact centers surveyed fit into one of three categories:

- Small - 10 to 50 agent positions
- Medium - 51 to 200 agent positions
- Large - over 200 agent positions.

CONTACT CENTER TYPE

Whether a contact center is predominantly inbound or outbound can fundamentally determine how the contact center is run. Therefore, we sometimes analyze data by contact center type:

- Inbound: more than 75% of work is inbound
- Outbound: more than 75% of work is outbound
- Mixed: less than 75% of work is either inbound or outbound.

THE STRUCTURE OF THE DATASETS

The data provided by the 204 contact centers interviewed in this study were broken down into discrete segments:

Vertical markets

- Entertainment & Leisure - 9
- Finance - 26
- Insurance - 17
- Manufacturing - 9
- Medical - 15
- Outsourcing - 27
- Public Sector - 17
- Retail & Distribution - 17
- Services - 31
- Technology, Media and Telecoms (TMT) - 32
- Other (not included in vertical market analyzes) - 4

Size bands

- Small (10 to 50 agent positions) - 66
- Medium (51 to 200 agent positions) - 80
- Large (200+ agent positions) - 55
- Did not answer (not included in size analyzes) - 3.

Inbound / outbound

- Mostly inbound (75%+ inbound) - 128
- Mixed (between 25% and 75% inbound and outbound) - 39
- Mostly outbound (75%+ outbound) - 35
- Did not answer (not included in size analyzes) - 2.

Sales / service

- Mostly service (75%+ service) - 126
- Mixed (between 25% and 75% service and sales) - 41
- Mostly sales (75%+ sales) - 32
- Did not answer (not included in service/sales analyzes) - 5.

DISTRIBUTION AND USE OF THIS REPORT

This report is written for the community of people interested in the present and future performance of the US contact center industry. Amongst others, these may include:

- Contact center managers and directors
- HR managers and directors
- Operations managers and directors
- Customer service directors and those involved in contact center strategy
- IT managers and directors
- Contact center solution providers: hardware, software & services
- Outsourcers
- Consultants
- Training providers
- New entrants to the US contact center industry
- Government bodies
- Academic institutions
- Contact center industry organizations
- Regional & national development/inward investment agencies.

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CCNG

Calabrio, Inc. develops and markets Calabrio ONE®, a comprehensive suite of contact center workforce optimization software that's easy to implement, use and maintain.

Calabrio ONE includes call recording, quality assurance, workforce management, speech analytics and performance-based dashboards and reporting.

Calabrio ONE is built on a modern Web 2.0-based architecture that allows the contact center to integrate new applications easily, as well as personalize and optimize the desktop toolset for each user – agents, supervisors, managers, knowledge workers, and executives.

Calabrio is a member of the Cisco Developer Network (CDN), and a gold member of the Avaya DevConnect program.

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CCNG is a member Professional Peer Network (PPN) for Contact Center and Customer Service Executives, Managers, and Leaders.

Within the CCNG Member Network, Contact Center and Customer Service Professionals:

Connect for networking and sharing best practices

Interact to enhance their professional network and gain valuable insight into Contact Center and Customer Service best practices and technology.

Share their experience and ideas contributing to the valuable discussion

All Call Center, Contact Center, Customer Care, Customer Service, and Customer Experience Professionals are invited to participate in the CCNG Member Network.

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You can also find us on LinkedIn and Facebook.

Contact Center pipeline

Contact Center Pipeline is a monthly instructional journal focused on driving business success through effective contact center direction and decisions. Our goal is to provide contact center professionals with valuable content, insights, research and advice from trusted and respected industry experts and practitioners.

Each issue contains informative articles, case studies, best practices, research and coverage of trends, technology and people issues that impact the customer experience. Our writers and contributors have a unique understanding of how to optimize resources and maximize the value the organization provides to its customers.

Draw upon CCP's incisive analysis to help you make better decisions about your career and your center.

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conversocial

Conversocial is a cloud solution that enables businesses to manage social media as a large-scale customer service channel.

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The Customer Care Institute (CCI) is an international resource organization that assists Customer Care Professionals with improving the delivery of Customer Care.

The Institute's programs and services include:

- Customer Care certification courses
- Front-line and management skills training
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- Other programs designed to increase customer satisfaction and build customer loyalty

CCI conducts and monitors research on Customer Care issues, identifies emerging trends, organizes Forums and workshops and publishes the Customer Care Update newsletter.

Over 13,000 Customer Care professionals are members of the Institute. CCI has assisted companies from a wide range of industries with enhancing their Customer Care programs.

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Enghouse Interactive is a global leader in providing solutions that deliver differentiated customer experience and maximize the value of every customer interaction. Enghouse Interactive's comprehensive portfolio of interaction management solutions span multi-channel call centers, Computer Telephony Integration (CTI), self-service Interactive Voice Response (IVR), knowledge management, operator consoles, call recording and quality monitoring, media voice services, and outbound dialers. These solutions support any telephony environment and flexible deployment options, on premise or in the cloud. With Enghouse Interactive solutions, your customers can reach you anytime, anywhere, and anyhow.

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Genesys

Genesys is the leading global provider of multi-channel customer experience and contact center solutions. With over 3,500 customers in 80 countries, Genesys orchestrates more than 100 million customer interactions every day across the contact center and back office. Genesys helps customers power optimal customer experiences that deliver consistent, seamless and personalized experiences across all touchpoints, channels and interactions.

With the industry-leading Genesys Customer Experience Platform, Genesys ensures that the experience you deliver aligns with the expectations of your customer and is journey appropriate. By most effectively matching the workload and the required staffing levels for each customer journey, you can deliver consistent service levels over all touch points, channels and interactions throughout your call or contact center and back office.

The Genesys Customer Experience Platform is available in three editions to address the needs of businesses from the smallest company to the largest global enterprise and can be deployed in the Cloud or on your premise.

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inContact

inContact's cloud contact center software and contact center agent optimization tools help organizations around the globe create high quality customer experiences.

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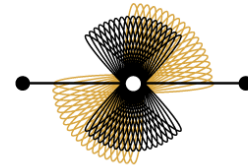
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At Interactive Intelligence, it's what we do.

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Intradiem is the leader in intraday management solutions for multi-channel contact centers.

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NICE's Customer Interaction Management solutions enable you to capture the opportunity in every interaction – getting you closer to your customers, helping you to really understand them, and provide a customer experience that goes beyond what they expect.

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OpenSpan solutions are deployed on more than 350,000 desktops across the world, and are optimizing billions of transactions in the banking and financial services, insurance, telecommunications, retail and technology industries.

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vht
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Virtual Hold Technology (VHT) delivers solutions at the heart of the customer experience, enabling contact centers to maximize the opportunities that come from customer interaction.

VHT's solutions deliver a virtual, multi-channel interaction queue that enable organizations to efficiently align available resources to customer needs. These solutions integrate easily to existing call center infrastructure and applications. The results are both dramatic improvements in call center efficiencies, as well as happier customers.

In 2013, VHT solutions were used by more than 170 million callers, saving them over 1.5 billion minutes in hold time. Last year, companies using VHT eliminated more than 18 million abandoned calls, and they improved their average speed of answer (ASA) by 29%.

VHT is headquartered in Akron, Ohio, with global offices in Latin America, Europe, and Asia-Pacific. Today there are more than 25,000 VHT licenses deployed in over 20 countries. VHT holds 13 United States and international patents, with 8 additional patents pending.

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VoltDelta is a global cloud-based contact center provider with 35 years of experience. We perform intelligent, data driven contact management to optimize your customer's journey.

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IMPROVING QUALITY AND PERFORMANCE

Within this chapter, methods and solutions are discussed that improve the quality of the customer experience and allow the contact center to gain insight into each customer and agent to improve their own business strategy.

Topics include:

- Interaction recording and analytics
- Quality management
- The agent desktop
- Workflow
- Training and eLearning
- Customer satisfaction and complaints
- Queue management systems.

INTERACTION RECORDING

For the past decade, there has been increasing desire within contact centers to improve upon customer satisfaction and experience, in order to keep customers loyal and profitable for longer. ContactBabel studies have consistently shown that increasing customer satisfaction is the no.1 focus of US contact centers, outperforming other key areas such as decreasing costs or increasing sales.

Call recording and monitoring may have been around for a long time, but it is at the forefront of the battle to improve quality and thus customer satisfaction and loyalty. The new generation of interaction recording solutions brings the whole contact center into play, potentially gaining at several levels of the business through using the solution in different ways.

Call recording is one of the most prevalent contact center solutions, having many applications around quality assurance, compliance, security and agent training. It is used by 87% of this year's respondents, 21% of which state that they wish to replace or upgrade their current system. Only 9% of respondents have no intention of using call recording.

Figure 2: Use of call recording, by vertical market

Use of call recording, by vertical market

Vertical Market	Use now, no plans to replace/upgrade	Use now, looking to replace/upgrade	Will implement within 12 months	Will implement after 12 months	No plans to implement
Average	69%	18%	2%	1%	9%
Medical	54%	8%			38%
Manufacturing	75%				25%
Retail & Distribution	44%	33%	11%		11%
Public Sector	50%	33%	8%	8%	
Services	71%	13%	3%		13%
Finance	65%	20%	5%	5%	5%
TMT	69%	24%			7%
Entertainment & Leisure	71%	29%			
Outsourcing	83%	17%			
Insurance	91%	9%			

Legend: Use now, no plans to replace/upgrade · Use now, looking to replace/upgrade · Will implement within 12 months · Will implement after 12 months · No plans to implement

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For any company with a contact center, Uptivity offers incredibly clear and deep insight into customer service. It's a modern, integrated, and easy-to-use software suite that will help you enhance customer satisfaction and continuously improve call center operations, with a unified system for speech analytics, workforce management, and call recording.

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The majority of respondents in all sectors surveyed use call recording today, a solid background upon which new applications based on call recordings can thrive.

The use of call recording is influenced by the size of the contact center operation although the figure of 76% penetration in small operations shows that vendors have been able to offer solutions successfully at various price points and deployment methods.

Figure 3: Use of call recording, by contact center size

Use of call recording, by contact center size

	Use now, no plans to replace/upgrade	Use now, looking to replace/upgrade	Will implement within 12 months	Will implement after 12 months	No plans to implement
Average	69%	18%	2%	1%	9%
Large	76%	22%			2%
Medium	73%	20%	3%		3%
Small	61%	15%	4%	4%	17%
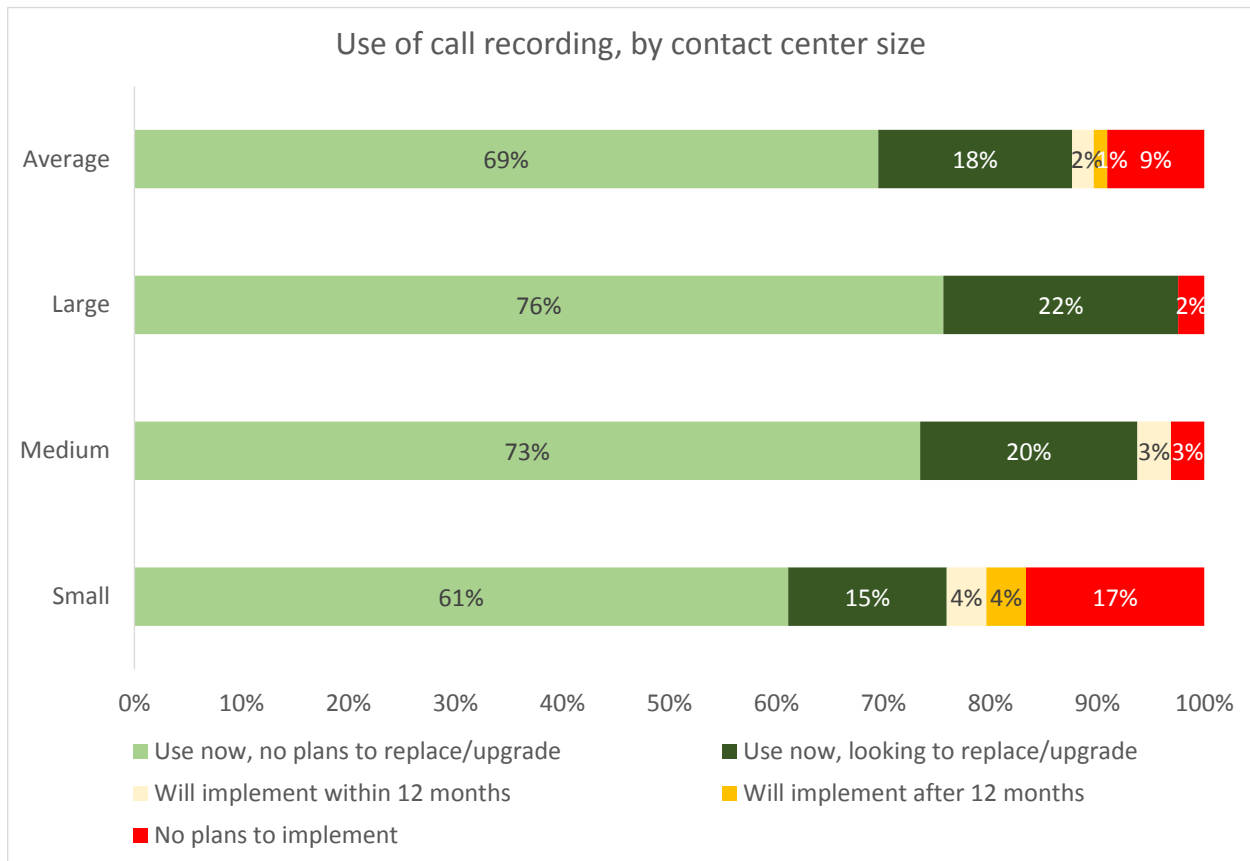
21% of survey respondents state that their call recording capability is delivered via the cloud, with 5% saying that they used cloud-based interaction analytics solutions.

Recording solutions have moved on from the days of simple bulk recording, and the phrase 'call recording' is no longer even an accurate description of the solution. 58% of respondents from large contact centers use screen recording as well as call recording, with an industry-wide figure of 40% usage, an increase on last year. It would certainly be more realistic to talk of 'interaction recording', which captures and synchronizes what is happening on the agent's screen with what is happening in the audio channel, and allows recording of after-call work, email and web chat, and can be used to identify areas of workflow improvement.

Figure 4: Use of multichannel recording and analytics, by contact center size
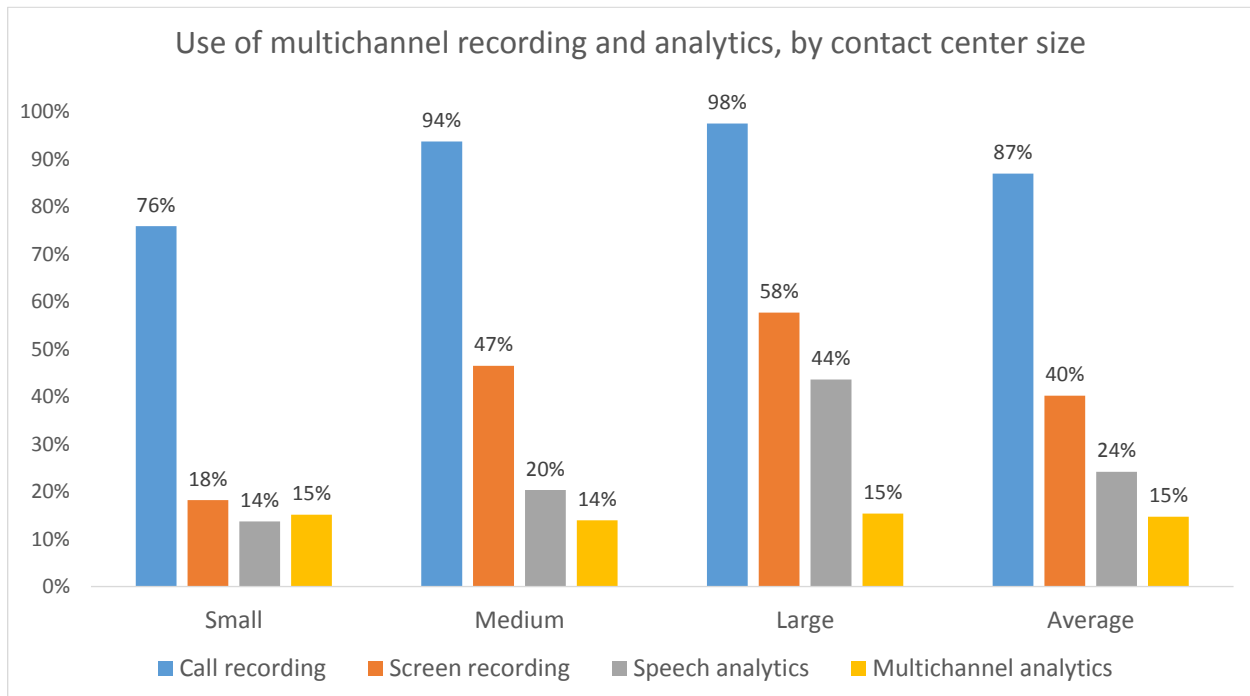
Use of multichannel recording and analytics, by contact center size

The new generation of interaction recording solutions brings the whole contact center into play, potentially gaining at several levels of the business through using the solution in different ways.

New generation interaction recording solutions include features for contact centers to reward agents for attaining specific target performance achievements. This 'gamification' capability enables contact center managers to model work activity on games to achieve productivity gains, align performance to standards and improve agent retention.

The traditional user of interaction recording solutions has been the contact center supervisor or team leader. The **supervisor** deals heavily with quality monitoring at the agent and team level, using the recording facility along with data about the call (e.g. deal size) to provide examples of best practice to other team members. This means the supervisor does not have to listen in live to the call, but can choose which ones to listen to, and when, considerably reducing cost. As statistics later in this chapter show, users of call recording in the main are extremely happy with how it assists them in their quality control and assurance processes.

The supervisor may also be responsible for customer dispute resolution, and can find out exactly what has been said by customer and agent in order to deal with the matter accurately. In industries where recording may be a legal requirement - an increasing trend - businesses may have **compliance officers** to deal with disputes. Even in areas which do not require bulk recording, many companies look upon this solution as a tool to protect against an increasingly litigious world.

With some of the more sophisticated interaction recording solutions available, the supervisor can move into a more analytical role, understanding not only what has happened, but the reasons for it as well. Taking a top-level view of team performance, a supervisor may see that certain types of call have been dealt with very quickly by a specific agent. Standard management information systems may show this as a positive situation, but using interaction recording capabilities may illustrate that this agent cannot help the customers, and is simply passing the calls through to colleagues. Now the supervisor has a chance to improve the situation, rather than missing the problem in the first place which may happen without this interaction analysis.

uptivity Performance quality depends on staff detecting causes of 'trouble' calls. Speech analytics automatically identifies these calls so staff can address issues quickly and effectively and receive coaching to improve interactions, first call resolution, average handle time and customer satisfaction.

Agents can be given the chance to add to the value which interaction recording can provide. By using agent-initiated tagging of calls, your front-line team can add to the store of useful information which the company as a whole acts upon. For example, if customers talk about the competition and what they are offering specifically, these agent-tagged calls can be reviewed for possible action by a business's commercial team. This has the added benefit of making agents feel a key part of the overall business.

A more strategic use of call recording may occur at the **management or executive** level. When all interactions are recorded and analyzed, a complete performance management program may be put in place. Agent performance can be viewed by supervisors, team performances can be analyzed by the operational manager, and contact center performance can be evaluated by executives. Analysis of interactions is also vital as part of a wider process optimization strategy, to identify good and bad business practices and process bottle-necks.

Using interaction recording, the performance of the contact center as a whole can be viewed in terms of quality, not just quantity. Key performance indicators can be set and reviewed (such as average revenue per call), which are directly relevant to the needs of a business as a whole. Contrast this with the traditional efficiency measures of a contact center's success: average speed to answer, average call duration and occupancy rate. Measurement and improvement in key performance indicators, due to interaction recording analysis, will help to **prove** the contact center capable of making a real impact on a company's profit.

Of those contact centers which use interaction recording, the majority use it for both quality assurance and training purposes, so that the supervisor and the agent can both learn from it. Many of those using interaction recording solutions are trying to get their senior management involved in what goes on within the contact center. Compliance has also been a major reason to implement call recording.

Call recording may be used in three modes:

- 100% call recording: often used for compliance purposes, this records the entirety of every call

- Random / Scheduled Call Recording: priority-based call recording schedules can be defined based on business rules, using multiple criteria on each schedule

- On-Demand Call Recording: contact centers may have situations where they do not need to record an entire call. On-demand recording can be customized to support agent-initiated call recording through a desktop interface, or automated through call recording triggers sent from third-party software.

uptivity

This year, 59% of respondents' operations handle card payments from customers over the telephone, although the public sector, insurance, manufacturing and TMT (technology, media and telecoms) vertical market respondents are less likely to do so this year. Payments are normally taken by agents, although vertical markets such as finance and entertainment & leisure often provide a fully-automated as well as a human payment option to their customer base. As such, issues arise with PCI compliancy which affects the use of interaction recording solutions as well.

uptivity

Automated blackout triggers that stop and restart recording based on activity in agent desktop applications or web-forms is preferred for achieving PCI compliance, by preventing the recording of sensitive authentication data (SAD). Protecting additional cardholder data with AES 256-bit file-level encryption of audio and video recordings increases security since the data cannot be decrypted without required password and encryption keys.

Figure 5: Does your contact center take payments over the phone? (by vertical market)
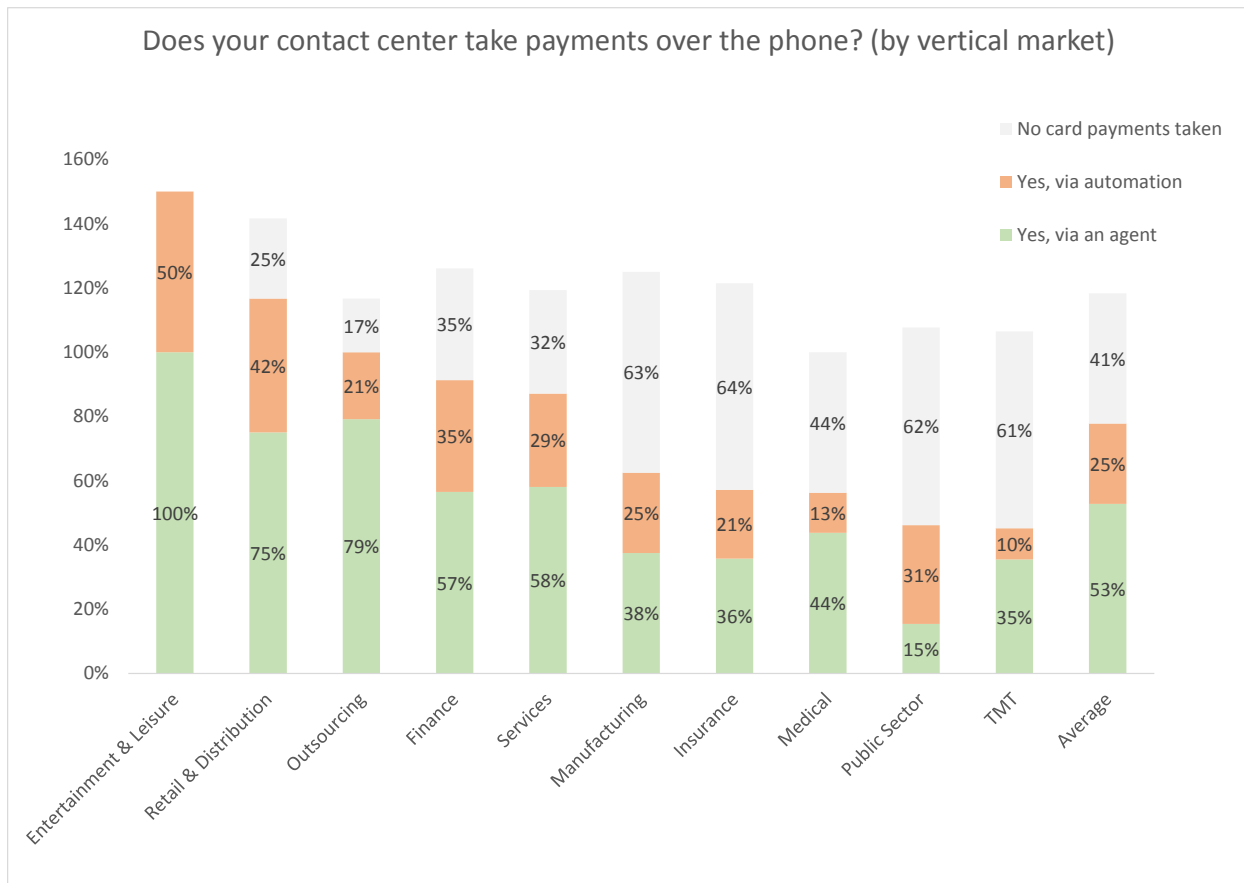
Does your contact center take payments over the phone? (by vertical market)

There are significant elements to consider around manually taking payment from cards: the time taken to take payment, the risk of fraud by agents and compliance with standards set by the Payment Card Industry Data Security Standard (https://www.pcisecuritystandards.org/security_standards/), in order to reduce credit card fraud.

36% of respondents that handle card payments stopped voice recording while the card payments is taken, and 27% use screen recording solutions that do not capture card details.

20% obscure the data as it is typed in, and the same proportion use an automated in-call or post-call solution to take the agent out of the frame altogether. Only 3% of this year's respondents detect and block the DTMF tones that could be used to identify digits.

47% of respondents that handle card payments on the telephone will either use another method, or simply seem to be hoping for the best.

Figure 6: Methods of assisting with PCI compliance (only those respondents taking card payments are included)

Methods of assisting with PCI compliance

Method	%
Voice recording stops while card payment is taken	36%
Screen recording application does not capture card details on screen	27%
Take payment via automated touchtone, mid-call or at the end of the call	20%
Obscure the data entered on an agent's screen	20%
Detect and block the phone's DTMF tones	3%
None of these, although we do handle card payments	47%
We do not handle card payments	41%

DePaul University Creates a Contact Center for Tomorrow

DePaul University in Chicago integrated student services into a one-stop center, DePaul Central, with cross-trained staff providing information about registration, financial aid and scholarships, tuition payment options and related inquiries. To provide highest quality service, DePaul Central needed visibility into issues students face when seeking answers to questions in-person, via telephone, email and chat.

The Challenge

DePaul Central improved in-person service, but bottlenecks remained in telephone service. Managing a high volume of calls to the standard of the in-person student experience was the goal. Staff needed to know much more about what happened when a student called, from when the call was answered to completion. To deliver fully-integrated services, DePaul Central needed to understand issues students faced during peak times, such as start of term or registration week and first day of registration. It needed a solution for handling spikes in call traffic and staffing guidance to meet fluctuating call volumes. DePaul also wanted to standardize the customer experience, deploy staff for greatest efficiency, and ensure optimal service and staff satisfaction.

"We needed to record calls and screen activity to understand of why individuals contact our office," explains Susan Leigh, Associate Vice President, Enrollment Management & Marketing. "With that information, we can structure our queue environment, ensuring the right person gives the right answer. This improves the experiences of our students. Integrating services based on the in-person model was our vision for DePaul Central Contact Center, where students get accurate answers and guidance for issues needing special attention."

The Solution

Challenges:
- Capture and understand student customer issues and motivations.
- Standardize customer service.
- Make better use of staff resources.
- Ensure student and staff satisfaction.
- Indentify and improve operating trends based on collected data.
- Institute a process for assigning calls to the most suitable agent (not next available).
- Meet compliance and security expectations and requirements.

Solution:
- Uptivity Discover Suite for:
  - Interaction recording (call and desktop)
  - Quality management
  - Surveys
  - Coaching and training

Results:
- Reduced AHT by 40 seconds
- Removed long handle time calls
- Increased call acceptance rate by 10%
- Increased satisfaction from 77% to 93%
- Improved FCR from 79% to 92%
- Implemented two-tiered handling system
- Decreased call abandonment by 66%
- Decreased average wait time by 71 seconds

After consulting with DePaul, Uptivity recommended the Uptivity Discover Suite for interaction recording, quality management (QM), surveys and coaching and training. Discover's interaction recording enabled process improvements and efficiency gains by making it easier for agents to obtain caller information. Using Discover's QM enabled DePaul Central to improve service quality, consistency and agent compliance with consumer privacy regulations. Coaching and training enabled DePaul Central to pinpoint call handling inefficiencies and gaps in agent knowledge so a two-tier, skills-based handling system could be established to eliminate cross-department call transfers.

Uptivity's solution helped DePaul Central quickly reduce average hold time by 40 seconds. Call activity saw a dramatic decrease in average hold time to an average ten to 23 seconds per agent. Similar improvements in talk time from an average two minutes and 19 seconds to one minute, 40 seconds occurred. "Having access to high-level data at our fingertips dramatically increases our ability to respond and improve service," explains Leigh. "We took our collaborative staffing model and duplicated it on our phone center operations with immediate results. With Uptivity we were able to quickly identify services that should be offered online and any broken processes. We couldn't be happier."

Call recording and speech analytics are often used in tandem. The following chart is taken **only** from data from those respondents which use call recording, but not speech analytics. This should allow the reader to gain a clearer view of what recording is good for, and what analytics is good for (equivalent 'recording plus analytics' data can be found in the next chapter). Survey respondents are very positive about the effectiveness of call recording for quality monitoring and identifying agent training needs, including the demonstration of best practice to other agents. Recording is also seen by most as an effective tool in proving compliance.

Figure 7: Effectiveness of call recording for specific tasks
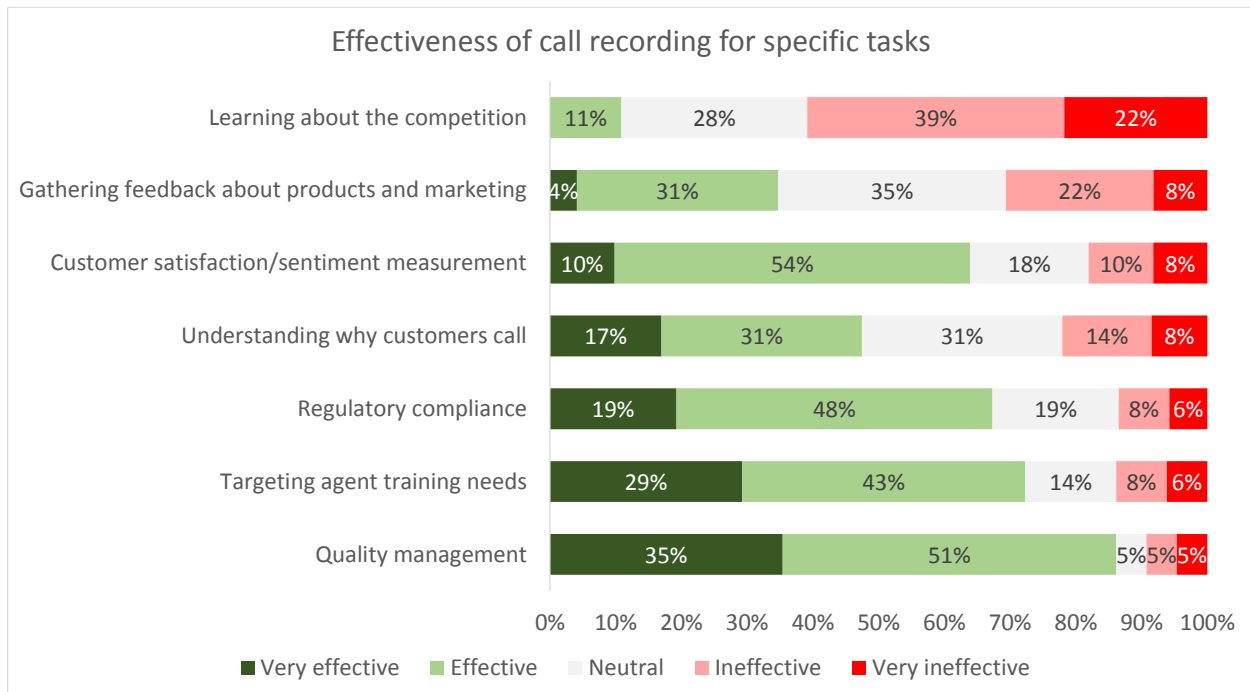
However, there is less enthusiasm for call recording's effectiveness at getting feedback from customers - it can be a difficult manual task to pick the right calls to demonstrate customer sentiment - and there is a strong link between those who find call recording very effective and those who use speech analytics, which the next chapter looks at in more depth. Very few respondents considered that call recording was of any use for the learning about the competition, although it was seen as useful in gauging customer satisfaction.

Call recording by itself does not seem able to provide users with insight into their customers, or especially their competitors. It is possible in theory to brief agents to record a conversation in which a caller mentions a competitor's name, but in practice the moment will have already passed, and it might be seen as disrupting the flow of the conversation and breaking the agent's concentration in any case. Speech analytics can hunt for specific words and phrases automatically, both in bulk and in real time, and should be a more effective method of gaining competitive information.

CUSTOMER INTERACTION ANALYTICS

The term "Customer Interaction Analytics" refers to the analysis of all interactions between contact centers and customers, whether that interaction was via telephone, email, a web chat session, or even social media. Such conversations are free-form by their nature, hence any data captured from the interaction will be unstructured by definition, which makes this data more difficult to analyze. However, there is an enormous amount of valuable information hidden in this mountain of unstructured data, and the interaction analytics technology available today is very effective at capturing the voice of the customer and improving contact center performance based upon this.

Interaction analytics solutions are similar to data warehousing and mining applications in as far as they analyze huge quantities of data - here, call and multichannel recordings - and identify important and insightful patterns in caller and agent activity. Hence, speech analytics has also been called audio mining. (It should be noted that some analytics solutions can also act in real-time, so the analogy is not quite exact). However, unlike the gap in functionality between data warehousing and data mining, interaction analytics solutions offer a proven and insightful option to release the customer value that is stored in these enormous quantities of information: insight about the customer, the agent, the business processes, and the products and services that the business sells.

As the rise of multichannel contact continues, with more than 25% of the work handled in many contact centers being non-voice-related, 'interaction analytics' can be seen as a more accurate description of the solution than 'speech analytics', with leading solution providers expanding their multichannel functionality at a pace.

Within the contact center industry, speech analytics is probably the best understood and most used aspect of customer interaction analytics. The first speech analytics product for commercial purposes was released in 2002 (before then, the technology was used primarily for government intelligence purposes). Since 2002 the technology has improved drastically, as have the number of successful customer implementations.

Turn On Great Customer Experience

Actionable insights for better business results.

Imagine this: Interaction Analytics so reliably accurate that they are immediately actionable without further human intervention.

Analyze 100% of conversations, across all channels of contact. Continuously optimize the performance of your workforce and your customer's experience.

Do it all with Genesys, the global leader in multi-channel customer experience and contact center solutions. Available from the cloud or your datacenter, the Genesys Customer Experience Platform can help you turn on great customer experience today.

Find out more at www.genesys.com.

Genesys®

The elements of speech analytics

There are various elements to speech analytics solutions, including:

- Speech engine: a software program that recognizes speech and converts it into data (usually either phonemes - the sounds that go to make up words - or as a text transcription, although there are solutions which directly recognize entire spoken phrases and categorize calls with higher accuracy and completeness based upon the occurrence of those phrases, as no data is lost in conversion).
- Indexing layer: a software layer that improves and indexes the output from the speech engine (when the speech engine is phonetic or speech-to-text) in order to make it searchable
- Query and search user interface: the desktop application where users interact with the speech analytics software, defining their requirements and carrying out searches on the indexed data
- Reporting applications: the presentation layer of speech analytics, often in graphical format
- Business applications: provided by vendors, these pre-defined modules help improve agent coaching and/or quality monitoring with speech analytics data, or look at specific issues such as adherence to script, debt collections etc., and provide suggestions on what to look for.

Each of the speech engines mentioned above has specific strengths and weaknesses which mean that each engine is better suited to some business uses than others. Therefore, when evaluating speech analytics solutions, it is very important to determine which engine is best for each of your specific business requirements. For example: Phonetic engines are good for searching for rare occurrences within large volumes of audio, such as Legal Discovery types of applications; but Speech-to-Text transcription is required in order to automatically discover emerging trends or unexpected events within calls; however, as mentioned above, some information is always lost in the process of converting speech into text or phonemes, so solutions which directly recognize entire phrases within the call audio itself are able to categorize calls with much higher accuracy and completeness since no data is lost in conversion.

How to Maximize the Benefits of Interaction Analytics for Your Organization

As this chapter illustrates, Interaction Analytics is a powerful solution for optimizing workforce performance and the customer experience. Interaction Analytics deliver these business results in three primary ways: categorizing all conversations according to every topic discussed; automatically discovering emerging trends and unexpected events within the voice of the customer; and enabling users to search for particular words or phrases within interactions. Although search is often considered the primary usage of Interaction Analytics and is definitely a key capability, categorization is required to achieve most of the business benefits discussed in this chapter. Also, since "you don't know what you don't know", it's often crucial for an Interaction Analytics solution to be able to automatically discover emerging trends or unexpected events that users wouldn't have known to search for.

Determine which Speech Analytics Technique is the Best for Each of your Business Requirements

Speech Analytics is a critical element of Interaction Analytics, as the majority of interactions in the contact center still occur via the telephone. As mentioned in the beginning of this chapter, there are three kinds of Speech Analytics engines available today: Phonetic, Speech-to-Text and Speech-to-Phrase. Each engine has distinct strengths and weaknesses and is better for some uses than others, so many vendors offer hybrid approaches. You should begin by evaluating which engine is the best for your each of your specific business requirements.

Phonetic indexing is a good solution for searching for rare occurrences within large volumes of audio, but it is not very reliable (accurate and complete) for categorizing calls, and it is impossible to automatically discover emerging trends or unexpected events using Phonetic engines. Speech-to-Text transcription is required for such automatic discovery because Text Analytics can analyze the transcriptions to uncover those trends and events. Transcriptions can also be indexed to enable rapid ad-hoc searches, and merged with other text-based interactions (i.e. chat, email, social media) to enable unified analysis of all interactions across all channels. The recommended best practice for maximizing these transcription related benefits is to transcribe 100% of your organization's calls into text. Although Speech-to-Text engines are usually more reliable than Phonetic engines for categorizing calls, both approaches begin by converting speech (into phonemes or text respectively), and some information is always lost in conversion. Speech-to-Phrase engines directly recognize entire phrases within the call audio, so no data is lost in conversion. For this reason, Speech-to-Phrase engines are the most reliable for speech categorization.

Make your Interaction Analytics Actionable

Interaction Analytics are useless unless they are actionable---unless the analytics trigger actions which address the issues or capitalize on the opportunities that are uncovered. There are a few pre-requisites to making your analytics actionable. First, the analytics must be extremely accurate and comprehensive in order to provide information that is statistically reliable enough to depend upon to automatically trigger workflows to improve performance. Secondly, a rules engine is required in order to define the actions that need to be taken when the Interaction Analytics determine that your business rules have been broken. Finally, a work distribution system is required in order to assign those actions to the appropriate people who are skilled and available to handle the particular task, and then deliver the work to those employees. When all of these capabilities are integrated into a single solution, the result is actionable analytics which continuously optimize your workforce performance and customer experience delivery.

To learn more about how to maximize the benefits of Interaction Analytics, please read the eBook
"Cancel out the Noise: Three Capabilities Every Speech & Text Analytics Solution Should Offer".

Compared to recording-based functionality, interaction analytics (especially of the multichannel variety) is still to reach its full maturity, although the continual increases in penetration rates and the enthusiasm shown by contact centers to learn more about the subject is very positive.

Figure 8: Use of multichannel recording and analytics, by contact center size

Use of multichannel recording and analytics, by contact center size

Legend: Call recording, Screen recording, Speech analytics, Multichannel analytics

Contact center size	Call recording	Screen recording	Speech analytics	Multichannel analytics
Small	76%	18%	14%	15%
Medium	94%	47%	20%	14%
Large	98%	58%	44%	15%
Average	87%	40%	24%	15%
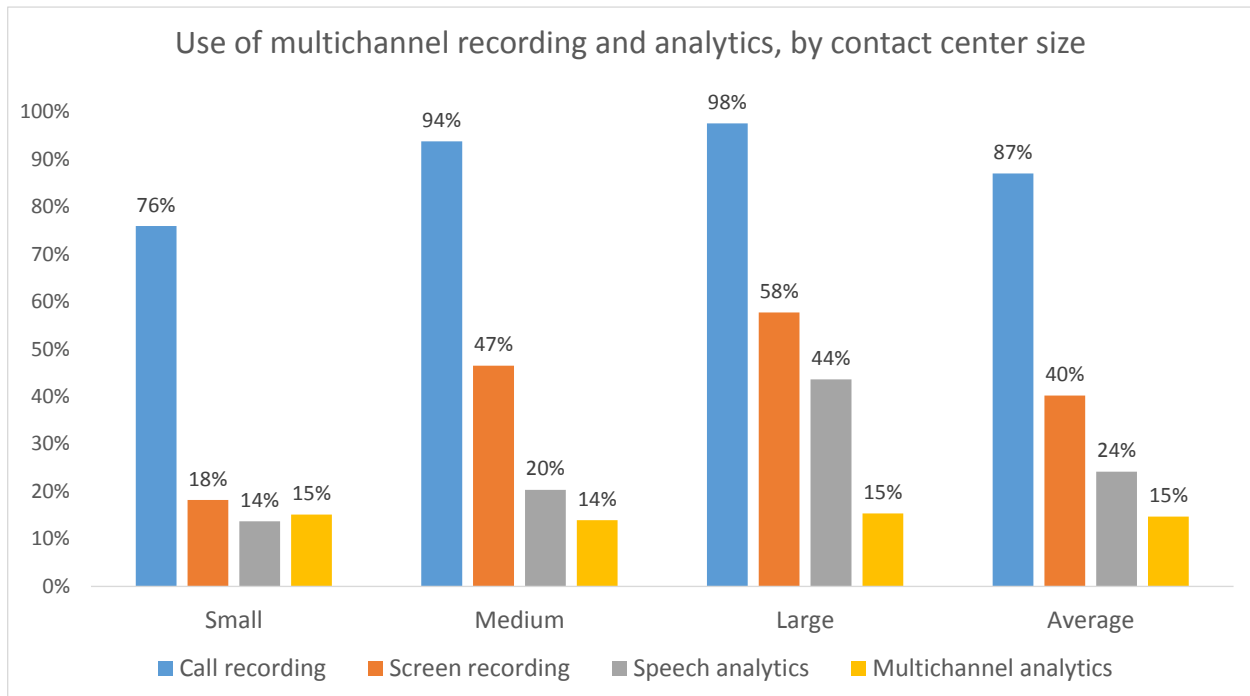
Against a virtual ubiquity of call recording, the penetration rates of interaction analytics are much lower, although almost one-quarter of this year's respondents use it today, and 26% state that they have definite plans for implementation.

(While vertical market figures have been provided, readers should be aware that the research base is relatively low for this question).

Figure 9: Current and future use of interaction analytics, by vertical market

Use of interaction analytics, by vertical market

Vertical	Use now, no plans to replace/upgrade	Use now, looking to replace/upgrade	Will implement within 12 months	Will implement after 12 months	No plans to implement
Average	20%	4%	10%	16%	50%
Medical	8%		8%	15%	69%
Finance	5%	5%	5%	37%	47%
Retail & Distribution		13%	13%	25%	50%
Manufacturing	13%	0%	13%	25%	50%
Services	15%	4%	15%	4%	62%
Public Sector	25%			25%	50%
Outsourcing	23%	5%	9%	9%	55%
TMT	25%	7%	11%	11%	46%
Entertainment & Leisure	50%		17%	17%	17%
Insurance	55%		9%	18%	18%

Legend:
- Use now, no plans to replace/upgrade
- Use now, looking to replace/upgrade
- Will implement within 12 months
- Will implement after 12 months
- No plans to implement

The correlation between size and penetration rate is very noticeable for interaction analytics, which may require significant investments. Having huge volumes of recorded calls and a large customer base to learn from also means that business patterns can be identified more accurately, and any improvements reap correspondingly higher rewards.

43% of respondents from large contact centers are already using interaction analytics, with those in the mid-sized sector also demonstrating enthusiasm in the near future, as the mid-market becomes increasingly well catered for by vendors, with cloud-based options being available.

Figure 10: Current and future use of interaction analytics, by contact center size

Use of interaction analytics, by contact center size

Size	Use now, no plans to replace/upgrade	Use now, looking to replace/upgrade	Will implement within 12 months	Will implement after 12 months	No plans to implement
Average	21%	3%	10%	17%	49%
Large	33%	10%	10%	23%	23%
Medium	19%	2%	12%	20%	47%
Small	14%		8%	8%	71%

Legend:
- Use now, no plans to replace/upgrade
- Use now, looking to replace/upgrade
- Will implement within 12 months
- Will implement after 12 months
- No plans to implement

THE COMMERCIAL APPLICATIONS OF INTERACTION ANALYTICS

Most contact center solutions have a specific, easily-communicated reason for purchase, usually around cost savings. The most popular and widespread solutions, such as IVR, workforce management, CTI and outbound dialing, have all had a clear and quantifiable route to cost savings and improved efficiency.

Interaction analytics has a different appeal to contact centers, and can be used in many different ways to address various business issues. This is an advantage - it is hugely flexible - but it can also make its message to the market more complicated, and to the cynical, it can seem as though interaction analytics is claiming to solve every problem that a contact center could possibly have. However, depending upon how interaction analytics is used, it can certainly assist in cost reduction, agent improvement, business process optimization, avoidance of litigation and fines, customer satisfaction and loyalty improvements, and increases in revenue.

Analysis of bulk call / interaction recordings can reveal patterns and suggest cause and effect which go towards building real business insight. As discussed earlier, there is certainly a place for real-time and near-real-time analytics as well, but the following charts look at how analytics can add to the strong base that call / interaction recording solutions give to an operation. In the previous chapter, respondents which used recording solutions were asked how effective these were in various circumstances, and findings were shown from those respondents which use **only** call recording. The following charts show responses only from those businesses which actually use interaction analytics for these purposes.

COMPLIANCE

Many businesses, especially those in finance, insurance, public sector and debt collection, have become encumbered with regulations which they must follow strictly, with potentially expensive penalties for failure, including heavy fines and criminal prosecution.

Contact centers have tried to reduce their risk through scripting, call monitoring and call recording, but these do not offer any guarantees or proof of compliance. Interaction analytics means that 100% of calls can be verified as compliant - and be proven to be so - preventing disputes or escalation of enquiries by monitoring the exact language used within each call. Return on investment comes from the avoidance of litigation and fines, and the use of interaction analytics for compliance is widespread, perhaps more in North America than the UK. The majority of analytics users find it effective in ensuring compliance.

Figure 11: Effectiveness of analytics for compliance

Effectiveness of analytics for compliance

- Very ineffective 8%
- Ineffective 8%
- Neutral 23%
- Very effective 38%
- Effective 23%
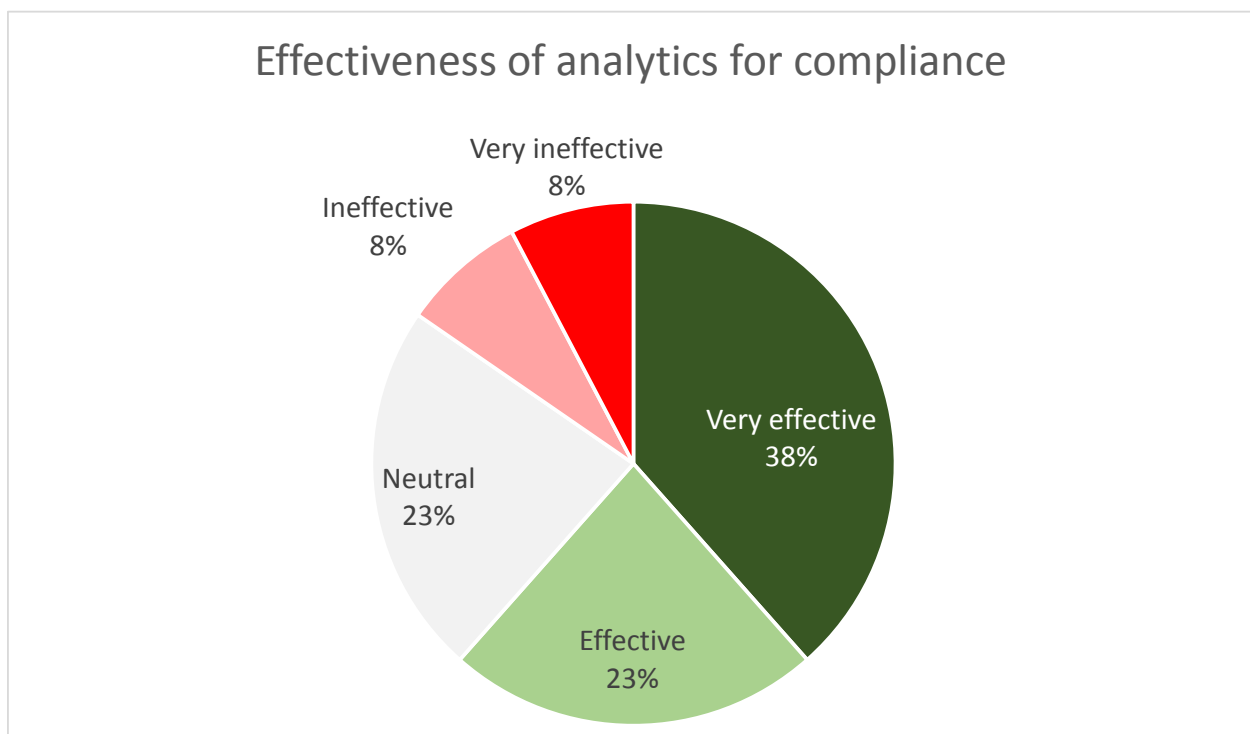
Improve the quality monitoring program

Interaction analytics tries to takes the guesswork out of improving customer experience, agent performance and customer insight. By moving from anecdote-based decisions, from qualitative to quantitative information, some order is put on the millions of interactions that many large contact centers have in their recording systems, improving the reliability of the intelligence provided to decision-makers. The need to listen to calls is still there, but those listened to are far more likely to be the right ones, whether for agent evaluation or business insight.

The limitation of a recording-only quality management approach is that it lacks scale, objectivity and relies on the consistency of multiple supervisors and analysts: the only reason that a business would not want to monitor the quality of every single interaction in and out of the contact center is because it is far too difficult to get reliable, timely and accurate information via human means alone. The chart below shows that the experience of all of the respondents that use interaction analytics for quality monitoring purposes is extremely positive.

Figure 12: Effectiveness of analytics for quality monitoring

Effectiveness of analytics for quality monitoring

- Effective 27%
- Very effective 73%
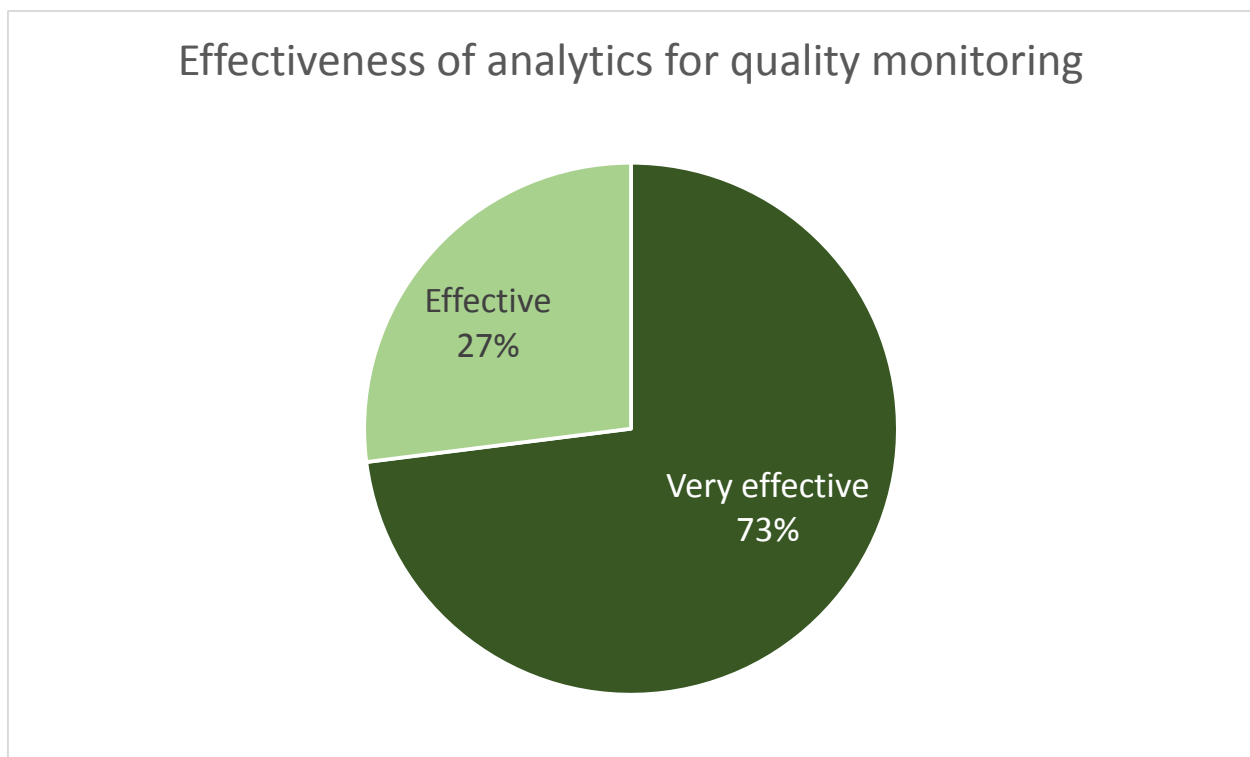
Identify agent training requirements

Apart from 100% monitoring of calls, interaction analytics is used to flag cases of talk-over, as well as silence detection. The former can be a source of irritation to the customer and long silences can indicate lack of agent knowledge, although long system navigation times or delays in system response times can also cause this. The analysis of these types of call will identify which of these issues is really the problem. Respondents state that analytics seems to be very effective in identifying agent training needs.

Figure 13: Effectiveness of analytics for identifying agent training needs

Effectiveness of analytics for targeting agent training needs

- Neutral 7%
- Very effective 40%
- Effective 53%
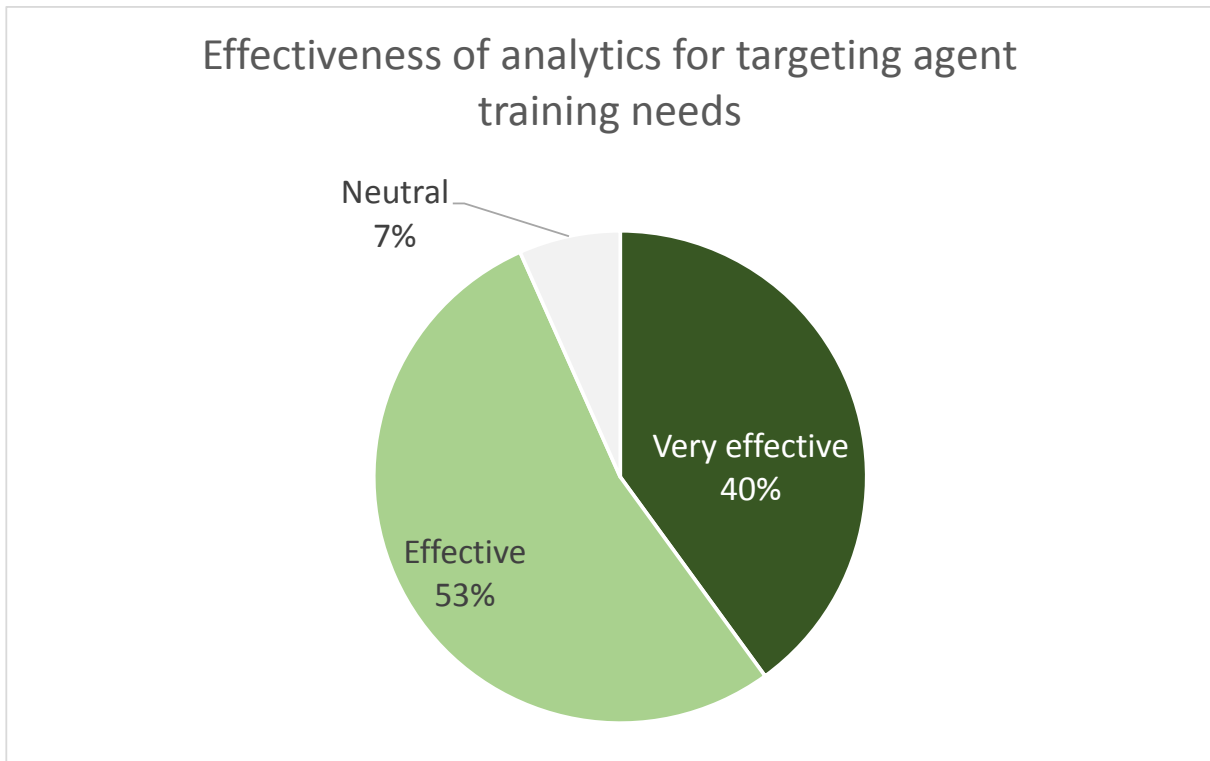
As illustrated by Figures 12 and 13 above, Interaction Analytics have been found to be far more effective than traditional manual methods for quality management/monitoring (QM) as well as targeting agent training needs, because Interaction Analytics can automatically evaluate 100% of conversations and help improve agent performance and the customer experience. However, Interaction Analytics are most effective for these purposes when those analytics are actionable — when the analytics automatically trigger actions which address the issues or capitalize on the opportunities that are uncovered. In order for Interaction Analytics to be actionable, those analytics must be statistically reliable enough to depend upon to automatically trigger actions, and the analytics need to be integrated with a work distribution solution which can assign those actions to the appropriate people who are skilled and available to handle the particular task and then deliver the work to those employees.

CONTACT CENTER PERFORMANCE IMPROVEMENTS

On first glance, interaction analytics can be seen as providing similar information to management information and reporting systems - taking masses of data and making sense of what they mean to the contact center's performance and perhaps even inside the wider business. However, the vital thing to understand about interaction analytics is that it gives contact centers the answer to 'Why?', not just 'What?'. Why are average handle times so different across agents? Why are customers of this product upset? Why are people calling the contact center? With high quality data inputs, mixing audio information with data such as call outcomes and revenues, analytics also identifies patterns which the business had no idea even existed, suggesting best practice and identifying areas for improvement at agent, contact center and process levels.

Why are customers calling?

Categorizing types of calls or emails, and then analyzing them for the occurrence of similar types of words and phrases can give an insight into the reasons for customers' interactions. For example, a category such as 'sales' might be analyzed for patterns, and it is discovered that the words 'delivery' and 'website' are mentioned in a disproportionate number of them. Analyzing some of these conversations, it may be found that the website does not highlight delivery times effectively enough, leading to unnecessary calls or emails to the contact center, rather than the customer simply purchasing on the website. This value-add functionality that analytics can provide can be seen to be highly valued, although having 27% of respondents lukewarm at best suggests that not all users of analytics are getting the most from its capabilities.

Figure 14: Effectiveness of analytics for understanding why customers call

Effectiveness of analytics for understanding why customers call

Ineffective 7%
Very effective 20%
Neutral 20%
Effective 53%
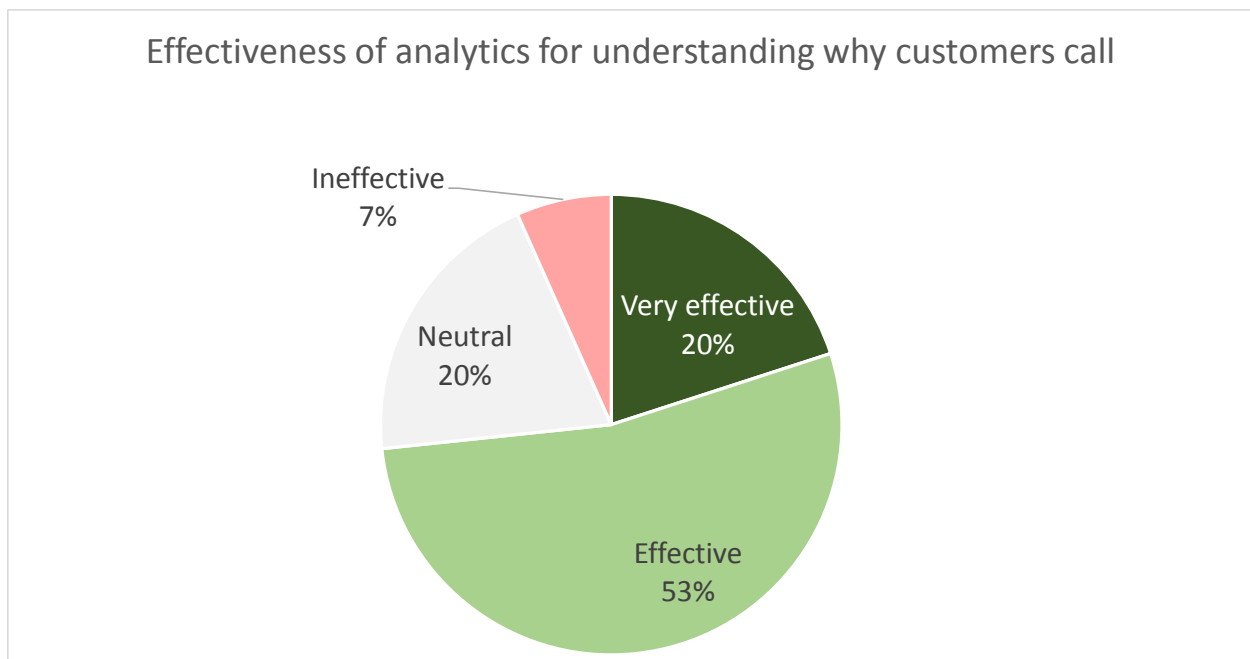
As the various flavors of self-service take more of the simple interactions away from the live channel, contact centers will be left with more complex and difficult queries. Analysis and understanding of the patterns of these types of call will be vital for businesses to be able to provide the right skills, training and knowledge to their agents.

Call transfers

Rather than making an agent use a call disposition code when they pass a call to another agent (which they may forget to do, or code inaccurately), interaction analytics can identify the reasons for passing calls to other agents and putting customers on hold (whether lack of training, broken processes or lack of access to the right systems).

First-contact resolution

A major metric for contact center and customer experience success, first-call resolution can be increased by identifying repeat callers and eliminating the root cause. Multichannel interaction analytics can also track contacts across channels, as many callers may first send an email, then try to call, which may appear to be a voice-only issue when in fact it is a multiple contact interaction.

An example of this was an organization where they had identified repeat issues as being a problem. Analyzing the calls categorized as such, it was found that agents were saying "we'll call you back within 3 hours". As the callers were very keen to get the issue resolved, they were prone to overestimate the time passing, so analysis found that many called back before the three hours were up. By changing the script to e.g. "It's now 11.45am, we'll call you back by 2.45pm", customer expectations were set and call-backs dropped immediately. A few weeks later, call-backs went back up, and it was found that many agents had gone back to the 'old ways', and had forgotten to give the exact time.

Average handle time

Average call duration / average handle time has traditionally been one of the main measures of a contact center's 'success', at least when judged by those outside the operation whose focus has often been on cost reduction.

Long call durations may be linked with poor agent abilities, lack of knowledge, navigation between systems or very complicated calls, and of course, impact on cost, queue times and the customer experience. Short AHTs can be as bad, if not worse, as they can indicate lack of agent capabilities (so agents pass the call to a colleague, or even deliberately lose the connection); that the contact center is handling too many simple calls that might be better handled by self-service or that there is a quick and easily-resolved common issue, the solution to which could be propagated in the IVR announcement, on the website or via email/SMS. The problem for businesses is that they often don't know with any level of confidence **why** call durations differ.

Interaction analytics allows businesses to categorize each type of contact, and through root-cause analysis, determine what a reasonable length for each type of contact is, and investigate the outlying anomalies, either on an agent level, or more widely, by comparing the amount of time taken on each category of contact now compared to the past. The identification of contacts resolved successfully in a reasonable amount of time will also provide the training department with examples of best practice.

BUSINESS PROCESS IMPROVEMENTS

Everyone connected with the contact center industry has always known that there is huge insight and knowledge held within the operation and its agents, but which has never before had the ability to be quantified or acted upon by the wider business. Interaction analytics offers the ambitious business the greatest potential for improvements in business processes, but there is a great danger of underachievement with so many departments and divisions potentially involved.

The marketing and website departments are amongst the non-contact center areas most likely to be benefiting currently from insights about customers' views, but there are also examples of how delivery, provisioning, billing and even warehousing departments have learned from the analysis of customers' experiences in the contact center.

The quality of insight and its actionability is totally dependent on a swift reporting process, simple yet rich intelligence, the ownership of process improvement at senior level and before/after comparisons to prove success. Cross-department rivalries or poor communication are a real risk to this, and the importance of having a project champion of sufficient seniority to exercise cross-department control cannot be underestimated.

BUSINESS INTELLIGENCE

Customer Satisfaction Surveys

There has been a great increase in customer satisfaction surveys in recent years, with the widespread uptake of Net Promoter® being a good example of companies' desire to learn what their customers actually think about them. However, research has shown that a 'satisfied' customer isn't necessarily a profitable or loyal one, and the results of customer surveys, particularly the written or telephone-based variety (the latter of which, despite its limitations and expense, is still seen as the best method), are carried out at a time when any feelings about the original interaction may have changed or dissipated, are prone to inaccuracy, delay and lack of detail.

With all of the methods of customer surveys, the questions are fixed in advance, and if the right questions aren't asked, the level of actionable insight is low. In many cases, a business might know that x% of its customers are satisfied, and y% dissatisfied, but it still has no real idea why this is, or even how it will impact upon their profitability. As an alternative to customer satisfaction surveys, interaction analytics allows a business to gather customers' views within the interaction itself - guaranteeing immediacy and accuracy - and can be applied across 100% of calls, rather than focusing on the outlying 'very dissatisfied' or 'delighted' customers. Furthermore, through widespread and detailed analysis of what the call is about, the type of language or messages used in the call, how the customer was handled, and the eventual outcome, businesses will be able to learn how to improve their customer retention and satisfaction in real-life, by-passing the standard metric (e.g. "83% of customers are satisfied") and getting to the root causes of satisfaction or dissatisfaction and sharing the results with the rest of the operation. This relatively sophisticated use of analytics is thought to be effective by 86% of those using analytics, which is certainly positive.

Figure 15: Effectiveness of analytics for measuring customer satisfaction or sentiment

Effectiveness of analytics for customer satisfaction/sentiment measurement

- Ineffective 7%
- Neutral 7%
- Very effective 20%
- Effective 66%
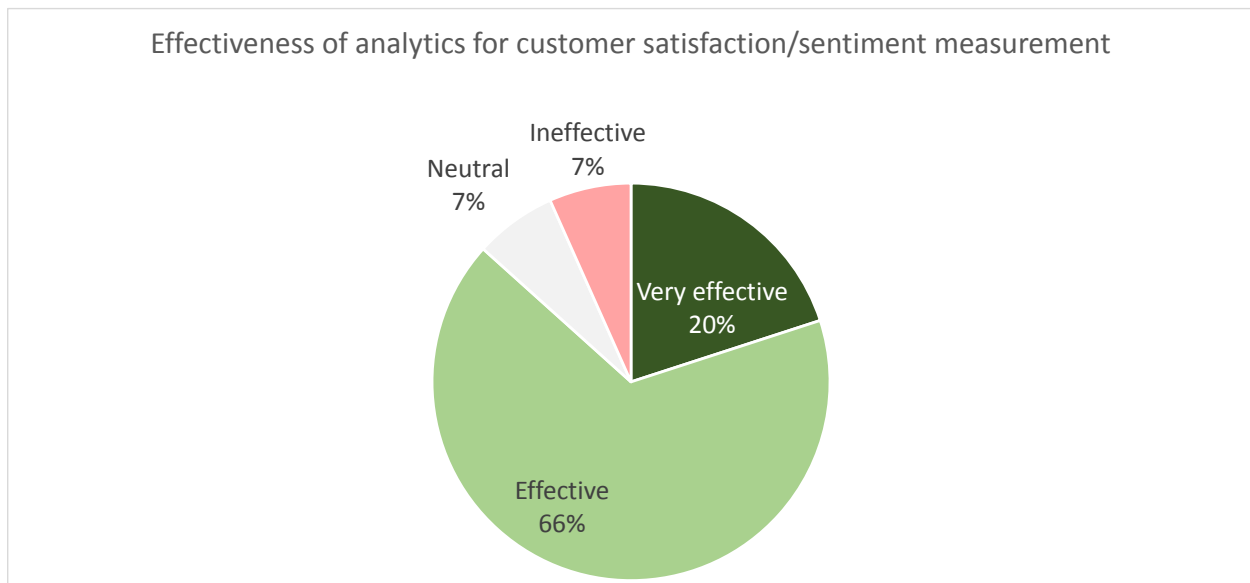
Customer Insight

As mentioned above, one of the greatest advantages that interaction analytics can provide is the ability to understand **why** things are happening, rather than just **what** is going on. With some solutions, it is not even necessary to know what you are looking for: automatic categorization of calls into their constituent types is a starting point, based on the types of words and phrases that typically get used within these types of calls (e.g. "complain", "not happy", "disappointed", "speak with a manager" etc., will often relate to customer complaints).

Non-audio data, such as the activity of account closure, refunds etc. can also be captured from the screen and linked with the call to provide richer data for analysis. The tracking of word usage compared with its historical use (e.g. a 300% rise in the use of the phrase "can't log-on" after a software upgrade) can quickly indicate and identify issues that can be handed to the relevant department much more quickly than typical inter-department channels could usually manage. Regular references to competitors and their products can be captured, analyzed and passed to the marketing or pricing teams to provide them with real-life, rapid and accurate information upon which to base decisions.

Unlike the conclusions that can be drawn from most previous charts, businesses still seem to be coming to grips with gaining insights about products or marketing from the analysis of customer interactions, as while 40% of respondents state that this use of analytics is effective, 46% are neutral and 14% unenthusiastic.

Figure 16: Effectiveness of analytics for gathering feedback about your products or marketing

Effectiveness of analytics for gathering feedback about products or marketing

- Very ineffective 7%
- Ineffective 7%
- Very effective 13%
- Effective 27%
- Neutral 46%
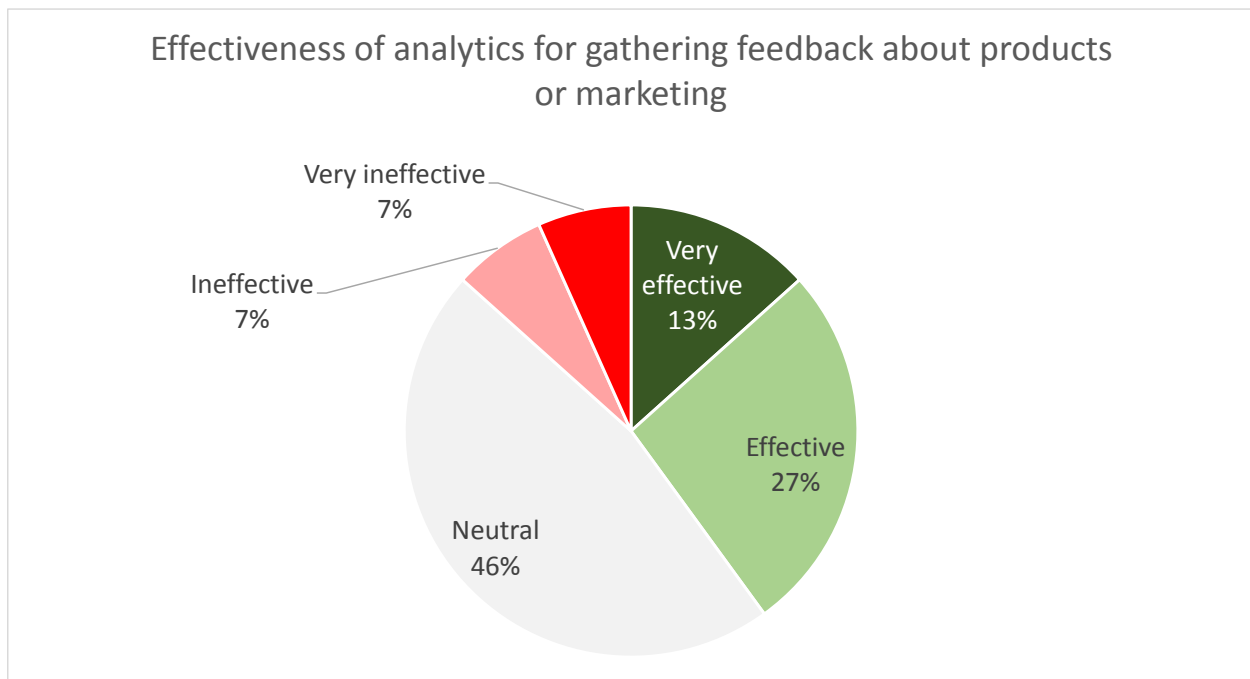
Crisis management and reaction

A solution with automated root-cause analysis capabilities - constantly looking for anomalies and new patterns - can identify spikes in unusual activity shortly after it happens, alerting specific users to the key issues so as to handle them before it runs out of control, damaging brand or customer satisfaction.

Product and pricing feedback

Interaction analytics allows businesses to seek out key words and phrases, such as competitors' names or any instances of pricing, or to gather feedback after a marketing campaign goes out.

However, as was the case last year, our respondents report that this is the least successful current use of analytics, with only 15% stating that this was an effective use of analytics, and 31% reporting that it was almost useless.

There is no reason why analytical functionality cannot give in-depth information about the competition or the business's own performance, and this is a potential opportunity for businesses and solution providers to steal a march on their competitors.

Figure 17: Effectiveness of analytics for learning about the competition

Effectiveness of analytics for learning about the competition

- Effective 15%
- Neutral 46%
- Ineffective 8%
- Very ineffective 31%
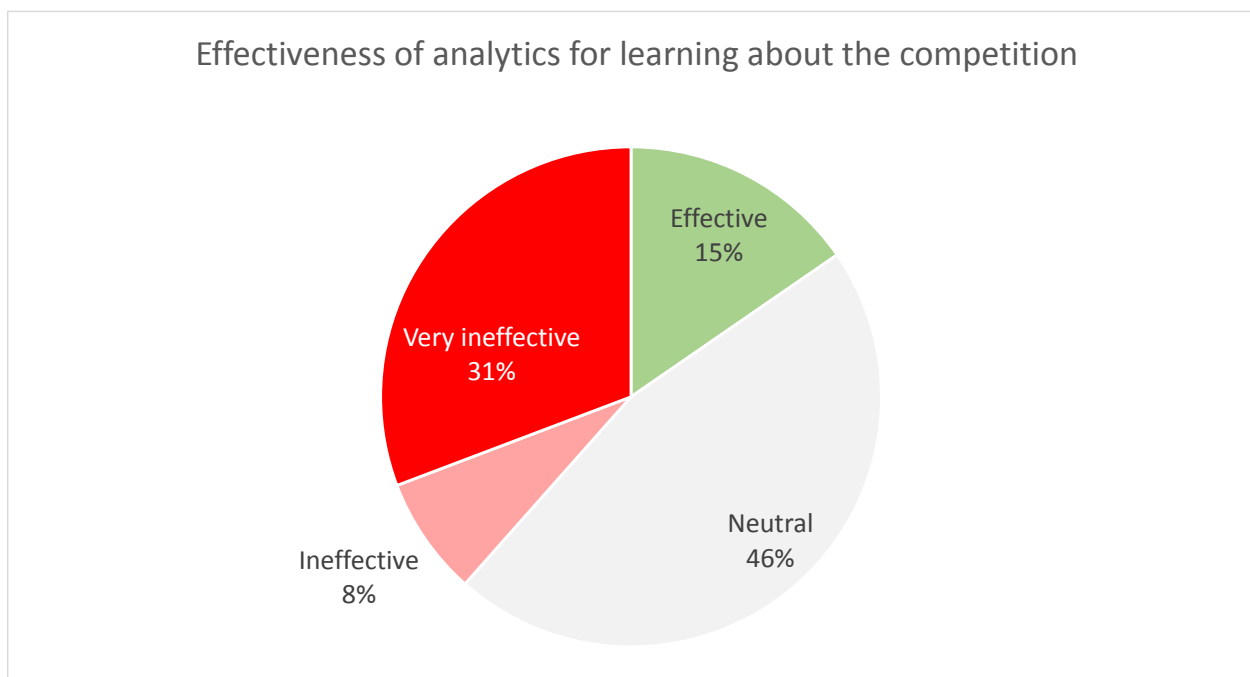
IMPROVING THE CUSTOMER EXPERIENCE

Factors that impact the customer experience - such as first-contact resolution and shorter call and queue times - have been addressed already. This section looks at the handling of complaints, and how interaction analytics can take into account the entire customer experience outside the contact center.

Complaints handling

Complaints are a potentially rich environment for businesses to understand where they are going wrong, and which issues are in danger of turning a customer into an ex-customer. For many businesses, each complaint is dealt with on a case-by-case basis, with little in the way of categorization or structure being put in place formally, and little chance of communicating findings in an actionable way to the relevant department.

Interaction analytics gives businesses a chance to quantify the reasons that customers complain, identifying the most important factors, assessing trends and spikes, and providing hard recommendations based on every call taken. Around 5-10% of calls received by contact centers are complaints, with the vast majority of these being about problems elsewhere in the enterprise (rather than in the contact center). Understanding and acting upon what is driving these complaints will clearly make a huge difference to cost and customer satisfaction.

On an individual contact basis, real-time analytics allow businesses to track words and phrases related to complaints (such as 'supervisor', 'manager', 'complain', 'unhappy' etc.), allowing escalation to a supervisor, or screen-pop to the agent to provide them with a revised script or suggestions of how to handle the call. Emotion detection may also be used to identify these customers.

Many customers prefer the written word when it comes to complicated and potentially antagonistic interactions, so the ability to analyze emails as well as phone calls when looking at complaints is very useful, and text analysis is becoming increasingly used in the multichannel contact center.

The customer experience outside the contact center

There is an increasing requirement and interest in multichannel analytics, including considering email, web chat, IVR and web browsing sessions to get the full picture of the customer's real journey in a single interaction, in order to identify and improve any channels that failed to fulfil their requirements. Improving self-service optimization is often a quick win that can provide immediate economic benefit to businesses: around 1 in 5 calls that go into an IVR system are 'zeroed-out' - rejected by the customer in favor of an operator.

Businesses using interaction analytics to review these failed self-service sessions will be able to categorize many of them in order to improve the processes at a macro-level. Common findings from the analysis of these calls is that the IVR system was poorly worded or menu choices are not intuitive or match current service choices. Other failures occur through mistakes in IVR routing, and there may also be problems with a lack of customer awareness that various activities can be carried out by self-service.

Debt collection and improving cross-selling & up-selling

Although many debt collection firms have detailed scripts for their agents - often driven by the need to comply with regulations - the results, such as the promise-to-pay ratio - can differ widely by agent. Interaction analytics provides two benefits for debt collectors: the ability to prove compliance; and through the analysis of successful and unsuccessful calls, the chance to understand the type of agent language and behavior that yields the best results, and share these with underperforming agents.

The same principle of matching successful outcomes with particular call traits can be used for improving cross-selling and up-selling rates in sales environments.

Managing customers at risk of churn

Using real-time analytics, linked with a company's own CRM systems, agents can be provided with up-to-the-second advice on how to handle customers identified as being at risk of churn, including linking what the customer is saying on the call back to the transactional model in order to update the best offer available for that customer.

Feedback on marketing campaigns

Tracking customer comments and outcomes after the advent of a marketing campaign can mean the difference between success and failure. Messages that are incorrectly understood can be identified and altered quickly before the contact center becomes swamped with calls about the issue.

Phone-based contracts

Real-time interaction analytics mean that phone-based contracts can be seen to be completed first-time, with all relevant information provided to the customer on the call, and red-flagged on the agent's screen if they have missed saying anything vital, or made an error. This reduces the need to call a customer back and avoids any dispute over whether a legitimate contract has been made.

Cut new-starter attrition rates

Additionally, interaction analytics will also make the training and coaching received by new agents in particular far more effective and targeted. This is especially important for this class of agent, as many operations report that a substantial amount of their overall staff turnover and associated recruitment cost occurs in the first 90 days of the job, when agents are obviously less-skilled or confident about their role or the organization.

ESTIMATING RETURN ON INVESTMENT FOR INTERACTION ANALYTICS

As part of the research for ContactBabel's report "The Inner Circle Guide to Speech Analytics", thousands of contact center professionals were asked for their views on interaction analytics, particularly about what would hold them back from implementing it. By far the most important issue raised was how to build a strong enough return-on-investment (ROI) case to get the required corporate buy-in.

Lots of budget is now held within marketing, website or customer experience teams, rather than at contact center level, and these teams must be made to understand that the contact center is a big part of people's experience of dealing with a company. To get the most from an interaction analytics solution, especially the more complex systems, businesses need to identify and empower a senior project champion, overseeing a cross-functional team. The champion must have a strategic view of what analytics can provide, as well as being able to understand the operational and technical requirements of the contact center and IT teams.

ROI for interaction analytics can come from numerous sources, depending upon how the solution is used. Generally, it will come from the avoidance of a specific cost, (including the reduction of a risk in the case of compliance), or the increase in revenue, despite the fact that much of the benefit from interaction analytics comes from actionable insight around **why** customers are calling.

Interaction analytics is used extensively in North America for compliance, for which ROI can be proven through the avoidance or reduction in litigation and regulatory fines, placed against the cost of the solution. Large banks will have funds allocated that run into the tens of millions of dollars each year against the possibility of paying out, and any significant reduction in fines would pay for a interaction analytics solution very quickly.

Variables to be considered for ROI measurements include:

Cost reduction:

- Reduction in headcount from automation of call monitoring and compliance checking
- Avoidance of fines and damages for non-compliance
- Reduction in call volumes after understanding **why** customers are calling, and acting to optimize any broken processes elsewhere in the organization (e.g. website, marketing, distribution, etc.) that are causing these calls
- Reduction in cost of unnecessary callbacks after improving first-call resolution rates
- Avoidance of live calls that can be handled by better IVR or website self-service
- Reduced cost of quality assurance and monitoring
- Lower cost per call through shortened handle times and fewer transfers
- Lower new staff attrition rates and recruitment costs through early identification of specific training requirements

Revenue increase:

- Increase in sales conversion rates and values based on dissemination of best practice
- Increase in promise-to-pay ratios (debt collection)
- Optimized marketing messages through instant customer evaluation
- Reduced customer churn through dynamic screen-pop and real-time analytics tailoring calls to the customer
- Quicker response to new competitor and pricing information

Also, the improved quality of agents, better complaints-handling and improved business processes outside the contact center should be considered.

Against these potential positives, costs to consider include:

- License fees or cost per call analyzed
- IT costs to implement (internal and external)
- Possible upgrade to call recording environment may be required
- Bandwidth if hosted offsite: the recording of calls is usually done on a customer's site, so if the interaction analytics solution is to be hosted, it will involve of lot of bandwidth, which will be an additional cost, especially when considering any redundancy
- Maintenance and support agreements, which may be 15-20% annually of the original licensing cost
- Additional users - headcount cost - decide who will own and use it, do you need a speech analyst, etc.
- Extra hardware e.g. servers will be required for audio processing and analysis, the number of which is dependent on the volumes of calls and the speed which customers require the analysis to be completed by
- Ongoing and additional training costs if not included
- Extra work across the enterprise generated by findings
- May need extra software to extract data from the call recording production environment if using different vendors for recording and interaction analytics.

A major inhibitor to uptake is an awareness within the company that their environment is not yet ready for interaction analytics, in that they may still not have a reliable recording environment or an optimized QM or QA process. Some businesses consider that their existing call recording and manual quality monitoring processes are sufficient, and fail to understand the potential business value of interaction analytics.

Vendors' own estimates of the time taken for the solution to pay for itself vary between 6 and 18 months, with most current implementations being in the 100+ seat contact center sector. Apart from calculating figures for ROI, perhaps the most difficult element of the business case is to ensure that executives beyond the contact center understand and support the contact center's role in enterprise success. Finance, marketing, IT and senior management need to be talked with in the terms they understand - customer retention, product satisfaction, revenue, competitive metrics, and more - showing that interaction analytics is an effective way to give a window into these trends.

Have your vendor help you to create an ROI to justify the project to the corporation in terms they understand: most vendors have tools which can be used to estimate return on investment, often based on what they have seen in similar operations elsewhere, and they are keen to share them with potential customers. Start with a project that you are comfortable managing from a cost and resource perspective to ensure you can track and present an ROI. Once you've achieved those results, it will be easier to justify expanding the project into other areas.

Genesys would welcome the opportunity to leverage the ROI models we have created based upon the rapid ROI our customers have achieved with our **Interaction Analytics** to help your organization to estimate your ROI and build a business case tailored to your specific business situation and objectives. In agreement with the recommendations above, we recommend as a best practice to start with a focused project targeting a specific area of your business, potentially focusing on a single Key Performance Indicator (KPI) and a small group of Interactions/agents at first in order to rapidly prove the potential ROI. Many of our customers have found that it is often quickest and easiest to minimize hardware procurement and/or the availability of internal expertise as potential impediments to such a project, at least initially, so in addition to on-premise deployment, Genesys also offers basic hosting as well as completely Managed Services Cloud-based Interaction Analytics solutions in order to accelerate your ROI.

BUSINESS INSIGHT AND THE USE OF INTERACTION ANALYTICS

Having seen previously how interaction analytics **can** provide real value-add to the existing worth of call recording solutions when they are used for this purpose, the chart below comes as something of an anti-climax (as it did last year), showing as it does the extent to which respondents actually influence processes and actions outside the contact center itself. Of course, there is the possibility that the level of detail and actionable insight provided by users and non-users of interaction analytics is very different, and that analytics users are providing far more to their businesses. Interaction analytics, for the reasons detailed above, can offer a huge amount of inside, quantitative knowledge that can be fed to the rest of the organization. However, the under-usage of this solution can be seen by the very small differences between the amount of insight provided by users and non-users of interaction analytics solutions, with non-analytics respondents actually having more say in three examples out of the four (the exception is that analytics users provide more feedback about broken or sub-optimal processes).

Figure 18: Business insight and the use of interaction analytics
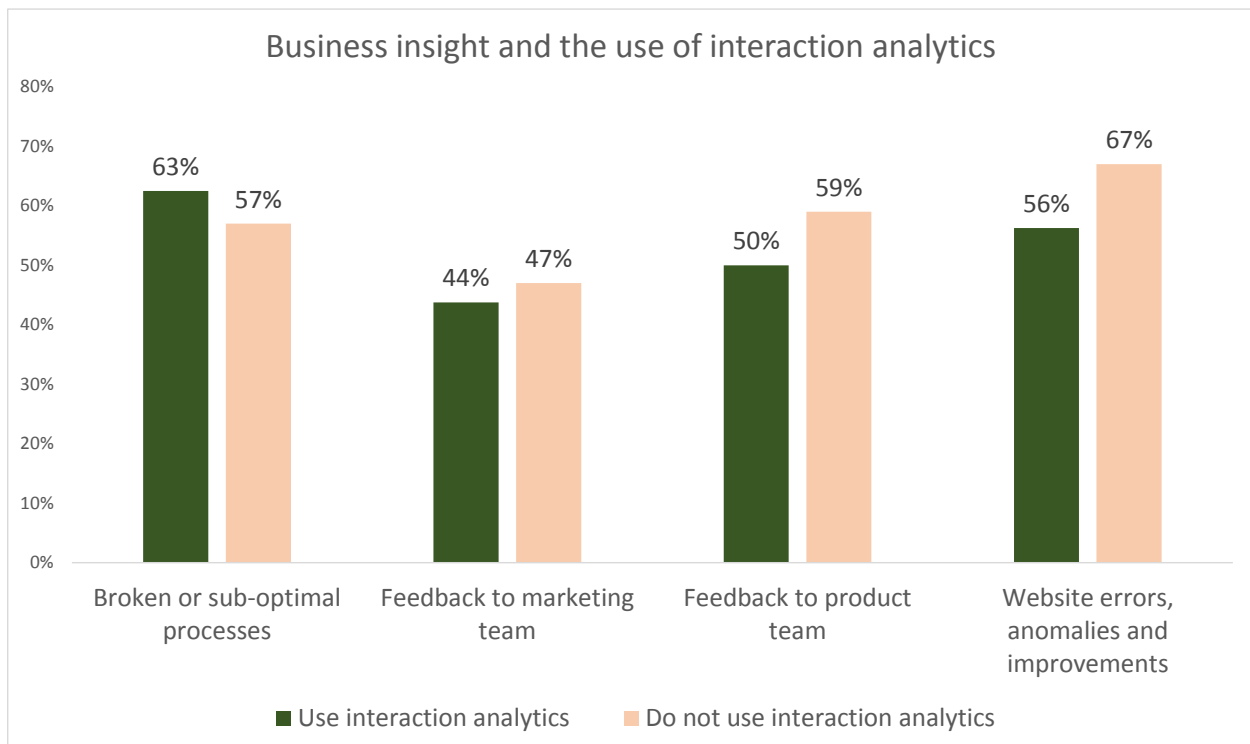
This suggests that interaction analytics solutions are not yet being used to anywhere near their full potential for the provision of business intelligence, being perhaps more focused upon concrete issues such as compliance and QA. As users of analytics gain more experience and confidence in the solution's ability, the wider business will be seen to benefit far more than it does now.

For more information about interaction analytics, please download ContactBabel's "Inner Circle Guide to Speech Analytics".

CROSS-SELLING, UPSELLING & DESKTOP OPTIMIZATION

The variable capabilities of agents is a contributory inhibitor to quality improvements and profit maximization.

One possible solution is to look at an overall unified desktop environment that includes dynamic scripting, as well as understanding agent training needs through call recording and analysis, and delivers the right training and in-call information, including relevant cross-selling and upselling offers.

THE AGENT DESKTOP

Many of today's contact centers use complicated, multiple applications, often only loosely-linked, which require skilled and experienced agents to navigate, let alone to manage interaction with customers successfully at the same time. Even after the call is completed successfully, each system may need specific inputs from the agent in order to start the required back-office processes, or to keep each database consistent with the others, and there is always the danger that even if the call has been completed successfully, opportunities to maximize revenues have been missed.

Figure 19: Use of multiple applications across vertical markets

Vertical market	Use of multiple applications
Finance	Customer accounts, CRM, product database, payment systems, email, quotation system (esp. insurance), complaints, other sister companies' systems (often through merger and acquisition), legal and compliance scripts, insurance claims
Outsourcing	Multiple screens and applications depending on customer requirements, not all of which will be familiar to agents
Retail & Distribution	Supply chain systems, distribution and shipping history, warehouse stock systems, CRM, customer history, pricing applications, payment systems, complaints, email
Telecoms	Customer accounts, cross-selling/upselling applications, CRM, field maintenance booking systems, real-time network status screens, complaints, payment history, credit/debit card applications, fulfillment systems, email
Utilities	Customer accounts, payment systems, utilities status systems (e.g. scheduled or emergency work being done on water, gas, electricity supplies), cross-selling/up-selling prompts, product information, maintenance and booking systems, complaints, email

The result is that even though a contact center may be staffed with experienced, hard-working and skilled staff, its overall performance is suboptimal, leading to low customer satisfaction, unnecessary costs and decreased profits.

With 93% of contact centers requiring their agents to use multiple applications within a call, there are significant dangers around forgetting to key in information, not asking for the required information, starting the correct processes or failing to type in consistent data. The use of multiple applications will have a negative effect on training times and accuracy rates for new agents as well.

Figure 20: How many applications does an agent use within a call?
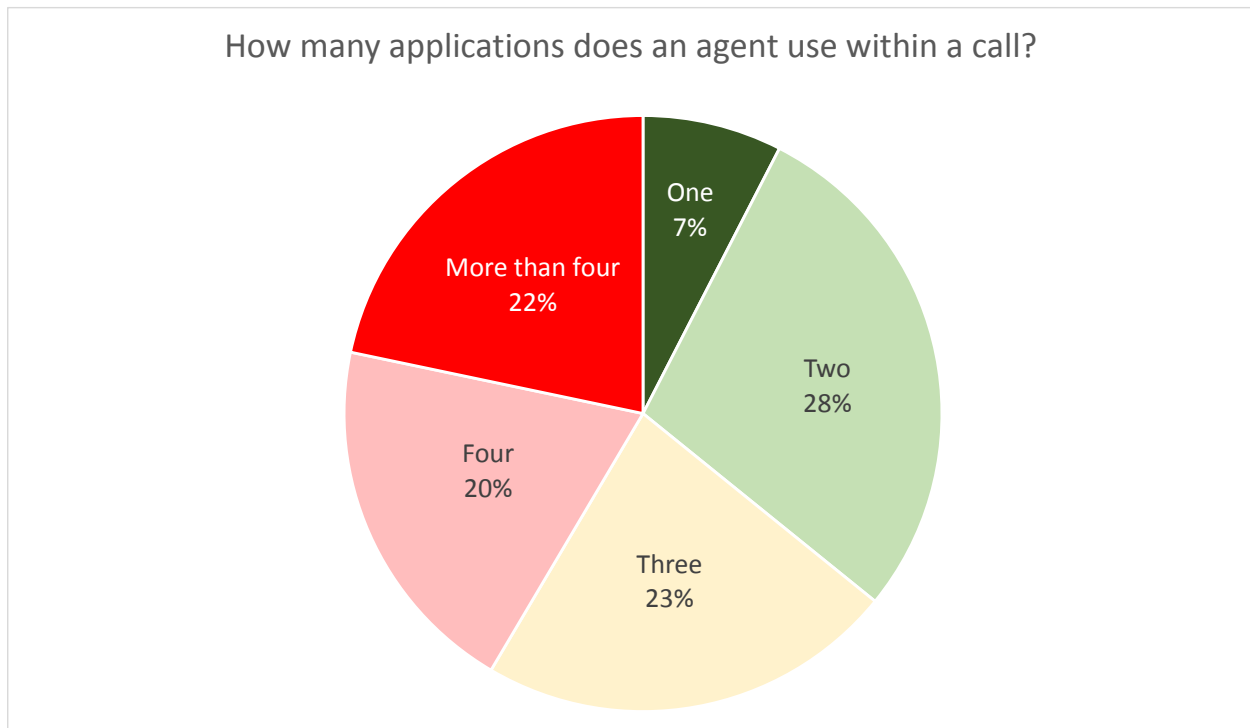
Looking at these statistics by contact center size, there is something of a positive correlation: the larger the operation, the more in-call agent desktop applications tend to be used. Small respondents' agents had a mean average of only 3.1 applications on the agent desktop, with medium respondents at 3.9 and large operations at 3.8.

In most cases where complex, multiple applications are used, they are necessary for the agents to do their job, so the question is not "How can we reduce the number of applications?", but rather "How can we improve how the agent uses the applications?". At the moment, due to complexity, expense and the sheer weight of constant change, applications are either integrated very loosely, or not at all. Agents are trained (or more likely, learn on the job) to switch rapidly between applications, relying on their experience to make sure they don't forget to do what's required.

Such an approach can have severe primary and secondary effects:

- Increased training costs
- Higher staff attrition caused by inability to complete tasks successfully
- Inconsistent data caused by keying errors or missed procedures caused by manual wrap-ups
- Increased call handling times
- Lower customer satisfaction caused by long queues and unnecessarily long calls
- Missed opportunities to cross-sell and up-sell
- Multiple open applications on the agent desktop can lead to system instability and lower performance.

Desktop automation and analytics solutions can remove the need for agents to log into multiple applications, assist them with the navigation between applications within the call, and make sure that customer data is gathered from the correct places and written consistently back to any relevant databases without the need to navigate through multiple systems.

Within the call, dynamic call scripting helps the agent to provide the right information at the right time, seamlessly linking with multiple back-office applications and databases, providing only what is relevant onto the agent's screen. Depending on the experience or profile of the agent, what the customer is trying to do and any regulatory inhibitors, on-screen buttons can be enabled or disabled, or access to fields limited according to business rules. Furthermore, adherence to business processes can be assured by making the agent complete all of the required steps in the transaction (for example, adding call notes, reading disclaimers, etc.).

The following table shows some key contact center performance metrics that were analyzed in the context of the number of in-call applications that agents use. It is important to note that although there appears to be a correlation between superior performance metrics and the use of fewer in-call applications, this does not necessarily demonstrate **causality**: this pattern of statistics do not mean that it is possible to say definitely that the use of fewer applications within a call will in itself improve contact center performance.

However, it is reasonable to suppose that not having to navigate through multiple screens or spend significant periods at the end of the call typing out notes or making changes to multiple databases, and being given access to dynamic scripting that provides the correct information without having to search for it will encourage shorter calls, improved agent availability, and lower call abandonment rates.

Figure 21: Selected performance metrics, by number of in-call applications used

Metric	Respondents using 1 in-call application	Respondents using 4 or more in-call applications
Average speed to answer	16 seconds	58 seconds
Average call duration (service call)	4m 33s	6m 1s
Call abandonment rate	3.2%	5.5%

It is logical to suppose that using complex, multiple applications without any specific agent support will often lead to longer calls. However, this is not the end of the problem, as this type of work also tends to initiate requests for processes to be carried out within the back-office (e.g. initiating an engineer or sales visit, sending out literature, moving a customer request onto the right department with the right information, flagging a customer as a hot prospect for a specific marketing campaign, etc.).

This, as well as the need to enter information in multiple applications (as shown below), will tend to increase post-call wrap-up to a point where the agent spends a great deal of their time unavailable to take more calls. Historically, 10-15% of an agent's time is spent on post-call wrap-up.

Figure 22: How many applications does an agent use after a call?

How many applications does an agent use after a call?

More than four 8%
Four 7%
Three 18%
One 37%
Two 30%
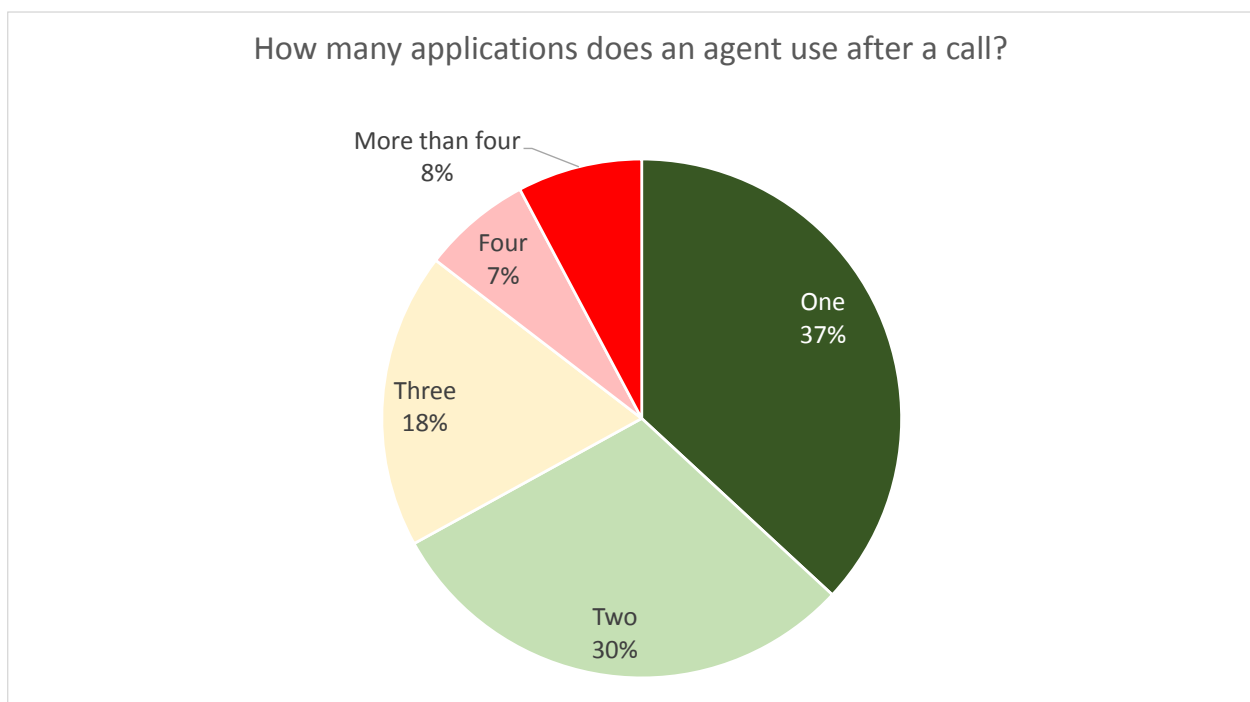
Additionally, manual inputs involved in transferring data during wrap-up commonly lead to data entry and processing errors, causing an adverse effect on operational efficiency, contact center cost, performance and customer satisfaction. Cost per call rises, productivity per agent declines and first-call resolution rates slip as more calls are escalated due to the complexity of the systems hindering agents, rather than helping them. So we can see that poor application integration and presentation at the desktop level has a direct and negative effect on those long-term contact center strategies deemed most important and desirable, such as customer satisfaction, lower first-time resolution and reduced escalation levels.

It is in the post-call wrap-up stage that a lot of time and effort is wasted by sub-optimal manual processing of data. For example, a simple change of address request could take many minutes in a non-unified environment, with several separate databases having to be altered, which is itself a process prone to error, with a negative impact on the customer and business, as well as at least one extra unnecessary future phone call from the customer. Reducing wrap-up time through optimizing the agent desktop is not simply a matter of writing consistently to the correct databases, although this is a key element. The contact center also kicks off a number of processes elsewhere in the enterprise: it is the prime mover for sending out documents, instructing the warehouse to release goods, arranging deliveries, taking payment and many other key elements to a successful customer-business transaction.

Some calls require a great many notes to be made to the agent desktop application the end of the call. Desktop automation solutions can automatically log the events which happened within the call (for example, changes to customer data records, billing enquiries, alterations to orders, etc.) which can save minutes in the post-call wrap-up stage in some cases.

The cost of excessive wrap-up

Although few contact center managers would say that excessive wrap-up times cause the same level of concern as attrition or customer satisfaction, the current average of 10.1% of time that contact center agent spend each hour in after-call work adds up to an enormous cost.

The overall expenditure of the US contact center sector - salaries, IT, telecoms, building, rent, utilities, etc. - comes to around $200bn each year. Wrap-up time accounts for 10.1% of the time spent by the industry: slightly less in larger contact centers, which account for the bulk of the jobs. As such, wrap-up costs the industry over $20bn each year. This is not to say that all wrap-up is wasted and unnecessary, but this is a segment of expenditure that is ripe for efficiency-enhancement.

As an example, a 500-seat contact center, processing 5m calls per year, would spend around $2.8m each year just on wrap-up. A 20% reduction in wrap-up time would save well over $500,000, quite apart from the savings in training and lower attrition, as well as the benefits of shorter queues and simpler applications.

There has been a big growth in interest in unified desktop solutions in recent times, with additional benefits coming from reduced training times (as agents are learning one system, not many); processing the call quicker (by hiding slow legacy applications or posting information to multiple systems in one go without replicated effort) and improved customer satisfaction / conversion rates (as the agent can concentrate on the customer and is supported by knowledge bases).

Businesses can usually focus either on cutting costs or improving quality. However, there is a third way, which allows desktop solutions for users to be developed separately from the underlying applications, re-using existing logic and interfaces rather than replacing them. The agent works with a single desktop application which is tailored to their specific needs, pulling in only the right data and applications from disparate systems and presenting them on a single screen. In the background, business rules and workflow make sure that the right back-office processes happen without agent intervention, thus reducing wrap-up costs.

An application which supports less-experienced agents, and helps them to learn means that staff attrition rates can be managed more effectively. High attrition rates and poor knowledge bases mean that people take away the knowledge as they leave. By having a user interface which provides the right information dynamically - and which increases the amount of leeway an agent has as they become more competent - means that agents can find the right balance between being too tightly managed and feeling cast adrift by the system's lack of user-friendliness.

Figure 23: Plans for streamlining workflow and simplifying the agent desktop, by number of in-call applications used
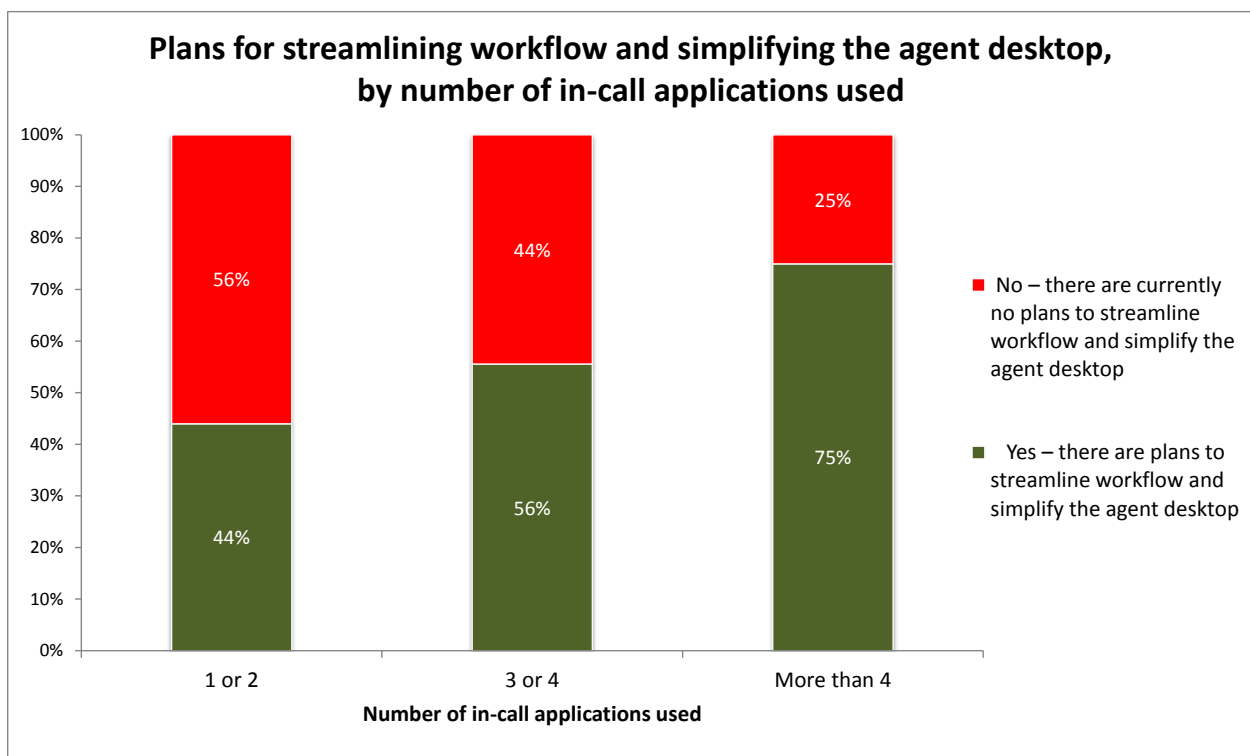
This desire to improve the agent desktop and workflow seems to be more of an issue for those with numerous in-call applications - as we would expect - but it is by no means exclusive to them. Even amongst those respondents with only one or two in-call applications, there is significant appreciation that processes and follow-on work can be improved, which suggest that this is not simply about reducing the number of applications that an agent has to learn to use.

About Group O

Group O is a business process outsourcing provider that helps world-class organizations optimize their operations through strategic marketing, business intelligence, packaging and supply chain solutions.

Group O provides contact center services to support the millions of reward cards that it fulfills annually on behalf of its blue-chip client roster. The center handles more than three million calls annually, with two million handled by a live agent.

Business Challenge

While overall call handle time, cost structure and customer satisfaction results were positive and trending in the right direction, Group O regularly looks for ways to take its results to the next level. As part of its continuous improvement process, Group O identified opportunities that could benefit from an integrated automation solution:

- Agents were using disparate applications and websites from its clients, partners and internal systems.
- This resulted in reps often needing to complete manual processes and redundant steps when serving callers.
- Reps sometimes were required to focus more on system navigation – taking focus away from the customer experience and interaction
- Multiple systems also posed a risk factor that potentially could impact accuracy.

"We realized we needed a way to bridge the disparate systems and enhance the customer experience," commented Paul Flemr, director of customer care for Group O. "In order to keep our leadership position and better serve our clients and customers, a change was in order."

Solution

Group O began to investigate a variety of call automation solutions. Following a comprehensive demonstration and proof of concept of the OpenSpan Desktop Automation solution, Group O selected OpenSpan to move forward with its contact center project. Group O rolled out its first live implementation in less than ten weeks.

Group O took a strategic approach to building and deploying its first automations. Leadership met with representatives to uncover where the greatest redundancy and duplication of effort was occurring – as well as the areas that could distract an agent from providing customers with full attention. This helped to build buy-in and adoption of the new automations – and helped to drive immediate results.

The company rolled the solution out one team at a time, paralleling with untrained agents on the use of both the new and old ways of doing business. "The differences in average handle time (AHT) and call presentation accuracy between the trained and untrained agents were striking and the results helped us affirm our choice of OpenSpan," said Flemr.

The solution building effort was flexible and allowed Group O's development team to experiment and find just the right sequence of interrogations to pull or plot the most useful data for agents. "The OpenSpan solution provided great options for the front end dashboard display to agents and allowed other applications to run in the background," said Flemr. "This allowed agents even more focus on the tasks at hand and the customer on the phone!"

OpenSpan's support teams provided onsite help during the initial deployment as part of its enablement model. This allowed Group O's development team to receive firsthand guidance and mentoring as well as tips for building future solutions.

Results

Group O found that the OpenSpan solutions helped to improve its AHT, quality and customer satisfaction scores:
- AHT on calls supported by OpenSpan automations improved by as much as 40%
- Overall AHT decreased from 3:30 to an all-time low of 2:54 over a sustained 90-day period
- QA scores improved from 94% to 96%
- Customer satisfaction scores increased from 91% to 99% in targeted categories.

In addition, Group O was able to reduce new agent training by a full 1.5 days for new hires, thanks to OpenSpan. This allows Group O to put agents into production sooner, and their transitional ramp-up time to achieving key metrics has dropped by almost 25%.

Group O has already begun to expand OpenSpan's use to other major client contact centers. To date, it has built more than 30 automations for agent desktops – and has plans for another dozen within the next six months.

AGENT DESKTOP KNOWLEDGE MANAGEMENT

The following table shows the knowledge resources that agents have within a call. Finding, reading, assimilating and using information actually within a call as very difficult and is rarely done seamlessly. An application such as case-based reasoning, which prompts the agent to ask specific questions, drilling down to find the right answer, is very useful but only 25% of agents have access to this sort of dynamic application. Most have to search around on a company website or FAQ page, or rely on a wide, unsupported search of knowledge bases or the wider Internet, hoping to get lucky.

Figure 24: In-call access to computer-based knowledge sources for agents

Access to in-call information for agents

Source	Percentage
Your company website	91%
Internet	85%
FAQs	83%
Free-text search of knowledge base	50%
Case-based reasoning / logical dialogue path	25%
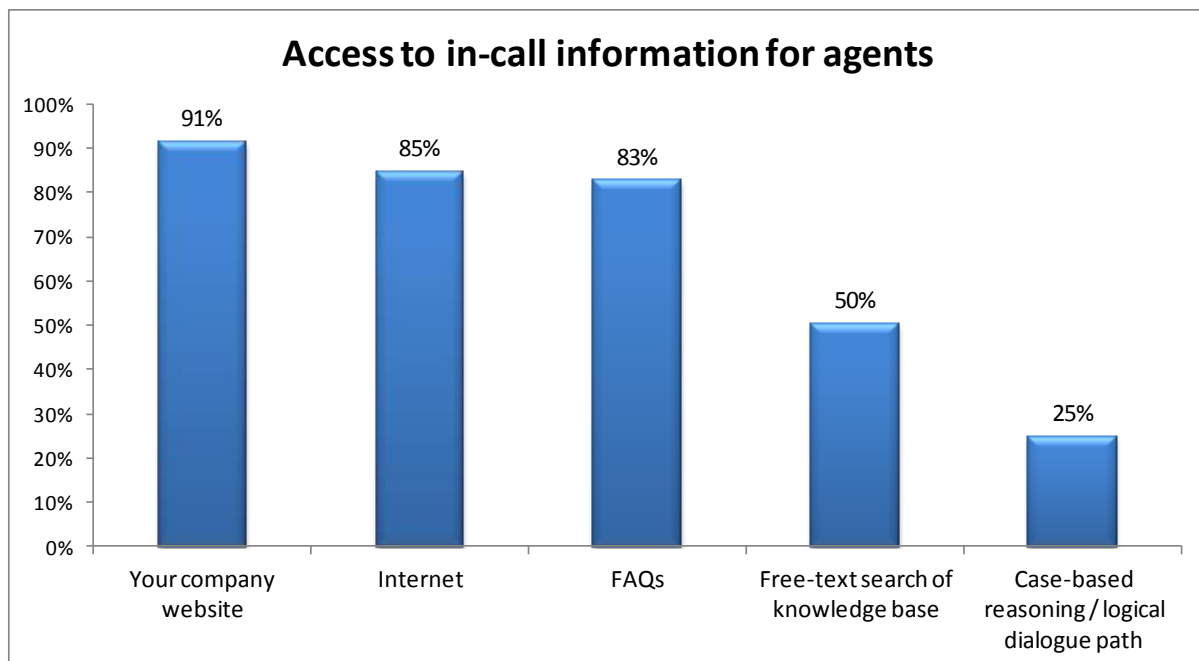
Not only do most agents have numerous in-call / post-call applications as well as non-integrated knowledge sources to contend with, but most also have hard-copy documents in their workspace that they have to refer to as well. Only 36% of respondents had effectively a clean-desk policy with no hard copy reference material available to agents, a figure which was lower for agents working in a mixed service/sales environment, who tend to have to cover a wide range of varying topics.

Figure 25: Hard copy reference materials in the agent workspace, by contact center activity type

Hard copy reference materials in the agent workspace, by contact center activity type
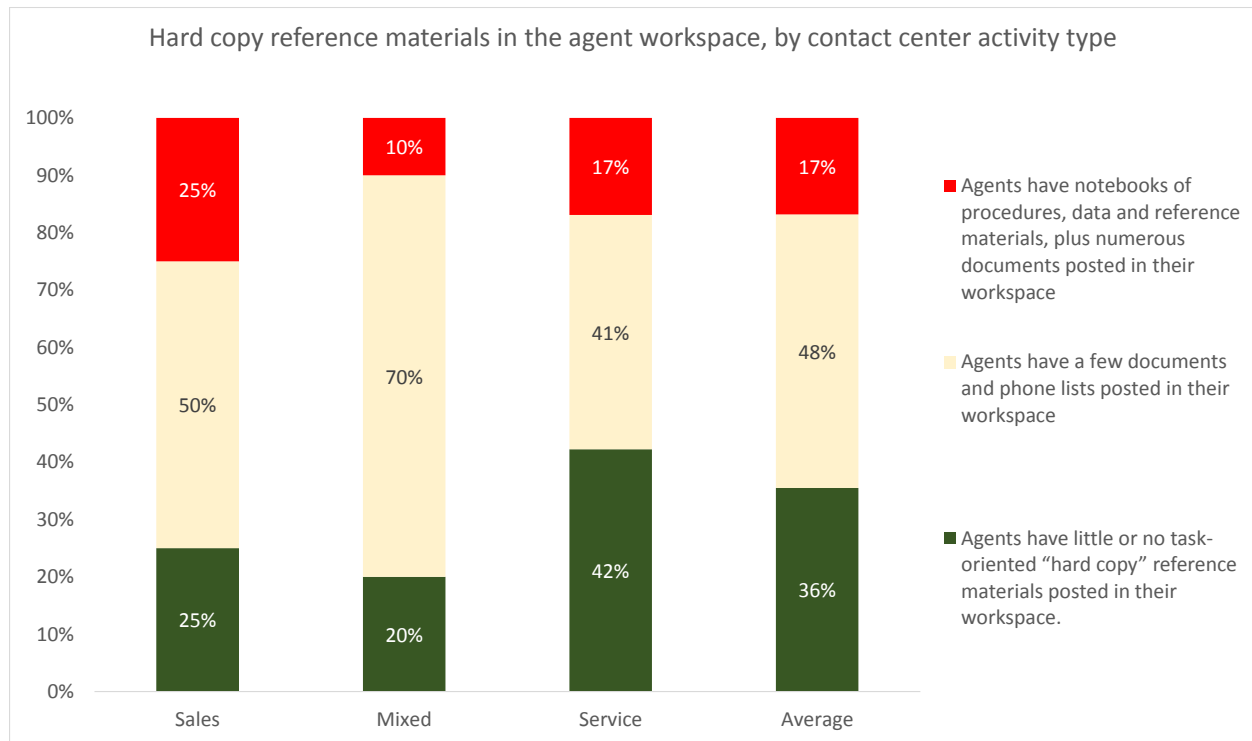
Larger operations were more likely to have a clean-desk policy, with only 17% of small respondents' operations having paper-free agent workstations.

Figure 26: Hard copy reference materials in the agent workspace, by contact center size

Hard copy reference materials in the agent workspace, by contact center size

- ■ Agents have notebooks of procedures, data and reference materials, plus numerous documents posted in their workspace
- ■ Agents have a few documents and phone lists posted in their workspace
- ■ Agents have little or no task-oriented "hard copy" reference materials posted in their workspace.
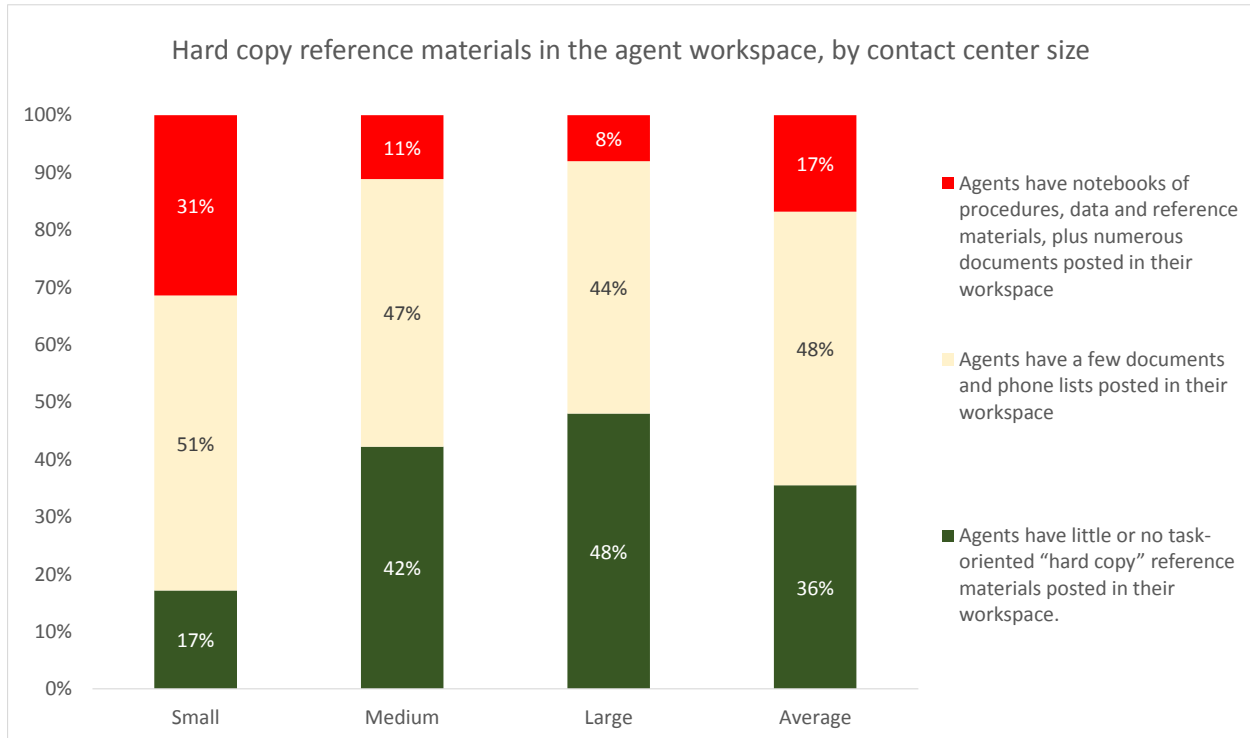
The provision and delivery of agent training via a traditional classroom environment is still popular with the majority of respondents, regardless of the size of the operation. However, larger contact centers are far more likely to be using computer-based training aids as well, whether a dedicated IT training resource away from agents' desks (60% vs. 38% average), or online via the agent desktop (60% vs. 49% average). A significant minority of each size band still give paper-based pre-shift updates to their agents.

Figure 27: Provision of agent training, by contact center size

Provision of agent training, by contact center size
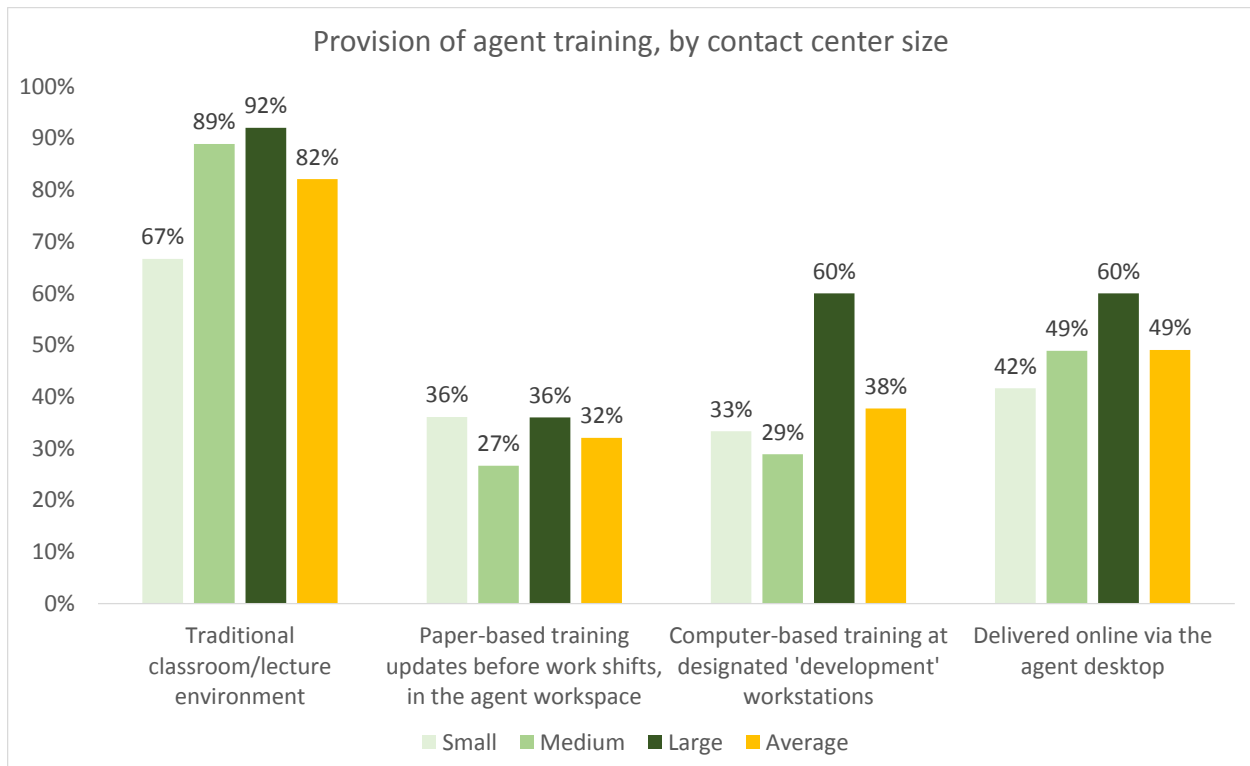
PROFIT MAXIMIZATION, CROSS-SELLING & UPSELLING

Cross-selling and up-selling have been major sales strategies since commerce began, but it took the advent of CRM to get businesses firmly focused on them.

One definition of up-selling is that it is the process of offering a customer who just placed an order, either a bigger or better deal on a more expensive item than that which they have just bought. This also includes the process of "accessorizing", where a customer who has bought a high-value item is persuaded to add (probably higher-margin) accessories to it. For example, a customer purchasing a DVD player may be offered insurance, better leads, a dust cover and various other items connected to the DVD's operation.

Cross-selling, unlike up-selling, refers to offering customers additional items in different categories. These items may be related (e.g. a television to go with the DVD player), or unrelated (e.g. a digital camera).

Although there are differences between cross-selling and up-selling, the purposes are the same:

- to increase overall revenues
- to increase profit per customer
- to decrease customer churn
- to lower the costs of associated marketing (e.g. there is no need to send out brochures to customers who have already received a sales pitch on a call)
- to make sure that the customer has all of the right products and services for their situation
- to make the customer more dependent on the business and its products so they are less likely to defect, helping the customer retention strategy.

Cross-selling and up-selling can happen on both inbound and outbound calls, but the importance of selling off the back of an inbound service call is greatly increasing, as legislation against outbound calling tightens ever-further. Added to this is the stated aim of many businesses to move their contact centers away from a being a service-based cost center to becoming a sales-focused profit center: cross-selling and up-selling have become crucial to the business.

Figures for successful cross-selling and upselling conversion rates are difficult to come by. The question was asked in this year's report, but so few respondents are able to give an exact, meaningful figure that any detailed segmentation would be misleading. Of those industries that provided enough answers, the finance sector claims a 29% conversion rate (median 20%), outsourcing 29% (median 30%), services 22% (median 20%) and TMT 24% (median 18%).

The industry-wide mean average was 25%, the median 22%, with 1st quartile 40% and 3rd quartile 10%.

This year, entertainment & leisure respondents have the greatest proportion of service agents able to sell opportunistically, with the outsourcing, finance and retail sectors also geared-up to achieve extra sales.

From very low levels, the manufacturing and medical sectors are most likely to feel that their cross-selling and upselling activity could be increased further in an ideal world.

Figure 28: Agents capable of cross-selling and up-selling, with future requirements, by vertical market

Vertical market	% of service agents able to cross-sell and up-sell	% of service agents desired to be able to cross-sell and up-sell	% increase required
Entertainment & Leisure	75%	85%	13%
Retail & Distribution	70%	100%	43%
Finance	57%	80%	39%
Outsourcing	54%	80%	48%
Services	39%	61%	57%
Manufacturing	30%	77%	156%
TMT	23%	32%	40%
Medical	19%	35%	85%
Insurance	17%	20%	20%
Average	**39%**	**55%**	**40%**

There are numerous ways that an automated desktop solution can support organizations in their quest to increase their cross-selling and upselling capabilities:

- remove the need to switch manually between applications, avoid desktop clutter and allow the agents to concentrate on the conversation and the customer's needs
- identify those customers who are most likely to be amenable to cross-selling or upselling attempts, and provide the agent with relevant biodata and customer value alerts
- deliver the cross-sell or upsell offer to the agent at the relevant point in the conversation
- analyze and report the success of cross-selling and upselling techniques so that the process may be refined
- automate any back office processes that are kicked off by a successful cross-sell or upsell offer.

With 80% of respondents agreeing (whether strongly or not), the greatest inhibitor to increasing the amount of cross-selling and up-selling was once again the concern that service agents do not have the necessary skills of sales agents. It is a debatable point whether this is a matter that can be rectified with training, or whether it is a deep-rooted truth that a service mentality excludes sales. While the latter point is certainly true for some agents, for most a successful transition into sales mode depends upon having the confidence that the system and their own knowledge will support them in this uncharted territory, and that they are in fact, servicing the customer at the same time, by offering products and services that are relevant and helpful. It is up to the contact center and the wider business to make sure that the agent is helped with this new task, rather than just issuing a blanket statement that all callers are to be offered Product X through a heavily-scripted approach.

Figure 29: Inhibitors to cross-selling and up-selling
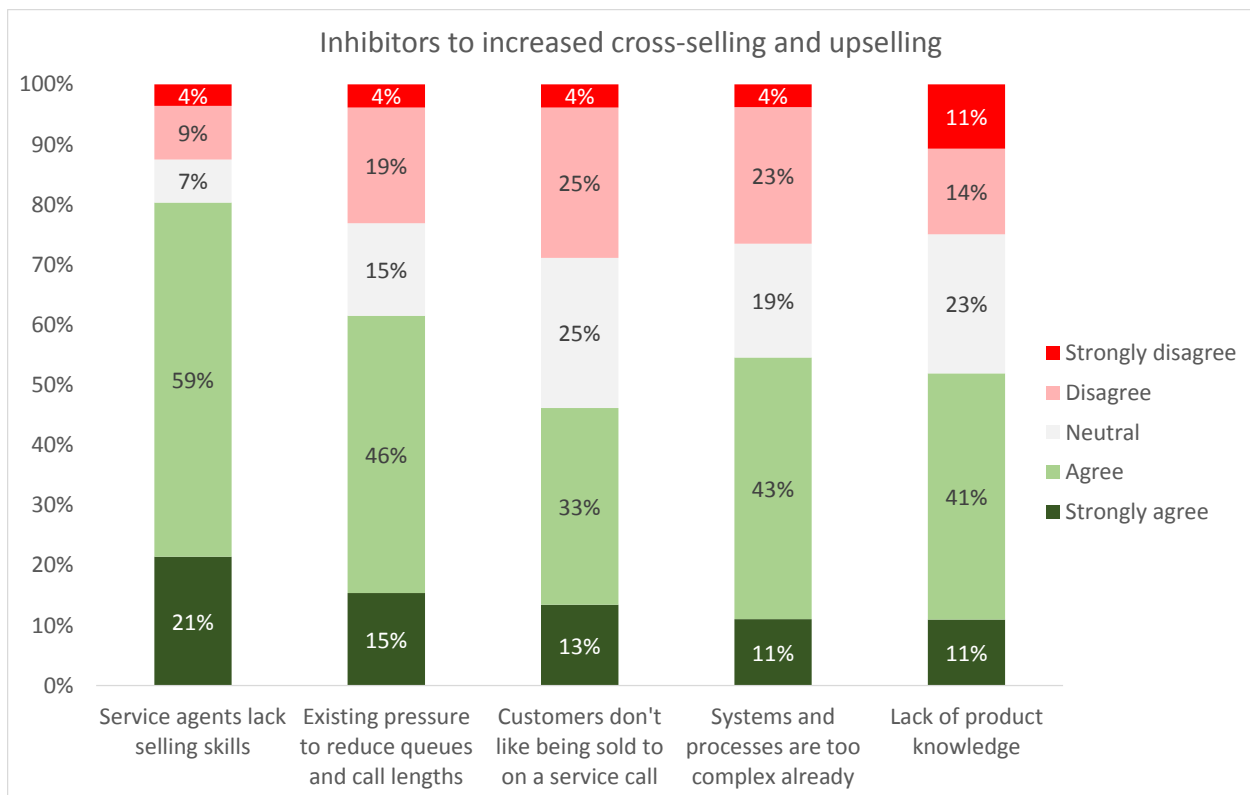
61% of contact centers (an increase on last year) say that the pressure they are under to cut call times means that any drive to increase cross-selling and up-selling on the call (and thus, increase average call lengths) is much more difficult. Such businesses should consider their recruitment policy (working out a cost-benefit analysis to see what sort of additional revenues would be achieved through cross-selling and up-selling, against the cost of recruiting and paying additional staff), as well as looking at a call avoidance policy (such as self-service) and efficiencies possible within the call (such as automated security and the use of desktop automation).

46% of contact centers say that customers dislike talking off-topic, and here is a clear case of one size not fitting all. Cross-selling and up-selling is far better left to the end of a conversation which has gone well, rather than when the customer is clearly disgruntled or even in a hurry, and real-time speech analytics can assist agents in deciding when and how to start an attempted cross-sell, as can dynamic scripting supported by a unified desktop environment. Experienced agents can use their experience and intuition to judge whether to start a sales conversation, although of course supervisors have to make sure agents push themselves as well. There is also the fact that some customers are very aware that they are paying for a call, and trying to sell them something and make them pay for the privilege of the time spent doing so is seen by many to be negative. Of course, offering a toll-free number takes this element away.

54% of contact centers believe that their environment is so complicated already that they can't carry out additional sales work, which is a missed opportunity for businesses - which should certainly be addressing the underlying systems as well as the presentation layer - as effectively their systems and procedures are stopping them from moving their business forward.

52% of respondents cite a lack of product knowledge as being something of an inhibitor, a matter that can be addressed through training, but also through offering support systems such as dynamic scripting within the conversation, and also being more realistic with the number of products on offer through cross-selling and up-selling.

CUSTOMER EXPERIENCE MANAGEMENT & IMPROVEMENT

Most businesses say that customer satisfaction is vital to them. Yet this raises more questions: how 'satisfied' do customers have to be? And what do customers want from contact centers? Quite simply, they would like to be answered quickly by a person who is able to help them without passing them around, and have the correct answer given to them quickly by someone with whom they feel comfortable talking. Additionally, the business has to deliver on the reason the customer is calling in the first place - by sending out the purchased item promptly, changing the database details or refunding money, for example. So the contact center does not stand alone: it orchestrates the rest of the business.

Various pieces of research show that the benefits to a business that are made from increasing customer satisfaction are non-linear: if a customer is very happy, they are likely to be worth a great deal in additional direct purchases and possibly more importantly, will act as a brand advocate for your company. A customer who is merely 'satisfied' will not have anywhere near the same positive impact on revenues or profits, and is likely to be a good deal less loyal.

A contact center can achieve all the operational performance measurements which it sets for itself, without actually being successful. If the customer does not hang up the phone feeling that she has been treated appropriately and that her query has been resolved to her satisfaction, then that counts as a failure, regardless of how good the internal metrics may be.

Turn On Great Customer Experience

Today, great CX is great business.

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Find out more at www.genesys.com.

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FACTORS IN ACHIEVING CUSTOMER SATISFACTION

Respondents were asked to choose the three most important factors impacting upon customer satisfaction from a list of eight, with the graph below showing the most popular choices.

Figure 30: Most important factors in achieving customer satisfaction

Most important factors in achieving customer satisfaction

Factor	1st	2nd	3rd
Short call times		4%	3%
Short IVR menus	1%	4%	11%
Long opening hours	2%	4%	7%
No call transfer between agents	2%	9%	9%
US-based agents	4%	3%	16%
Polite and friendly agents	20%	28%	22%
Short queue times	28%	27%	19%
First-call resolution	43%	22%	14%
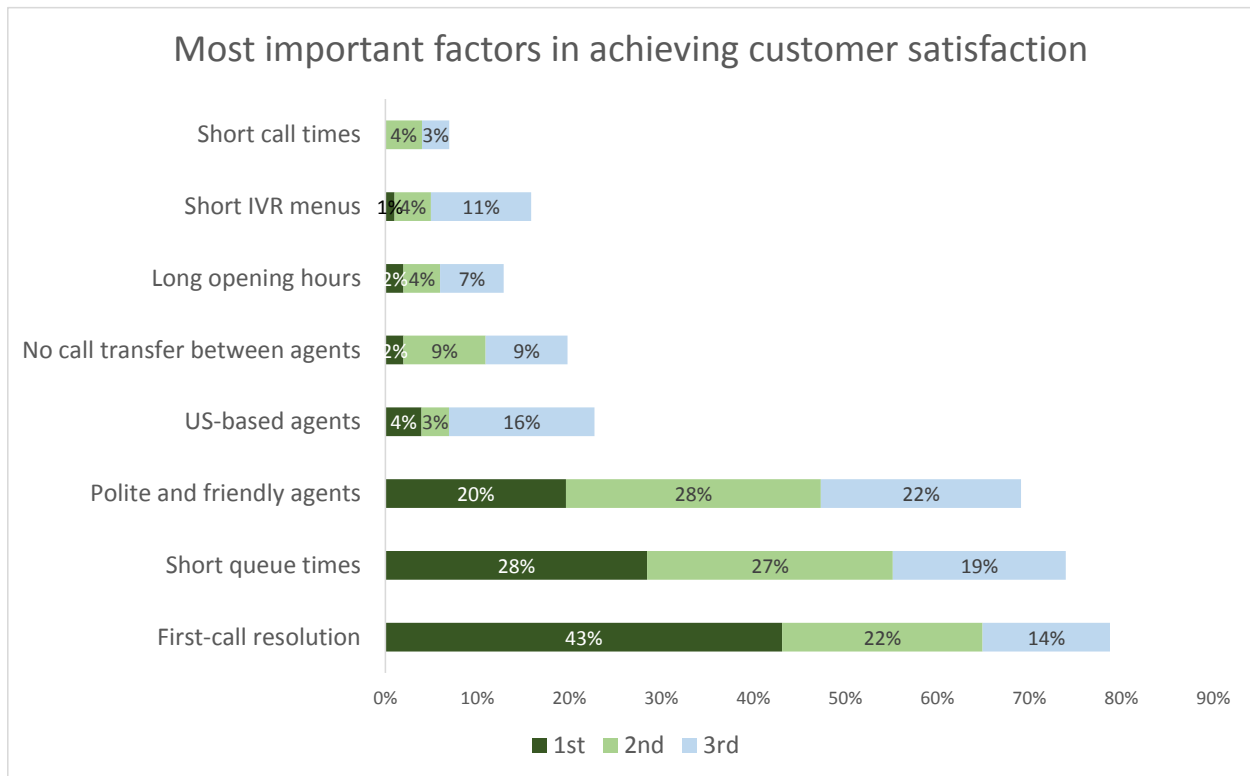
Last year's #1 choice was "polite and friendly agents", but this has been pushed into third place this year by "first-call resolution" and "short queue times", the latter acknowledging that the customer experience starts well before the agent's greeting.

Genesys Solving everyday problems in the contact center can go a long way to improving the customer experience. From eliminating repeat calls to better managing SLAs to improving low web conversions, applying common routing, reporting and analytics across all channels ensures customers are connected to the right resource, over the right channel at the right time.

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Contact center management also believe that having US-based agents goes a long way to helping customer satisfaction, with 23% of respondents placing domestic agents in the top 3, although this is down on last year's figure of 33%.

Short call duration, which has been slipping as a primary metric for a number of years, was not picked as the most important factor in achieving customer satisfaction by a single one of the respondents this year, further evidence that average handle time is becoming increasingly irrelevant in the modern day contact center, to businesses at least.

CUSTOMER SATISFACTION MEASUREMENT TECHNIQUES

Customer surveys have been an integral part of most businesses since time immemorial. Recently, there has been a great increase in the number of organizations implementing "Voice of the Customer" programs, often based around large-scale analysis of call recordings. This approach is investigated in more depth within the 'Interaction Analytics' chapter within this report, but the more traditional, direct methods of understanding customer experience and requirements are still very much present.

The numerous methods of directly surveying customers include the following:

IVR: at the end of the call, and after agreeing to do so, the customer may be passed through to an automated IVR system, which typically asks a mixture of open and closed questions which can be answered with a combination of DTMF touchtone and speech. This has the benefit of immediacy, in that the caller will be able to give an accurate assessment of the call and the agent, and also allows the business to be alerted in near-real-time to any major problems through pre-programmed automated SMS, dashboard or email alerts.

The speed and ease with which an agent-invited IVR survey can be implemented gives it a distinct advantage over a survey conducted via outbound calls. The resources and staff time required to make outbound calls often mean that they are conducted erratically and rarely during peak times which undermines the quality and usefulness of the data collated. As agent-invited IVR surveys are automated, they require little staff input and can monitor customer satisfaction whenever the contact center is open.

It is also worth mentioning that outbound automated surveys are becoming more prevalent, with many tens of millions of outbound IVR survey calls estimated to be made each year in the US (18% of survey respondents use this technique - for more information, see the 'Outbound & Call Blending' chapter). After the call has been concluded, the caller's number may be put into an outbound dialer's queue, which calls them and offers an IVR survey. The speed with which this call-back is made is crucial to the take-up rate of the survey, with up to 70% acceptance rate if the call-back is in minutes, but perhaps only 10% if the call is made over 48 hours later.

Written: a system-generated letter is posted to the customer soon after an interaction takes place, requesting feedback. Typically more customers who have had a poor experience will bother to return the questionnaire, skewing the figures, and although some good and detailed learning points can emerge, it's an expensive way to survey customers. It's also the case that results will be tilted towards the demographics with more time available to them, especially older people. There can be a lack of immediacy, and some people might feel that sending out a written questionnaire to ask about how well a call was handled is over-kill.

Written surveys via letter or person-to-person interviews have an important role to play, particularly where the feedback generated can be compared side-to-side with feedback by other methods. Having quantitative and qualitative data provides valuable feedback that can't be achieved by adopting a single surveying method.

Outbound: frequently, the contact details of a proportion of incoming callers will be passed to a dedicated outbound team, who will call the customer back, often within 24 hours, to ascertain the customer's level of satisfaction with the original call. Sometimes customers will find this intrusive, while others will welcome the chance to provide feedback. Additionally, certain companies employ **outside agencies** to survey customers regularly, which may be useful in benchmarking exercises, since they will apply a more formalized and structured approach to data gathering and presentation. The automated option as mentioned in the 'Outbound & Call Blending' section elsewhere in this report should also be considered as an option.

SMS: In theory, text messaging has the advantage of immediacy of sending and also of reporting on the results. It is a cheap way of carrying out surveys, and can be linked to a specific agent, allowing the contact center to use this information for agent performance as well as satisfaction with the business. SMS does not allow detailed or multiple questions though, and businesses will have to collect cellphone numbers if they do not already have them. However, the costs associated with sending and receiving text messages in the USA mean that SMS continues to be extremely niche channel for this purpose.

In today's omnichannel society, it is important to choose a survey platform that caters for all your customers. Though many customers want to continue to contact you by telephone, there are others who prefer to text or email and it is necessary to offer consistent service across your business. Monitoring all interactions to the company will give comprehensive insight into customers' opinions of the service you offer.

Similarly, different customers will prefer to be surveyed in different ways and a survey platform should have the flexibility to support IVR, web, text and written surveys and collate the results in a unified reporting system. Not only will this mean that you are increasing the number of customers you access, but you will get a different quality of feedback from each approach.

We would suggest that there is no single best way to gauge customer satisfaction. If detailed feedback is what's needed, a written or telephone-based questionnaire is best, although IVR can offer the option of direct quotes through speech recognition or recording transcription. If what you need is immediate knowledge about an issue (including your customers' views of your agents' performance), consider post-call IVR or an SMS survey in certain circumstances. The more information you have at your disposal, the more confident you can be that you fully understand your customers.

It is important before organizations begin to survey their customers, that they:

- Clearly determine the purpose and aims of the survey
- Consider adopting a variety of question types. Scored questions enable the business to produce statistically significant and representative data. Free comments can provide real insight into customers' perception of service
- Select an experienced company to set up and host the survey. Businesses will benefit from their expertise and knowledge and avoid potentially costly errors
- Ensure that the survey can be carried out throughout the day, including peak times, to gain a true picture of the customer experience
- Make sure that the results of the survey can be collated and analyzed in a wide variety of ways. It is pointless to amass information if it cannot be evaluated and the results disseminated usefully
- Have procedures in place to act upon the information that is found. The survey may have uncovered some broken processes in the service which need attention. It will also inevitably throw up disgruntled customers whose specific concerns need addressing. In this instance, any survey platform should provide some mechanism for alerting and following-up to ensure that dissatisfied customers are escalated to the appropriate staff
- Adopt a unified approach across the business to assessing and monitoring customer satisfaction. If businesses continue to reward agents based on traditional call performance metrics, they are merely paying lip service to good service. If they reward agents based on customer satisfaction ratings the businesses will increase agent engagement and retention at the same time as improving the service offered to customers.

USING CUSTOMER FEEDBACK

Many companies **hear** their customers, but do they actually **listen** to what their customers say? And more importantly do they act upon it to change or improve their processes? There is no point in generating an expectation which you have no intention of fulfilling. Don't ask the customers for feedback if you have no intention of using it to make the service you provide them with substantially better.

Some of the most important feedback a customer can give is that they are dissatisfied, as these people are far more likely to go elsewhere, and to tell their acquaintances (in real life or via social media) about their bad experience, doing exponential damage to the brand and company.

Customer loyalty is built by delivering effortless customer experiences involving personalized responses to service and sales opportunities. To keep up with today's customer, it's critical to track customer satisfaction in real-time. Identify any service or agent issues, and take action. Combining survey insights with contact center activity can quickly create actionable information and immediately improve the customer experience.

Figure 31: How is knowledge gained from customers used to improve the business?

How is knowledge gained from customers used to improve the business? (by contact center size)

- There is a formal process that gathers information from agents, analyzes it and passes recommendations to the wider business on a regular basis
- Management will pass some recommendations outside the contact center informally
- There is little or no communication from the agents to the wider business

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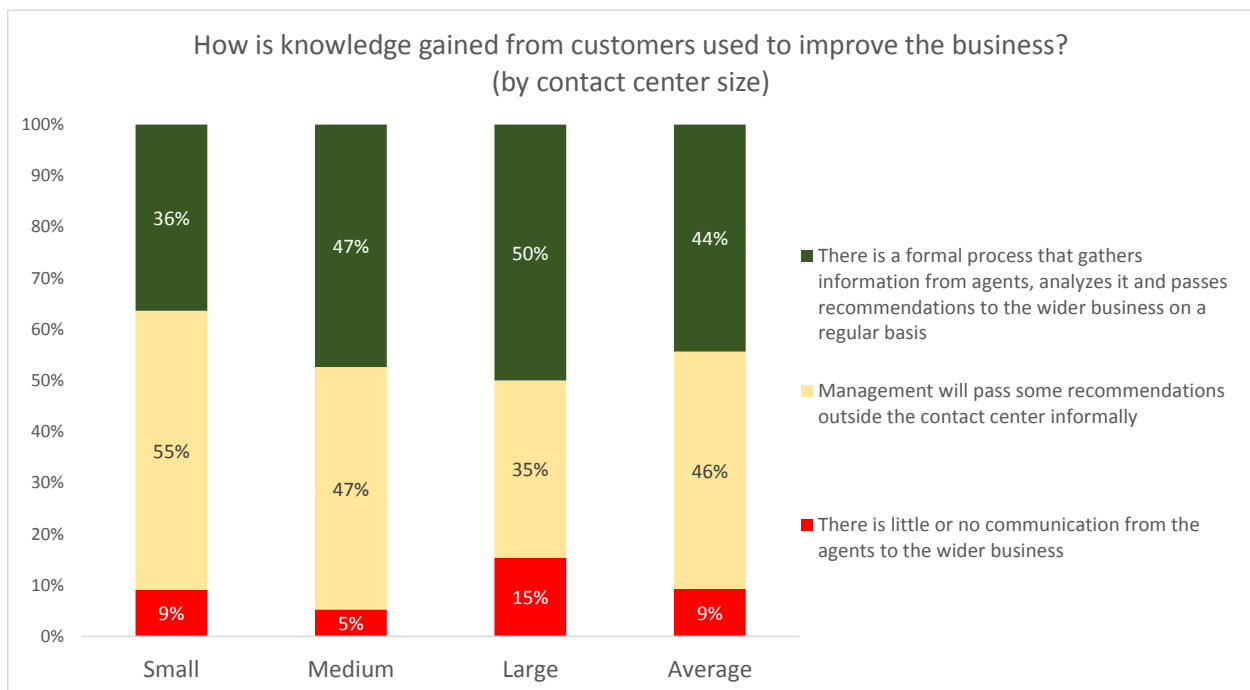
Only 9% of respondents admit that customer feedback is never used by the wider business, although that figure increases to 15% for large operations. Improving on last year, 44% of respondents have a formal process for gathering, analyzing and passing on information to the relevant sources, which is slightly more likely to be the case in large operations. 46% of respondents try informally to pass information to where it might be useful to the business, but this can be fairly hit-or-miss.

83% of respondents that identified dissatisfied customers claim to do something about it within a single working day, usually calling to discuss the matter further. This is significantly lower than 2013's figure of 89%, a possible trend which we will monitor with interest, considering social media's power to share negativity instantaneously. A rapid reaction offers businesses the chance to prove themselves to the customer and turn a detractor into an advocate, and is not an opportunity which should be spurned.

The public sector is amongst those most *laissez-faire* about responding to a dissatisfied customer, although this year's research shows it tends not to have large volumes of complaints. The same cannot be said of the medical vertical market, which this year posts unimpressive statistics both around the lack of response to dissatisfied customers, as well as the overall number of complaints that it receives.

Any reluctance to deal promptly with unhappy customers does not seem to be a factor of contact center size or available resource. While 88% of large operations are geared-up to fire-fight a bad customer experience, 93% of respondents from small operations say that they can do the same, although this figure is only 70% for medium-size contact centers suggesting that contact center size is not a factor.

Figure 32: Response to dissatisfied customers within one working day, by vertical market

Proportion of respondents responding to dissatisfied customers within one working day, by vertical market

![Genesys]
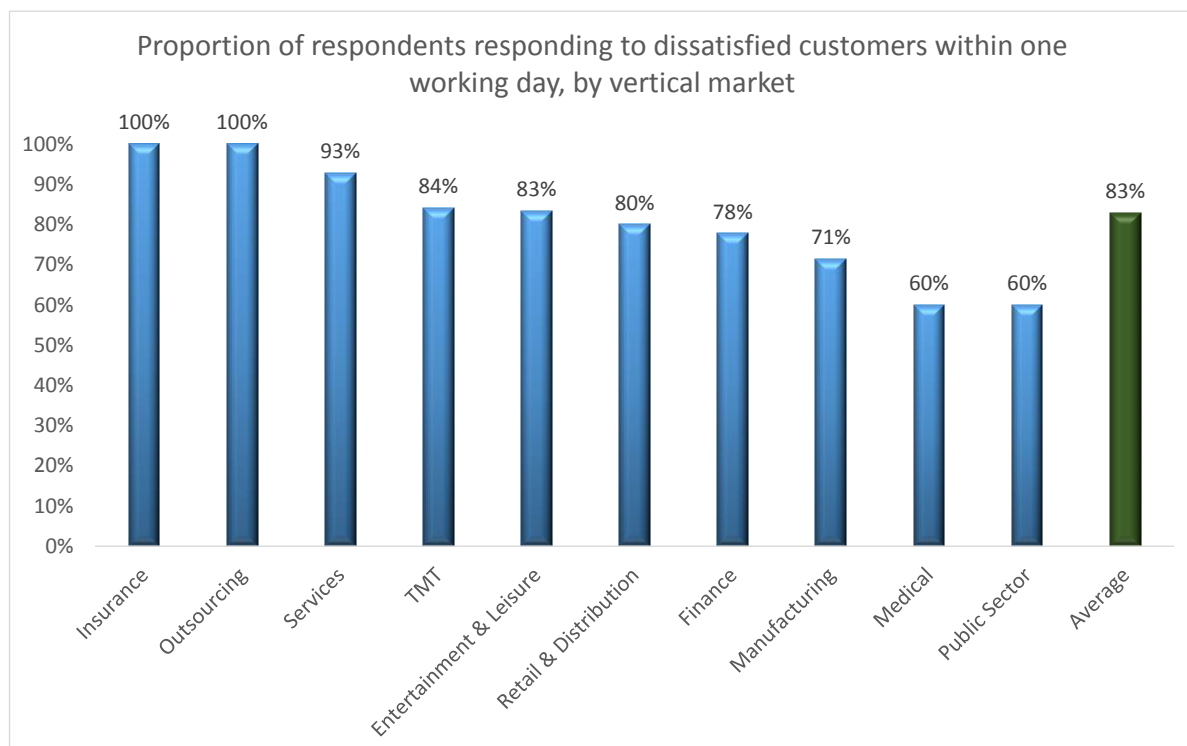
Optimize the Customer Journey with Customer Experience Analytics

Companies That Focus on Customer Journeys Perform Better

Today's customers engage with companies using more touchpoints (company web site, mobile apps, branch locations, contact center, etc.) and channels than ever before – including the phone, email, web chat, SMS and social media. This expansion in customer engagement is also connecting customers with more people from across the company – from departments like marketing and sales to the back office and branch locations. As each customer journey becomes more complex, delivering a consistent, seamless and low effort experience for customers becomes even more challenging for companies to deliver.

As a result, many companies have turned to customer journey mapping and analytics with the goal of optimizing and personalizing each customer experience, while reducing the steps taken by the customer to achieve their goal. In fact, companies that focus on optimizing the customer journey can realize measurable business benefits. According to McKinsey, focusing on the customer journey can lead to a 10-15% boost in revenues, a 20% increase in customer satisfaction, and a 15-20% lower cost to serve.

Analyze Key Customer Experience Indicators to Orchestrate the Customer Journey

When it comes to effectively managing customer journeys – including customer on-boarding, customer support & problem resolution, account changes, billing inquires and re-purchase or renewal – how companies orchestrate each and every customer experience becomes critical to success. In order to achieve this, companies need to blend the right mix of business rules, context and analytics to map and design optimal customer journeys. This process includes:

- Measuring customer experience performance indicators for each customer journey
- Orchestrating customer interactions based on business rules across the customer journey
- Managing service levels for each and every interaction to optimize the end to end experience

As you look to transform the customer experience at your company, focus on the customer journey and understand the actions you need to take to succeed.

Better Customer Journeys with the Genesys Customer Experience Platform

The Genesys Customer Experience Platform ensures that the experience you deliver aligns with the expectations of your customer and is journey appropriate. Insight into the customer journey helps your business anticipate a customer's next step to personalize the experience or provide proactive updates to streamline the process. By leveraging built-in, actionable analytics capabilities of the Genesys Customer Experience Platform, you can more effectively analyze key performance indicators and orchestrate customer interactions across the customer journey.

The result is consistent, seamless, and low effort customer experiences that drive revenue growth, increase in customer satisfaction and lower your cost to serve.

To learn more about how customer experience analytics and the Genesys Customer Experience Platform please visit Genesys.com
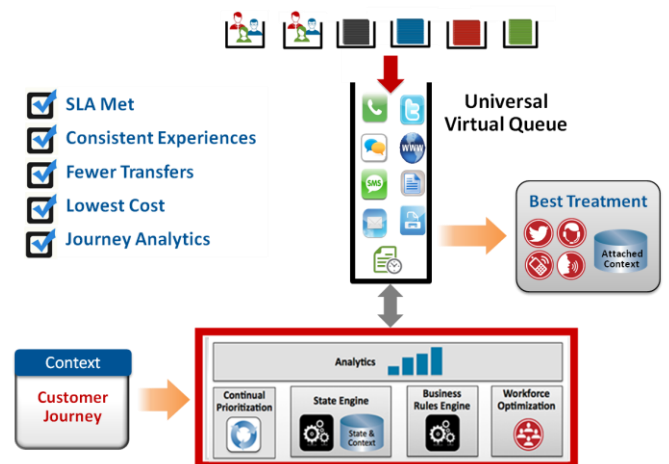
Delivering the Best Customer Treatment with the Genesys Customer Experience

The Genesys Customer Experience Platform Manages Customer Journeys

CUSTOMER SATISFACTION BY CHANNEL

Around half of respondents try to track customer satisfaction across both telephony and email channels. Interestingly, 6% of respondents said that email had a better customer satisfaction rating than the telephony channel: although this may not be a particularly impressive figure, it is still higher than last year's findings when no respondent reported that this was the case.

31% state that telephony has a better customer satisfaction score than email, with 12% not seeing much difference.

Figure 33: How does customer satisfaction differ by channel?

How does customer satisfaction differ by channel?

- Phone gets a higher customer satisfaction score 31%
- We don't measure this 51%
- No major difference 12%
- Email gets a higher customer satisfaction score 6%
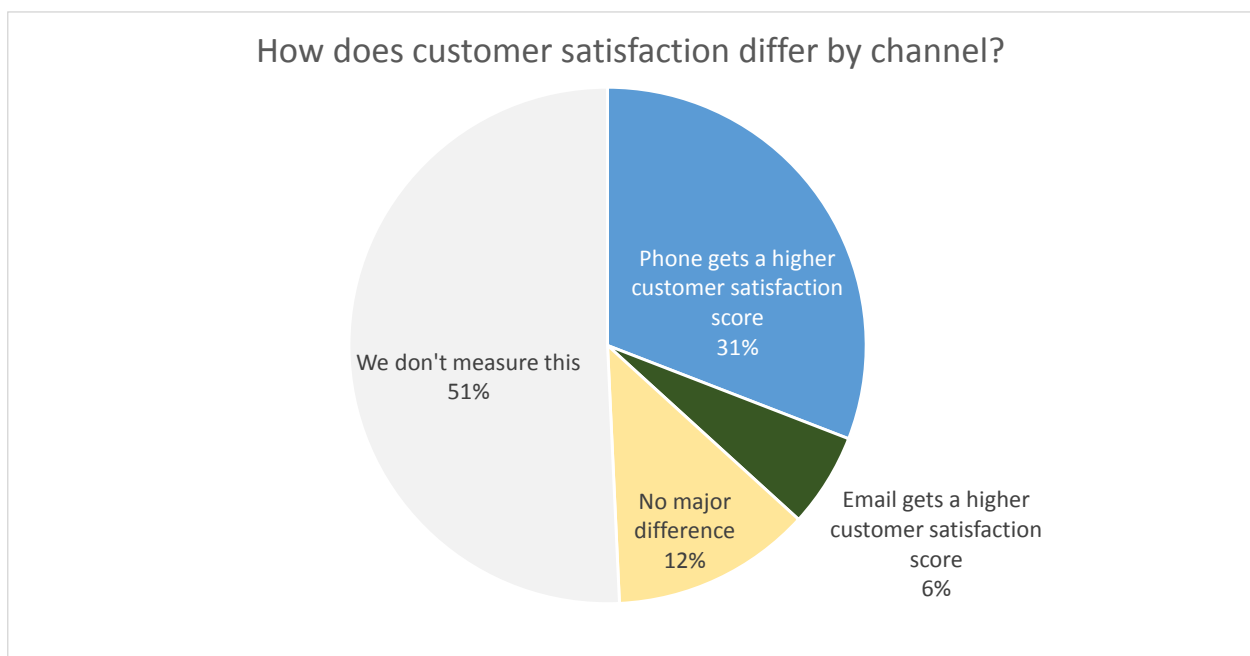
Multi-channel touchpoints have greatly complicated the end-to-end customer journey. Customers expect to receive consistent customer experiences, whichever channel they use, but this is very difficult to deliver when each channel emerges from a separate technology silo. Managing multiple platforms significantly increases expenses and allows less flexibility to address ever-changing business drivers: reducing system complexity and removing silos helps organizations more effectively manage cross-channel customer journeys.

COMPLAINTS

John Seddon uses the term "failure demand" to describe calls that are created by the inability of the business's systems to do something right for the customer:

> "A failure to do something - turn up, call back, send something…causes the customer to make a further demand on the system. A failure to do something right - not solve a problem, send out forms that customers have difficulty with and so on - similarly create demand and creates extra work. Failure demand is under the organization's control, and it is a major form of sub-optimization."[1]

Seddon cites the instance of the bank where failure demand created almost half of the calls which they had to deal with. Another classic example of failure demand is where emails go unanswered, leading to calls being made (first-stage failure demand). Later, the email will be answered, unnecessarily, as the customer already has their answer or has gone elsewhere (second-stage failure demand). This redundant work will then impact on other (still live) messages in the email queue, creating a vicious circle of failure demand. Redesigning and restructuring the way in which work flows around the organization, putting the contact center at the heart of it, rather than treating it as a separate silo, will go much of the way to reducing unnecessary contacts. The customer ends up getting a better service from the whole company, not just the contact center.

One way in which this can be achieved is to unify and automate the agent desktop, bringing in the relevant data automatically, depending on who the caller is and what they want. At the end of the call, the correct data is written back to the relevant places, and the correct processes kicked off automatically, meaning that the right departments will be provided with the right information, thus reducing the risk of failure demand, unnecessary calls and irate customers. This also takes the pressure off the agents to remember which systems to update and how to navigate through them within the call (which causes long delays, negatively impacting customer satisfaction), or in the wrap-up, which risks agent forgetting to do things, and also decreases agent availability, increasing the queue length, and decreasing customer satisfaction. In cases where multiple processes have to happen in order for the customer's requirement to be met, automated outbound messaging to the customer, whether by email, SMS or IVR is likely to reduce the number of follow-up contacts that the customer feels that they have to make.

Information on failure demand can be gleaned from the contact center, which can also hold huge amounts of knowledge about what customers' views of the products, services, competitors and company are. Feedback loops will be established in leading contact centers to push information and insights upwards to those who can make a difference in product development, process improvements and customer strategies. Interaction analytics offers businesses the chance to mine huge amounts of data and find patterns and reasons in a timely fashion, and it is vital then to act upon this knowledge, proving to both customers and agents that the business takes them seriously.

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[1] *Freedom from Command and Control: A better way to make the work, work*, John Seddon, 2005

Customers who take the time to complain are also taking the time to state what went wrong with your process, product or communication, and this effort should be acknowledged and treated as being important. Businesses have found that fixing the problem for one customer can help many other customers, including the ones who never contacted you. Most customers are not complaining to cause trouble - they want you to know what went wrong, and believe that you can fix it. If one customer makes a complaint, the chances are that there are many more who are experiencing the same thing. A customer that has given up on your company will probably not complain, but go elsewhere and tell everyone who will listen that they are doing so, an issue that is particularly important in today's world of omnipresent social media.

Figure 34: Proportion of calls received that are complaints / target of complaints, by vertical market (sorted by largest proportion of complaints about the contact center - high-to-low) - median

Vertical market	Proportion of calls that are complaints	% complaints about the contact center	% complaints about the wider business
Medical	11%	24%	76%
Manufacturing	10%	15%	85%
TMT	5%	27%	73%
Outsourcing	5%	26%	74%
Retail & Distribution	5%	15%	85%
Finance	5%	17%	83%
Entertainment & Leisure	3%	28%	72%
Services	3%	22%	78%
Insurance	2%	25%	75%
Public Sector	2%	22%	78%
Average (median)	**4.9%**	**23%**	**77%**

NB: "Proportion of calls that are complaints" figure is median average rather than mean, to provide a more 'typical' view.

The preceding table shows, by vertical market, the proportion of inbound calls received that are complaints, and also, in the widest sense, what that complaint is about (i.e. internal - such as a rude agent or not being called back when promised, or external - such as failure demand, which is explained below). Of course, it is sometimes difficult to divorce one from the other, but this table gives an indication of what organizations feel customers are pointing out is wrong within their business.

The table is sorted by those vertical markets which have the greatest proportion of their calls being complaints about the contact center itself. In this case, respondents from the medical sector had 2.6% of its overall calls being complaints about the service received in the contact center itself (calculated by multiplying the % of complaints - 11% - by the % that refer to the contact center - 24%). On the other hand, the public sector has only 0.4% of calls being about the failings of its contact centers, and has once again smallest proportion of complaints about its operations.

The majority of complaints received by a contact center are not about the contact center itself (or its staff), but rather 'failure demand', caused by a breakdown of process elsewhere in the organization. However, the contact center has to deal with the dirty work, and further failures within the complaints procedure (or lack of it) can see customers calling into the contact center again and again, becoming more irate each time, despite the real problem lying outside the contact center. There is also the case that there is a blurring of responsibility between the contact center and the rest of the business so that lines of demarcation over where the fault lies can be difficult to find. For example, a telecoms provider that has taken an order for a new line has to rely on the rest of the organization to provision and deliver this correctly. If the agent takes the contact email down incorrectly, the customer will not receive any information about their order, which may have a query on it. When the irate customer rings in to complain, the problem may appear to be with the back-office processes where the order has halted, but the fault actually lay with the agent. Whether this is tracked or reported on correctly is not a certainty, so the split above between contact center / back-office complaints should be treated with caution.

There is also a real risk, especially within large contact centers, that a single agent does not have the capability or responsibility to deal with the customer's issue, which may reach across various internal departments (e.g. finance, billing, provisioning and technical support), none of which will (or can) take responsibility for sorting out the problem.

Businesses who choose to monitor customer satisfaction evidently value their customers' opinions. However, the report's findings reveal that the majority of contact centers are missing a great opportunity to utilize customer feedback to drive real service improvement. Many contact centers do not know the specific characteristics and behaviors most liked or disliked by customers, and these operations are investing time and money without reaping the benefits of meaningful and actionable information.

Organizations able to help with Improving Quality and Performance:

Calabrio powerfully redefines workforce management with software
that is intuitive, flexible and hassle-free.

Conversocial is a cloud solution that enables businesses to manage social media as a large-scale
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Enghouse Interactive: The most comprehensive set of contact center technology and quality
management tools in the industry.

Genesys is a leading provider of multi-channel customer experience and contact center solutions.

HireIQ's solutions enable customer service organizations improve their agent retention and center performance through better, targeted hiring: read our case studies here.

inContact's Quality Monitoring in the cloud - with Shared Smart Inbox - streamlines the process of gathering, reviewing, and monitoring customer interactions.
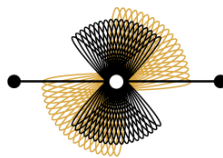
At Interactive Intelligence, it's what we do.

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With Intradiem, agents receive the training, coaching and communications they need - when they need it -- to improve their performance and deliver best-in-class customer service, and their queue assignments are always up to date to reflect their most recent skills and performance.

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OpenSpan provides activity intelligence and desktop automation solutions that improve performance, drive revenue and increase efficiencies in customer-facing business units across the enterprise.

ORACLE®
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Oracle Service Cloud helps The Boston Globe to manage approximately 60,000 calls each month and respond to 5,000 monthly e-mails and they can now track e-mail response times and meet the 24-hour service level agreement. Learn more.

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Uptivity's Quality and Performance management solutions enable contact centers to improve agent handling of customer interactions.

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In 2013, Virtual Hold Technology (VHT) improved the customer experience for 170+ million callers, saving them more than 1.5 BILLION minutes of hold time, and eliminating more than 18 million abandoned calls.

VoltDelta
CONNECTING PEOPLE & INFORMATION

VoltDelta OnDemand delivers exceptional customer care with cloud-based multi-channel contact center solutions.

MAXIMIZING EFFICIENCY AND AGENT OPTIMIZATION

Improving call throughput and decreasing costs has been a focus of most contact centers since the industry started, and few solutions or processes are considered without understanding how they will affect productivity.

This section looks at ways in which contact centers can make the most of what they've got, through increasing efficiency, or by avoiding unnecessary calls in the first place. Solutions and issues include:

- Contact center performance metrics
- Alternative ways of working - virtualization and homeworking
- The enterprise-wide contact center
- IP and convergence
- Voice biometrics
- Call routing and queue management
- Workforce management
- Headsets.

CONTACT CENTER PERFORMANCE METRICS

The success or otherwise of contact centers has traditionally been measured by observation of key metrics, usually related to cost and efficiency - average call length, average speed to answer, % of calls answered within a certain time, etc. While these figures are a useful and still widely acknowledged and understood benchmark, times are changing. Many contact centers now try to measure the effectiveness of their operation by tracking metrics such as first-time call resolution and customer satisfaction levels, although there are no standard measures or agreements on what constitutes a satisfied customer or fully-resolved call. This does tend to strengthen the hand of those who believe that because the contact center **can** provide detailed data on call volumes and handling times, then that is what it **should** primarily be measured against. Depending on the type of work that they do, contact centers may consider focusing upon various measurements from the following table.

Figure 35: Contact center metrics

Metric	Comments
Call duration / Average Handle Time	A typical 'old-fashioned' metric, which seems to be going out of favor, based on the idea that each call is different and should take as long as it takes. However, it is one of the easiest statistics to measure, and work out cost against.
Cost per call	Although this is an attractive and easily-understood metric for senior management to view, there is a real danger that calls are closed too quickly and revenue and loyalty-building opportunities are lost. If a contact center has many short calls (which may be better off being dealt with by self-service), this will produce a lower cost-per-call figure, which makes it look as though the contact center is doing well, when the opposite may be the case. The same logic applies to first-call resolution rates (see later in this chapter). Cost per call is a very complicated metric that is difficult to get correct. However, senior non-contact center management understand how cost figures impact the business more than occupancy or call abandonment rates, although these have an impact on all parts of the business. At the most basic level, cost per call can be calculated by dividing the overall spent budget of the contact center by the number of calls, although this does not take into account abandoned calls or situations where the customer has had to call multiple times to get a resolution (a situation which in fact brings cost per call down, although being negative to both business and customer). Neither does it take into account the effect of failure demand - where the contact center cleans up after processes elsewhere in the business go wrong, leaving the contact center to sort them out. As such, it should be viewed with caution.

Metric	Comments
Schedule adherence	Schedule adherence is a metric that looks to help with the fine-tuning of a contact center's labor force, so that calls are answered swiftly, but that agents are not sitting idly waiting for calls. It is a metric that is of more importance to schedulers than to customers, although the impact of getting schedules wrong can be catastrophic for efficiency, cost and performance.
Agent occupancy rate	The agent occupancy rate is calculated as the proportion of time in a given period that is call-time plus wrap-up, (that is, the proportion of time that each agent spends on dealing with the call itself and the actions deriving from it. A laborious wrap-up time caused by slow back-office systems or lack of familiarity from the agent's perspective can go some way to producing high occupancy rates, which looks as though the agent is constantly active, but which is actually negative for both business and customer.
Customer satisfaction ratings	Customer satisfaction is seen to be directly linked to profitability through increased loyalty, share of wallet and customer advocacy. There is considerable debate about how satisfied (or delighted) customers have to be before it starts making a noticeable difference to the bottom-line (i.e. how happy does a customer have to be before they accept premium pricing strategies, and how unhappy do they have to be before they go elsewhere?). There's no easy answer, but high customer satisfaction ratings - at a reasonable cost for the business - are surely good for everyone. The Customer Satisfaction Measurement and Improvement section in the previous chapter should be read into order to understand the various methods of measuring customer satisfaction scores.
Call throughput and abandonment rates	Understanding the types of call being received as well as tracking the number that are dropped can be translated into lost revenue within a sales environment, making a pitch for greater investment easier.
Call transfer rate	This metric can indicate training needs at the individual agent level, a failure in the initial IVR routing or a need to update FAQs or other information on a website (for example, a spike in this metric might be driven by a recent marketing campaign which has confused some customers, creating a high level of calls about the same issue). Tracking and analysis of call recordings in cases of high transfers should identify the issue.
Revenue per call	As many contact centers are now profit centers, understanding the effectiveness of the sales efforts is vital to judging the success of the contact center itself.

Metric	Comments
Staff attrition rates	A well-publicized cost that senior management are very aware of, high levels of staff attrition are poisonous to the effective running of the majority of contact centers, causing high levels of recruitment and training cost, lower average call handling quality and longer queue times due to inexperienced staff, as well as the vicious circle of lower staff morale.
Average speed to answer / longest call waiting etc.	Has a strong and demonstrable effect on customer satisfaction or frustration, as well as impacting on call abandonment, lost revenues and high staff attrition rates caused by excessive pressure. Average speed to answer is a metric which is easily measured, and forms a vital view of the contact center's staffing levels as well as impacting directly upon the customer experience. As such, it is similar in nature to the call abandonment rate. Contact centers should of course consider the amount of time that a customer spends in the IVR segment of the call when considering the 'speed to answer' metric - as the customers themselves surely do so.
Customer loyalty / lifetime value / churn rates	A central thought of CRM is that a business should focus upon keeping profitable customers, and growing unprofitable ones. A single figure for customer retention is not effective, as it does not include the types of customer churn, or the undesirability (or otherwise of losing such customers).
First call resolution	Improving first call resolution (FCR) benefits customers (who are more happy / loyal / profitable / etc.); agents (higher morale; fewer frustrating calls); and business (lower cost of repeated calls; higher profitability): everyone wins. This can be very hard to measure, as it is the customer, and not the contact center that should be stating whether the issue has been resolved successfully. There is more detail and the use and effectiveness of first call resolution methods later in this chapter.

Trigger a 20% Business Impact

and enable a real-time front line workforce
that's always prepared, always productive and never caught off-guard

if ... then

	if	then
Intraday Task Management	Call volume drops	Deliver off-phone tasks
Intraday Staffing	Overstaffed or understaffed	Approve voluntary time off or overtime
Reskilling	Agent completes skill training	Prioritize agent in queue
Channel Balancing	Chat queue volume spikes	Reassign email agents to chat
Alerts and Notifications	Calls exceed AHT threshold	Alert a supervisor

Benefits of a real-time front line workforce...

- enhanced agent productivity
- better business performance
- superior customer experience

Automatically respond to unpredictable events and fluctuating business conditions in real time. Intraday workforce management solutions can improve business performance by 20% for contact centers.

Visit **www.intradiem.com/dynamic** to watch a two-minute video on how intraday management allows your contact center to improve operational efficiencies and increase performance.

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AGENT ACTIVITY

Agent activity per hour is a key structural metric aimed at helping contact center management understand how the agent's time is being spent. We have segmented it into seven parts:

- **Call time**: amount of time actually spent on the inbound call
- **Post-call wrap-up**: after-call data input and actions driven specifically by that call
- **Email / web chat:** text-based communication with customers
- **Training:** whether desk-based or lecture-type
- **Administration**: general administration and keyboard- or paper-driven work which may be for internal purposes only (e.g. timesheets) or for external work as well (e.g. sending faxes).
- **Idle**: time spent not taking calls or doing other work
- **Other**: anything not covered by the previous activities.

Figure 36: Agent activity

Agent activity

- Other: 3.0%
- Admin/paperwork: 4.2%
- Training: 5.4%
- Email/web chat: 8.6%
- Idle time: 9.4%
- Post-call wrap-up: 10.1%
- Talk time: 59.3%
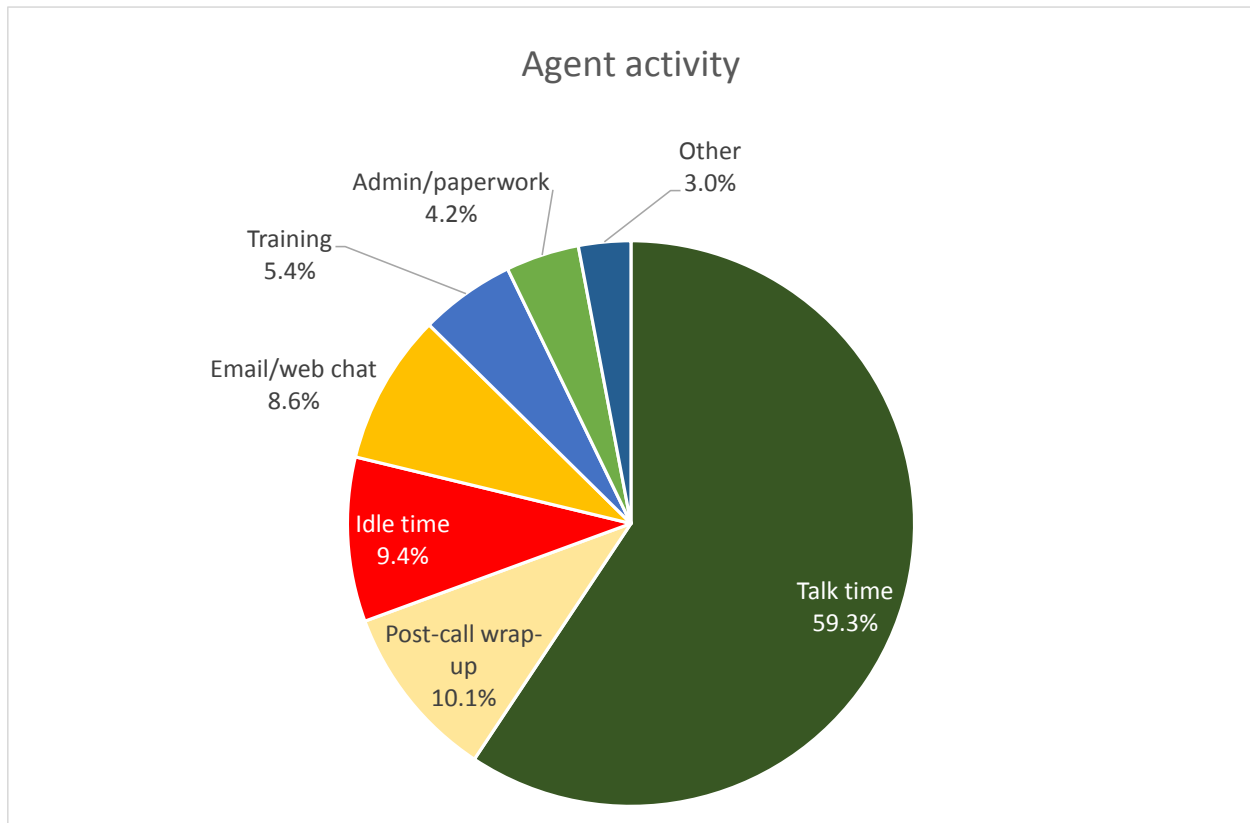
Talk time has actually increased somewhat on last year's result of 56%, and it will be interesting to see if this figure has now reached a point of relative stability. Taking into account email and web chat handling time as well, the overall agent/customer communication time is now around two-thirds. Post-call wrap-up remains steady at around 10%, as does idle time.

The identification of idle time is one thing: being able to recover unproductive time in the agent's daily routine and use this otherwise-lost capacity is quite another. A workforce management solution that has intraday capabilities can recover these small pockets of fragmented agent idle time as the day goes on, aggregating this time into larger blocks that can be allocated to other productive activities such as training, coaching, back office tasks or administration, which goes a long way towards using the agent time that businesses necessarily pay for already, but which could not previously be accessed.

There will never be a way to perfectly predict volume across channels and specific skills. The sustainable approach is to effectively manage the frontline workforce so that it can adapt to changing call volume and respond appropriately. In one month alone, automation services provider Vivint used five hours of downtime per agent that would have otherwise been lost as idle time to deliver training that increased average handle time and its "fixed on the phone" metric.

There is also a significant opportunity for reducing the non-productive call time at the beginning of the call, where an agent is authenticating the caller's identity. By doing this automatically, either through IVR or more securely, through biometric identification, the business can free up around 20-30 seconds of agent time, which makes a big difference to call and queue lengths. This element is investigated in-depth in the 'Voice Biometrics' section later in this report.

Post-call wrap-up time is also an area which could further be reduced in many contact centers. There are many applications in the market which are capable of reducing the amount of after-call work that an agent has to do by bringing together all of the systems and applications the agent needs on that specific call into a single virtual application and then updating the relevant databases accordingly. This removes the need for a specialist knowledge of legacy system navigation, reducing keying errors and dramatically shortening wrap-time through kicking off relevant back-office processes automatically. Most of these agent desktop optimizers do not touch the logic of the existing systems, but act as a user interface that picks up and presents the relevant fields and business processes at the right time. There is further detail on how this can be achieved in the 'Cross-Selling, Upselling and Desktop Optimization' chapter.

Vivint Applies Real-time Approach to Prepare Agents for Fast-changing Business

Key Initiative

A home security, energy management, and automation services provider to more than 675,000 customers in the U.S. and Canada, Vivint's 600 customer service and retention agents support multiple products in a competitive business and require a lot of development and communications. But, as in many busy centers, finding the time to deliver critical training and coaching to agents was a challenge.

Prior to implementing Intradiem, Vivint's agents typically received one training session per week, and it was difficult to keep track of which agents had completed particular sessions. While all new hires were segmented out for training, others were randomly pulled off the floor during overstaffed periods.

Agents found it difficult to get the information they needed to effectively handle customer inquiries, and managers struggled to find the right balance between taking agents off the phone for development while at the same time maintaining service levels.

Solution

Vivint implemented Intradiem's intraday management solution to provide agents with the knowledge they need to effectively handle complex customer inquiries and provide a consistent customer experience.

Intradiem increases the frequency of training and coaching by dynamically delivering individualized and prioritized activity sessions directly to the agent desktop during natural downtimes in call volume. When call volume unexpectedly spikes, agents are automatically prompted to return to answering calls so that service levels are not negatively affected.

vivint.

Results at a Glance

- 3.1% operating impact (2.2% increased productivity and .9% increased performance)
- 2,400 sessions delivered to 400 agents in 5 days
- Average handle time decreased by 5%
- Increase in Vivint's 'fixed on phone' metric

"Vivint was able to find more time for training, increase overall agent productivity and effectiveness, and improve the customer experience with intraday management."

Today, the level of information Vivint is able to deliver to agents is more in line with the complexity of its products, which translates to more efficient and higher-quality customer interactions overall. Agents receive consistent, ongoing product-specific and soft skills training, company and team communications, compliance training and call reviews. When specific areas of need are identified, performance-based training is also assigned.

Impact

Vivint has measured the financial benefit of Intradiem as an operating impact of 3.1 percent, with 2.2 percent based on increased productivity and 0.9 percent based on increased performance. Since implementing Intradiem, there has been a dramatic increase in the amount of training delivered to agents. Within the first five days of introducing Intradiem, Vivint was able to deliver 2,400 sessions to 400 agents – each agent receiving six sessions in five days – all during idle time.

Usage has increased every month since launch. In one month alone, Vivint used five hours of downtime per agent that would have otherwise been lost as idle time. Average handle time has decreased by 5%, and there has been a dramatic increase in Vivint's "fixed on the phone" metric, which measures agents' ability to address customer issues during the initial conversation. Additionally, quality and escalations have improved.

Overall agent productivity has also increased. Agents are more highly utilized and employee morale has improved, with agents reporting that they enjoy the training and the "break" it provides to vary their work. This has led to empowered agents who are more confident and better equipped to do their jobs, and the customer experience has improved as a result.

See how Vivint's call center leaders leverage Intradiem for their on-going success.

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Looking historically at how talk time and idle time has changed, it can be seen that the average amount of time an agent spends talking to customers has hovered around the 60% mark for many years. Certainly the agent today has more tasks than previously: the job will tend to be more varied and require greater depth of knowledge, meaning that increased training and administration tasks will need to take place, and of course many agents now handle significant amounts of multichannel work in addition to their traditional telephony role.

We would expect to find that the overall amount of agent time spent idle has reduced very significantly as a result of agents having so much more to do and the focus that the economic downturn has placed on efficiency and cost-cutting. However, although idle time has decreased from a historical average of 14% to 15%, there has been little further decline seen in this metric within the past few years. This leads to a likely conclusion that unless a new way of working is considered that can make these small fragments of idle time into a period long enough to do something productive with, most businesses will struggle to get this metric much below 10%.

Figure 37: Talk time and idle time, 2008-2014
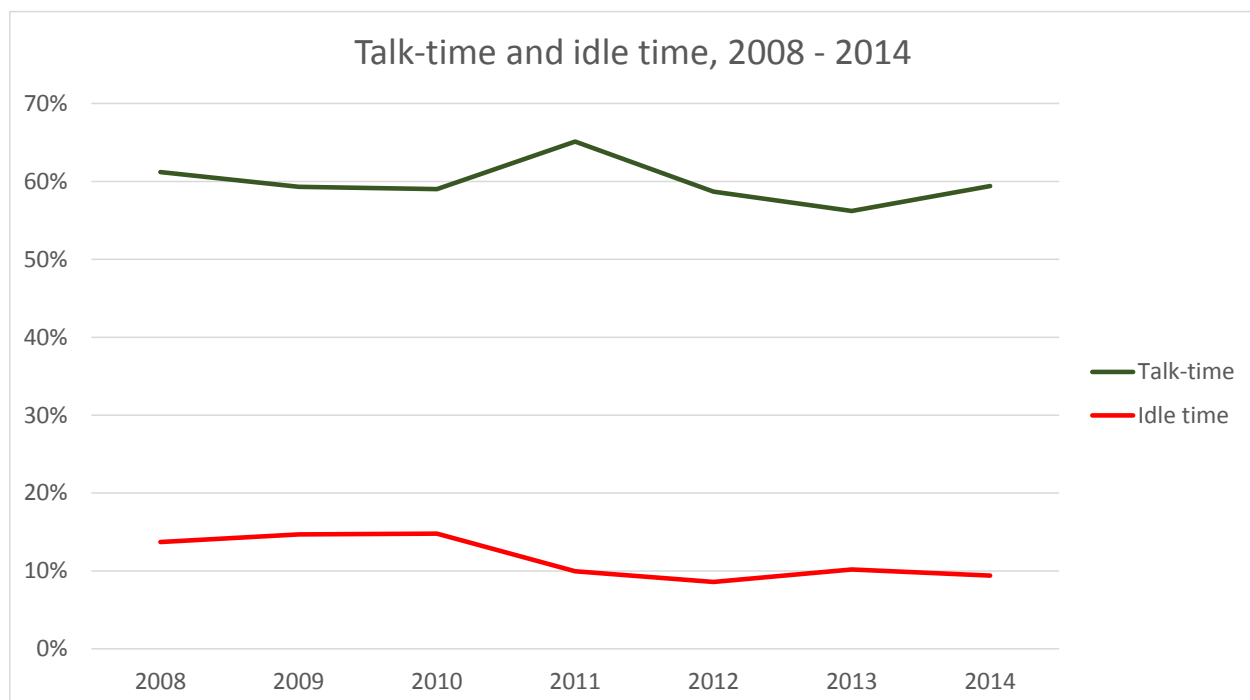
As self-service siphons off easier calls, agents must be equipped with the knowledge and skills they need to handle more complicated customer issues, but time for this preparation is scarce. Ironically, idle time abounds. Contact center service provider Afni uses intraday management technology to send important client updates, training, and development sessions directly to agent desktops during aggregated idle time.

PERFORMANCE METRICS

Figure 38: Selected performance metrics

Metric	Mean average	Median average
Average speed to answer	43.3 seconds	24.0 seconds
Call abandonment rate	5.3%	4.0%
First-call resolution rate	74%	80%
Call duration (service)	381 seconds (6m 21s)	310 seconds (5m 10s)
Call duration (sales)	408 seconds (6m 48s)	325 seconds (5m 25s)
Call transfer rate (excl. receptionists)	8.5%	4.8%
Cost of inbound call	$5.84	$4.50
Cost of outbound call	$6.34	$4.53

NB: as a few respondents may show extreme results, data are not distributed symmetrically. Median values show the midpoint and may demonstrate the truer picture of a 'typical' operation. If calculating an industry-wide amount (e.g. total cost of calls, or total time spent waiting to answer), the mean average is more appropriate.

Detailed analysis of all of the above performance metrics, including historical changes and segmentations by vertical market, contact center size and type of activity are available in the "US Contact Center HR and Operational Benchmarking (2014)" report.

There is also analysis of budget expenditure, including past and planned changes in Opex and Capex budgets.

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Over the years, the importance of contact center metrics have changed considerably. 10 years ago, average call duration and cost-per-call were considered to be perhaps the most important metrics, but respondents to recent reports consider them of minor importance compared to more customer-focused measurements.

Perhaps unsurprisingly, one-third of respondents chose customer satisfaction rating as being the most important measurement that a contact center tracks. However, first call resolution and speed to answer are very close behind: both of these metrics are of huge importance to customer satisfaction (or the lack of it), and handling more calls effectively first-time is key to improving customer satisfaction and reducing repeat calls, which will impact positively upon queue lengths. The rest of this chapter considers the way in which this key performance metric, first-call resolution, can be measured accurately and improved upon.

Figure 39: Most important contact center metrics
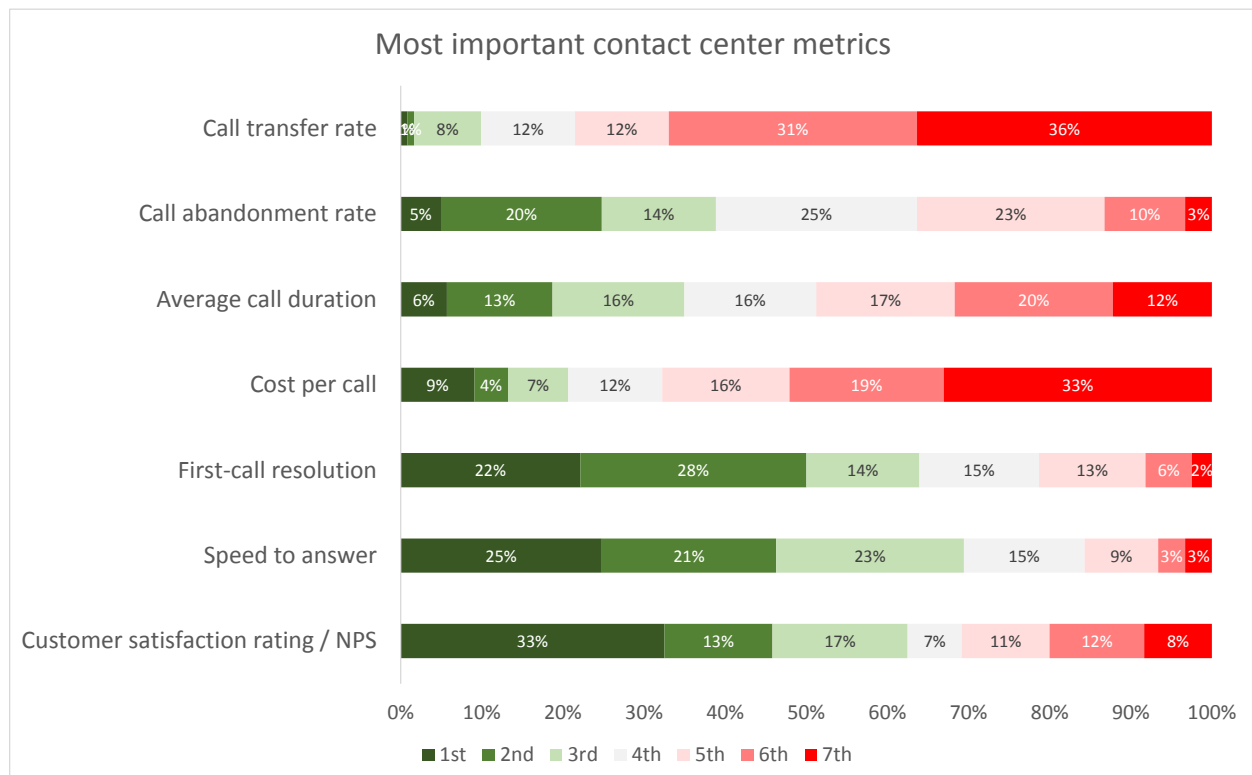
THE ROLE OF FIRST-CONTACT RESOLUTION

For most businesses, there is no fixed agreement on what a successful contact center looks like: even in similar industries, around half of businesses state that a contact center is a strategic asset, with the other half seeing it as an operational cost center. Contact center managers are tasked to balance factors such as cost, efficiency, staff morale and attrition, call quality, customer satisfaction and revenue - some of which may be mutually antagonistic - in a constantly-changing environment where there is limited opportunity for reflection. Often these contact centers exist on a virtual island away from the rest of the business, not just geographically, but logically as well. Although they belong to the business, and constantly receive insights about other parts of the operation, they may not have the ability to provide actionable insight either for their own benefit or for other departments.

Having said that, most of the contact center world has moved on from the ruthless focus on call throughput and call duration that characterized many operations a decade ago. A major question being asked today is, "How do contact centers attempt to measure the most important metric of all - first-contact resolution?" (First-contact' resolution differs slightly from 'first-call' resolution, in that it includes emails, web chat and other non-voice channels as well. In reality though, non-voice resolution rates are much less commonly measured).

It can be stated with some confidence that first-contact resolution is seen as the key to a successful contact center: while the previous chart shows that customer satisfaction rating is the most important metric, 79% of the report's respondents place first-contact resolution as being one of the top 3 metrics that are most **influential** on customer satisfaction, with 43% stating it as being no.1: in effect, far more important than any other metric. (The section of the report on 'Customer Experience Measurement & Improvement' gives more detail). So, logically it seems that to improve customer satisfaction, a business has to improve first contact resolution rates.

The ability to understand a query and deal with it in a reasonable timeframe at the first time of asking is the key to a contact center's success, reducing the overall number of contacts while providing the customer with a good experience which will impact on the company's overall performance. It also has a positive effect on the agent's morale (and thus, staff attrition rates), and increases the chances of a successful cross-sell and up-sell being made. Little wonder that the first-contact resolution metric has grown hugely in importance, but it can be problematic to quantify accurately. This risks the metric being downplayed, especially as it is not simply a matter of producing a monthly report from ACD statistics.

First-contact resolution rates are not simple to understand, but have to be viewed in context. An improving business may well see its FCR rate actually decline after it implements process improvements, which is counter-intuitive, but if the business had been handling live calls that were more suited to self-service or avoidable through better marketing communications, getting rid of these 'easy' calls entirely will make the FCR rate decline. If many calls are about the same issue, and are answered quickly and accurately, it improves FCR rates, but of course piles up cost and impacts negatively upon other performance metrics, such as queue length and call abandonment rate.

Businesses should consider the reasons for these unnecessary calls, rather than just focusing upon a single metric, as high first-contact resolution rates may actually be masking underlying problems:

- The contact center is handling simple and repetitive calls that could be moved to self-service, or which could be addressed on a website and through better marketing communications
- Callers are dropping out of self-service to speak with agents because the self-service application is failing in its task and should be re-engineered
- Unclear marketing communications are causing customers to call
- Calls are being received that are actually driven by mistakes from elsewhere in the enterprise.

When businesses begin stopping unnecessary calls at the source, those left are usually of a more complex nature. This will lower first-call resolution rates initially, allowing a clearer picture of what is really happening in the contact center to emerge, which can then be addressed more fully.

The drop in first-call resolution (FCR) rate in 2013 seems to have been more of a statistical blip than a fundamental change, with the mean average rising this year to a more 'normal' 74%. However, the overall trend for FCR is certainly not upwards: as the easier interactions go to self-service (especially online), the contact center is left with more difficult and varied tasks, which are also very complicated to categorize effectively using the current tools available to most. What these figures may show is that the exodus of 'easy' work to self-service channels is being balanced by improvements in knowledge sharing and other agent support processes that means first call resolution rates are staying relatively stable as a result.

Figure 40: Changes in first-call resolution rate (2007 - 2014)

Year	Mean average first-call resolution rate
2007	73%
2008	70%
2009	76%
2010	75%
2011	74%
2012	73%
2013	71%
2014	74%

The first-contact resolution rate is an important metric to study, being concerned both with the customers' experience as well as avoiding unnecessary calls. However, it is very difficult to measure effectively, with no single best practice method of getting definitive statistics that are directly comparable to the rest of the industry. This difficulty is shown by the fact that in past years, perhaps half of contact centers responding to this survey did not collect FCR performance at all (this year's non-responding figure is only 15%, which is a great improvement).

Of those that do, there are various ways to measure, or at least closely estimate, first-call resolution rates:

- Agents provide opinions on whether the call was resolved completely
- Tracking of issues shows if they are re-opened
- Supervisors monitor calls and score based on their opinion
- The company or a third-party can contact customers later to ask their views
- Customers provide feedback in end-of-call IVR sessions
- SMS messages or emails are sent to customers at times defined by the business.

Call monitoring is by far the most widely-used way of gauging the call's success, and is used by 81% of respondents. Post-call methods of trying to gather first-call resolution rates are much less widely used.

What happens when quality monitoring identifies an issue with an agent's ability to resolve calls of a certain type? Relying on manual processes to update queues due to changes in competencies creates real challenges for workforce management professionals. As agents complete training or show a need for improvement, intraday management automatically updates skill and queue associations so that customers are always talking to agents best equipped to serve them.

Figure 41: Use of first-call resolution measurement methods

Use of first-call resolution rate measurement methods

Method	Percentage
SMS survey (post-call)	3%
End-of-call survey by agent	12%
IVR survey (post-call)	20%
Agent opinion (post-call)	27%
Follow-up phone survey	27%
Tracking customer callbacks	40%
Follow-up email/web survey	44%
QA/call monitoring	81%
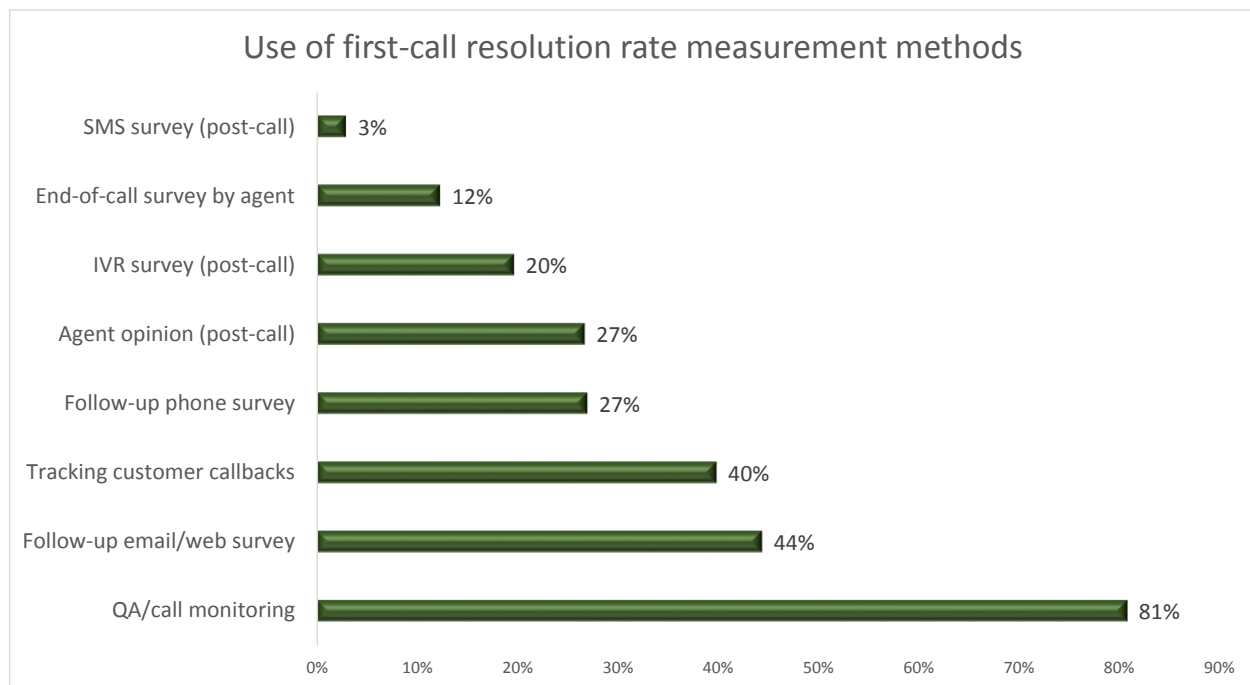
However, even if FCR can be measured successfully and accurately, this figure is still not necessarily actionable: we do not always know why some calls are not resolved first-time. Without a greater level of insight, contact center managers may not be addressing the real issues that are impacting on customer satisfaction and the effectiveness of the operation. In the near future, we expect to see the power of speech analytics being directed at understanding why customers contact a business multiple times.

It is worth noting that the majority of contact centers who track first-call resolution do so **only** based on the initial telephone call itself: that is, they do not check whether the action or business process initiated by the call has been followed through successfully. The vast majority of the complaints received by a contact center are about the failings of the wider business, so focusing entirely upon the work done within the contact center is missing the point of measuring first-call resolution. The traditional insularity of the contact center operation fails the needs of the wider business, but without an explicit remit to investigate and report on processes outside the contact center, it can hardly be blamed for the failure to hunt down and fix the wider problems.

Perhaps logically, the most widely-used form of gathering first-call resolution information is also seen as being the most effective (or else, why would it be so widely used?). Call monitoring is seen as being very effective by 37% of respondents that use this, with only 5% viewing it negatively. Tracking customer callbacks, and carrying out follow-up email, web or phone surveys are also generally thought well of. With the exception of SMS, which is rarely used by respondents in any case, most first call resolution measurement methods seem to have their advocates.

Figure 42: Effectiveness of first-call resolution measurement methods (where used)

Effectiveness of methods of measuring first-call resolution
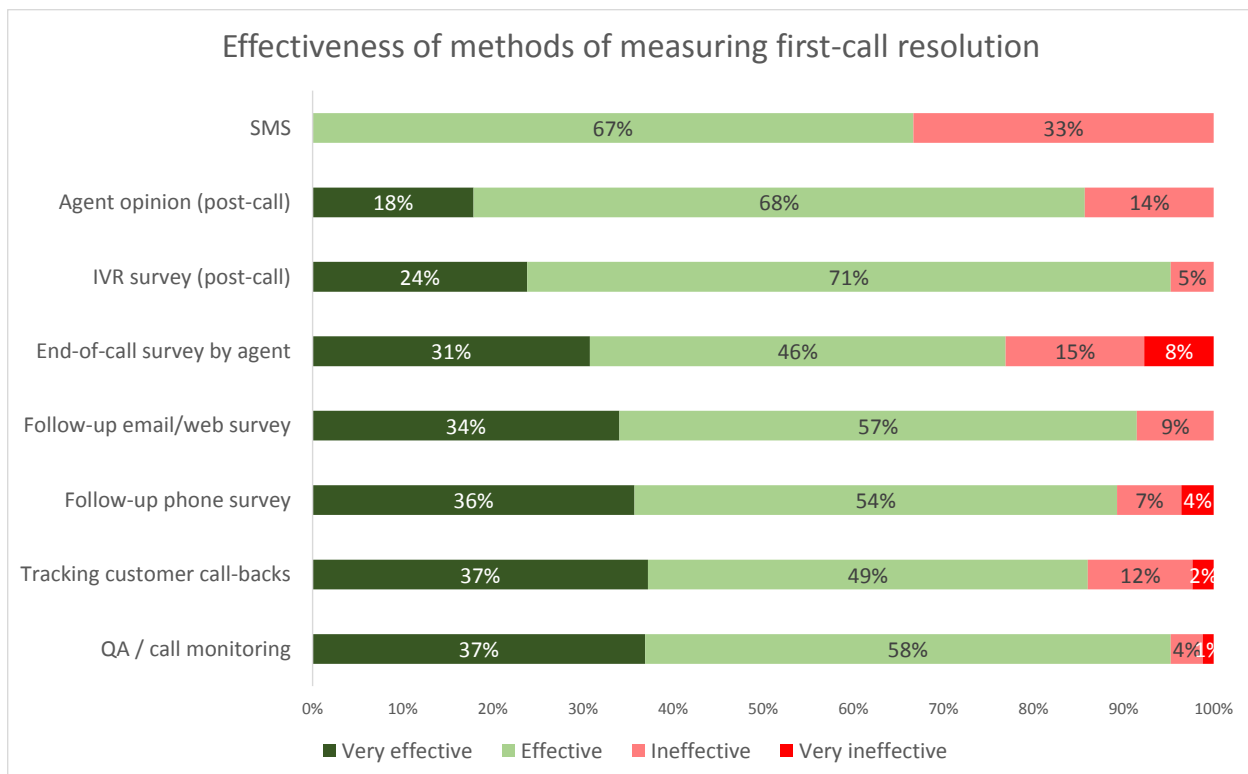
ALTERNATIVE CONTACT CENTER MODELS

Although many contact centers still operate in the same way in which most were originally set-up - a single, centralized site - for many years there have been increasing commercial pressures and technical opportunities allowing businesses to look at alternative ways of working, such as using virtual contact centers, or encouraging homeworking.

The causes for this include:

- the presence of multiple contact centers - possibly gained through mergers and acquisitions (especially in the finance, insurance, telecoms and utilities sectors) which are not linked together in any way, thus not gaining from any economics of scale
- increasing levels of staff attrition and difficulty in finding the right staff to replace them, especially highly-skilled agents
- the requirement of many contact centers for better-qualified staff, rather than just "warm bodies" to answer phones as a result of self-service take-up
- the need to keep the contact center open for longer, despite agents not wishing to work anti-social hours or businesses wanting to pay for a full shift when only a couple of hours are needed
- the rising concern about coping with call spikes, which could be dealt with by logging agents on for an hour or two, rather than having them come in for a full shift
- the desire to increase the size of the contact center, which may not be possible in that location due to market saturation and a shrinking labor pool.

This section looks at alternatives to the 9-to-5, full-time, centralized ways of working, and investigates the number and type of contact centers that are using these alternatives.

VIRTUAL CONTACT CENTERS

The application of technological abilities to commercial issues created the virtual contact center which, although located in multiple sites, can still be run as a single logical entity. The virtual contact center consists of many operations (including homeworkers or satellite offices) which are linked together so as to be viewed and managed as a single site, allowing significant economies of scale and improvements in performance to take place, but with fewer of the attendant problems around environment, morale and attrition that plague many very large operations.

The virtual contact center model has been driven by several factors. These include:

- For businesses involved in acquisitions or mergers, the number of contact centers they run have increased, particularly in the finance, insurance, telecoms and utilities sectors

- Rapid contact center growth in certain geographical hotspots has caused agent recruitment issues. This has meant that businesses have to consider new physical locations in which to establish and grow their operations

- A rise in teleworking and remote locations means some agents may never see their parent contact center. This is increasingly the case in 2nd- and 3rd line technical support, where skilled agents can be extremely scarce and expensive to replace

- Some companies prefer to offer a local touch to customers by basing operations in the area or country which they serve, or in which the company already has a non-contact center operation, but with capacity available to develop a new telephony department

- Improvements in networking and communications, such as cloud and IP telephony, have meant that the virtual contact center is now much more easy to realize at an affordable cost with reduced upfront investment required

- Companies have increasing needs to serve global customers, necessitating either contact centers operating in different time zones, or paying overtime for working anti-social hours

- Operational redundancy, disaster recovery and continuous service are possible with multisite contact centers

- Smaller contact centers tend to have lower staff attrition rates than large operations, meaning that a large virtual operation made up of several smaller sites could benefit from this.

Treating multiple contact centers as a virtual contact center allows great efficiencies can be made through economies of scale. This is especially true where businesses are using skills-based routing. All agent competencies are displayed to the scheduler - regardless of agent location - who can be more flexible, simply because the available resource pool is so much more deep.

![Enghouse Interactive logo]

Maximize the value of every customer interaction

Anytime – Anywhere – Anyhow

Multi-Channel Contact Center

Self-Service IVR & Knowledge Management

Outbound Dialer

Operator Consoles

Call Recording & Quality Management

Integration & Optimization Solutions

Industry Solutions
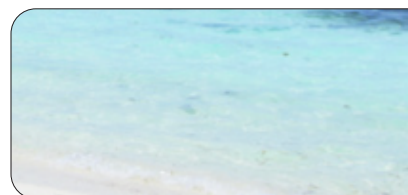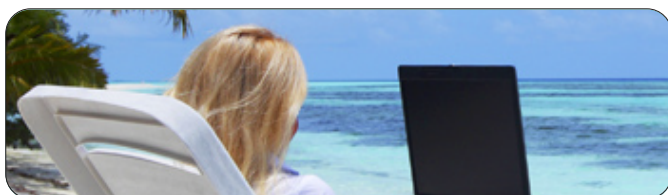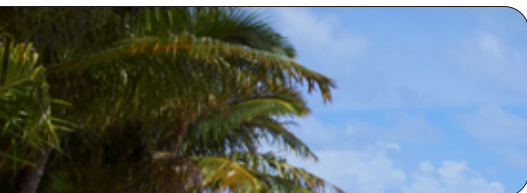
Effect of virtual contact center	Commercial advantage
Larger pool of skills available	More likely to be able to match the call to the customer effectively. This improves first-call resolution, customer satisfaction and also improves agent morale, as they are able to help more customers first-time. It also means that businesses can route calls based on more detailed criteria than previously, as the available pool of skills is greater (e.g. if there are 5 contact centers, but only 1 person in each contact center speaks a specific language, then it only becomes feasible to offer this as a routable skill once the contact centers are linked together to create a virtual language team)
More balanced work across contact center locations	In a stand-alone multiple contact center environment, there is a very real risk that agents in one contact center will be overworked (leading to stress and increased queue times), whereas those in another may be underused yet unable to help their colleagues. The ability to overflow calls between physical locations is a key advantage of virtual contact centers, which can improve both customer and agent experience
Skills may be widely deployed and managed	Virtual contact centers can look at agent skills and competencies with a view to scheduling staff and routing calls accordingly. This allows specialized virtual teams to emerge
Forecast and schedule only once	Where many contact centers are treated as a single entity, work can be shared across sites as the contact centers are viewed as a single resource. Viewing the operations and skills available as one entity makes scheduling easier and more flexible. The resource pool is much deeper, allowing customers to be offered more skills, and the time and cost of scheduling is greatly reduced
Increase global coverage	For global businesses which have contact centers spanning distant time-zones, the opportunity exists to create a follow-the-sun contact center, where the customer can be served 24/7, without the need to increase headcount or bear the costs and inconvenience to staff of working anti-social hours
Deploy applications in a standardized way	Virtualization can mean that improving and standardizing the functionality available to agents in separate locations can be easier through a cloud-based hosted solution. Making the same functionality available to each agent regardless of their location means that a consistent level of customer service and agent experience can be achieved
Offer 24/7 availability and use more flexible and imaginative agent resourcing	Agents which work from home or smaller offices allow the business to expand dynamically, offering 24/7 cover without the cost of keeping the major contact center operation open. Virtual contact center technology also allows businesses to reach out to new labor pools such as the housebound and other non-traditional sources
Allows dynamic choice of outsourcers	If a company uses multiple outsourcers, these outsourcers can bid dynamically for the work available, e.g. the company does 80% of the work with its own people, but outsources the overflow as and when needed

Linking contact centers together has been a complex task, especially in circumstances where the business has multiple types of switch and other infrastructure, perhaps as a result of merger and acquisition history. Recent years, and the widespread take-up of IP-based infrastructure and cloud-based solutions has made such a task easier. Without a solid and scalable platform, separate applications, hardware and locations will remain isolated, or cost so much time and money to integrate that it would be better to leave them alone. Using a single open platform, this investment becomes much lower, and leaves the way open for businesses to add locations, channels and applications as needed. The single open platform should be a concept which is always in the minds of people making decisions about the future of their multi-site, multi-platform operations.

In today's commoditized markets, organizations are focused on creating differentiations and on delivering greater value to their customers, achieving this through organic growth as well as strategic alliances. Organizations also rely on multi-site 'follow the sun' models, knowledge workers, and virtual agents and their blended skill sets, with Contact Center the primary communication point for customers. Savvy customers appreciate contact center technology that grows with the business, reduces overall cost of operations, has scalable features, and offers flexible deployment models such as public or private Cloud, hosted, on-premise or a combination thereof.

42% of this year's survey respondents are part of a multiple-site operation, and as such, are potentially part of a larger virtual contact center structure.

46% of respondents in multi-site contact centers act as part of a full virtual contact center operation, with a further 29% acting as a part of a partial virtual operation (e.g. in cases where a only few of the overall number of US operations are linked together). These figures show something of an increase in virtuality compared to previous years.

Looking at the uptake of virtualization by contact center size, the larger operations have historically been much more likely to put enabling technology in place to gain further from their existing economies of scale, although with the high proportion of respondents showing a mix of virtual and standalone operations, it would be safe to say that this is still a work in progress.

Figure 44: Virtualization by contact center size (multiple-site operations only)

Virtualization by contact center size (multiple-site operations only)

	Small	Medium	Large	Average
Stand-alone	50%	31%	13%	26%
Mixture of virtual and stand-alone	33%	15%	38%	29%
Virtual contact center	17%	54%	50%	46%
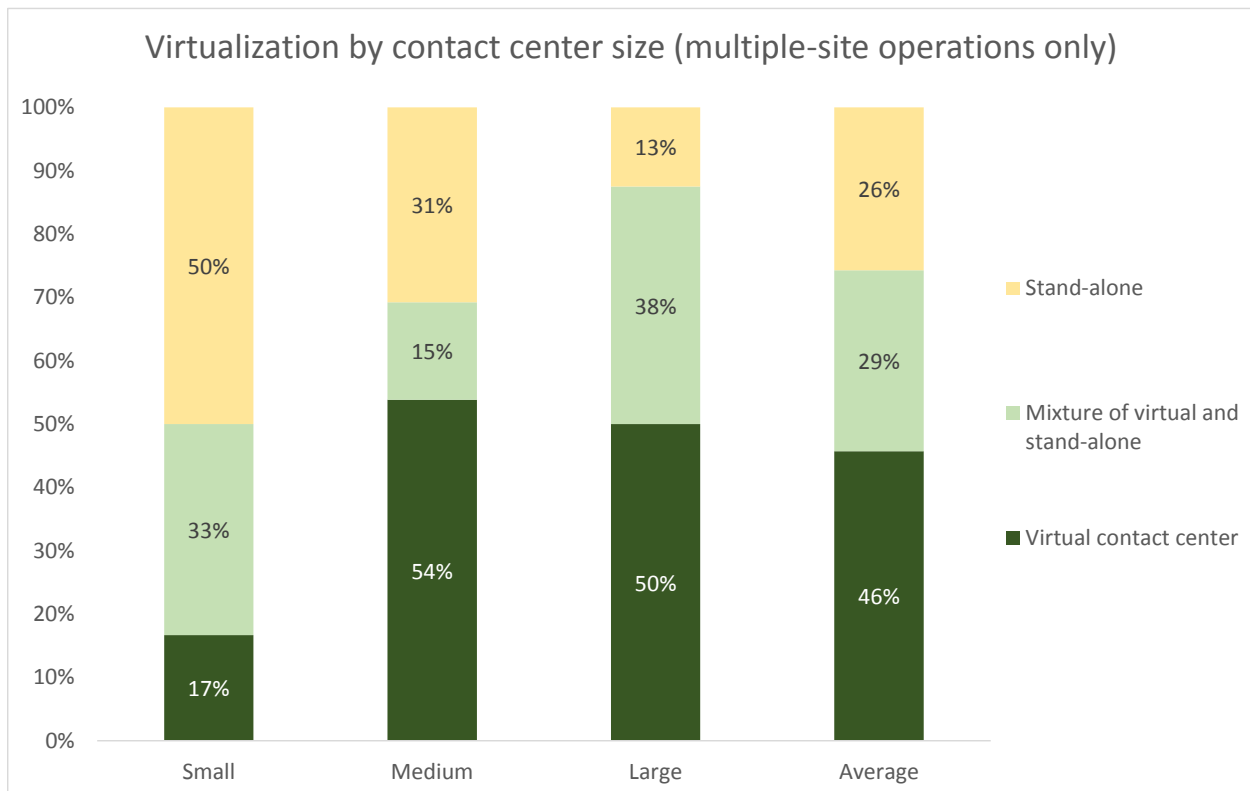
Respondents with virtual contact centers have generally been very pleased with the gains in efficiency and service level that they have experienced. The ability to smooth out call spikes by moving them between contact centers, and the reduced wait times were particularly mentioned, although all of the potential virtual contact center benefits mentioned were rated positively, showing a maturity and bedding-down of the technologies. However, there is some lack of unanimity amongst respondents about the net effect of costs caused by virtualizing contact centers.

Figure 45: Effects of contact center virtualization

How has virtualizing your contact centers affected...

Category	Positive	Neutral	Negative
...costs of attrition, buildings, hardware, software implementation, etc?	58%	27%	15%
...call costs between sites?	72%	28%	
...the ability to offer longer opening hours?	73%	27%	
...the range of agent skills available to callers?	74%	22%	4%
...agent utilization / queue lengths?	81%	19%	
...handling of call spikes?	85%	15%	

Positive ■ Neutral ■ Negative

The issue of coping with call spikes has grown year-on-year, and virtual contact centers allow agents from other locations (including homeworkers) to make themselves available to deal with a different queue, being seamlessly moved back to their original work when the spike has flattened or the length of their own primary queue triggers a move back to their original work. Dealing early with such call spikes can often remove the issue before it becomes a real problem, and such movement between call groups can be done automatically by setting thresholds in each queue. Such flexibility of agents means that there is a fairer agent utilization, as the situation of a set of agents sitting idle while others are under great pressure is less likely to happen.

Figure 46: Reasons for not implementing a virtual contact center

Reasons for not implementing a virtual contact center

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Can't see the potential business benefits		25%	17%	42%	17%
Too expensive and disruptive	8%	15%	31%	31%	15%
Concerns about data security	8%	25%	42%	17%	8%
Concerns about the management of teams at multiple locations	13%	47%	13%	7%	20%
Too many different systems at each site	14%	29%	29%	29%	
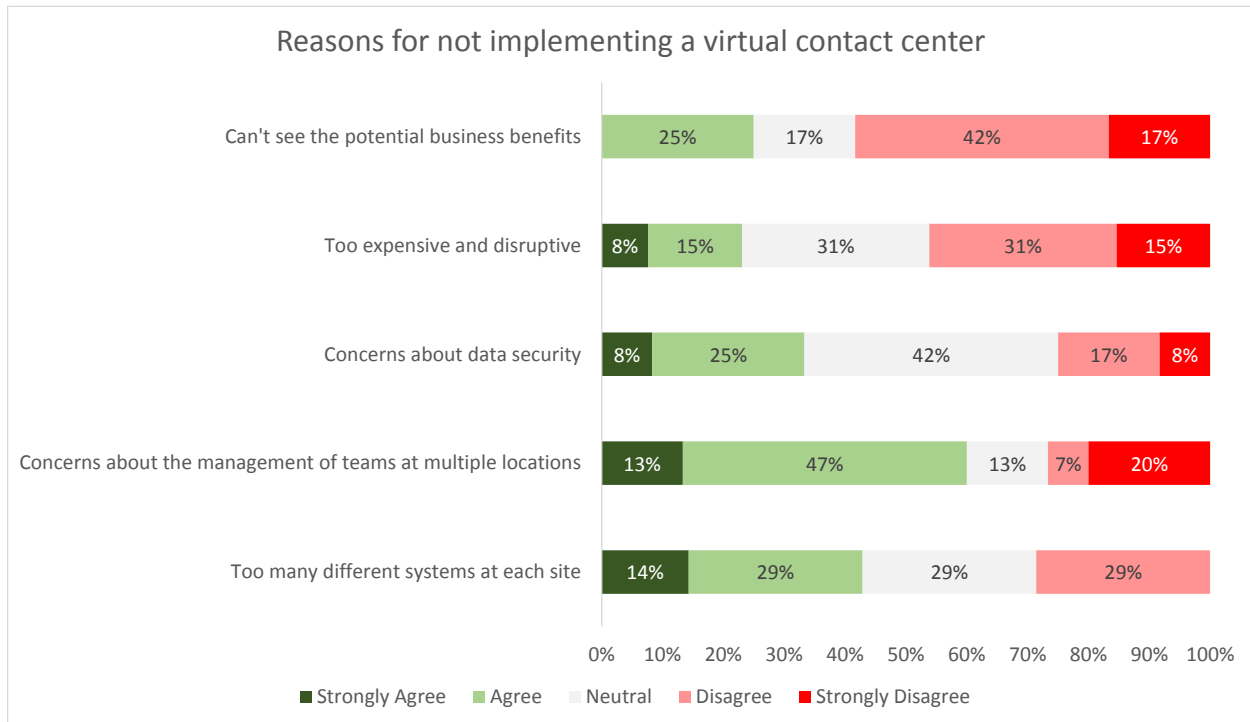
Of the multiple-site respondents who had not virtualized their operations, concerns about data security, inter-site integration and remote management are the biggest problems, unlike the years up to 2007, when the biggest issue was failing to see the commercial benefits of virtualization. It seems as though some of the industry has become more convinced about the benefits, but is being held back through needing to persuade the senior management to make the necessary investment, or through technical issues that they believe to be insurmountable (or at least, not worth solving compared to the potential gain). While 25% of respondents agreed that they could not see the business benefits of virtualization, 59% disagreed that this was the case for them.

There is not one single overwhelming inhibitor, rather it seems that suppliers of virtual contact center solutions will have to make their pitch against many objections, rather than being able to focus on one.

Concerns related to ease of integration, data integrity, security, operational complexity, scalability, agility, remote management, and centralized and distributed administration are addressed by true multi-tenant, virtualized, single hardware instance contact center deployed in any number of scalable Cloud configurations. Organizations adopting such a robust solution are free to focus on optimizing their business processes and delivering great customer experience.

Is there a paradigm left to be shifted?

During a recent customer conference I asked an analyst what was the last ground-breaking development in the customer communication space? His answer was, "The Internet."

It is true that the contact center industry hasn't had its "iPad" in quite a while. We use the word innovation quite loosely. May I propose the idea that incorporating a slightly modified version of something somebody else is already doing is NOT innovation.

However, in the customer communication space there is room for real innovation. It may not be the next iPad—but a different kind of innovation. I present this challenge of self-reflection and paradigm shifting to the readers: Don't wait for someone else to tell you what's next. Find different ways to look at things and more efficient ways to solve problems.

Customer satisfaction and customer loyalty do not necessarily guarantee repeat business. However, customer advocacy does. That's when customers are advocates of your brand just like the Apple users are of Apple products. In a saturated market, in addition to having a truly differentiated solution, one sure way to win new business, and keep existing customers is by going beyond great customer service and delivering even greater customer experience.

Based on the premise that there is no new game-changing or disruptive technology coming in the near future, I challenge you to find ways to innovate with what you already have. Shift your paradigm. Move your own cheese. Below are a few ideas to get you thinking differently about the challenges you face when it comes to customer interactions and different ways of approaching solutions.

- **Keep up with the technology.** Your customers are carrying iPads and iPhones and grandma is Face-Timing with her grandchildren around the world. Your contact center technology should not be more than 3 years old. Adapt the latest innovations in infrastructure, business software, communications technology, and programming languages that take advantage of latest hardware and operating system enhancements.

- **Know the difference between "greater connectivity" and "greater connection."** The former does not necessarily signify the latter. Just because you now have a multi-channel contact center and social media channels, does not mean you are truly reaching your customers. Technology is never a substitute for a personal touch. Use your contact center as a tool to re-establish the human-to-human connection and make your customers feel special.

- **Actively seek out enhancement opportunities.** Listen to your customers and not just to the survey responses. Learn what their challenges are. Create a library of customer interaction use cases if you don't have one already. Employ highly skilled quality assurance professionals to help develop use case scenarios looking outside-in, as well as the performance testing and success metrics for them.

- **Focus on the right numbers.** Performance metrics do not mean much if they don't drive the desired business outcome. For instance, reduction in call handling time could be causing lower customer satisfaction scores. Try to find similar correlations and focus primarily on their business outcomes.

- **Be open to flexible deployment model.** Organizations can easily be limited to certain deployment configurations when selecting business applications. This often leads to making compromises on features and functionality, directly impacting business processes and, in turn, customer experience. What should matter the most is delivering the results your business, and its customers, require—without worrying about how the business applications are deployed.

- **Remember and Reward your agents.** Only a select group of people within your organization have direct contact with the customer. Agents—back office and front office—are your knowledge workers. They are the people who can deliver great customer service and superior customer experience. Empower them with the right tools: efficient ways to collaborate and handle, process, and share information. Train them, coach them, and listen to their feedback. Incentivize them for delivering exceptional customer experience and gamify their reward system.

- **Collaborate with cross-discipline experts**. Different departments interact with your customers for different purposes. Leverage all of their unique perspective on your customer needs and challenges as you seek to identify opportunities for innovation. Take a simple example of recording IVR prompts, those are typically recorded by an engineer deploying the IVR solution and marketing's input is hardly ever sought.

- **Remember your customers.** Change the name from call center to "Customer Engagement Center." The word "customer" will hit you hard and then sink in. It's a humbling thought to have a constant reminder that if it weren't for the customers we wouldn't have our jobs.

Whether you have the technology you need, or your company has imposed a freeze on technology related expenses, you can still improve your Customer Engagement Center. Focus on use cases or business processes and find ways to mesh-up and stitch together using what you already have to create new ways of doing things.

Early on in my professional career I realized the genius is in the implementation—not necessarily in the "Lego blocks" you buy from the vendor. Over the next few years the competition is only going to get more intense and commoditization of goods and services will see an unprecedented level of maturity. The winners will be the ones who have a keen focus on delivering exceptional customer experience through innovative use of the contact center and related technologies.

HOMEWORKING

Homeworking and homeshoring promise contact centers significant benefits, but is perhaps not for every agent or contact center. Amongst the potential advantages are:

- the environmental benefits of working at home, reducing carbon emissions and decreasing congestion on the roads
- offshored contact centers are often unpopular, yet businesses are looking at ways to cut costs
- increased flexibility in working hours means rapid response and reduced idle time
- the increasing costs of recruiting and retaining staff allow agents outside the commutable distance to work as well.

Remote working opens the door to the sorts of people who might not otherwise seek employment in a typical contact center but who would happily work in their own home taking calls. For an industry facing cyclical difficulties in recruitment of employees who themselves are having to become more highly skilled and deal with more complex issues year-on-year, this opportunity to deepen the labor pool without widespread pay increases should not be ignored. The contact center could also use limited homeworking (for example, one day a week) as a reward for its top agents, encouraging their loyalty and offering a tangible promise to others.

Remote agents, whether working at home, or in a telecottage (small, remote sites), can be a part of the larger virtual contact center by being linked to the main operation via DSL or a leased line (in the case of telecottages). Some solutions permit least-cost routing and redundancy, where if the IP voice quality deteriorates, the call can be switched onto a back-up connection until the IP quality improves sufficiently to move it back to IP. Agents need only a PC which may act as a softphone, a headset (or IP phone) and a data connection.

Remote agents or virtual agents are highly desirable for organizations that must cater to customers in niche markets, living in various geographic locations and time zones, and speaking different languages. These agents or knowledge workers work in front, middle, or back office. Even the smallest of such contact centers can benefit from an application that offers the same powerful agent workspace to all agent types and ensures their high productivity with ready information access, robust collaboration tools, efficient workflows, seamless integrations with 3rd party applications, and 360 degree view of customer interactions.

CURRENT USE OF HOMEWORKING

39% of respondents are already using homeworking, with 4% running a pilot scheme. 24% of respondents have not acted either way on homeworking, although 1 in 5 state that they have made a firm decision that homeworking is not for them.

Figure 47: Current use of homeworking

Current use of homeworking

- We cannot use homeworking (a firm decision has made about this) 20%
- We use homeworking already 39%
- Nothing done so far 24%
- Researching / evaluating 13%
- Running a pilot 4%
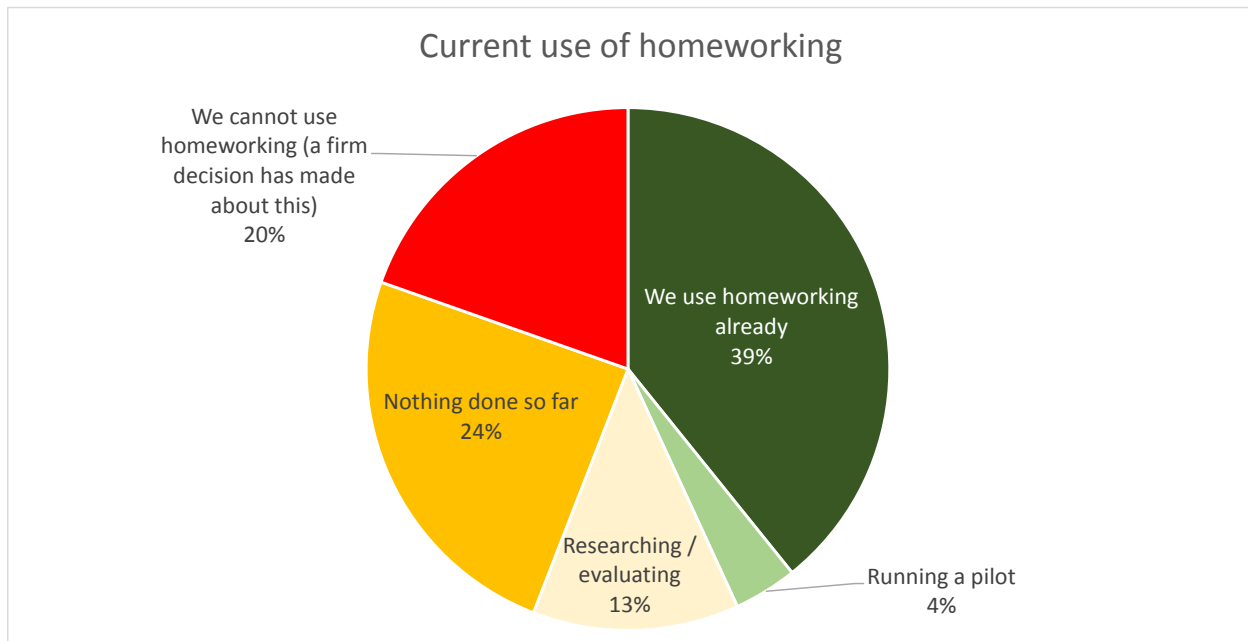
The proportion of contact centers using homeworkers has almost doubled since the end of 2007, and the overall numbers of homeworking agents has more than trebled.

Figure 48: Changes in use of homeworkers, 2007-Q1 2014

Year (end)	% respondents using homeworkers	Mean % of agents that are homeworkers industry-wide
2007	22%	3%
2008	21%	4%
2009	36%	6%
2010	37%	11%
2011	42%	10%
Q1 2013	45%	10%
Q1 2014	43%	11%

NB: calculation for "mean % agents that are homeworkers industry-wide" is taken from "% of respondents using homeworkers" multiplied by the mean % of agents that are homeworkers ONLY from these operations (i.e. 43% x 25% in 2014)

Respondents that use homeworking reported that a mean average of 25% of their agents were homeworkers (with a median of 14%). An average of 83% of a homeworker's time is spent working at home, meaning that an average of around one day a week is spent at their parent operation.

There is a continuing and growing trend that larger operations are more likely to use homeworkers than small operations, with 46% of large operations, 40% of medium and 31% of respondents from small contact centers doing so. Outbound operations are far less likely to use homeworkers than inbound operations.

Figure 49: Current use of homeworking, by contact center size

Current use of homeworking, by contact center size
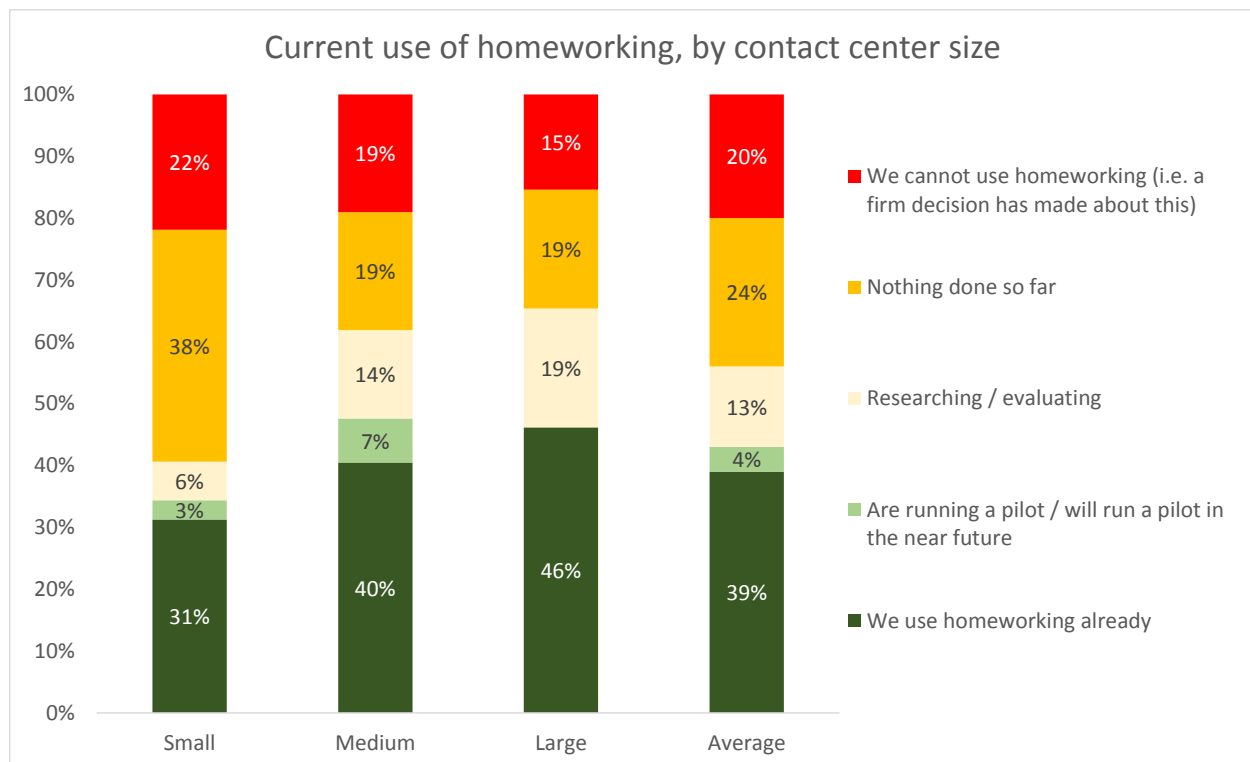
Although asking survey respondents to predict the future is a risky business - much of the time, organizations tend to be somewhat overenthusiastic, and underestimate how long is needed to achieve anything - it is interesting to see that the proportion of contact centers not using any homeworking is predicted to decline from 57% to 23% within the next two years.

Although we would be extremely surprised if this level of growth in homeworking materialized in reality, it is indicative that there is a broadly positive expectation around the future of homeworking, even amongst the majority of contact centers that do not use it today.

Figure 50: Proportion of agents to be homeworkers, 2014 & 2016

Proportion of agents to be homeworkers, 2014 & 2016
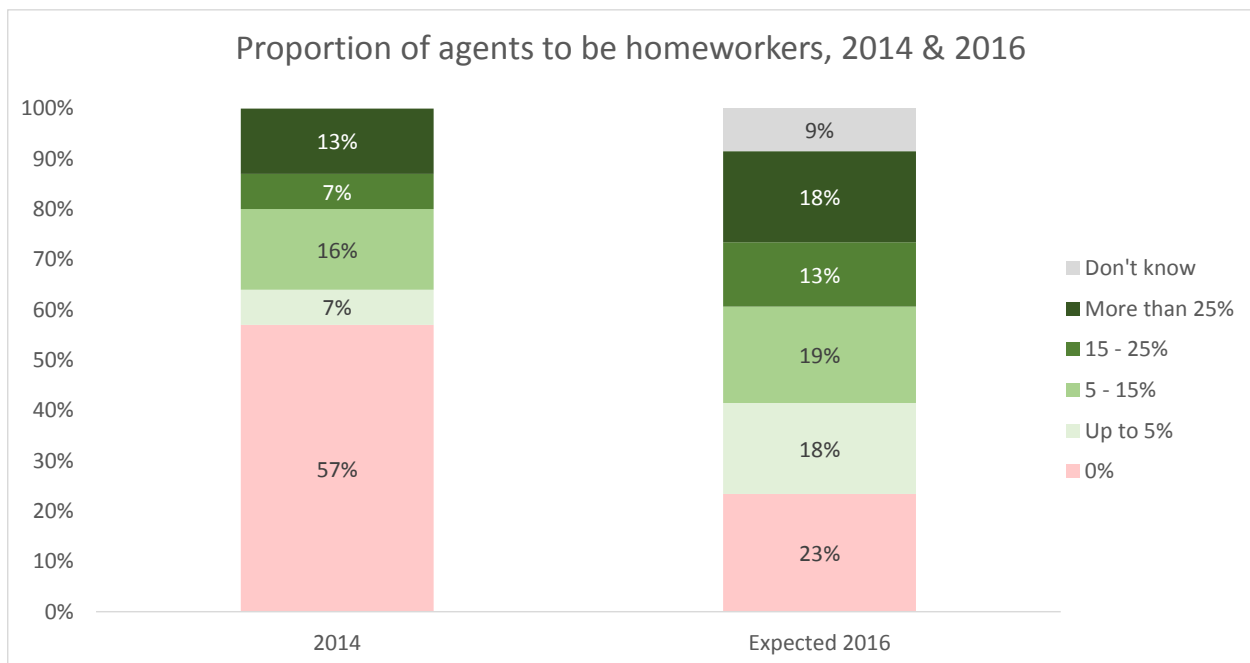
BUSINESS DRIVERS FOR HOMEWORKING

The main drivers for considering homeworking are reported to be a reduction in agent attrition, and a greater ability to handle overflow and call spikes. Homeworking is expected to reduce agent attrition, because it takes away the stress, cost and time of the commute and enables the employee to work in less stressful, more personal surroundings. This allows the business to offer a more flexible working day to their employees, for example, a 4 or 5 hour shift in the middle of the day, allowing the employee to pick up and drop off their children at school, which may also coincide with the busiest period of the day for the organization. In such cases, the employee is happy to work the hours that suit them, and the organization bears less cost. Agents are far more likely to be able to work an hour or two in the evenings as well, allowing the contact center opening hours to be longer.

The ability to handle overflow or unexpected volumes of traffic is also a particularly good reason to consider homeworking: in the same way that the virtualization of multiple contact center sites allows agents to be moved between virtual queues instantaneously, having a large pool of homeworkers to draw upon very quickly, as needed, can be a great advantage in handling call spikes.

Figure 51: Business drivers for homeworking

Business drivers for homeworking

Category	Percentage
Reduced agent attrition	72%
Handling overflow or unforecasted needs	71%
Offer longer opening hours	59%
Satisfying seasonal demand	46%
Difficult to find skills (e.g. languages, technical knowledge, certifications)	43%

120
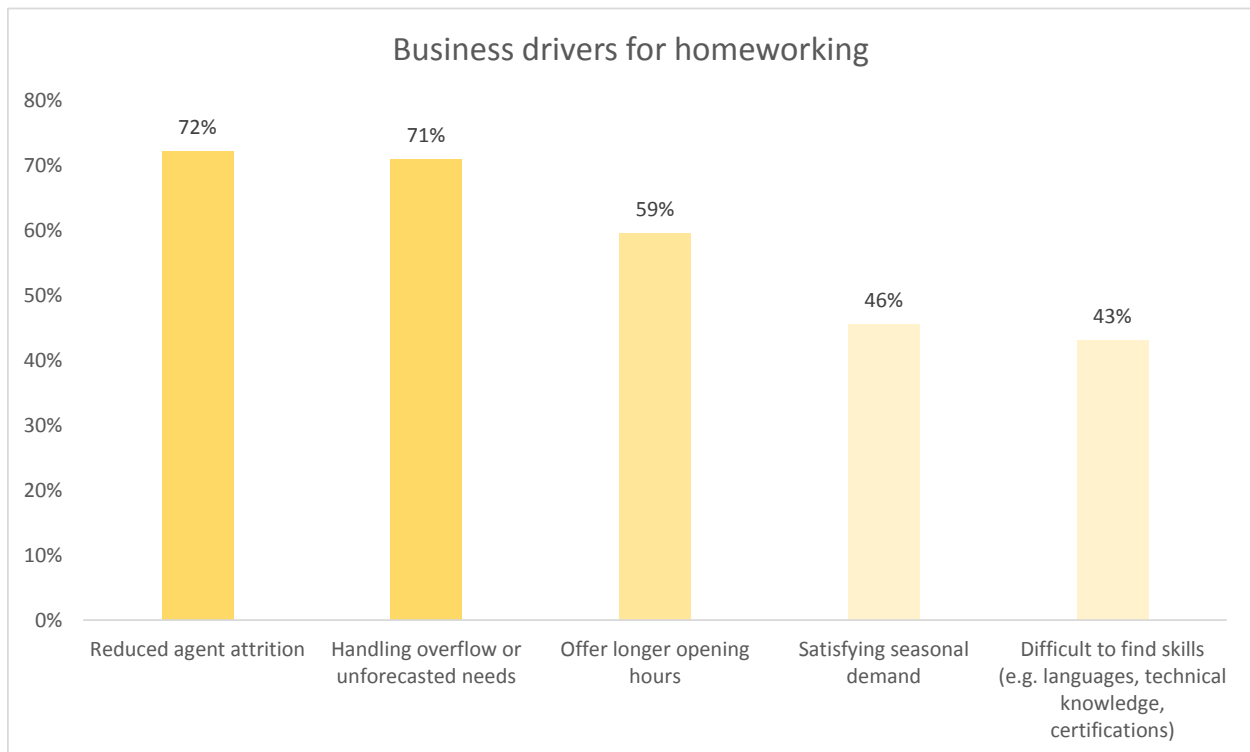
THE EFFECTS OF HOMEWORKING

Respondents' view on the future of homeworking are more positive than they have been in the past, perhaps as a result of there being many definite successes experienced from businesses which have started using homeworking. In the following charts, respondents were asked to give their views on homeworking, and responses are segmented depending on whether or not the respondent has had any experience of homeworking.

"It is / would be difficult to manage homeworking agents effectively"

The concern that homeworkers cannot be managed effectively from a remote location has always been an objection to this way of working. Isolation can be a problem for both agent and management, and not all roles or agents are suitable for homeworking. It is generally considered that new mothers returning to work part-time, or older people who wish to reduce their working hours but who are not yet ready to retire completely are particularly suitable to be considered for homeworking roles, which require experience and maturity in the agent. With real-time adherence and call management systems in place, there is no real reason that a virtual contact center made up of homeworkers is more difficult to manage than a 'typical' operation, although the role of the team-leader (being someone to help actively) has to be re-addressed.

Figure 52: Opinion: "It is / would be difficult to manage homeworking agents effectively"
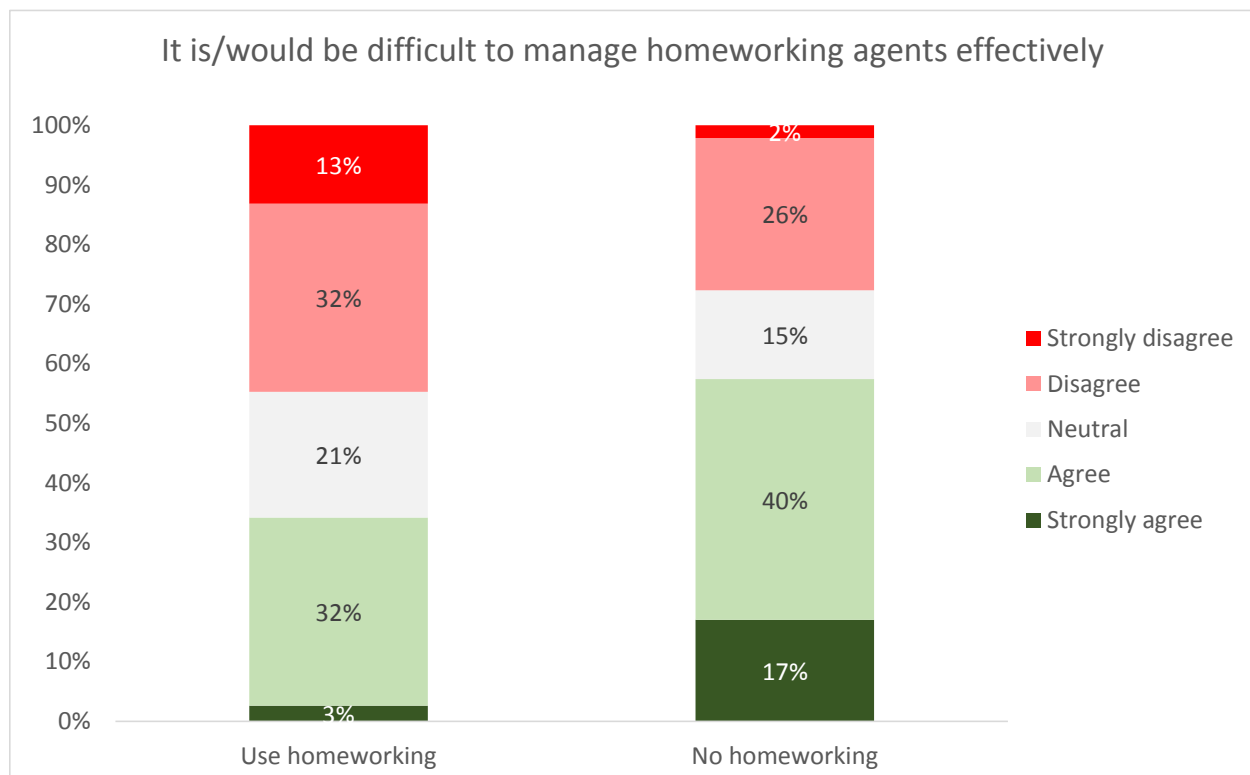
Once again, results show that those contact centers with some experience of using homeworking are far more likely to be positive about management of staff than those without this experience. 57% of non-homeworking contact center respondents are concerned about this, although 35% which have implemented some homeworking agreeing that remote management was difficult to some degree. 45% actively disagreed that it was any more difficult than managing someone in a traditional contact center environment.

Non-homeworking respondents are more likely to expect homeworkers to be less productive than centralized staff, perhaps as they are not in such a high pressure environment, with supervisors encouraging them, peer pressure and wallboards telling them the state of play. To some extent, it depends on the definition of 'productive': if it is a matter of call volumes, then not having these cues to hurry up may well have an effect. On the other hand, there are perhaps fewer distractions in the home. In any case, there is no reason to expect that quality will suffer - probably quite the opposite - and the homeworking model is particularly suitable to moving agents between queues rapidly, which in fact will improve the productivity of the entire operation.

"Homeworking brings / would bring us flexibility to add agents and be open longer hours"

This is one of the main advantages of homeworking, in that travel-to-work time is eliminated, and in an emergency, agents can be requested to log-on for an hour or so by a text message to their cellphone (in a typical contact center, the operation just had to live with it, or overflow calls to an outsourcer, which can be expensive).

Some contact center agents rely upon public transport which may not run well outside core hours, and some are put off by having to wait around and travel in the dark. Homeworking also opens the door to the sorts of people might never seek employment in a typical contact center - as the industry has a mixed reputation - but who would happily work in their own home taking calls.

Figure 53: Opinion: "Homeworking brings / would bring us flexibility to add agents and be open longer hours"
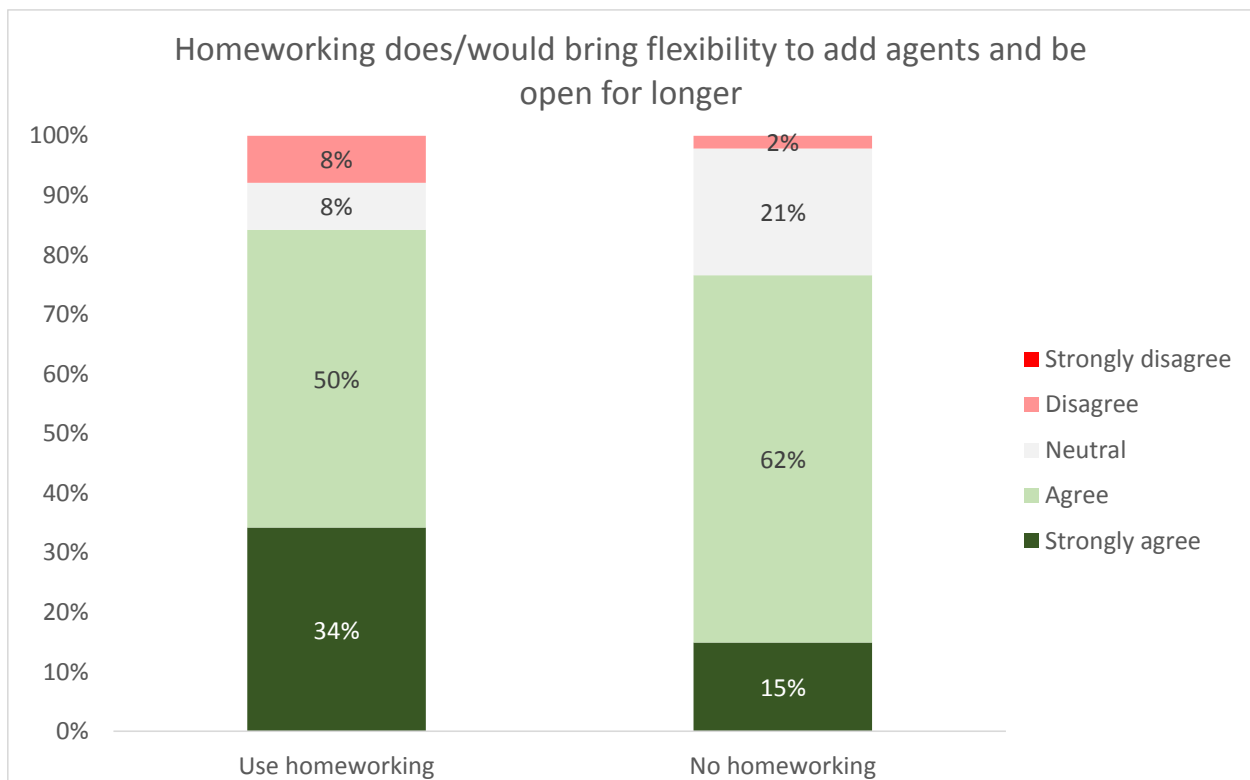
There is a general opinion that flexibility of staffing is both a potential and actual major advantage of homeworking. 84% of contact centers using homeworking agreed that flexibility was a benefit to them as a result, and most non-homeworking respondents seemed convinced of this potential too.

"Data security issues are / would be a concern"

Working in an unsupervised environment is likely to mean that the potential risks for data theft and fraud are greater than in a closely-supervised environment such as a traditional contact center, especially if any physical paperwork is involved, payment card details taken or passwords written down. With the home workspace accessible to family members and visitors as well, risks are not just restricted to the homeworker.

The use of an automated mid-call or end-call payment card application would reduce the opportunity for deliberate card fraud and definite policies around the storage and usage of equipment have to be agreed upon. There are various data access methods available that circumvent the need for written passwords, such as voice biometrics or coded key-fobs, and strong firewalls and encrypted hard drives will also reduce risk.

Figure 54: Opinion: "Data security issues are / would be a concern"

Data security and fraud issues are a concern
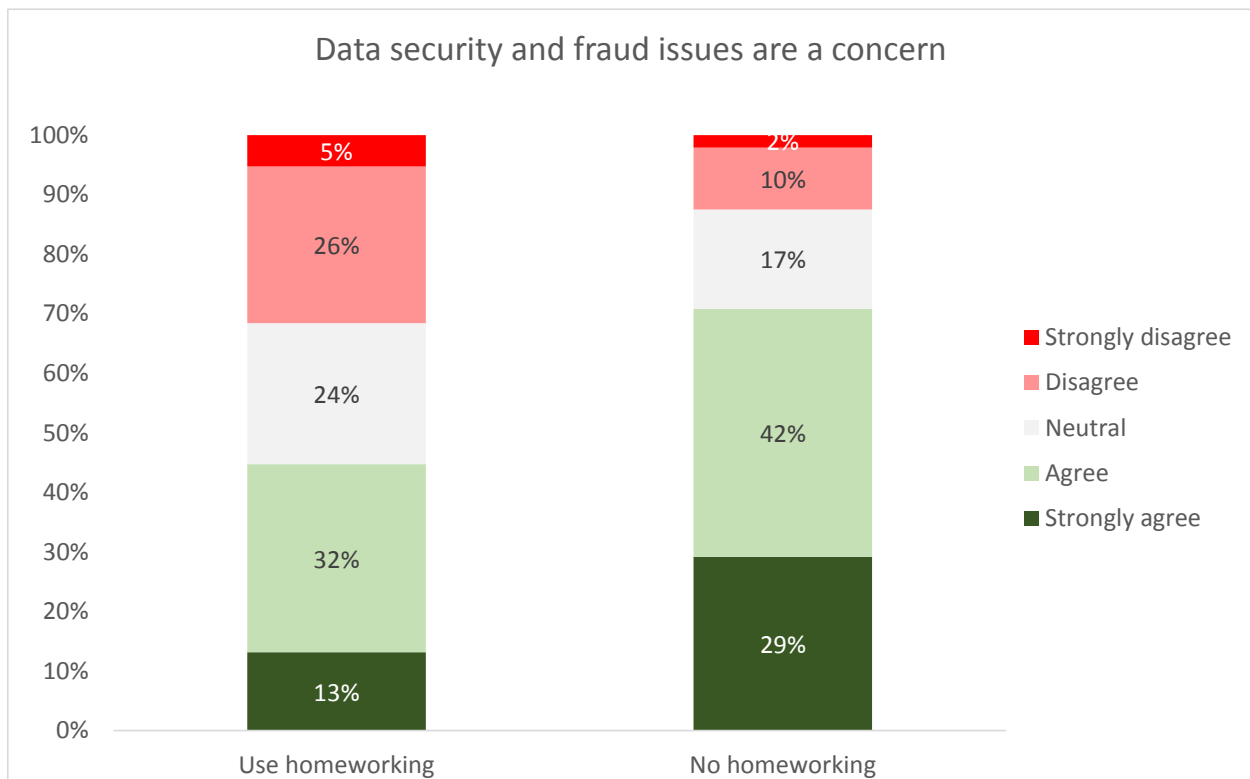
45% of those who use homeworking agree or strongly agree that data security is a concern to them, and although this is a significant drop on last year's figure of 71%, it is still very significant. It appears that this issue is certainly important in reality, with penalties for non-compliance and the effort of getting various security certifications clearly being an issue for many.

"Homeworking is / could be used as a performance incentive or reward for the best agents"

Interestingly, this possible advantage to homeworking is one which most respondents on both sides of the homeworking fence now think is feasible, although homeworking contact centers used to be much less likely to see this as a potential carrot to dangle in front of staff. It may be that the work required to get an agent into a successful homeworking environment (health & safety checks, IT and telecoms infrastructure, training, etc.) is less onerous than it has been in the past, as experience and technology smoothes the way.

Figure 55: Opinion: "Homeworking is / could be used as a performance incentive or reward for the best agents"

Homeworking is/would be useful as a performance incentive or reward for the best agents
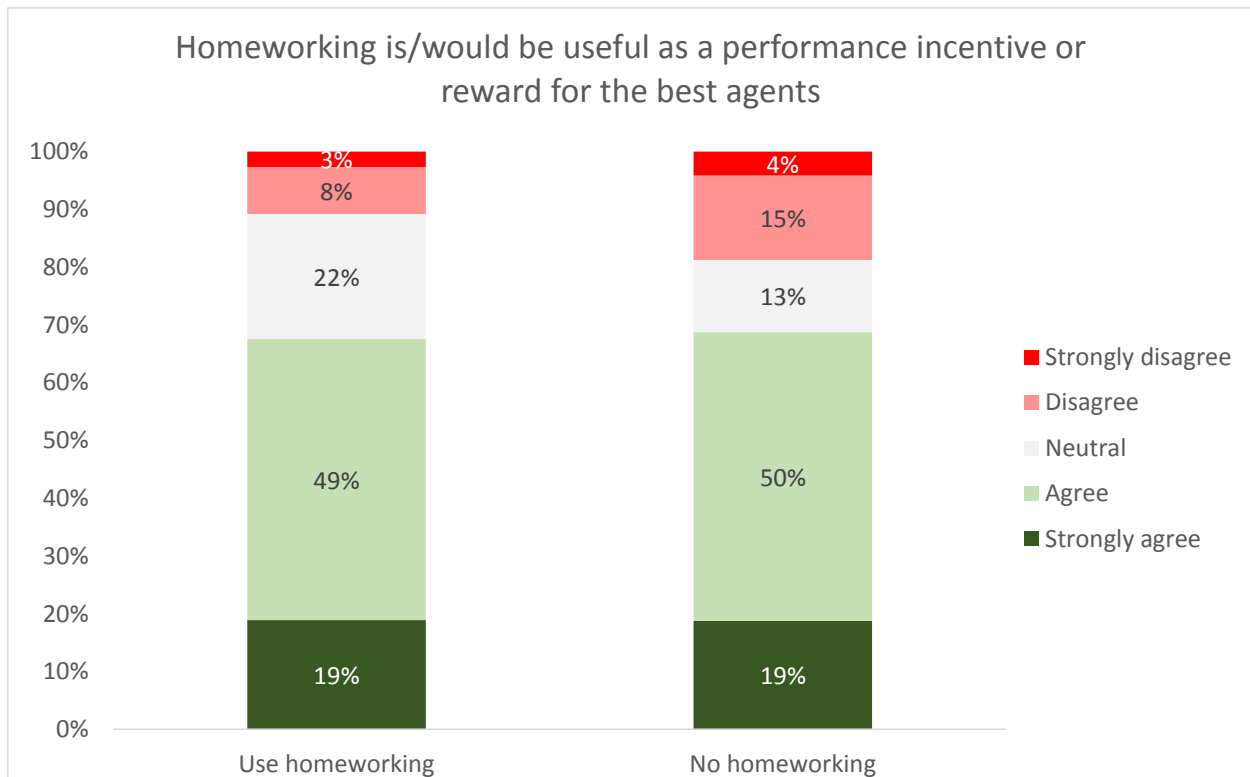
"Many staff do not / would not have anywhere suitable to work in their homes"

For some contact center workers, it would be difficult to have a room away from the noise of the household, and this is a concern for both types of operation, with around 40% agreeing that this would be a problem. Obviously, it's important to consider working location on a case-by-case basis to assess the suitability of the agent for homeworking.

Figure 56: Opinion: "Many staff do not / would not have anywhere suitable to work in their homes"

Many staff do not/would not have anywhere suitable to work in their homes

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Use homeworking: Disagree 25%, Neutral 33%, Agree 42%

No homeworking: Strongly disagree 2%, Disagree 28%, Neutral 30%, Agree 33%, Strongly agree 7%
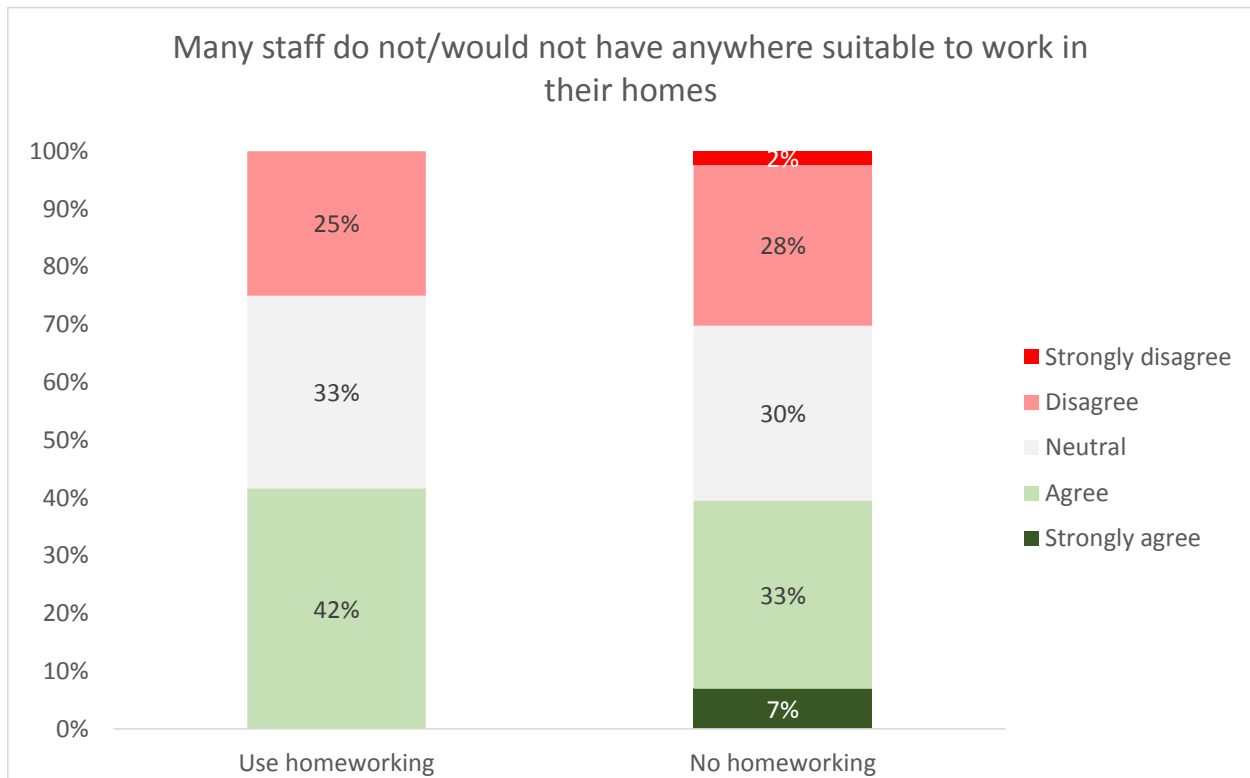
"Homeworking reduces / would reduce the cost of equipment"

A contact center will have to be equipped with PCs, desks and phones to accommodate the maximum numbers of agents that it will require at any point, leaving desks empty in the quieter times. As such, most contact centers could be considerably physically smaller a large proportion of the time, and end up wasting money in rent and equipment.

38% of respondents that use homeworkers state that it has made a positive impact on their equipment and running costs, compared to the expectation of only 22% of non-homeworking respondents. However, 35% of homeworking contact centers disagree that their equipment costs have been reduced, so this does not seem to be as strong a driver for implementing a homeworking environment compared to flexibility or the ability to offer longer working hours, for example.

Figure 57: Opinion: "Homeworking reduces / would reduce the cost of equipment"
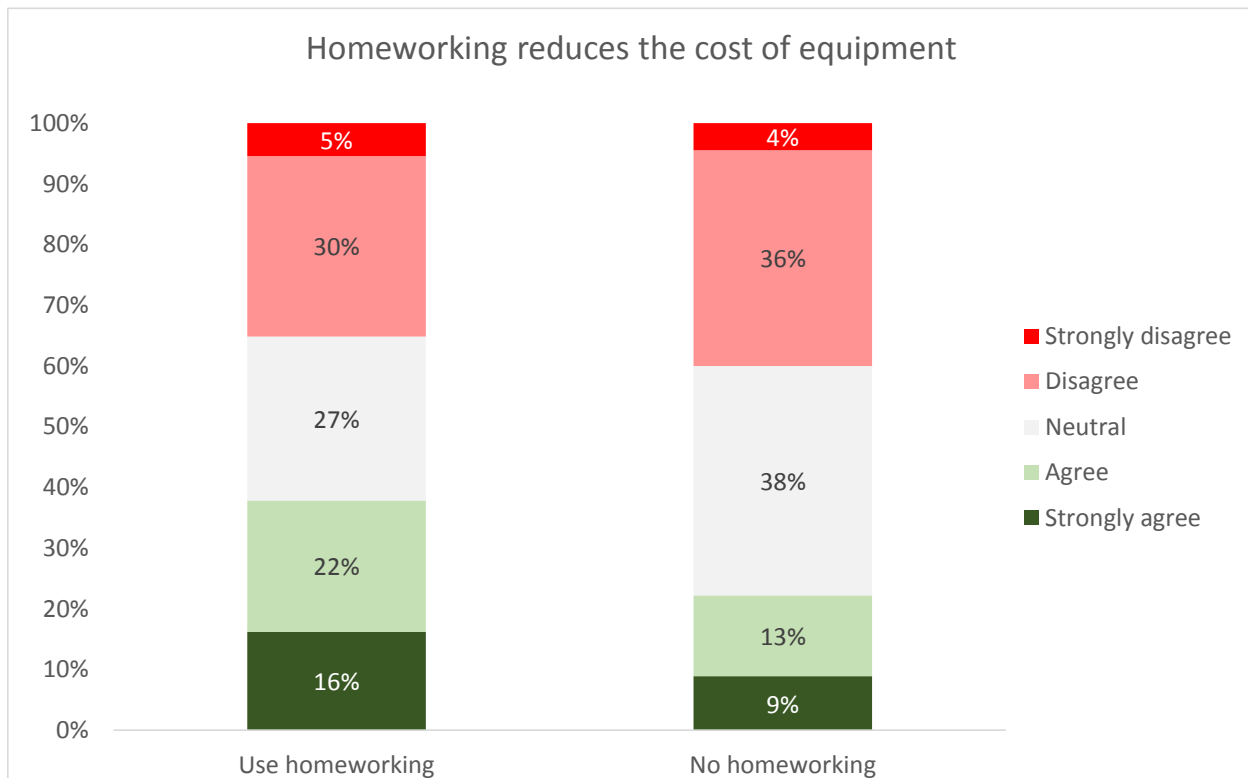
"Using an outsourcer to run home-based agents is better than dealing with it in-house"

Homeworking does not just have to be a matter of moving your own employees from a centralized location to their own homes. It is also possible to add an outsourced contingency workforce through a homeshoring model (for example, Arise), employing staff as and when they are needed, rather than employing them directly. Stated benefits include increased agent productivity and decreased staff turnover, and cost savings of up to 20% are claimed.

The broad disagreement felt by respondents, especially those already using homeworking, should be viewed in the context of many of these respondents running in-house operations, who would logically tend to believe that they could do a better job than an outsourcer.

Figure 58: Opinion: "Using an outsourcer to run home-based agents is better than dealing with it in-house"
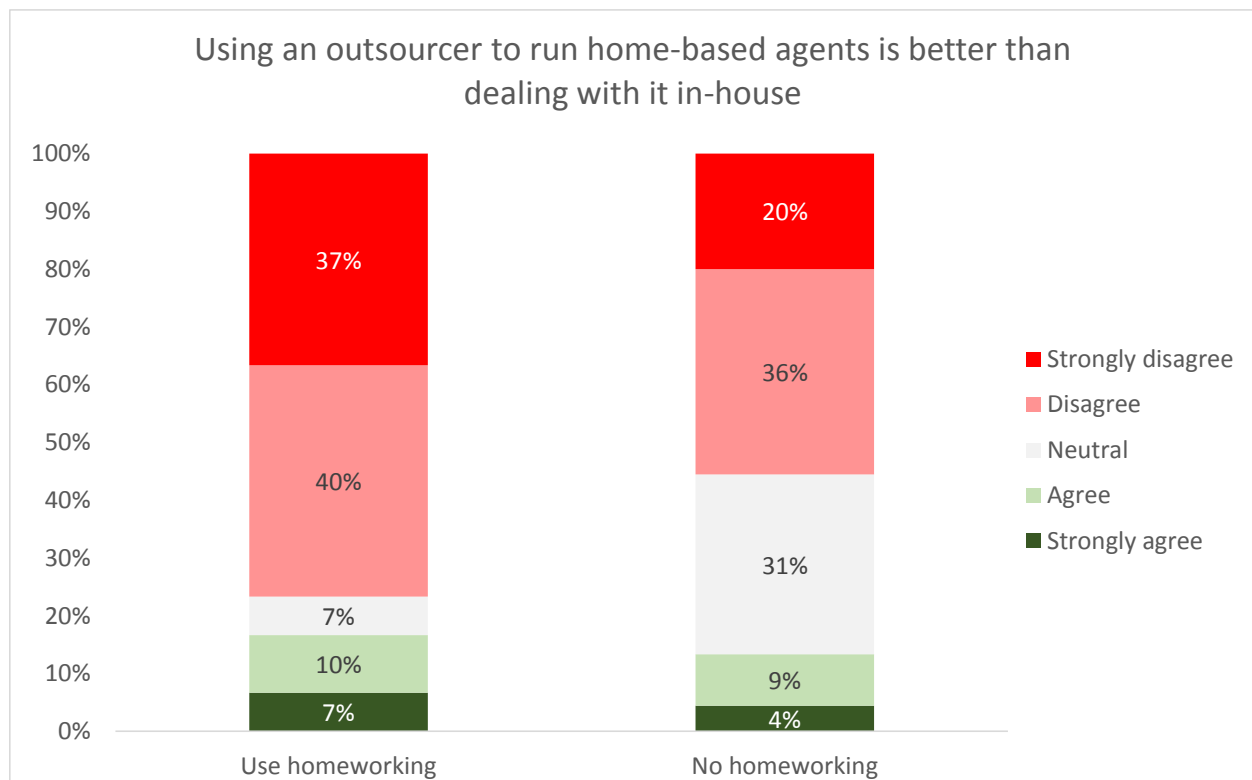
"Homeworking is becoming a lot more interesting to us"

Finally, a general question was asked to gauge how interest in homeworking is changing, to see whether those who have introduced homeworking are planning to carry out more (the proportion of agents in this survey who are homeworkers has stayed around the 10-11% mark since end-2010, so there may be stagnation), as well as to gauge the feelings of those who have not yet dipped a toe in the water.

75% of homeworking contact center respondents agree or strongly agree that homeworking is becoming more interesting, suggesting increased growth in future. Amongst non-homeworking respondents, opinions are less positive, with 34% disagreeing and 35% agreeing that homeworking was becoming more interesting. This negativity is somewhat puzzling when placed against the earlier finding that many non-homeworking contact centers were expecting to implement at least a small proportion of this activity within the next two years.

Figure 59: Opinion: "Homeworking is becoming a lot more interesting to us"
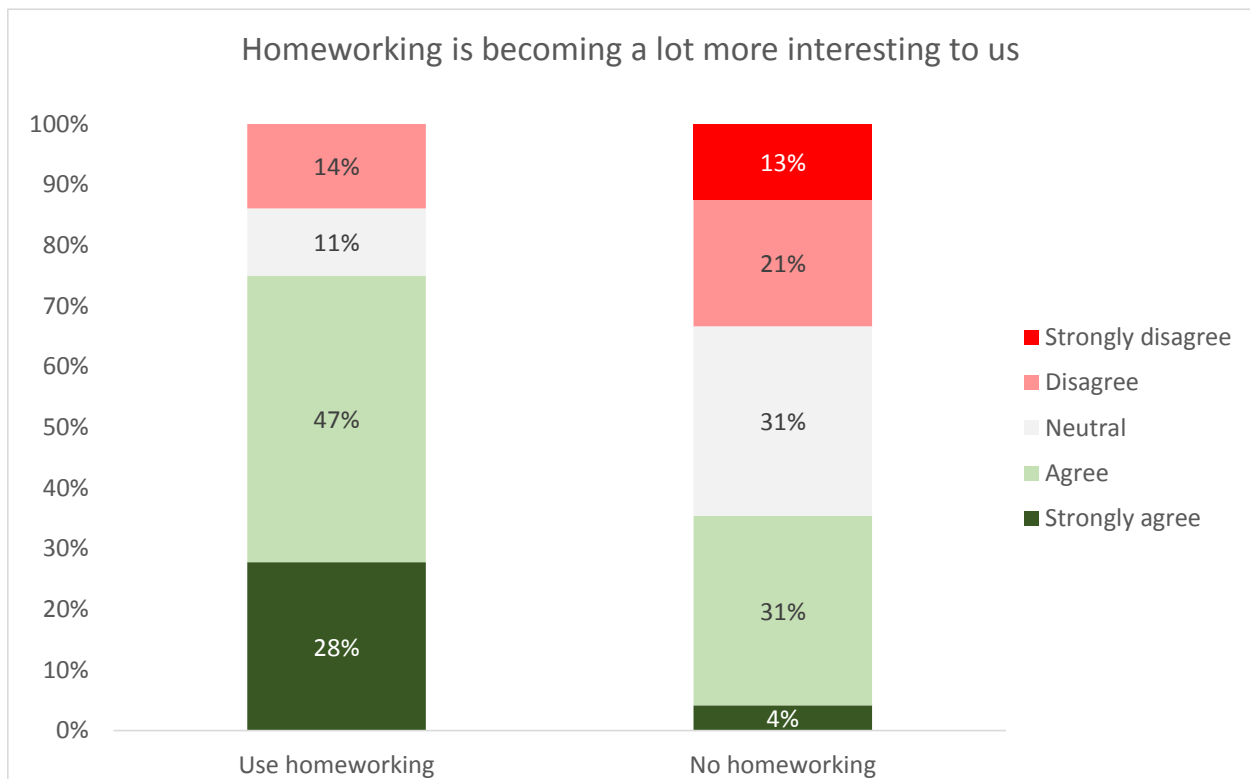
For many years, the larger contact center solution providers have been encouraging businesses to look beyond the four walls of a typical operation and consider how and when to involve other knowledge workers in the enterprise, whether office- or field-based, in the business of customer service.

IP contact center and cloud-based solutions can break down the boundaries between the contact center and the wider business, allowing every employee to act in the capacity of a contact center agent if in the best interests of the business. In many cases, the drive and interest towards IP telephony has come from the internal corporate telephony and IT departments, especially in the multi-office environments where real savings can be made.

From a contact center perspective, there are potentially massive advantages to having non-contact center personnel available to speak with customers on occasion: superior customer service (and the attendant improvements in customer spend and retention), immediate interaction with the right person, reduced call abandonment rates and shorter resolution times, as well as more intangible benefits like the ability of executives to listen to the customer first-hand and learn from the experience.

Knowledge workers / experts form part of the overall customer handling resource pool in 30% of respondents' operations, especially in the insurance, retail and services sectors.

14% of respondents state that employees within branches or stores handle a significant number of customer calls, with the finance, insurance and manufacturing sectors most likely to do this (respondents from the latter vertical market are probably referring to their satellite offices).

13% of this year's respondents state that field-based workers handle customer calls, with those in the medical and retail & distribution (especially the latter subsector) having the greatest proportion of these.

This suggests that the wider enterprise is not yet quite integrated into the contact center, but the demand for these services is certainly taking it that way.

Figure 60: Non-contact center staff handling substantial numbers of calls

Type of staff	% respondents using non-contact center staff to handle calls
Branch- or store-based staff	14%
Field-based employees	13%
Knowledge workers / experts based elsewhere in the organization	30%

Knowledge workers can be incorporated into the contact center on a part-time basis, without actually becoming a customer service agent. 'Presence management' links workers from diverse back office departments into the contact center by allowing communication and collaboration across sites and functions. Presence management shows if a user is available to communicate via a specific medium, such as instant messaging, email, telephony etc. Availability can be defined either by the knowledge workers themselves, or via device detection. It is possible to route calls to experts using the same criteria as in the contact center.

Presence can be seen as an extension of multi-channel contact routing by being integrated into software-based contact routing solutions, and can take multimedia routing further, particularly in a SIP environment where presence can be detected in a greater variety of modes.

There are, of course, some potential dangers:

- Highly-paid knowledge workers may be overworked by the demands and interruptions placed on them by agents, and become less productive
- Most collaborative tools include directory search, instant messaging and presence for every individual, however, it is skill sets rather than names that should be used, to discourage dependency on one expert.

Intelligent routing should be used to govern requests for help to experts, creating routing rules to decide when experts should be used, and at what times. This should have the benefit of keeping the knowledge workers onside, and not choosing to show their presence as unavailable to avoid interruptions. Each skill area or department could offer a schedule to make sure that someone is available for the contact center, thus ensuring the privacy of the others in that virtual team.

IP AND CONVERGENCE

Traditional contact centers operate their telephony functions in a circuit-switched telephony environment, where a fixed, dedicated line is left open between caller and agent. Running alongside this, a packet-switched data network breaks up any data (e.g. a customer record to go along with the phone call), sends it in packets along many routes, and reassembles it at the destination in the right order.

IP contact centers differ from traditional PBX-centric operations in that voice traffic is converted into packets of data and carried around the contact center (or between contact centers) on a data network, rather than a voice network. There are two types of IP contact centers: those running on an IP-only architecture, and those running a hybrid environment, where both IP and traditional circuit-switched infrastructures are used.

However, all IP-enabled contact centers are not the same. A distinction should be made between the type of IP systems where there is still some need for proprietary equipment and software to communicate, and "Open IP", which is entirely open standards-based and will allow any standard-based application or piece of infrastructure to communicate with another.

There are many reasons to consider changing from a traditional to an IP contact center, including:

- The use of common protocol (IP) and the growth of key standards such as SIP allow rapid development of new application functionality
- IP enables virtual contact centers, homeworking and the remote office model
- IP promotes the successful take-up and management of multimedia customer interactions
- More affordable functionality is made available to smaller contact centers
- IP reduces the cost of maintaining two networks
- There is more flexibility to add and change agents in an IP environment
- There is a reduction in call charges between sites via IP trunking
- IP supports reduced staff attrition through allowing flexible working
- The boundaries between contact center and the wider business are breaking down, and IP is a common theme across all parts of the enterprise
- IP infrastructure may be cheaper to upgrade than a circuit-switched platform.

The use of IP within the contact center has been present for some years now, and despite the relatively slow start to IP implementation, IP is now an integral, mainstream and strategic part of the contact center industry.

Moving contact center operations to an open IP environment should be seen as a strategic enabler, rather than just an obvious cost-cutting exercise. It is very difficult to put a number on the really important pieces, which are the business functionality improvements, but over time these will be far more important than short-term costs or savings that are associated with IP.

The key to understanding the real value of IP is through how it enables functionality to be deployed quickly and effectively regardless of physical location. Put simply, completely and genuinely adopting open standards means that contact centers release themselves from high maintenance costs associated with proprietary systems, and can choose the applications that exactly suit their needs at the time. Standards-based IP solutions are the closest the industry has come to being truly able to future-proof their contact centers.

In the following diagram which represents a likely return on investment scenario for an IP contact center, the initial capital outlay can be considerable, and far outweighs the immediate savings made from reduced telecom costs. However, over time, the business benefits from IP's greater openness and flexibility, allowing it to be more innovative and responsive. Costs are reduced as the system beds in, allowing maintenance of a single network. Over time, the benefits keep accruing, making the quantitative return on investment take longer than in most IT projects, but deliver greater benefits for longer.
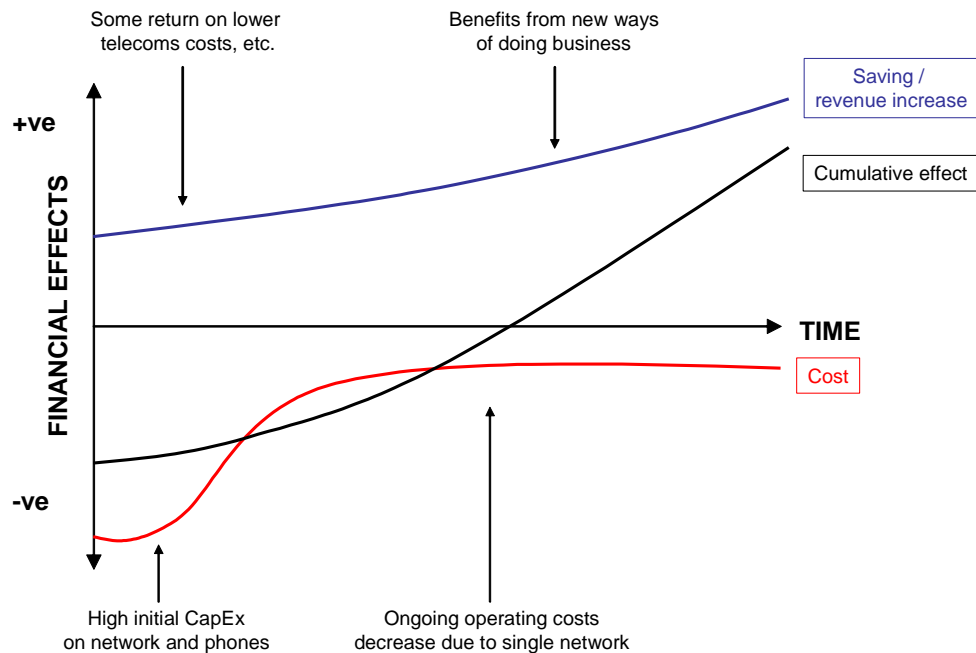
SIP - Session Initiation Protocol

Advances in standards such as the Session Initiation Protocol (RFC 3261) enable telephony applications to interface with each other and provide functionality that used to be only available using proprietary infrastructure hardware.

- Widely regarded as the successor to H.323 for IP-based telephony
- Gaining increased attention and visibility due to major technology solution providers
- An alternative to TAPI-based IP telephony models
- A protocol that removes the need for a separate IP-PBX and contact center solution
- The emerging standard for session control for a variety of media - greater flexibility and more scalability than many alternative multimedia communication protocols in use today
- Software-based, open and lightweight, allowing organizations of all types to support the new breed of SIP phones along with soft phones, analogue phones, desktop PCs, and even mobile devices and PDAs
- SIP also provides strong support for real-time voice communications, text-based messaging and application sharing - SIP can initiate real-time, multimedia sessions that seamlessly integrate voice, data and video

Open systems allow customers to select non-proprietary hardware and software for queuing, routing and applying treatments to interactions. This means that future contact centers will be free of the restrictive nature of proprietary systems, and able to develop and deploy applications which may have previously been too complex to integrate or maintain cost-effectively. The widespread use of a truly open standard will encourage application developers to push functionality boundaries further as time-to-market should be significantly decreased because integration will become much easier.

It is important to understand that there is no CTI link in the SIP world - true interoperability takes care of the integration. This has a distinct cost benefit, a reduction in complexity of deployment and maintenance, and an ability to implement quickly. Through SIP, the value of contact center solutions is moving from routing to applications - not so much "how shall we do it?" as "what shall we do?".

Recently, some vendors have developed unified communication platforms that allow contact center solutions to operate on standard servers with no specialized hardware components, providing an infrastructure that can be supported and maintained by clients' existing IT staff. This offers an easy path to a software-only platform or to allow hybrid applications where both traditional telephony and software-only SIP environments can be unified for a best-of-breed Unified Communication approach.

The mantra "evolution, not revolution" is often applied to the IP contact center environment, with vendors encouraging contact centers to consider the option of moving at their own pace towards IP, and this is what has happened in recent years. The movement from TDM to hybrid, and then to pure IP can certainly be seen over the years, with TDM penetration rate continuing its decline to 10% this year, compared with 12% in 2013 and 19% in 2012.

Figure 61: Current use of IP, by contact center size

Current use of IP, by contact center size

	Pure IP infrastructure	Hybrid IP / TDM	No VoIP (traditional TDM)
Average	60%	30%	10%
Large	50%	44%	6%
Medium	61%	28%	11%
Small	63%	26%	11%
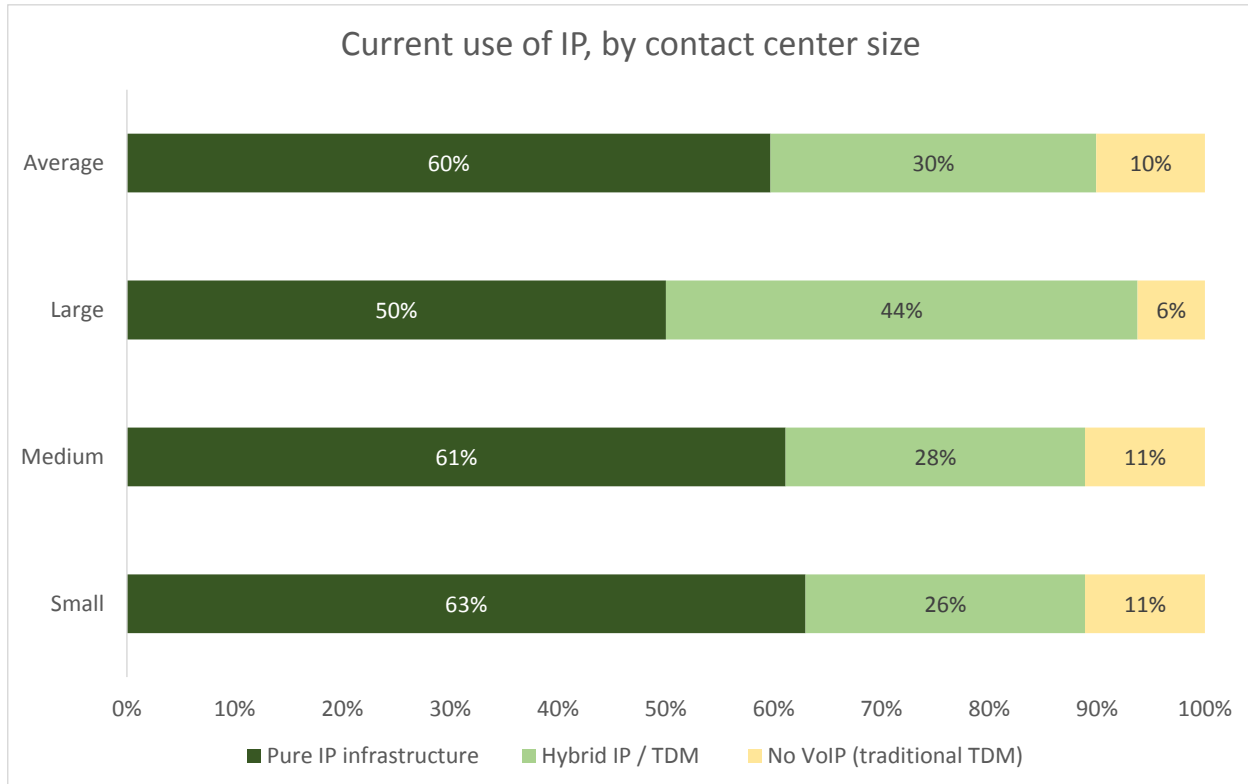
In the past, it was usually left to smaller contact centers to use a pure IP solution, as to upgrade or replace equipment and networks is much cheaper for them. The past few years have seen a big jump in the proportion of larger contact centers indicating that they are using pure IP, considering the figure was only 14% in 2008. The movement towards pure IP has been guided by smaller contact centers at first, with the mid-sized operations joining the party in the past five years, and larger operations getting into pure IP in the past four years.

In many cases, the decision on whether to make most contact center technology investments tends to boil down to operational cost savings: the amount of money saved by implementation is greater than the cost of the solution plus its maintenance. In many cases, IP contact center solutions do not easily fit into this simple model. There are some contact centers (especially small, or new operations) where the

value of having an IP-based solution is immediately obvious and provable, but at the other end of the spectrum, short-term ROI can be more complicated to find.

Yet in all cases, when businesses are considering implementing IP contact centers, they must look beyond the present day. IP contact center solutions are enablers, not necessarily ends in themselves. The value of an IP solution for many will come in what it will allow the contact center to do in the future, not the short-term cost savings it can make now. Having said that, IP solutions can certainly reduce operational costs in some cases, but anyone either researching or actively considering implementation of IP contact center solutions must be aware that they will be enabling their contact center to change and improve the way it operates. IP is a critical strategic decision which will support what you want to use your contact center for in 1, 2, 5 or 10 years' time.

The main driver for IP implementation is cost reduction through running a single network, as well as there being significant numbers of contact centers with a forced necessity to implement IP because of the requirement to replace their PBX, as well as it being a corporate decision for many too.

Enabling new multimedia channels, such as video, is also a driver for IP decisions, especially in larger operations. Although two-way video (for example) may not be what customers want as a priority, there are certainly advantages to being able to provide visual support, even in a self-service application:

- the self-service experience is faster and more interesting

- visual agent interaction may enhance trust

- improved communication - a picture is worth a thousand words - reducing call costs

- higher customer perception of the level of service

- new revenue opportunity through video advertising.

Having said that, there is no single over-riding reason for implementing IP - it adds flexibility and future-proofs the contact center somewhat (especially in a multisite environment), and most importantly perhaps, offers a foundation upon which to base the next generation of contact center functionality.

The effects that IP implementation has **actually** had (rather than the perceptions of what it could do) are primarily around network cost reduction, the flexibility to add and change agents quickly and the general movement towards cloud-based solutions as a whole.

It is interesting to note that there is still less evidence that moving to IP presents a greater choice of vendors or applications, with more users of IP being neutral than positive about this potential advantage. The increased use of SIP and drive to open standards should help this factor increase in importance in the long-run, but the proprietary nature of solutions and hardware, as well as long-standing contracts and vendor relationships is still widespread.

Figure 62: How has implementing IP affected your contact center?

How has implementing IP affected your contact center?

Category	Positive	Neutral	Negative
Choosing vendors or applications	44%	51%	5%
Integrating applications and systems	49%	49%	3%
Reducing telecoms costs between sites	53%	44%	3%
Supporting multichannel contact	53%	44%	3%
Flexibility in adding and changing agents	64%	33%	2%
Implementing cloud-based solutions	67%	33%	
Reducing the cost of running the voice/data network	82%	15%	3%
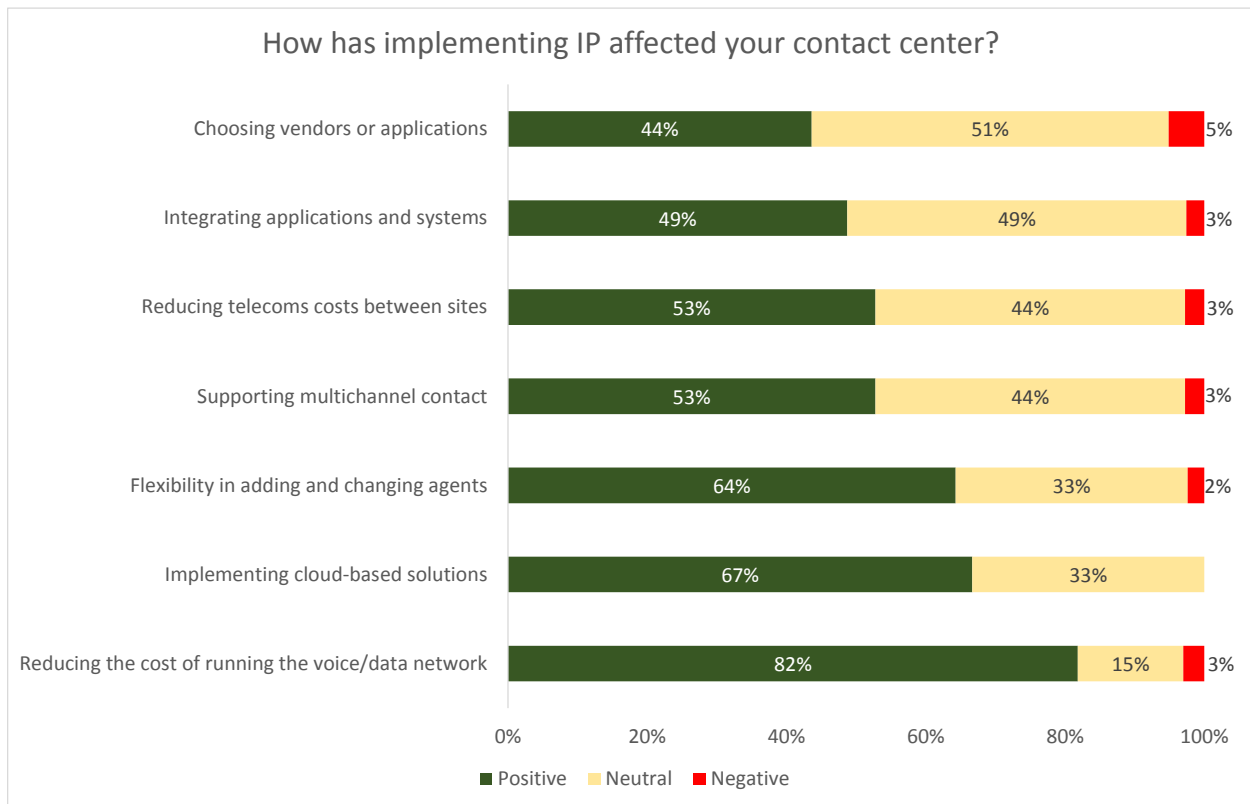
There is a balance between dealing with calls efficiently (i.e. without spending too long on them) and effectively (making sure that the customer is served well, and that the business gains what it can from the interaction as well). This section looks at ways in which the 'dead time' that occurs in an interaction can be reduced, with improvements for both customer and business.

PAYMENT CARDS AND SECURITY

This year, 59% of respondents' operations handle card payments from customers over the telephone, although the public sector, insurance, manufacturing and TMT vertical market respondents are less likely to do so this year. Payments are normally taken by agents, although vertical markets such as finance and entertainment & leisure often provide a fully-automated as well as a human payment option to their customer base.

Figure 63: Does your contact center take payments over the phone? (by vertical market)
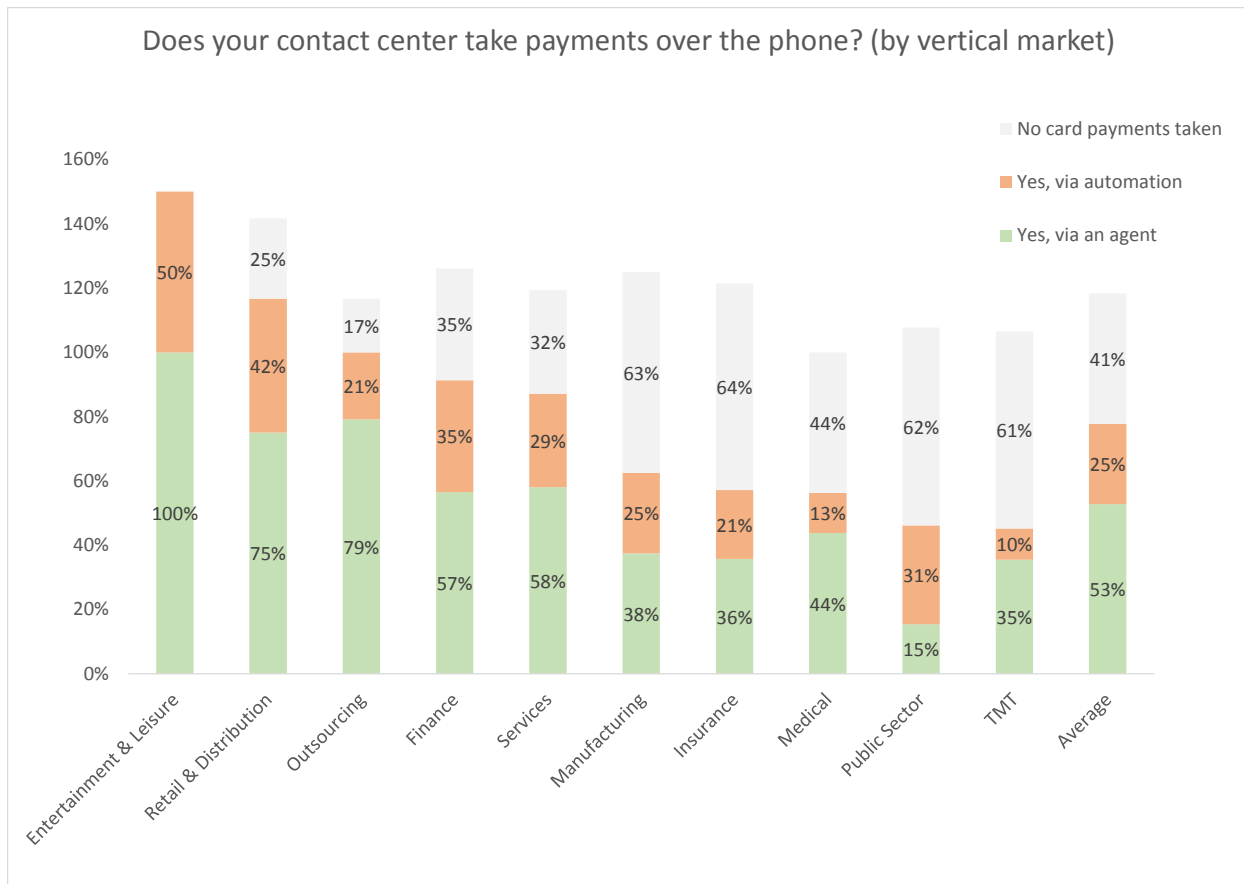
Does your contact center take payments over the phone? (by vertical market)

There are significant elements to consider around manually taking payment from cards: the time taken to take payment, the risk of fraud by agents and compliance with standards set by the Payment Card Industry Data Security Standard (https://www.pcisecuritystandards.org/security_standards/), in order to reduce credit card fraud.

Of the respondents that handle card payments, 47% do so without any form of automated assistance at all, trusting to internal processes and QA to reduce the chance of fraud. It is clear to see that taking card payments using an agent is an unnecessary and significant cost for the business, and has a greater level of risk of fraud than by using a secure automated environment, which can consist of an mid- or after-call IVR session, or the encrypted authentication of a voice signature.

CUSTOMER IDENTITY VERIFICATION

Customer security processes are about two factors: are you who you say you are, and are you allowed to do what you are trying to do?

Until a few years ago many businesses relied on trust that the caller was who they claimed to be - asking only for a name and address. Today, strong identity verification processes are now seen by virtually all businesses as critically important and most make some attempt to verify a caller's claimed identity by asking for additional information that only the real customer should know. The increasing focus upon fraud detection, strengthened by the need to comply with regulations, has meant that identity verification continues to become more important year-on-year.

Identity theft is a high-profile issue, and as such, businesses have had to tighten security and be seen to be doing so by their customers, as fraud prevention has now become a brand issue, as well as a regulatory one. While fraud certainly causes losses to a business, along with the threat of regulatory fines, the risk of losing customers' confidence by being seen as lackadaisical about security is potentially a much greater negative. Criminals' methods and the technology used have become more sophisticated and businesses have had to respond by introducing more complex identity verification processes.

However, identity verification procedures have now become intrusive and inconvenient for the customer, who are expected to remember an increasing array of IDs, passwords, PINs, memorable information, details of their last transactions, or to carry smartcards or tokens everywhere they go. Customers can undergo a 'Spanish Inquisition' before being permitted to make their enquiry or place their order - which reduces customer satisfaction, and also costs businesses time and money. It takes an average of 28 seconds to verify a customer's identity manually, and this mounts up considerably: the US contact center industry spends many billions of dollars each year, just to verify the caller is who they claim to be, and are permitted to carry out the action.

Over the past seven years, our surveys have found that over 30% more calls now require identity checks, which themselves take considerably longer due to more stringent testing. Although in-call efficiency has improved, identify verification is no faster than it ever was, all factors which drive up the cost of initial identification.

Identity verification processes are typically based on one or more authentication factors that fall into the following generally-accepted categories

- something you **know** - e.g. password, PIN or memorable information

- something you **are** - a biometric such as a finger print, retina pattern or voice print

- something you **have** - a tangible object, e.g. a PIN-generating key fob, or the 3-digit CVV2 code on some credit cards.

Combining these factors creates a more complex, and potentially more secure two-factor or three-factor authentication process, although being able to rely upon a previously enrolled voiceprint, rather than have to remember various pieces of information or carry round a code-generating device makes life far easier for the customer.

Figure 64: Proportion of calls requiring caller identification, by vertical market

Proportion of calls requiring caller identification, by vertical market

Vertical Market	Percentage
Average	63%
Manufacturing	27%
Entertainment & Leisure	46%
Outsourcing	48%
TMT	50%
Public Sector	60%
Services	71%
Medical	76%
Retail & Distribution	81%
Finance	85%
Insurance	86%
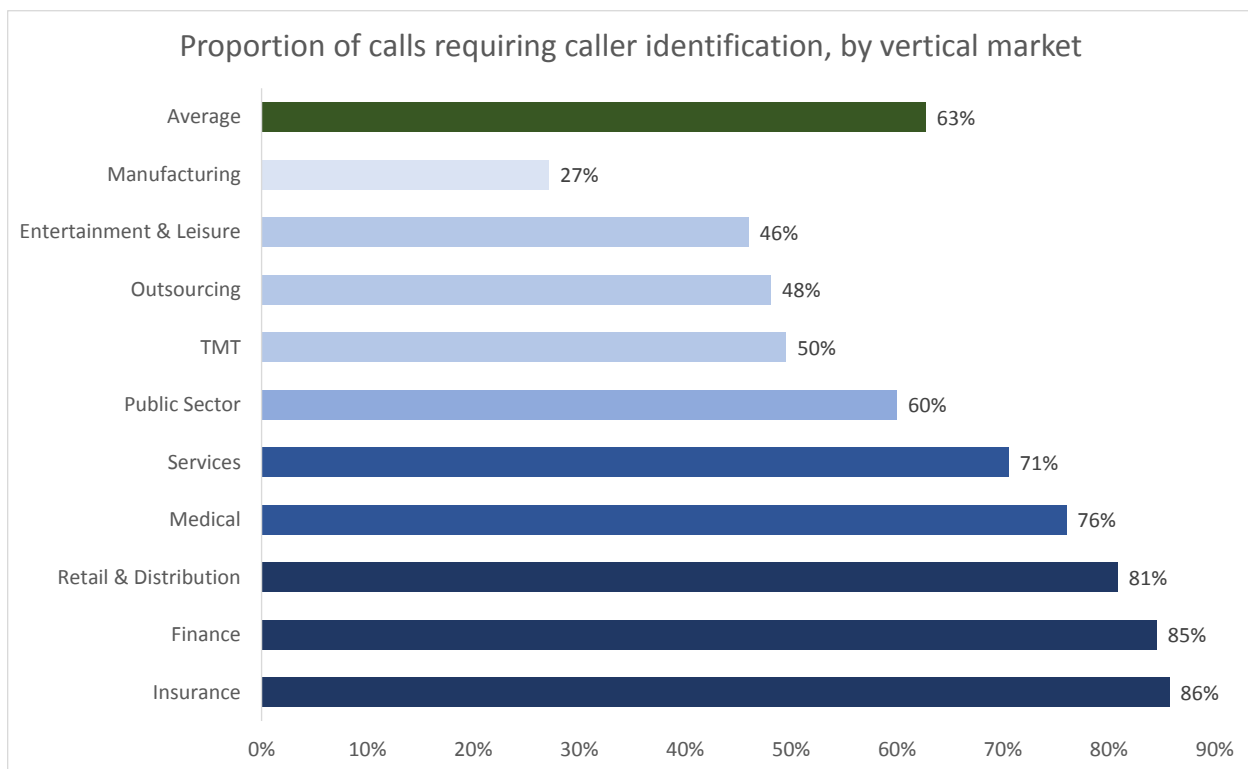
In line with regulatory and commercial pressure to improve fraud detection and achieve compliance, businesses' identity checking procedures have become more stringent, with 63% of calls having identity verification in Q1 2014, compared to 53% in 2007. As might be expected, the finance and insurance sectors are amongst those most often authenticating callers' identity.

Figure 65: Caller identity authentication methods (only those contact centers which authenticate some or all calls)

Identification method	Proportion of contact centers using this method
Touchtone IVR	28%
Speech recognition	6%
Using **only** an agent	77%
*Using **only** automation*	*9%*

77% of respondents who authenticate identity do so through **purely** human means, taking an average of 28 seconds to do so. 23% use touchtone IVR or speech recognition (or both) to identify the caller, which itself takes around 20 seconds. However, in the majority of these cases, businesses first get the caller to use an IVR to collect their details, then also use the agent to double-check once the call is passed through, wasting the caller's time and increasing the contact center's costs.

The amount of time required to authenticate an identity through manual means (using an agent) differs significantly between vertical markets, with those in the finance, insurance and TMT sectors taking the longest this year.

Figure 66: Time taken to authenticate caller identity, by vertical market

Time taken to authenticate caller identity, by vertical market

Market	Seconds
Average	28
Manufacturing	14
Outsourcing	19
Public Sector	20
Entertainment & Leisure	21
Medical	24
Retail & Distribution	26
Services	27
Insurance	35
Finance	36
TMT	45

N·I·C·E® While the authentication process can take up to two minutes, most leading enterprises looking to protect their contact centers and their customers will typically report authentication times of 45 to 60 seconds, especially across Financial Services, Telecommunications and Insurance verticals. However, the increasing threat of fraud targeting the contact center is driving these numbers up and this is likely to continue going forward.

The unnecessary cost of caller authentication

63% of all calls require a security and identification process to be completed first. 91% of these will require some agent input even if IVR or speech recognition is also used. On average, it takes 28 seconds to go through security. Using these statistics, it is possible to estimate how much US contact centers spend each year on screening customers by using agents.

Inbound calls per year (handled by agents): 47.7bn[2]

Proportion of inbound calls that require security and identification checks: 63%

Proportion of security and identification checks carried out using an agent: 91%

Average length of agent-handled security and identification check: 28 seconds

Average call duration: 6m 38s (therefore 7.04% of the call is ID&V)

Mean average cost per inbound call: $5.50

Cost of time spent on agent-handled security and identification check: 38.7c per call

Overall cost of agent-handled security and identification checking: **$10.6bn per year**

NB: this cost figure is somewhat lower than last year, mainly due to the lower average reported cost per call in this year's survey. This particular statistic varies considerably year-on-year, depending on the make-up of the survey respondent set and the relatively low number of respondents that feel confident to answer the cost per call question accurately.

As such, we do not believe that in reality, the overall cost of agent handled security and identification checking has decreased significantly (if at all), and that it remains between $10-15 billion per year.

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[2] ContactBabel, "US Contact Centers in 2013: The State of the Industry", 2014 estimate

To recap, there are several factors to consider when trying to predict changes in the ways in which customers are identified:

- businesses want to reduce the cost of fraud
- customers want convenience but also their personal information and assets protected
- businesses need to comply with existing and new laws and regulations
- contact centers spend excessive amounts of money on identifying and verifying customer identities
- existing methods of identity verification (e.g. PIN, password, etc.) are not secure and are user-unfriendly
- it is not just criminal fraud that identity verification aims to stop. The issue of privacy, especially in the healthcare vertical market, is a powerful driver for using right-party authentication to facilitate personal information sharing. This is also the case when using speech-enabled automated outbound calls, it being necessary to make sure that the person answering the call is the one to which the business actually needs to talk.

THE EMERGENCE OF BIOMETRIC TECHNOLOGIES

Biometric technology uses physiological or behavioral characteristics to verify a person's claimed identity. Physiological biometrics includes fingerprints, iris, or retina recognition, and voice verification. Behavioral biometrics includes signature verification, gait and keystroke dynamics.

Of these, voice is the only biometric that can be used over the phone, making it a viable identity verification solution for contact centers. Voice verification systems use spoken words to generate a voiceprint, and each call can be compared with a previously enrolled voiceprint to verify a caller's identity. The most sophisticated systems generate a voiceprint by using spoken words to calculate vocal measurements of a caller's vocal tract thereby creating a unique digital representation of an individual's voice, as well as other physical and behavioral factors, including pronunciation, emphasis, accent and speech rate. These systems are not affected by factors such as the caller having a cold or using different types of phones, or aging. Voice verification systems are now delivering levels of accuracy and security that have proven robust enough for use by banks and insurers.

A significant advantage of voice biometric verification is that both enrollment and verification can be done unobtrusively - in the background during the natural course of customers' conversations with an agent - using text-independent and language-independent technology. Real-time authentication significantly reduces average handle time and improves the customer experience by utilizing voice biometrics to authenticate customers within the course of the conversation.

With this advanced technology, contact centers can:

- Voiceprint the vast majority of customers for seamless passive enrolment: in the course of a conversation, a voiceprint is created for that customer which lies on record for them to be authenticated against on the next call
- Securely authenticate customers with zero customer effort, significantly improving the customer experience: the first few seconds of a call will be enough to match the customer's voiceprint against those on record
- Help agents expedite time to service, cutting seconds off average handle time: no need for customers to answer numerous security questions as the conversation they are having provides enough information to identify them
- Significantly reduce fraud risk for all customers, and deter fraudsters.

NICE® As the success of a voice biometric authentication program is highly dependent on the enrollment of end-customers, significant value should be ascribed to the ability to leverage existing infrastructure to passively enroll end-customers without any effort on their behalf. Broad-based enrollment in the authentication program also provides enterprises with a more compelling return on investment and better fraud protection.

The customer's experience

Since speaking is natural and intuitive, a well-planned implementation can result in a better customer experience that eliminates the need for PINs or passwords. For example:

- In the case of text- and language-independent authentication, the customer's voiceprint (collected on previous calls) is authenticated in the background during the natural course of conversation with an agent, while simply outlining their service request - minimizing both customer effort and time-to-service. There is no need to remember PINs or passwords, which greatly improves the customer's experience

- 'Account Number'-based voice verification - the caller is asked to speak their account number. The account number identifies the caller, and the spoken words are used to generate a voiceprint that verifies the caller is the account holder

- 'Challenge Response'. Typically the customer is asked to repeat a series of numbers , e.g. "Please say 'one seven three four'". The spoken words are used to generate a voiceprint. The numbers spoken are usually different each time the caller phones.

In cases where a two-factor authentication process is required, voice verification can be combined with a 'something you know' - such as an answer to a memorable question. Real-time agent guidance can prompt agents to ask a further security question within the call if the process requires it.

The business benefits

Businesses benefit from two types of savings. These can be illustrated in the following example:-

A contact center receives 10 million inbound calls per annum with the existing identity verification procedure taking on average 28 seconds and being performed by an agent:

- Eliminating the time taken by an agent to verify a caller's identity can save 38.7c per call ($3.87m per annum)
- Secure automated identity verification enables a broader range of fully automated services to be offered, reducing agent cost.

The potential benefits for the business are huge, and the customer also gains through a better experience, longer opening hours and greater identity protection.

Similar savings will also be found in the case of text-independent authentication, where the caller's voiceprint is authenticated within the natural course of the conversation. The agent begins each call by immediately asking how they can help the customer, and the authentication process is carried out by voiceprint verification at the same time that the agent is listening to the caller and preparing to help them.

It is also possible to use contextual analysis, such as the caller's geolocation (as detailed from their cellphone's GPS coordinates, or their ANI) to add another layer of confidence in the security process, automatically notifying the agent whether the caller has been identified successfully, and guiding the agent to ask alternative questions if further verification is required.

Voice verification can also be used to protect the enterprise against repudiation (where the customer says at a later date that they did not do it) as it can verify the physical presence of an individual at the other end of a phone line. Interestingly, this capability is already used by various US law enforcement agencies to check that released offenders are where they should be.

For procedures such as internet password resetting, the higher level of security achieved with voice verification can enable businesses to offer real-time password resets or reminders. This benefits both customer and business and can reduce up to 70% of helpdesk calls.

Voice verification has the advantages of near-ubiquity (the vast majority of people would be able to use it) as well as improving levels of security and reducing costs. The increasing demand of the public for identity protection, coupled with businesses' permanent desire to increase profits mean that voice verification is an option that any company concerned about identity authentication should now seriously consider.

The contact center is increasingly being targeted as a part of more complex cross-channel fraud schemes. The ability to simultaneously verify a customer's identity and detect fraudsters in real time has become a business imperative. By leveraging multi-layered, secure authentication and fraud prevention enterprises can now keep the **good guys** safe and the **bad guys** out.

CALL-BACK, QUEUE MANAGEMENT AND ROUTING

Collecting information about customers before an agent has spoken with them is a contact center technique which has been around for decades, under the wider auspices of CTI (computer telephony integration). CTI infrastructures route calls and automate information retrieval to help agents deal with issues quickly and accurately, without transferring callers or leaving them on hold.

CTI and SIP

SIP ("Session Initiation Protocol" - see the section on IP) will enable companies to use CTI functionality throughout IT infrastructures instead using a proprietary hardware/software layer. Applications will use SIP commands to carry out call-related activities and also non-call functions such as presence management.

A contact center's CTI servers use caller ID information from PBXs to retrieve customer information from various databases. This information is then passed to the agent along with the voice call as a screen-pop, cutting down the time spent at the beginning of a conversation. If calls are transferred, the information follows the voice call so the customer does not have to repeat information they have already given. CTI is extremely effective, however, it's also expensive, proprietary and complex. The use of SIP allows CTI-like functionality to be used far more widely and effectively.

Enabling a voice device to communicate with a data network has required the CTI middleware layer to translate TDM (Time Division Multiplexed) voice traffic into data. If a contact center uses SIP and a pure IP infrastructure, it removes the need for CTI as a separate layer in the IT infrastructure because SIP enables mobile phones, laptops, smartphones, etc. to communicate directly with IT resources. In pure IP networks, calls will enter the infrastructure as VoIP traffic and travel to a SIP proxy server which initiates sessions with the necessary applications to perform call routing and customer information searches for which the CTI server was formerly responsible.

Standards-based SIP proxy servers are much cheaper than CTI servers and can be implemented on standard hardware. Integration is easier and quicker as all the input and output in the network is one standard protocol, which opens this up to smaller operations too, however all voice traffic must be through VoIP.

Empowering customer conversations

Virtual Hold Technology (VHT) enables contact centers to maximize the opportunities that come from customer interaction, regardless of channel.

VHT's 2 core products are Callback and Conversation Bridge. Callback calls the customer back when a live agent is available to assist. This callback can happen as soon as possible (ASAP), or at a time that is more convenient for the caller (Scheduled). Callback holds the customer's place in queue so they do not need to wait on hold to speak to a live agent.

Conversation Bridge enables a customer, regardless of the interaction channel they are on, to intuitively request & receive a voice callback, with the live agent knowing the relevant context about that customer before the live conversation begins. Conversation Bridge ensures a consistent multi-channel service experience for the customer.

Callback and Conversation Bridge sit on top of VHT's award winning customer experience platform – a platform that ensures integration with a customer's technical infrastructure and with their existing customer service applications across the enterprise. The platform enables effective administration of the VHT deployment, and it provides insight through reporting and analytics into the critical KPIs that VHT's solutions are impacting.

VHT CUSTOMER EXPERIENCE

Callback
ASAP   Scheduled

Conversation Bridge
Mobile Apps, Web Chat, Social Media, E-Mail, Text/SMS, and IVR.

CX Platform
Administration, Integration, Analytics, Reporting, and Queue Management

VHT FACTS

13 US and international patents and 8 more pending

> 25,000 VHT licenses deployed worldwide

IN 2013, VHT...

Improved the customer experience for **170+ million callers**

Saved more than 1.5 billion minutes of customer hold time

Eliminated more than **18 million abandoned calls**

VHT's Impact by Industry in 2013

Vertical	Years of Hold Time Saved	Improved Average Speed of Answer	Reduction in Abandoned Calls
Telecommications	17	22%	21%
Utility	6	27%	26%
Government	46	62%	46%
Travel	20	36%	28%
Financial Services	7	24%	34%
Retail	9	24%	14%
Insurance/Healthcare	6	24%	34%
High Tech	24	24%	26%

Click here to learn more.

CALL ROUTING

Those contact centers which use DTMF (touchtone) IVR or automated speech recognition (ASR) considerably more than average have traditionally been found in the telecoms, utilities and finance sectors: high-volume environments where a few seconds shaved from a call or a reduction in misrouting can save considerable amounts of money. Most financial services companies have many products which require specific skills and product knowledge. As such, routing based upon selection criteria such as customer account numbers, sales/service and specific product choices can take place, supported by an IVR front-end, functionality which is often known as 'auto-attendant'.

It is worth setting some definitions here. While some IVRs are ALSO used to front a contact center, they are typically designed to filter out and resolve the majority of calls, rather than route them. The real benefit of an IVR is that it has the ability to provide ALL the assistance that a customer needs, such as company or event information or when integrated with customer recognition technology, account balances and other information sourced from internal databases. A solution used solely to route callers would simply be the (cheaper and less sophisticated) auto-attendant functionality within the CTI solution.

This particular section of the report investigates the business purpose of the IVR / CTI application as it is used for routing calls, rather than providing a full-service solution (which is looked at within the 'Self-Service' section). As such, 'IVR' will be used here to describe this particular call routing functionality, although the actual technology may differ between contact centers.

Figure 67: Does your contact center use DTMF IVR or speech recognition to route calls? (by vertical market)

Vertical market	Use of DTMF IVR or ASR for routing
Insurance	75%
Finance	67%
Outsourcing	67%
Retail & Distribution	67%
Services	61%
TMT	58%
Manufacturing	57%
Public Sector	57%
Entertainment & Leisure	50%
Medical	40%
Average	**60%**

In the past, less-automated or volume-based contact centers, such as public sector, and sales-focused operations, such as retail, have shown less of a demand for IVR call routing solutions. However, over the past few years, a substantial proportion of respondents from every sector have reported that they use DTMF IVR for call routing purposes, and automated speech recognition is in use in 24% of the respondents' operations that use call routing techniques.

Figure 68: Use of DTMF IVR and speech recognition to route calls, by vertical market (only respondents where calls are routed using these or ANI/DNIS solutions)

Vertical market	DTMF IVR	Speech recognition
Entertainment & Leisure	100%	33%
Insurance	100%	33%
Outsourcing	100%	25%
Manufacturing	100%	0%
Services	91%	27%
Finance	88%	11%
Public Sector	75%	30%
Medical	75%	25%
TMT	73%	20%
Retail & Distribution	50%	25%
Average	**85%**	**24%**

NB: totals may add up to more than 100% if both DTMF IVR and ASR are used

As auto-attendant is a solution which provides major cost savings in volume-based environments, we would expect to find more of the larger contact centers using it, and although this year's figures once again support this idea, the difference between size bands is smaller than ever.

58% of respondents in sub-50 seat contact centers report using DTMF IVR or ASR for routing, demonstrating that this is no longer a technology just for operations with lots of budget and in-house IT support.

Figure 69: Does your contact center use DTMF IVR or speech recognition to route calls? (by contact center size)

Contact center size	Use of IVR or ASR for routing
Small	58%
Medium	59%
Large	68%
Average	**60%**

More expensive speech recognition solutions are far more prevalent in large operations, where the correct automated routing of many thousands of calls each day can very quickly make a case for ROI.

Figure 70: Use of DTMF IVR and speech recognition to route calls, by contact center size (only respondents where calls are routed using these or ANI/DNIS solutions)

Contact center size	DTMF IVR	Speech recognition
Small	86%	14%
Medium	93%	22%
Large	74%	35%
Average	**85%**	**24%**
NB: totals may add up to more than 100% if both DTMF IVR and ASR are used		

Skills-based routing is a call-assignment strategy used in contact centers to assign incoming calls to the most suitable agent based on the caller's requirements and the agent's capabilities, instead of simply choosing the next available agent, allowing the call to be passed to specific virtual agent groups (clustered by skills) rather than routing through to a particular department or physical team. Historically, agents answering calls were generally able to be assigned to only one queue taking one type of call, meaning that agents who could deal with a range of call types had to be manually reassigned to different queues at different times to make the best use of their skills, or end up handling calls to which they were not necessarily suited.

Skills-based routing is an important element in a customer care strategy, but it should be balanced with an understanding that, while customers appreciate being routed to someone skilled to help them, the routing experience should not include a long hold time - waiting on hold is one of the top sources of customer frustration. A successful skills-based routing strategy incorporates assessing skilled-agent availability and wait times, and offers the customer an opportunity for future interaction if the skilled agent is not currently available. Matching skilled-agents with customers - when the agent and the customer are available for the interaction - is a win for the contact center, and for the customer.

Skills-based routing allows the agent capabilities required for a call to be assessed by the telephone number dialed (DNIS - dialed number identification service), the calling number or caller's identity (ANI - automated number identification), as well as options selected in the IVR system. A skills-based routing system then tries to match the call to a suitably-skilled agent. Instead of being served in the order of their arrival, calls are handled as agents with the right skills become available.

Figure 71: Use of ANI (automated number identification) and DNIS (dialed number identification service) by vertical market

Vertical market	ANI	DNIS
Entertainment & Leisure	50%	33%
Finance	23%	54%
Insurance	25%	38%
Manufacturing	29%	43%
Medical	10%	20%
Outsourcing	50%	58%
Public Sector	29%	29%
Retail & Distribution	33%	50%
Services	22%	44%
TMT	23%	31%
Average	**27%**	**40%**

Figure 72: Use of ANI (automated number identification) and DNIS (dialed number identification service) by contact center size

Contact center size	ANI	DNIS
Small	13%	26%
Medium	30%	35%
Large	42%	69%
Average	**27%**	**40%**

This report now investigates how DTMF-based auto-attendant is actually used for routing from the customers' viewpoint, as for time immemorial, overly-long and confusing DTMF IVR options have been a common complaint.

Looking at the number of levels used on a DTMF IVR (i.e. how many key-presses a caller must make to reach their destination), only 19% of this year's respondents keep it simple with a single-level of options, e.g. "Press 1 for Sales; 2 for Service; 3 for Accounts".

It is not just the amount of levels in a menu that can frustrate customers, but also the number of options within each level. As the customer cannot see what the options are, but has to listen to each, it can be a very frustrating experience, and one which the movement to visual channels such as web self-service or visual IVR via a smartphone will go a long way towards alleviating.

Respondents claim to restrict themselves to a median of 8 options (e.g. 2 levels with 4 options on each, or vice versa), which is still a considerable number for a caller to listen to, especially if their preferred choice is the last one in line.

Logically, larger contact centers will tend to support larger businesses, which usually have more departments, offer a greater level of segmentation and have more products and services available to customers: consequently there are on average many more menu choices offered in the phone menu of large contact centers.

Figure 73: DTMF IVR routing options, by contact center size

DTMF IVR routing options, by contact center size

	Mean	Median
Small	7	4
Medium	8	7
Large	13	9
Average	9	8
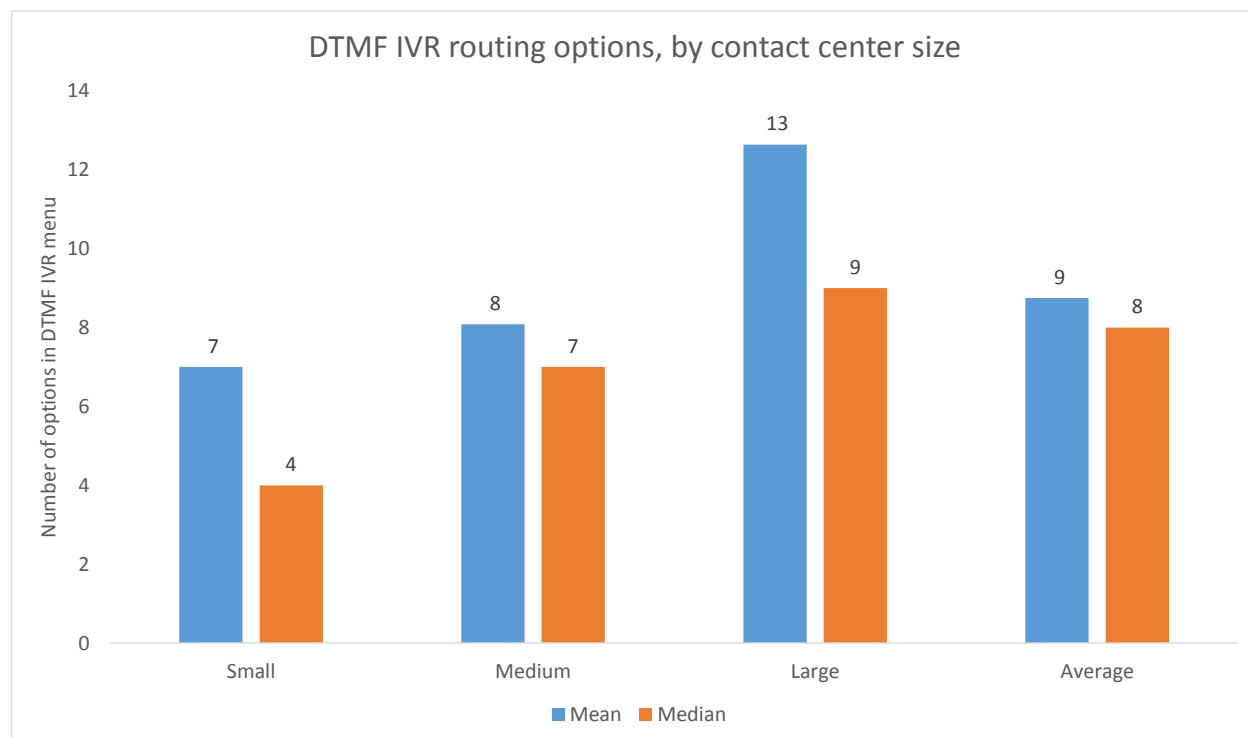
Sophisticated call routing capabilities allow the business to put the right agent with the right skills in front of the customer to meet the business's strategic aims, keep costs low and improve the customer's experience. Obviously, a business will want to treat a delinquent account differently to a high-value customer, or a caller identified at risk of leaving the business. The former can be routed straight through to collections, and the latter two to highly-skilled agents who may have worked with the customer previously.

Figure 74: Capability of routing calls automatically depending on the customer profile, by contact center size

Capability of routing calls automatically depending on the customer profile, by contact center size
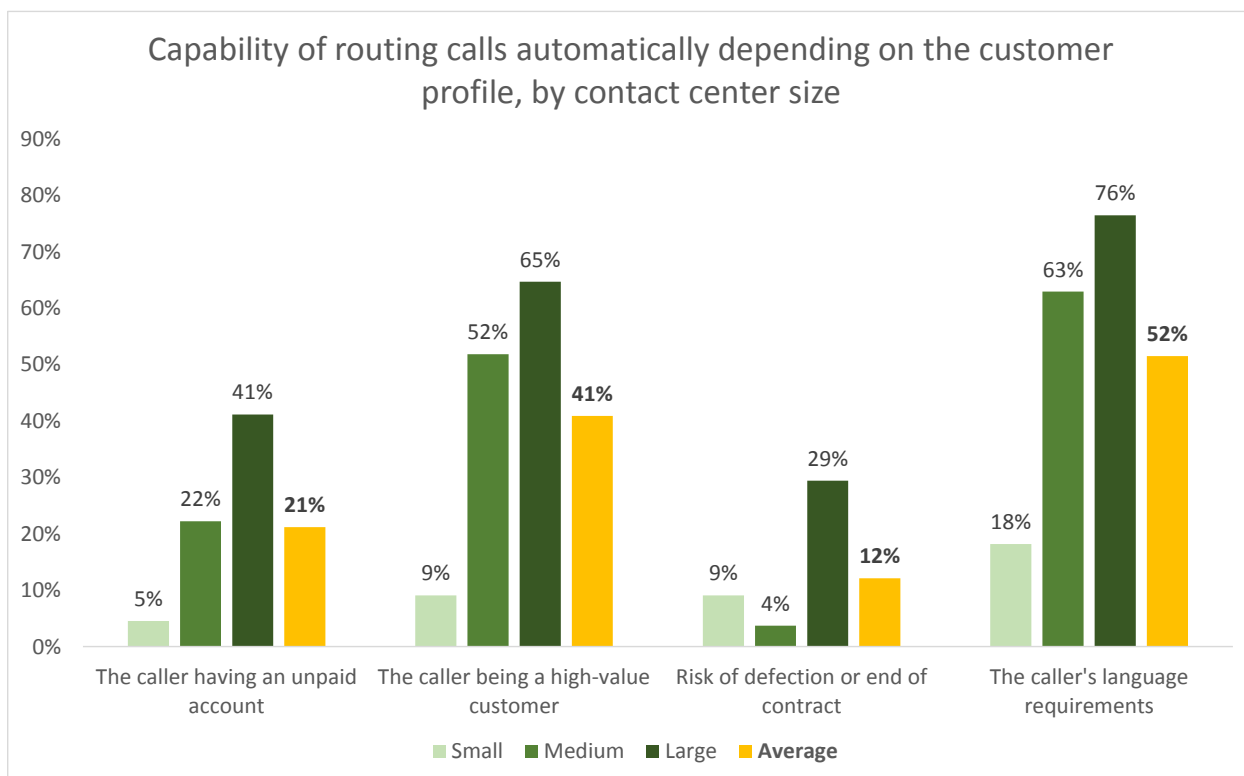
NB: statistics refer only to respondents that use DTMF IVR, automated speech recognition, ANI and/or DNIS to route calls

Very few of this year's respondents from smaller operations use much in the way of value-added routing, despite the ability to route a delinquent account automatically through to credit control being of great value to any type of business which offers accounts in arrears to its customers (finance, manufacturing, telecoms and utilities, for example). Large contact centers were far more likely than smaller operations to do this, with 41% of large respondents stating that they did so. A large difference was also noted when looking at whether a customer was likely to defect or churn.

Identifying a high-value customer (and presumably bumping them up the queue or sending them to a top agent) is somewhat more popular, although once again, the usage of this strategy is closely linked to contact center size. 52% of this year's respondents route calls automatically based upon a caller's language requirements.

Screen-popping

Information about the specific caller is collected and popped to the agent's screen by 58% of respondents. This ability seems to be a factor of contact center size, as the benefits of cutting 20 or 30 seconds from a call is worth far more to a large operation than a smaller one, simply due to the higher volume of calls received making the investment worthwhile.

In fact, 82% of respondents from large operations route calls to an agent complete with screen-pop, compared to only 32% of small and 63% of medium contact centers. (These figures are taken only from the subset of respondents that front-end calls with IVR, ANI or DNIS).

Figure 75: Automatic screen-popping of customer details, by contact center size

Automatic screen-popping of customer details, by contact center size

Category	Value
Average	58%
Large	82%
Medium	63%
Small	32%
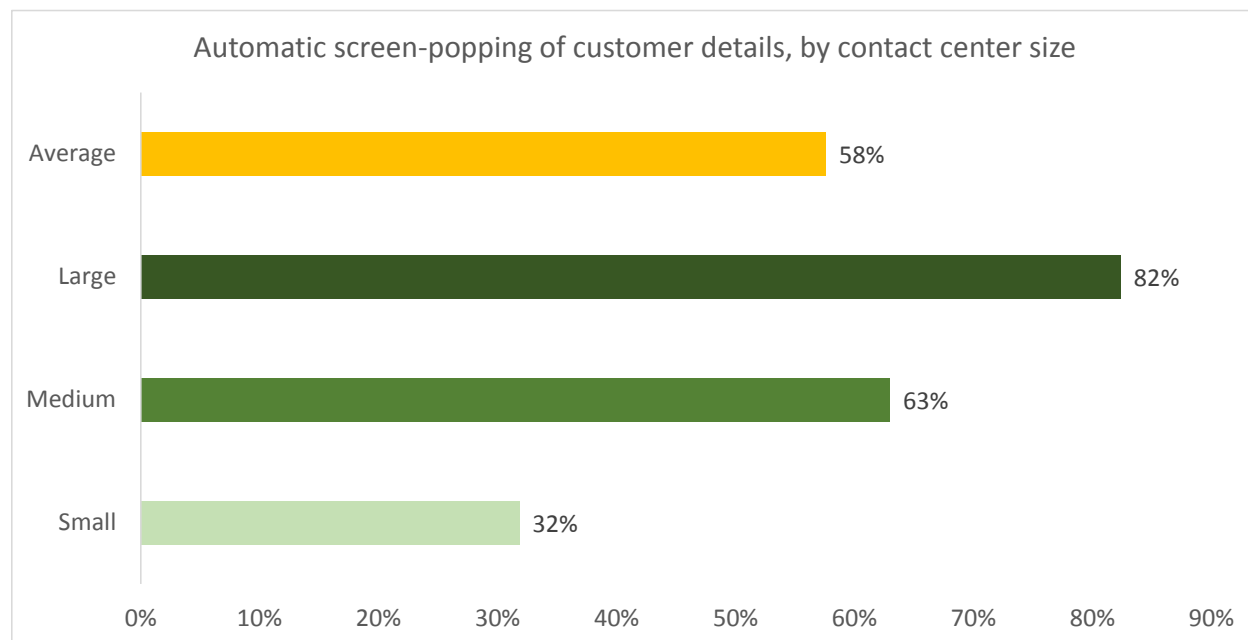
VIRTUAL QUEUE MANAGEMENT

ContactBabel carried out a large-scale survey of the public that explored why customers notoriously hate queuing to speak to a contact center agent, yet seemed far more acceptant to wait in an actual physical queue, often for a longer time.

Figure 76: Reasons given for dislike of contact center queuing

Reason for disliking queue	Average score from 10 where 10 is "extremely frustrating"	% of public scoring this at a maximum 10
Not knowing how much longer you'll have to wait	8.7	61%
Repetitive announcements	8.0	45%
Having to restate account information already given earlier in the call	8.0	45%
Can't do anything else in the meantime	7.9	46%
The music you have to listen to	7.3	39%

Apart from the fact that customers have a lot of strongly felt reasons for disliking phone queues, the key finding from this table is that 61% of the public absolutely hate not knowing how much longer they will be waiting. This is less of a problem when waiting in a shop to speak to an assistant, as although they cannot give you an exact statement of when someone can help, the queuing system allows a customer to see how many people are ahead of them, to estimate their own wait time, and exercise some level of control over the situation. This makes queuing psychologically easier for the customer, **even if the actual waiting time is significantly longer than it would be in a contact center queue**.

The phenomenon of 'Dentist-Chair Time' - time which seems to stretch out to infinity - is very much active in the contact center world. ACD statistics from thousands of contact centers over many years indicate that an average wait time is around 20-30 seconds. However, when the public was asked to estimate the time they **usually** (not exceptionally) spent waiting to speak to a contact center, the average answer was 11½ minutes - 27 times longer than the reality.

Clearly, trimming 10% off a queue time isn't going to make a lot of difference to the perception of the caller, even though it may be a very difficult task for the contact center to carry out. If customers aren't informed of wait time, they may become discouraged and frustrated as hold time drags on. This can lead to increased abandonment and even if the caller does decide to hold on, this experience starts the call off badly leaving the agent with a lot to make up. Customers waste time complaining about their experiences and may even ask additional questions on the call so that they 'get their money's worth'.

If customers are given the estimated wait time, they may decide to abandon immediately or may judge that the wait is acceptable and remain on the line to speak with an agent. This alleviates some customer frustration but means that some of the callers which abandon may not call back - ever - and it doesn't solve the fact that customers are still having to wait. One solution is to implement a virtual queuing system, which not only provides customers with information about current queue conditions but also presents them with various active options, such as remaining on hold or choosing to be called back when it is their turn.

The #1 reason people hate waiting on hold is not knowing how much longer they will have to wait to interact with a live agent. Virtual Hold Technology (VHT) owns multiple U.S. patents around the accurate calculation and communication of estimated wait time - critical elements in delivering successful virtual queue management solutions. In 2013, VHT improved the customer experience for over 170 million callers by eliminating over 1.5 billion minutes of hold time, saving more than 18 million calls from being abandoned: these results were driven from the accurate estimation and communication of wait time, which enabled customers to then make an informed choice on if to receive a callback or continue to wait on hold.

There are several different varieties of virtual queuing systems: the "First-In, First-Out" (FIFO) system keeps the customer's place in line by monitoring queue conditions until the estimated wait time hits a set target, at which point it intercepts incoming calls before they enter the queue, informing customers of the likely wait time and offering the option of receiving an outbound call in the same amount of time as if they had personally waited on hold.

At this point, customers choosing to remain on hold go directly into a queue. Customers who opt for a call-back (typical acceptance rates of a FIFO call-back are around 50%) are prompted to enter their telephone number and possibly some extra details that can be used for agent selection and skills-based routing, and are then asked to hang up. Virtual placeholders keep the customers' places in line and the virtual queuing system launches an outbound call to the customer at the agreed time. When the call-back is answered by the customer, the system checks the right person is on the line and ready to talk. If this is the case, the call is routed to the next available suitable agent, who handles it as a normal inbound call.

By replacing real hold time with this virtual version, customers are free to do other things, thus removing four of the five problems that they have with queues - unknown queue times, hold music, the inability to do anything else and repetitive announcements.

It is also worth considering a scheduled call-back system, which differs from a FIFO system in that customers do not keep their place in queue, but are called back at some time in the future that is more convenient for them (for example, when they know they will be back at their desk and available to take a call).

There are several types of scheduled virtual queuing:

- **Datebook-type scheduling systems** allow customers to schedule appointments for days in the future, with times blocked-out that are unavailable for scheduling, and limiting the number of call-backs available. This system also allows customers that reach a contact center out-of-hours to schedule a call-back during normal working hours

- **Timer scheduling systems** promise a call-back after a specific amount of time, regardless of queue conditions. While this ensures an on-time call-back for the customer, a surge in call volume or staff reduction due to a shift change can create problems for the contact center's queue, lengthening wait times for other callers

- **Forecast-based scheduling systems** offer appointments during times that are expected to have low call volumes. These times may not be convenient for the customer, and the contact center runs the risk that their scheduling may be inaccurate.

Virtual queuing and call-back, when implemented - and explained properly to customers - can be a win-win for both business and customer by:

- Increasing customer satisfaction
- Reducing average speed to answer
- Reducing call abandonment rates
- Reducing call lengths as customers should spend less time complaining and adding-on unnecessary queries "while they're on..."
- Reducing toll-free costs, as virtual queuing time does not incur telephone charges.

California Public Employees' Retirement System

The California Public Employees' Retirement System (CalPERS), headquartered in Sacramento, California, is the nation's largest public pension fund. CalPERS provides health benefits to 1.3 million members and retirement benefits to more than 1.6 million public employees, retirees, and their families. The CalPERS Customer Contact Center fields more than 650,000 phone calls a year with 80 full-time and 20 part-time agents.

Challenge

In the contact center, customers come first, as evidenced by their aggressive customer service goals: their target abandon rate was less than 5%, and they wanted customer wait times to be no longer 2 ½ minutes.

CalPERS experiences peaks throughout the year. The first two weeks of January – a new year where retirement checks change with tax and health premium deductions – are particularly difficult, along with tax season, open enrollment periods, Mondays, and the days following holidays. Workforce management helps manage the peaks to a certain extent, but CalPERS needs to avoid over-staffing.

Between budgetary issues, mandatory furloughs, and periodic peaks, it's difficult for CalPERS to make its goals, explained Debbie Hanson, the assistant division chief for the CalPERS Customer Contact Center.

"We're a state agency, so we definitely don't have an unlimited budget to hire for peak call volumes," Hanson said. "However, we also can't let our members wait on hold – that defeats our mission to provide quality service. Long wait times impact the callers' perception of the service we provide, and it is reflected back to our agents when they answer the phone."

Solution

When VHT and CalPERS first began working together, it was apparent that the Virtual Hold solution could definitely help manage hold times for the contact center, but the Virtual Hold business case analysis (BCA) revealed something else.

"We had around 80 permanent, full-time agents, which is pretty good staffing for 4.5-minute phone calls," Hanson said. "But the BCA showed us that our agents were consistently taking 6.5- to 7-minute calls. Virtual Hold helped us see that we needed to add some part-time staff."

Results

By bumping up staffing a little bit and adding the Virtual Hold solution, CalPERS immediately began seeing positive results in its customer service goals and operational efficiency.

"We are consistently meeting and exceeding our customer service goals," Hanson said. "We're way below our 2.5-minute wait time goal, and we're actually looking at lowering that goal now."

When the contact center is meeting its customer service goals, the benefits are seen throughout the contact center. Agent morale is up, while vacancy is down. Instead of hearing complaints about the hold time, agents are hearing, "thank you." It's clear: Callers don't mind waiting when they're not on the phone, Hanson explained. And happier callers mean that agents are able to perform their jobs in a more pleasant environment.

"Virtual Hold really balances out our phone volumes and gives us a chance to catch our breath," Hanson said. "Even when it gets really busy, we're working a regular work day."

Relieving customer and agent frustration aren't the only positive outcomes of adding Virtual Hold.

"With Virtual Hold, we were able to avoid repeat calls and let our customers hang up the phone. Our phone bill was cut by a third in just part of the fiscal year," Hanson said. "It's more than paid for itself and has really balanced out our workload."

HIGHLIGHTS

- **56% improvement in ASA during peaks**
- **Nearly 3.5 years of hold time avoided**
- **53% improvement in abandon rate during peaks**

The following table shows the prevalence of call-back options, with the proportion of those contact centers offering call-back once again increasing this year, especially the 'in-call' variety. The proportion of sales-focused respondents offering in-queue call-back has maintained last year's big increase, which we would certainly expect as these operations would be expected not to miss sales opportunities. Service-focused operations have also increased their callback options this year, both in the phone queue and from the website.

Callback solutions connect live agents to customers on the phone, but what about customers who are on other channels like mobile applications, a website, or even a set-top cable or satellite box? Research is clear – customers want to stay on their channel of choice, and they expect a consistent & intelligent service experience, across all channels of interaction. Callback solutions play a critical role in multi-channel customer support, as sometimes customers need to speak with a live agent to resolve an issue. To be effective, the callback REQUIRES the context of who the customer is, what channel(s) they are using, and what the customer is trying to do. A successful callback solution should include a common virtual queue across communication channels, with a supporting customer context model to drive relevant agent-customer interaction.

Figure 77: Use of website and queue call-back options and queue position announcements, by contact center activity type

Use of website and queue call-back options and queue position announcements, by contact center activity type
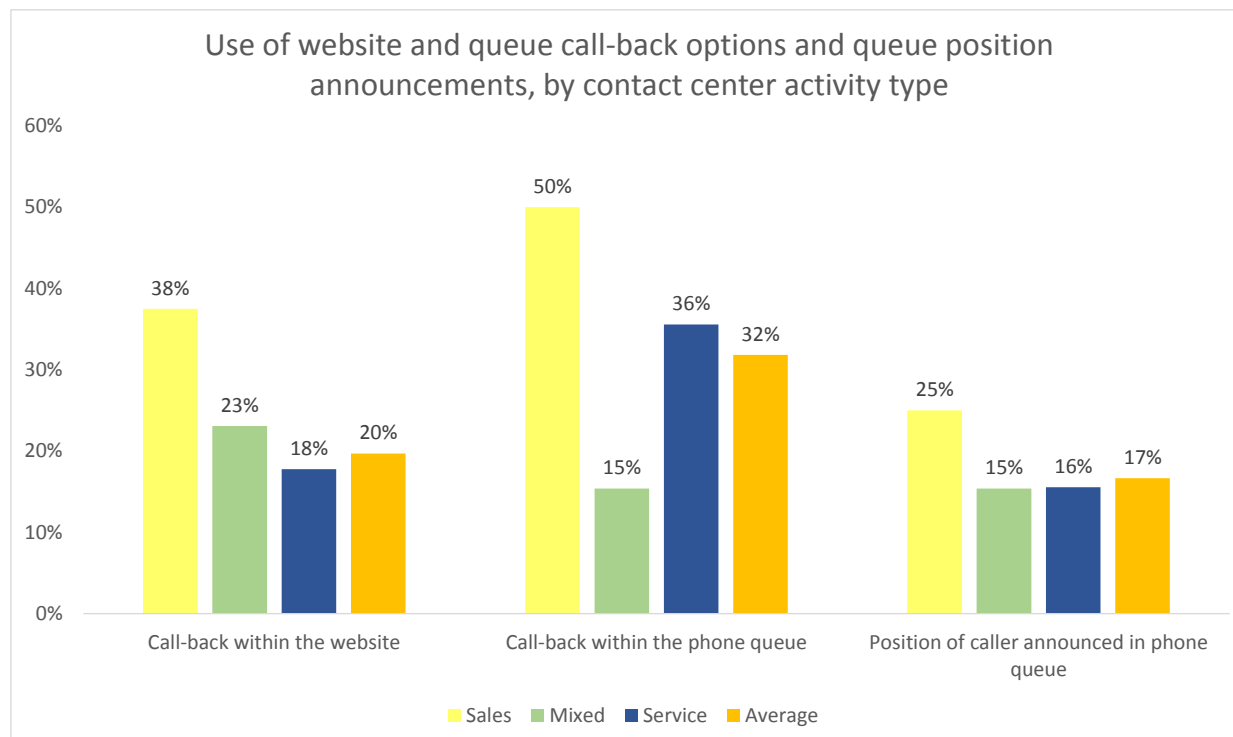
The use of a website 'call-me' button (which initiates an outbound call at a time specified by the recipient) is weighted similarly towards operations that carry out significant sales, and is present in the case of 20% of all respondents.

Announcing the position of the call in the queue does not have the same popularity as the callback options, although a minority of respondents use it, especially those in a sales environment.

Looking at how the use of these solutions differ by size, it can be seen that these are much less the preserve of large operations than has been the case in past years.

Figure 78: Use of website and queue call-back options and queue position announcements, by contact center size
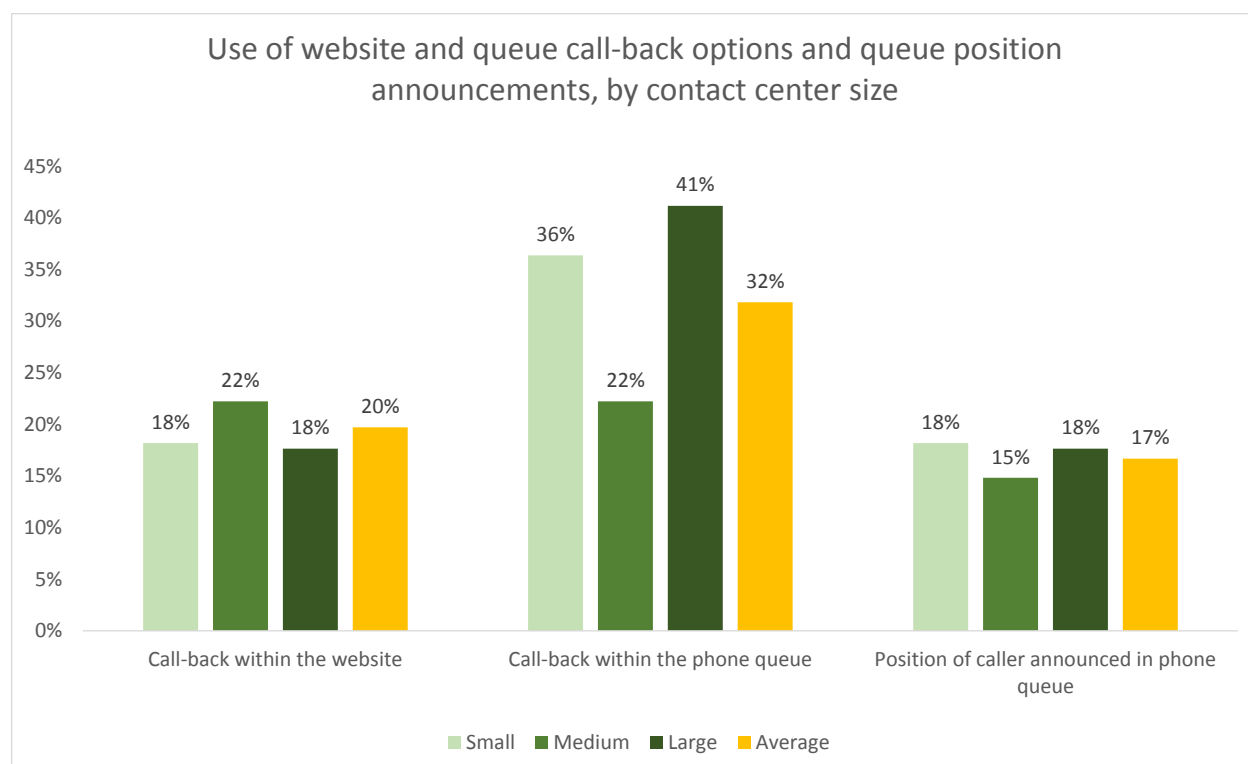
Queue management and call abandonment rates

Offering an in-queue call-back option seems to have a positive effect on call abandonment rates, with those doing so having a mean of 4.1% of calls abandoned, compared with 5.5% amongst those who do not offer this option, similar findings to last year's figures.

However, announcing the position of the caller in the queue seems to have much less of a positive outcome, with a call abandonment rate of 4.9% against 5.3% in operations where no such announcement is made.

A tentative conclusion can be drawn that call abandonment rates can be reduced best through actual actions that benefit customers, such as calling then back. Simply providing them with more information about the queue situation (which may be negative) could encourage customers to abandon the call and ring back later. However, having this knowledge and actively being able to choose what to do may well make the customer think more positively about the company (in that they haven't had to waste any great amount of time) but without a call-back option the customer will not have managed to do what they set out to.

MULTICHANNEL WORKFORCE MANAGEMENT

Workforce management solutions have to deal with environments which have become much more complex, in order to cope with the reality of the work that is being presented to agents. For example, all agents require good listening ability, familiarity with keyboard and IT skills and a knowledge of the business they are working in, but more now need a pool of in-depth and specific talent to be available in order to satisfy customers fully, including:

- Familiarity with either specific customers (e.g. account management) or customer sub-sets (e.g. commercial vs. domestic products)
- Specific product or technical knowledge
- Right level of experience and empowerment for the customer (e.g. "gold-card" customers may demand single-call resolution, meaning senior agents must take the call)
- Language skills (both in domestic and international markets)
- Ability to deal with multichannel interactions (either in real-time - such as web chats - or offline, such as emails).

Fulfilling service levels while managing costs is an iterative cycle, requiring several key processes to be completed. Feedback from each stage means that the enterprise can continually improve its efficiency and become more confident in future predictions.

Calabrio recognizes that the role of Workforce Management is swiftly expanding beyond phone interactions to multi-channel environments that include email, chat, and social media. As environments become more complex, there is a critical need to integrate WFM solutions seamlessly into the ecosystem that is our modern contact center, spanning channels and connecting seamlessly to related data in other environments, such as Human Resource Management Systems. Calabrio believes in a connected approach to WFM; providing a wide range of workflows, APIs, and services that support the cross-departmental processes that exist in today's contact center.

Gartner positions us as the only Visionary in the Magic Quadrant for Contact Center Workforce Optimization.

At Calabrio, we're on top of tomorrow's contact center trends today. That's why we take great pride making sure our WFO and Analytics customers stay ahead. Are you ready for what's next?

Become a visionary for change.

Let's have a conversation about how we can take your customer service to the next level. And find out why more than 400 organizations switched to Calabrio in 2013 alone. Call **1-763-795-7665** or visit **calabrio.com/change** to learn more.

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Tom Sullivan
Calabrio Senior Product Manager

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FORECASTING

Before any staff planning can be done, an enterprise first needs to understand what has happened in the past. A solution which provides historical data from entire customer contacts means that scheduling can take place in a more realistic way. Enterprises should also be able to factor in exceptions, such as advertising campaigns, training and public holidays, view when the best time for a meeting or training session will be, and measure the impact on the rest of the contact center. Running regular hypothetical 'what-if' scenarios can show a scheduler how alterations to shift-patterns would impact performance, as well as assisting in business continuity by seeing what would happen in a flu epidemic, for example.

A great deal of unnecessary agent work can be removed by identifying the types of call that are being received, and determining whether these could be reduced further up the line, in the departments whose activities actively affect the volume and type of calls received, e.g. marketing or IT (for the website). As such, workforce management is increasingly being used as part of an overall quality or performance optimization suite, which can include quality monitoring, speech analytics, HR management and training as well as the traditional workforce management forecasts and schedules, as all of these factors affect each other.

For example, understanding when and how other departments will be operating means that workforce management tools can be used to forecast and schedule accordingly (e.g. a new TV advert may trigger a wave of specific calls). Additionally, contact center management is able to brief agents - via a desktop broadcast if at short notice - about the correct responses and issues, as well as changing IVR prompts and messages to provide answers to the more simple questions, as well as managing agent skill-sets for relevant call groups.

Businesses should look for flexibility in forecasting functionality: situations can develop very quickly which mean that forecasts can become useless without the ability to alter schedules dynamically even at an intraday level to reflect reality.

SCHEDULING

Scheduling is not as simple as it may seem at first glance. The enlightened enterprise takes agent preferences and skill sets into account when scheduling. The "standard agent" approach to solving resource issues (i.e. treating one agent the same as any other) will cause problems with both agent satisfaction and customer service levels. Most companies using advanced workforce management software will have between six and nine skill-sets to work with, although a few contact centers use as many as 50.

Yet the business's needs must come first, so a scheduler will have to find the best way to match the company's requirements with those of its employees. This can get particularly complicated in a multimedia environment which usually has agents with multiple media-handling skills (e.g. voice, e-mail, web chat etc.) and multiple business abilities (e.g. sales, service, product knowledge, languages etc.).

Businesses must look for a solution which does not over-simplify the scheduling process, yet retains usability and the flexibility to make changes. Solutions that allow agents to request and alter their own schedules (for example, around holidays) are becoming increasingly sought-after, as they have also been proven to strengthen agent morale.

ADHERENCE AND REPORTING

Adherence is the ability to compare forecasts with reality, and learn from mistakes. Sophisticated scheduling and forecasting is useless without the opportunity for improvement brought about by adherence monitoring. Real-time adherence allows managers to see exactly what is happening, and can alert them to deviations from the expected activity, allowing them to make changes before problems occur. Adherence allows a business to fine-tune its contact center activity. Put simply, the more you use it, the more accurate your forecasts and schedules become.

This is another area where the cerebral activity of traditional workforce management has become more dynamic. Real-time reporting on schedule adherence, and the ability to access this information through a web browser or mobile phone means that dynamic changes can be made to the system. In the more sophisticated solutions, 'workforce management' has now become 'workforce performance management'.

For example, adherence does not have to refer to the contact center as a whole, as WFM solutions enable contact center managers to monitor and manage agent performance in real time, by connecting to the ACD system and monitoring the status of an agent's activity (for example, time spent logged on, against planned work schedules), even if the agent is working remotely. Agent adherence and non-adherence can then be acted upon quickly, and used to support performance appraisals.

Businesses should look for a solution which is simple to understand (so staff will feel comfortable using it) yet retains the power and functionality to help the contact center manager understand what has happened and to make changes quickly if necessary.

Workforce management systems are very common in contact centers, with a penetration rate of 63% industry-wide. 17% of these users are actively looking to replace their WFM solution, and a further 11% indicate that they are likely to implement a system for the first time in 2014.

Figure 79: Use of workforce management, by vertical market

Use of workforce management systems, by vertical market

Vertical	Use now, no plans to replace/upgrade	Use now, looking to replace/upgrade	Will implement within 12 months	Will implement after 12 months	No plans to implement
Average	52%	11%	11%	7%	19%
Public Sector	25%	17%	17%	25%	17%
Medical	42%		17%	8%	33%
Finance	37%	16%	16%	5%	26%
TMT	43%	11%	7%	4%	36%
Services	62%	3%	10%	10%	14%
Retail & Distribution	56%	11%		11%	22%
Entertainment & Leisure	57%	14%	14%	14%	
Manufacturing	71%			14%	14%
Outsourcing	61%	13%	17%		9%
Insurance	73%	27%			

■ Use now, no plans to replace/upgrade ■ Use now, looking to replace/upgrade ■ Will implement within 12 months
■ Will implement after 12 months ■ No plans to implement

Small contact centers have traditionally been less likely to have implemented workforce management, due to issues over cost, complexity and whether it was even necessary in small operations. Recent years have seen opportunities via cloud / SaaS (software-as-a-service) models, as well as subscription-based pricing alternatives, also enable accurate forecasting and scheduling options for smaller contact centers.

calabrio® Due in part to the explosion of interaction channels, visionary contact centers are re-evaluating how they set goals and define efficiency around classic metrics like service level and staff management, with customer demand for immediate service, shifting customer relationship models and the impact of newer generations all being factors. As the role of the contact center becomes even more critical, contact centers need tools that offer a wide degree of flexibility in order to create staffing models for today - and plans for the future. Calabrio WFM provides the most flexible forecasting, planning, and scheduling tools on the market today, and leads the way in innovative user experiences, streamlining complex problem solving, and making it easier to support new and unique staffing requirements.

Figure 80: Use of workforce management, by contact center size

Use of workforce management systems, by contact center size

	Use now, no plans to replace/upgrade	Use now, looking to replace/upgrade	Will implement within 12 months	Will implement after 12 months	No plans to implement
Average	52%	11%	11%	7%	19%
Large	74%	21%	3%		3%
Medium	52%	10%	18%	10%	11%
Small	37%	6%	10%	8%	40%
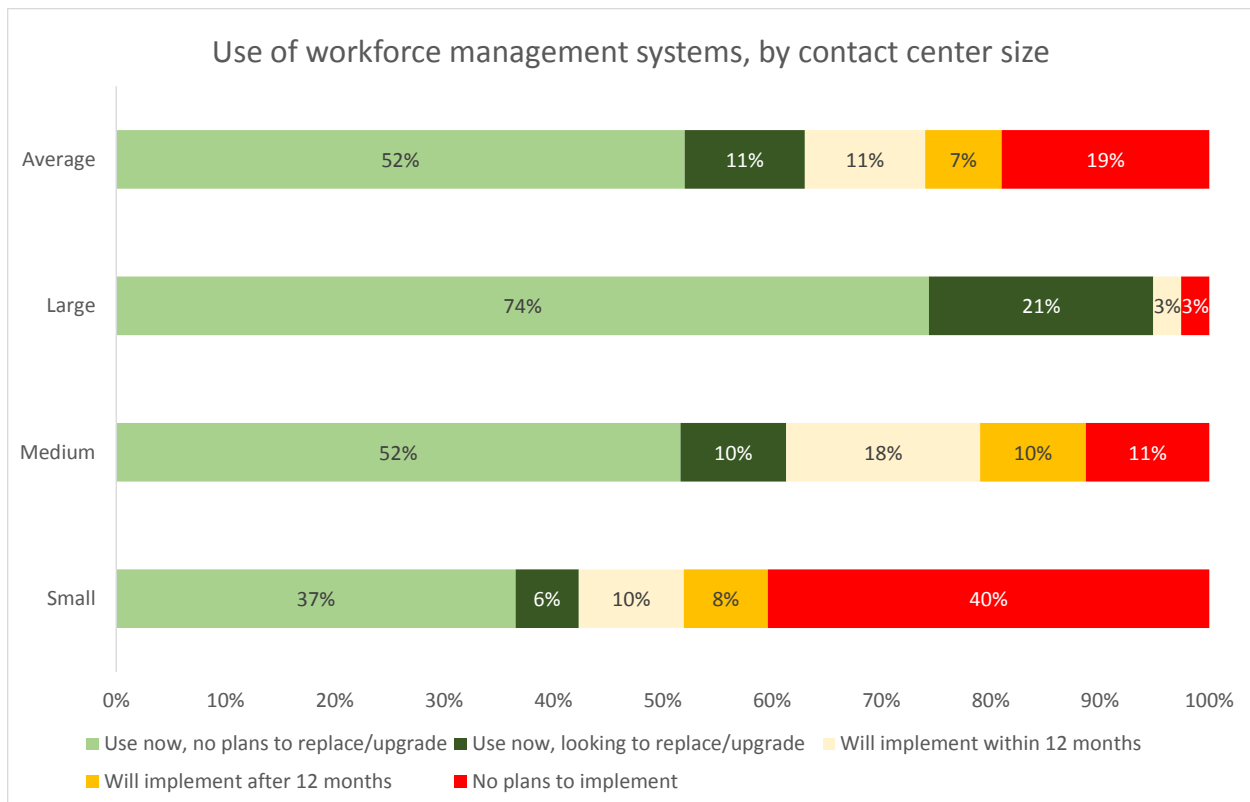
City Information Services Grows to Better Meet Needs of Employees and Residents

CITY OF VANCOUVER

OVERVIEW

INDUSTRY:
Government

SEATS:
80 seats, 2 locations

VOLUME:
More than 820,000 annual calls

20% year-over-year call volume growth

APPLICATION:
Calabrio Workforce Management

RESULTS

Adding
10 AGENTS
every 6 months

0%
AGENT TURNOVER
in 16 months

8%
ADHERENCE JUMP

BACKGROUND

Rooted in the value of strong community, the City of Vancouver established its 3-1-1 line as the first easily accessible point-of-contact for the people who call the city home. Residents are encouraged to call the three digit number to request information, non-emergency services, share concerns and give feedback. Citizen Service Representatives provide high-quality service to callers in up to 175 different languages, 365 days per year, making the phrase "talk to us — we want to hear from you" come to life.

The call center opened four years ago with 12 representatives taking 165,000 calls the first year. In 2012, more than 80 agents handled 820,000 calls. The rapid growth is attributed to more residents finding out about the service through advertisements, websites and official correspondence such as property tax notifications. The city anticipates call volume will continue to grow as the population increases and more citizens learn about 3-1-1. The city is looking at applying the same customer support model at city service counters, as well as establishing a work from home program for call center agents.

THE CHALLENGE

The City of Vancouver's challenge actually comes from its greatest attribute — doing right by their employees and providing well-rounded balance, all while managing a 20 percent year-over-year call volume growth rate. However, when going above and beyond to make employees happy, scheduling and adherence accountability raises red flags. The City of Vancouver needed a flexible solution that could not only handle an increased number of calls that were expected to be addressed with a high level of service, but also would inspire employees to work more efficiently. "By being efficient, we can help keep tax rates low while still providing great service to citizens of Vancouver," said Marc Dube, Team Manager (Workforce) at 3-1-1, the City of Vancouver.

THE SOLUTION

The City of Vancouver turned to Calabrio's Workforce Management to essentially see the future in order to plan ahead. With the ability to accurately schedule the right resources at the right time to answer the forecasted call volume, management has been able to effectively balance employee satisfaction while still providing exceptional service for their growing caller base. Calabrio's Workforce Management solution enables the City of Vancouver to provide more consistent service by training each employee to be a generalist so that every caller receives the same level of service no matter which agent answers the phone. "We are very much moving towards a McDonald's model, where Big Mac tastes the same no matter which city you order it in." Dube said.

THE RESULTS

By using Calabrio's Workforce Management to accurately predict call volume and efficiently schedule employees, the City of Vancouver has seen improved quality of life for its employees while successfully accommodating outstanding growth. This approach has brought great results, including 16 months with zero percent agent turnover. "We really try to fit work schedules into people's lives instead of fitting people's lives into the call center schedule," said Dube, "This approach lends itself more towards longevity of people staying with the company than do pizza days and social events."

Additionally, management uses the metrics provided by Workforce Management to have conversations with each employee about their adherence and time management. With the results in black and white, they are able to praise those who are exceeding expectations and help those who are pulling the team levels down. "When I started meeting with employees, I was initially surprised at how many thanked me for going over their metrics because they wanted to make sure that everyone else is working as hard as they were," Dube said.

As a result, the City of Vancouver saw a positive eight percent jump in adherence levels in just a six month period in mid-2012. "In a call center, we measure time in seconds. If I can get 10 more minutes per day of productivity out of someone multiplied by all our agents, then I can save money by not hiring another employee," Dube said. Additionally, by effectively managing employee time, the representatives can devote more hours to training which expedites the call center's goal of consistent service.

The City of Vancouver takes great pride in creating a great work environment and supporting its citizens. The 3-1-1 call center is now able to keep turnover low by providing work/life balance for their employees, increase the amount of time devoted to training and save the city money by reducing the amount of employees hired. And most importantly, they are providing superior and consistent assistance for each citizen who dials the number.

Respondents were asked to score the importance of various workforce and performance management issues out of 10. Results are shown below for the whole industry, and just for larger contact centers. (Only the scoring extremes of 'very unimportant' at 1 or 2/10, and 'very important' at 9 or 10/10 are shown, in order to demonstrate the pattern of people who feel very strongly one way or the other).

Figure 81: Workforce and performance management-related issues and improvements

Workforce and performance management-related issues and improvements

- Aligning the enterprise's goals with agents' behavior: 12% 7% ... 6% 12%
- Handling multichannel interactions more effectively and efficiently: 12% 10% ... 8% 11%
- Understanding why customers call the contact center: 18% 6% ... 3% 13%
- Identifying an agent's specific areas of improvement: 8% 6% ... 8% 10%
- Under/overstaffing: 11% 4% ... 3% 15%

Legend: 1 2 3 4 5 6 7 8 9 10
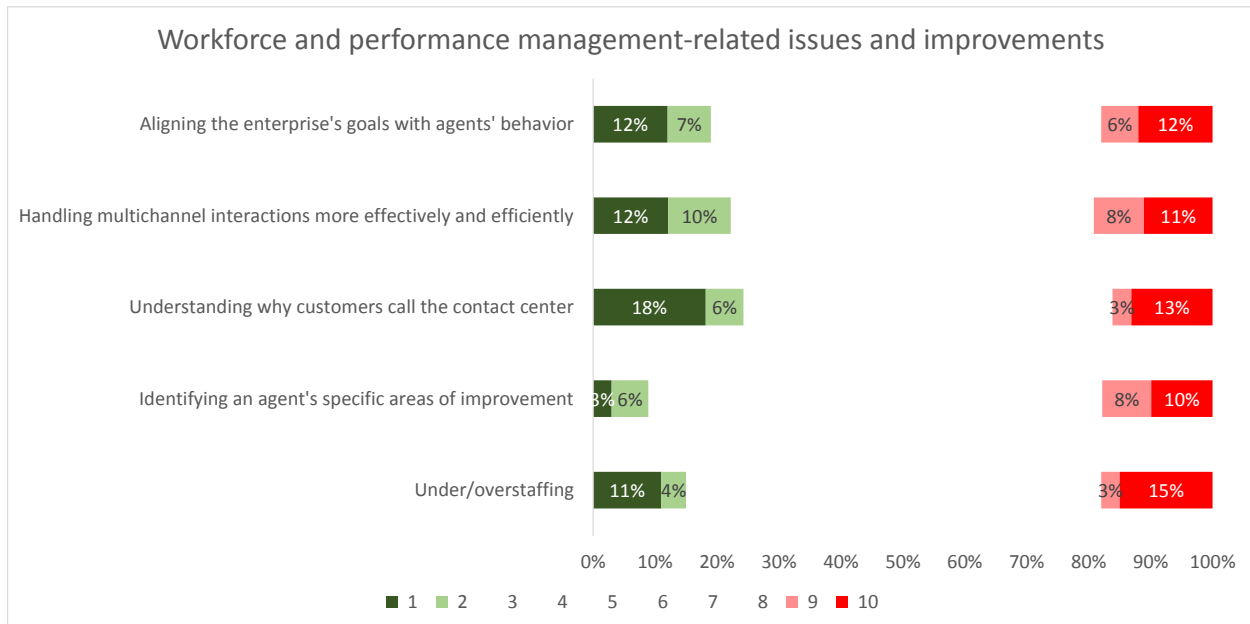
Figure 82: Workforce and performance management-related issues and improvements

Workforce and performance management-related issues and improvements (large contact centers)

- Aligning the enterprise's goals with agents' behavior: 9% ... 4% 26%
- Handling multichannel interactions more effectively and efficiently: 13% ... 13% 17%
- Understanding why customers call the contact center: 17% 4% ... 17%
- Identifying an agent's specific areas of improvement: 4% 4% ... 9% 13%
- Under/overstaffing: 13% ... 4% 17%

Legend: 1 2 3 4 5 6 7 8 9 10
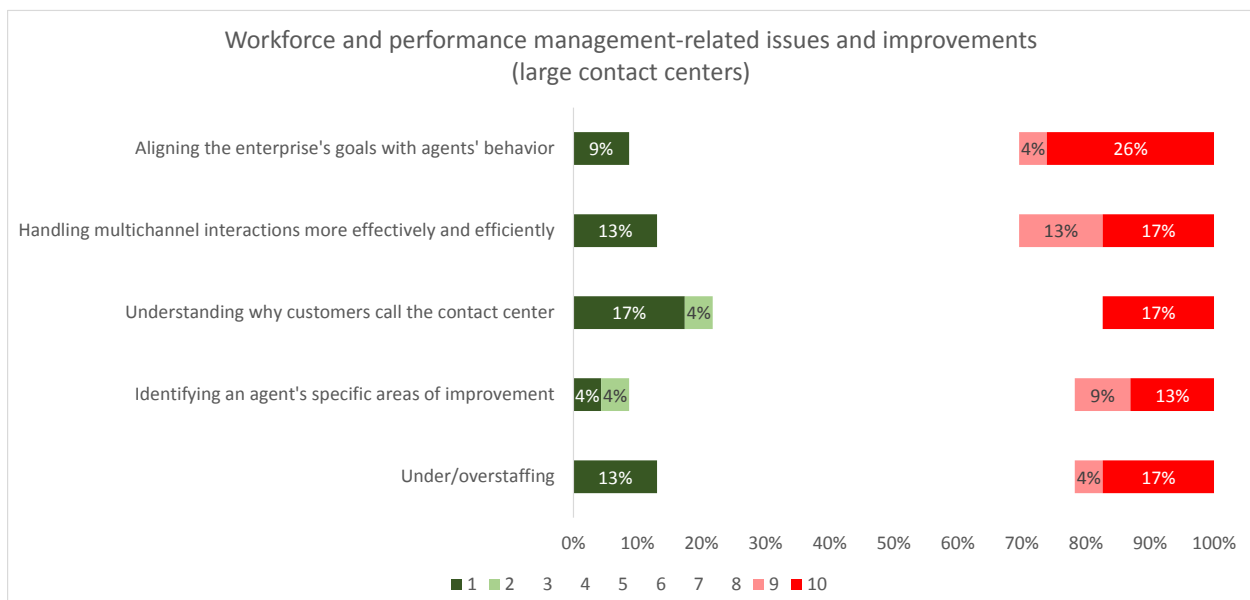
Perhaps the biggest discrepancy between the industry-wide results and those simply for large contact centers was the finding that bigger operations are much more likely to be aware that there can be a disconnect between how an agent behaves and how the company wishes to be seen. For example, an agent can be encouraged to finish a call quickly (and rewarded for it), which is good for the contact center's metrics, but which may make the customer feel rushed and less valued, going against what's best for the company. Understanding where the potential gaps are will allow scheduling and forecasting to take place that looks beyond simple efficiency, and which measures the quality of the call in the context of the company's goals.

The ability to forecast and schedule agents to handle non-voice work to an acceptable service level, while retaining their services for voice work as and when needed is seen as far more important for larger contact centers as well.

The reasons that customers are calling is not seen as being a particularly important opportunity for improvement amongst most respondents. In our view, this is an area which is ripe for further investigation, with tools such as interaction analytics offering the chance for businesses to understand their customers better, as well as being able to identify the purpose of the contact center, and where the costs of running an operation are actually being spent.

The identification of areas for improvement at an agent level was seen as an important area for improvement - especially with larger contact centers - with tools such as performance management, speech analytics and quality monitoring identifying each agent's training needs, matched with an understanding of the types of call that come into the contact center.

Excessive agent idle time and/or understaffing is seen as a major issue by 17% of large contact centers, against a similar figure of 15% industry-wide.

This year's workforce management chapter focuses on how systems can be improved, and the functionality that contact centers believe that they will need in order to manage non-traditional interactions, such as new channels or staff who are not based in the contact center, but who may speak with customers (e.g. branch or field staff). With 10-15% of inbound interactions being email for many organizations, and 25%+ of contact centers stating that customers speak with knowledge-workers elsewhere in the business, it is no longer enough for a workforce management system to forecast and schedule based only on voice calls taken by the contact center.

Figure 83: Which changes to your workforce management systems would benefit you most?

Which changes to your workforce management systems would benefit you most?

	Of great benefit	Of some benefit	Of little or no benefit
Employee self-scheduling	27%	21%	52%
Enabling better homeworking	30%	31%	39%
intra-day changes to schedules	36%	39%	25%
Reducing the effort / headcount needed to schedule	47%	43%	10%
Combining multichannel and voice traffic scheduling	49%	34%	17%
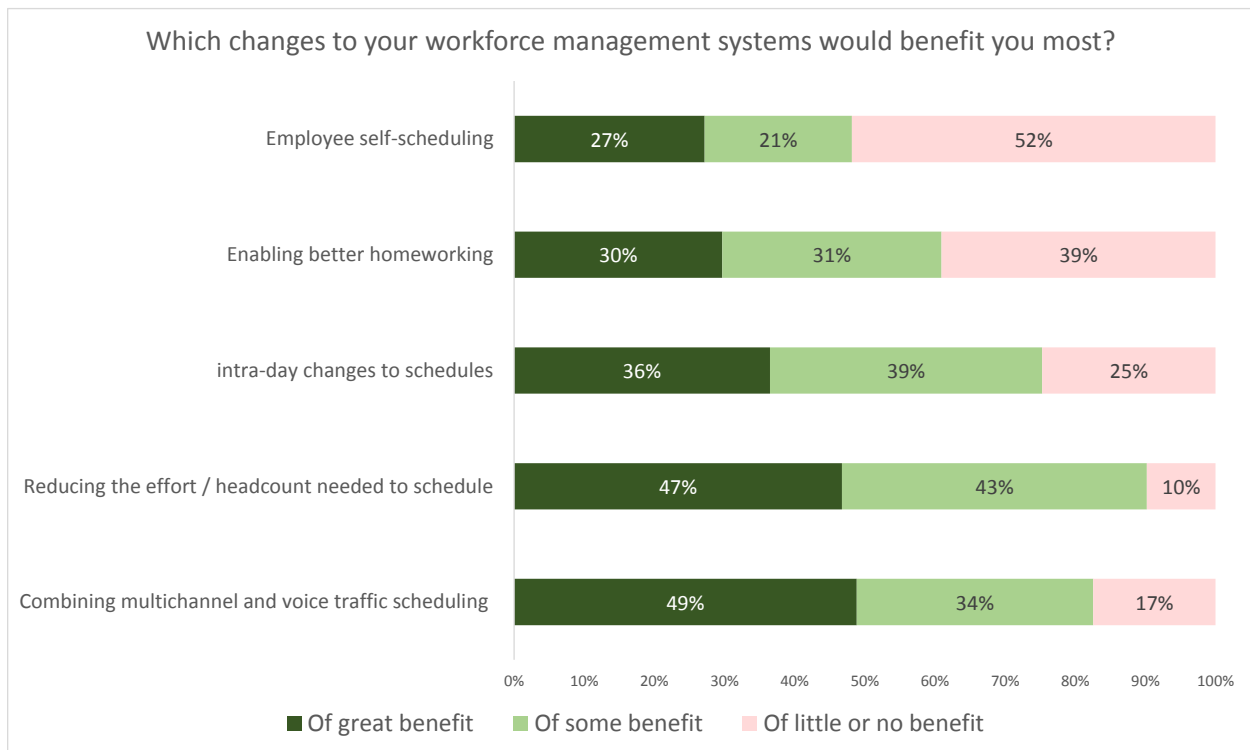
Contact centers have always struggled with how to manage long-range planning, with challenges ranging from trying to incorporate outside influences on contacts, to translating forecasts into staffing and capacity planning models that address contact center elements beyond the agents. Calabrio incorporates long-range planning elements and supports contact centers in addressing staffing needs for agents, supervisors and administrative staff, as well as facility components such as phones, desks, chairs, and other capital items typically not addressed in traditional staff planning exercises. With Calabrio WFM, the ability to estimate budgets, track long-range contact center business planning and create concrete hiring plans for Human Resources can dramatically impact and improve the entire capacity planning process.

It might be thought that as workforce management is most useful for businesses with hundreds of agents, where relatively small efficiencies in forecasting and scheduling can make a huge difference to performance and cost, that it would be these larger operations which most want multichannel capabilities. In fact, the advent of social media contact, the rise in web chat and the jump in email volumes across the board mean that around half of respondents from all of the size bands consider multichannel and voice scheduling to be of great importance to them.

Almost half of respondents would find easier scheduling of great value to them, with only 10% stating this will provide little extra value to them.

The ability to alter a schedule within the course of a working day will be seen to have great benefit by 36% of respondents, with those from medium and large operations understandably more enthusiastic about this capability.

Of secondary importance to many respondents in small and medium operations is the ability to allow agents to self-schedule (although this can be very good for morale), with homeworking being far more important to those respondents that actually carry out this activity, of course. 58% of respondents from larger operations thought that self-scheduling would be of great benefit to them.

55% of respondents from large contact centers use a combined voice and multimedia workforce management application, with small minorities using an ad-hoc approach or separate scheduling.

Figure 84: Scheduling of multichannel workforce activity, by contact center size

Scheduling of multichannel workforce activity, by contact center size

Legend:
- No or very little multichannel work done
- Using the same workforce management tool as for voice
- Not scheduled formally, done ad-hoc
- Separate scheduling of multichannel activity

	Small	Medium	Large	Average
No or very little multichannel work done	19%	32%	27%	26%
Using the same workforce management tool as for voice	22%	32%	55%	34%
Not scheduled formally, done ad-hoc	50%	29%	9%	32%
Separate scheduling of multichannel activity	9%	6%	9%	8%

Respondents were asked to comment upon those features which are most important within their workforce management solutions. As before, focus is placed on those respondents who feel most strongly about issues, whether negative or positive.

The most obvious finding from this chart is that reporting functionality is seen as the key to successful workforce management, closely followed by its usability. These elements are perhaps the most fundamental in any workforce management solution, and shows that despite the changing nature of customer contact, the basics still apply.

Enabling the contact center to view its activity holistically, through integration with other systems (where the front office, back-office or third-party), is also seen as a vital capability, and the ability for non-technical and more commercially oriented users to get the full benefit from a workforce management capabilities, can be seen in the relatively high ratings attached to the simplification of administration. Although mobility features are viewed as less important, 22% of respondents still rated as 9/10 or 10/10, a figure which will surely rise significantly in the near future.

Figure 85: Workforce management system requirements

Importance of workforce management elements
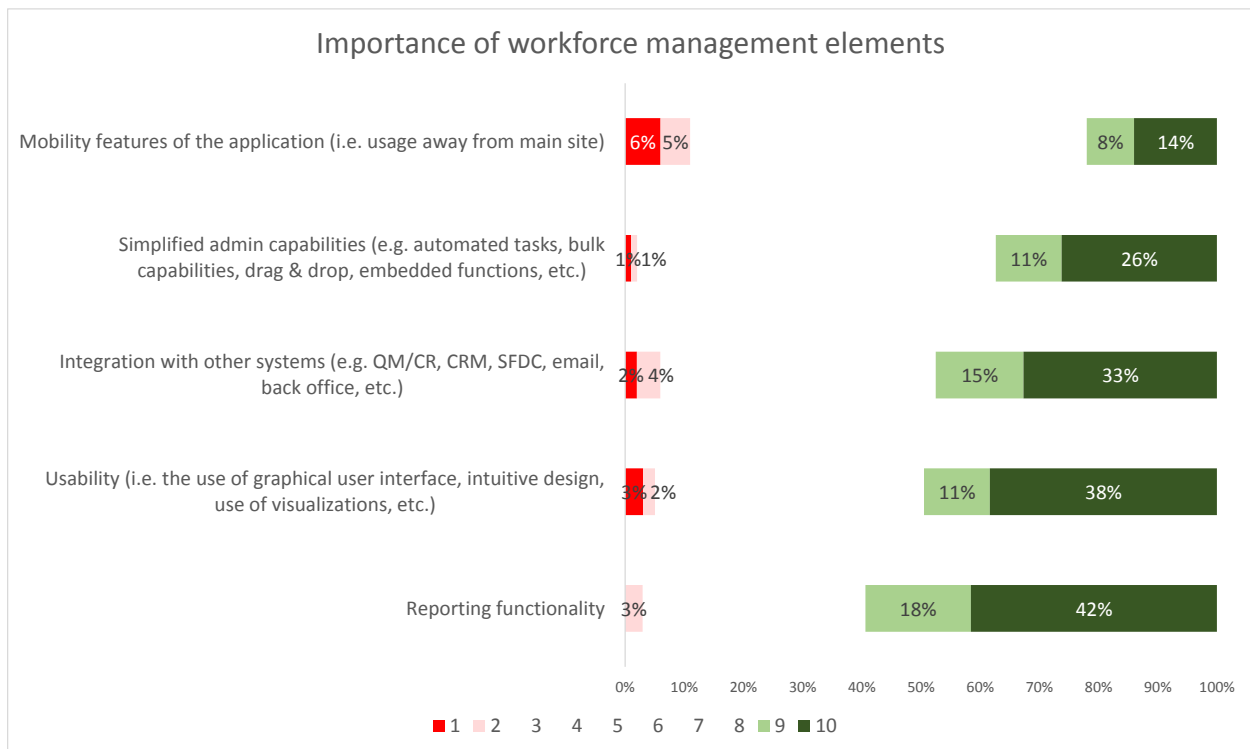
HEADSETS

There are various factors to consider when deciding which headset to purchase for your contact center workforce. If you have many hundreds or even thousands of agents, headset purchase can be a large ongoing capital expenditure that is important to get right. There are many things to consider:

- Compliance with health and safety legislation
- Total cost of ownership
- Durability
- Performance
- Comfort
- Contact center telephony infrastructure
- Sound quality.

Contact center agents wear headsets for hours every day, and the cost of replacing or repairing headsets should be considered in the total cost of ownership, requiring good levels of after-sales support and guarantees.

Some contact center agents like having the freedom to move around while on calls, especially in a high-pressure sales environment. Some contact centers may decide they don't want agents wandering around, but that the supervisor needs to be able to be mobile. Agents with wireless headsets can spend less time putting callers on hold as they can walk to where the information they need is held, taking the caller with them. This in turn reduces the time taken on each call, and improves customer satisfaction.

Headsets and the 'enterprise as contact center'

The newest headsets support the 'enterprise as contact center' model by allowing the agent to involve knowledge workers in a three-way conversation with the agent via Microsoft Communicator, IBM SameTime or VoIP. This allows, for example, a 2nd-line technical support worker to help immediately with a difficult part of a query without a formal, long-winded escalation process taking place.

The majority of contact centers have implemented Internet protocol (IP) telephony as part of their technology environment. Agents will make and take calls via their PC, so choosing a headset that can adapt to future technology infrastructures is key.

The weight, sound quality, amount of background noise allowed in, comfort and the length of time the headset will be worn should also be considered. Having sound in both ears (binaural) allows noise levels to be lower than is the case with single-ear sound (monaural), although some agents can feel isolated if

they cannot hear the world around them. In addition, a noise-cancelling microphones filter out the unwanted background noise which can make the conversation harder for a caller to hear. This may be especially relevant for homeworkers, where the background noise (traffic, children, dogs, etc.) may be less easily managed or predictable. Voice tubes can also allow more flexible positioning of the microphone, with attendant improvements in sound quality.

The effect of headsets upon productivity

There are examples of how improving audio and speech quality can positively impact upon call handling time and overall contact center performance. A Spanish contact center gave some sets of agents headsets with digital audio processors, and some used the more traditional headset. The first group's technology had the effect of 'cleaning up' unwanted noise at either end of the line, allowing the customer and agent to communicate more effectively. Calls were handled more quickly, fewer mistakes were made with data collection (with the attendant knock-on effect that fewer repeat calls were required), and overall, agents handled an average of 10% more calls per day than did the control group.

In some countries, there has been legislation put in place around noise at work, which detail maximum average and peak noise levels that a worker may undergo, and the maximum amount of time that it is permissible for the worker to experience these sounds. We believe that it is only a matter of time until similar legislation is imposed in all Western contact center industries, and that businesses should be putting procedures in place before they are forced to, which could help agents' health, and limit the business's exposure to litigation.

Surveys have seen that only 6% of contact center managers are aware of the level of ambient noise within their contact centers, and only 9% regularly measure it[3].

In the UK, "The Acoustic Safety Programme" has developed some simple advice for contact centers to help them meet or exceed legislation and make working life safer and more comfortable for their agents:

- Measure contact center noise regularly and record it
- Fully understand legislation and create a formal policy so that staff at all levels of a business are aware of it
- Make sure that the headsets used are compliant with current legislation, and test them throughout their life

---

[3] Source: CCF magazine

- Provide agents with a choice of headsets - monaural or binaural - the latter can help to absorb background noise, but may make the agent feel more cut-off from their environment
- Be aware that excessively long shifts may cause damage to agents' hearing, even if within nominally-safe limits
- Use sound-absorbing materials as much as possible to absorb unnecessary echoes and reverberation
- Educate agents on how to use their headset and phone correctly, including volume and ergonomic adjustments
- Test staff's hearing throughout their contact center career.

For more information, please visit www.acousticsafety.org.

HEADSET REPLACEMENT AND MANUFACTURERS

Around 20% of respondents' headsets are replaced in a given year, meaning that the average headset will have a useful life of around 5 years. This recent decrease in headset replacement may be a response to the cost reductions put in place across most contact centers in the past few years, and may be temporary. However, it may also be the case that the overall quality and durability of headsets is improving, meaning there are fewer requirements for replacement.

Figure 86: Headset manufacturers used by respondents

Headset manufacturers used by respondents

- Other 1%
- Motorola 1%
- Sennheiser 2%
- GN Netcom / Jabra 7%
- Don't know 20%
- Plantronics 69%
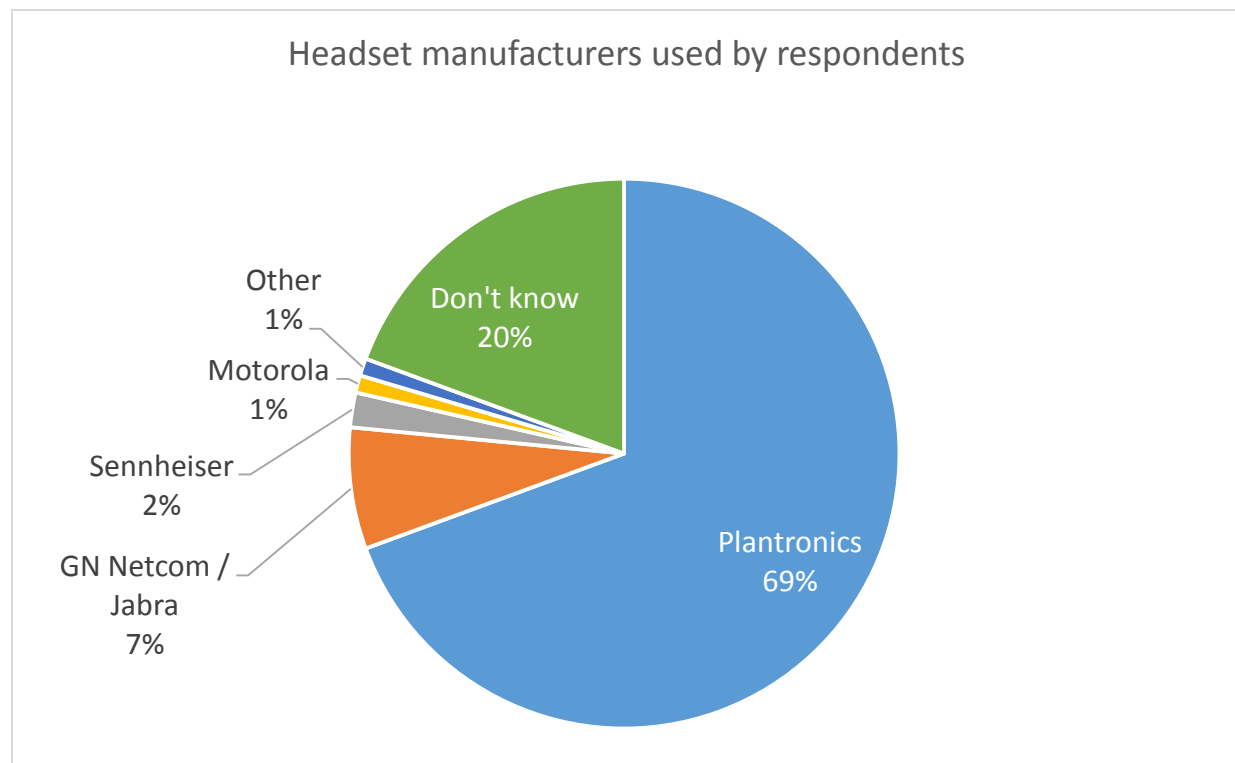
WIRELESS AND IP HEADSETS

Wireless headsets

62% of contact center respondents used some wireless headsets within the contact center, with an average of 57% of headsets in these contact centers being wireless. In past years, most of the wireless headsets were used by supervisors who are more likely to have to be mobile to help agents in their team, and two-thirds of those respondents who were using wireless headsets had a penetration rate of 20% or higher, strongly suggesting that wireless has filtered into the agent population as well.

52% of respondents in smaller contact centers use wireless headsets, with a penetration rate of 84% in operations that use them. In medium/large contact centers, 62% of operations have some wireless headsets, although the penetration rate is only 40% in these contact centers. The medical, services, finance and public sectors are the most likely to be using wireless headsets.

Agents working in product or technical support tend to have wireless headsets, as do supervisors. Outbound sales staff may prefer to be more mobile on their calls, and ask for wireless headsets too.

IP headsets

IP telephony can occasionally throw up some negative performance issues. As VoIP is a digital signal and human speech is analogue, converting between the two takes a certain amount of time. IP was not initially designed to transfer speech and so does not guarantee a time between the signal leaving one point and arriving at the next. These two points mean that there may be more of a delay in speech being transmitted from one point to it being heard at another on a VoIP system than with a conventional system.

As with all telephone systems, the person speaking will hear some of their own speech in their ear. This is referred to as 'sidetone', and when the delay levels are low it is an important part of the telephone system. When delays are excessive, the sidetone becomes echo, which is distracting for the people on both ends of the call. As detailed above, excessive delays are more common in VoIP systems than with standard telephony, meaning that echo cancellation is a critical component in improving call quality.

Some headsets are able to alleviate or even remove the impact of sub-optimal network performance on the conversation:

- Echo - how the earpiece fits to the ear and the positioning of the microphone relative to user's mouth helps prevent echo, and digital signal processing (DSP) alleviates echo management when it is unavoidable. DSP can help with unequal call levels, and manage sudden increases in amplitude and/or volume, and prevent acoustic shock

- Distortion - clipping the voice signal by taking away the highest and lowest voice registers can mean that the voice sounds distorted, an unpleasant sound for both agent and caller

- Latency - often viewed as one of the major bugbears of IP, latency is experienced as a lag, due to information being sent and received across the network in a sub-optimal manner. This can cause broken conversations, and can be extremely frustrating for both customer and agent, particularly when experienced as poor sound quality, such as missing pieces of sound, as well as the lag itself.

Currently, 82% of respondents have some headsets that are able to cope in an IP environment. Of these respondents, 91% of their headsets can handle IP, with 71% of these respondents saying that all of their headsets are IP-capable.

Large operations have implemented IP headsets in 82% of cases, against 84% of medium and 81% of small operations. 93% of headsets in these large operations are IP-capable, against 90% in medium contact centers and 92% in small contact centers.

The outsourcing, retail and medical respondents were most likely to have IP-capable headsets (80%+ of operations), with public sector respondents least likely this year.

IP headsets and homeworkers

The homeshoring / homeworking model can be supported by using a headset and IP audio processor (that links the headset and PC), rather than an IP phone. This method is cheaper than an IP phone, is simpler to support, and has the added advantage that if the PC locks up, the agent can continue to speak and be heard.

An IP-based contact center can choose either: an IP hardphone, (a physical phone with a keypad and headset/handset), or a PC-based softphone, where the agent connects a headset to the PC, without having a traditional telephone at all.

Figure 87: What sort of IP phone device are you using?

IP phone device	Proportion of respondents
IP hardphone	27%
PC-based softphone	25%
Both hardphone and softphone	37%
Don't know	10%

Single- / dual-earpiece headsets

Whether an agent or operations prefers single or dual earpiece headsets will tend to depend on the environment: those working in noisier backgrounds may prefer to reduce external distractions with a dual-earpiece headset, while others may prefer to be able to keep in touch with what's going on around them and choose a single-earpiece headset.

Figure 88: Use of single and dual earpiece headsets

Type of headset	Proportion of respondents
Single-earpiece	42%
Dual-earpiece	20%
Mixture of both	37%

ACOUSTIC SHOCK

'Acoustic shock' is a phrase coined to describe a sudden, unexpected noise, often delivered at a very intense frequency. It may be caused by feedback from telephone equipment, faulty telephone lines, non-compliant switchboards and headsets. Other sources of acoustic damage include caller abuse (shouting, screaming, blowing whistles etc. - most often found in the outbound environment) or background noise on the call. Acoustic shock also refers to the damage done by long-term exposure to noise in excess of healthy limits. It can lead to permanent hearing damage and cases of psychological trauma.

There is some doubt as to whether contact center agents are exposed to levels of noise sufficient to cause permanent deafness: studies from Denmark and Australia indicate that it can happen, whereas the UK government has been more doubtful, and the HSE is gathering more evidence on the issue. The CCMA (www.ccma.org.uk) claims that "tens of millions of pounds" have been spent in the UK alone on settlements related to acoustic shock.

Readers wanting more information may like to consider viewing www.acousticsafety.org

Contact centers may like to implement a traceable reporting system for headset users who may have been exposed to acoustic shock incidents.

The following information should be reported:

- Date and time of the incident;
- Details of the source of the exposure;
- Description of the noise;
- Duration of the exposure;
- Details of the headset and telephone equipment used;
- Whether the incident was electronically recorded (a copy should be kept for future reference);
- Symptoms experienced by the operator directly related to the acoustic shock incident.

Operators should be trained to recognize such incidents and how to report them. Organizations that operate call centers are further advised that they should keep up to date with developments in this field through their professional associations and other representative bodies, as well as through their enforcing authority if applicable.

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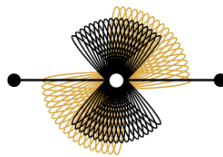
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NEW MEDIA AND THE CUSTOMER OF THE FUTURE

In the late 1990s, analysts predicted email to be the next big B2C communication method, only for customers to find that, in many cases, sending an email didn't get customers any sort of answer at all. Predictably, for many years, email accounted for only 1-2% of a business's inbound communication. However, individual organizations (especially those in the IT and retail sector) managed to make email an acceptable channel for customers, breaking the vicious circle that consumers had experienced: receiving poor service via email from a number of companies put customers off from using the medium, which meant that investments weren't made in improving the email channel because the required volumes weren't there, which further weakened its effectiveness.

It is consumers, not businesses, who make the decision on which communication methods will be most used. If the channel proposed by businesses is suitable for the type of interaction, then it will succeed - otherwise, it will fail. Predicting which channels will be used in future, and by whom, will give businesses a better chance to deliver high-quality service at the right points, while reducing cost where possible. Getting it wrong is expensive and damaging to the brand.

Multichannel contact centers have been mainstream for years, with over 90% of US contact centers dealing with email as well as telephony. The Internet - as a channel for self-service, sales and increasingly person-to-person contact - is an integral part of most businesses' customer contact strategy, with the advent of social media and the mobile channel throwing other elements into the mix.

Figure 89: Inbound contact channels: popularity, suitability and speed of response
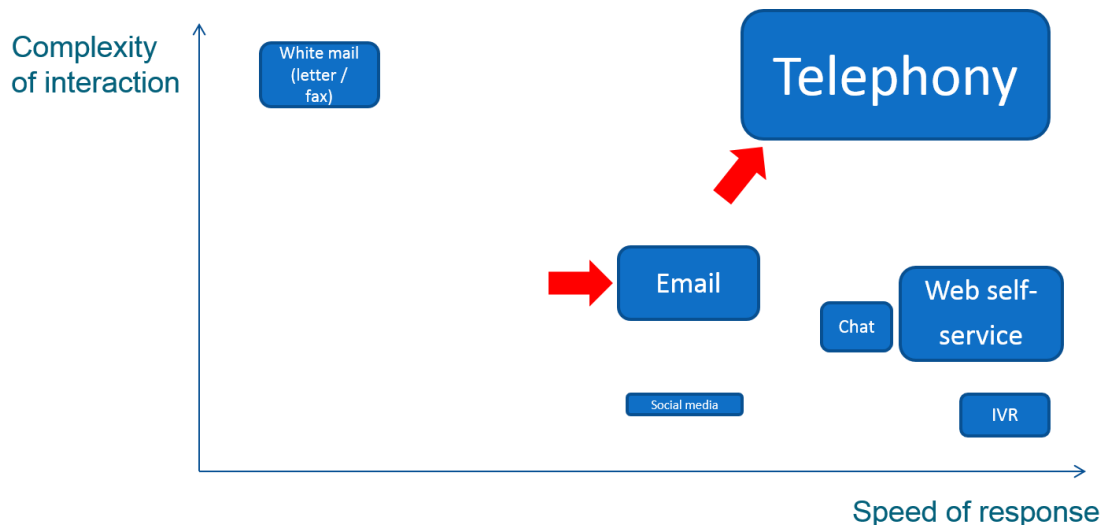
The preceding chart gives an idea of where things stand today. The size of the boxes gives an indication of the relative importance of major channels, by volume (with the exception of web self-service, for which we do not have comparable data on volumes).

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Each channel can handle interactions of certain complexity, and some are far quicker to provide a response than others. The red arrows indicate how the phone and email channels have altered their capabilities within the last few years.

White mail: suited to issues of great complexity and importance, due to the ability to establish a paper trail, found particularly in industries that are contract-driven, for example, insurance. Response times are, by definition, relatively long.

Telephony: on average, by far the largest inbound interaction channel. It has ubiquity, is a real-time two-way channel that is able to cover many different topics, and if queue length is reasonable, has one of the quickest speeds of response of any channel, despite popular perceptions. Since the widespread uptake of self-service, telephony is in the process of reinventing itself as the channel of choice for lengthy, important or complex interactions. For many businesses, contact center agents have actually become 'knowledge experts', without this having being planned.

Email: despite the inherent difficulty of establishing a real-time, two-way conversation, email volumes have grown dramatically in the past few years. Like white mail, email allows customers to go into considerable detail, expressing their thoughts in the order in which they wish. This ability is particularly valued in issues such as complaints, where the customer may have detailed information to impart which it is difficult to put across on a phone conversation, and the ability to create a paper trail with attached documentation and reference is particularly valued for complex issues. The red arrow shows that email response times have improved considerably, but it is still by no means the quickest channel.

Web self-service: this channel has grown enormously in the past few years, to some extent at the expense of telephony self-service. The visual medium provides customers with a far more flexible experience, and it is a very quick channel to use for simple queries. (As we do not have statistics on the volume of web self-service interactions, the relative size of the box should be ignored in this case).

IVR: this channel has declined somewhat, but is still widely available and widely used. It is most useful for handling the simplest of transactions, such as balance-checking or providing a meter reading. The appearance of visual IVR - which allows users of smartphones in particular to view the IVR menu structure - should give this technology a major boost.

Web chat: this formerly niche channel is establishing itself with significant recent growth, particularly in retail-based environments. As telephony agents provide a live back-up to telephony IVR self-service attempts, web chat offers the same capabilities to support a web self-service session which cannot be fulfilled successfully. It offers a similar speed of response to the phone channel, and there is no reason why customer authentication cannot take place which would allow access to a wider level of service than is currently the case. Cobrowsing can be seen as a very closely related to channel to web chat, with similar capabilities and uptake which will be closely tied to that of web chat.

Social media: while social media does not yet have significant volumes of interactions for many companies, it is growing rapidly and has an extremely high profile both outside and within the organization, and grabbing the attention of senior executives far more than the traditional contact center has ever managed to do. As such, there is a great deal of interest being shown in social media as a customer contact channel, due in no small part to the potentially damaging nature of a customer service failure being made extremely public.

From a Genesys perspective, we had seen in the early days of social media that it was predominately managed by the marketing organization. In the past year however there has been a double digit increase in the number of contact centers offering this as a customer engagement channel. It is important that the Contact Center and Marketing organizations collaborate when it comes to social media to provide consistency and a good experience for the customers.

For more information about the future of multichannel and omnichannel customer communication, please download the free report: "The Inner Circle Guide to Multichannel Customer Contact" from www.contactbabel.com.

Figure 90: Multimedia channels

Channel	Current use	Drivers	Inhibitors	Proportion of interactions
Email	Widely offered for inbound and outbound service by all sectors, especially IT and retail.	Email is widely-used and accepted by customers. As a non-real-time application, businesses can deal with emails in slack periods. Written format is suited to long and complex answers. Templatised responses offer cost savings.	Without investment in email systems, email is no cheaper to handle than a phone call. Service levels are often poor or inconsistent, leading to customer dissatisfaction. Any interaction that requires security is unsuitable for email checks.	IT and retail often highest. Insurance and finance usually low. On average, the US contact center industry has 10-15% of inbound interactions as email.
Self-service	Both voice and web self-service are widely used, the former either through touchtone IVR or speech recognition, which handles simple queries and transactions.	Variable costs of using self-service are very low (i.e. once the system is set-up correctly, incremental cost per use is negligible), making it suitable for high-volume, simple interactions, avoiding the costs of these calls being handled by agents. Allows 24/7 service at low cost.	Excessively pushing the use of self-service, & badly-designed IVR menus can mean that callers feel frustrated & alienated. The use of natural language self-service is not yet widespread, & older voice-based applications are often inflexible & long-winded.	c.7-10% of inbound contact center interactions are dealt with by voice self-service, much higher in some sectors with very large contact centers. Movement to web self-service continues.
SMS	Often used for marketing messages, SMS can also provide proactive customer service, such as balance threshold alerts and appointment reminders.	SMS is a cheap channel, mobile phone penetration is greater than 100%, and SMS senders are very likely to have their messages read.	The same rules against email spam apply to SMS, so customers must give their permission to be sent SMS. Inbound SMS is like email, in that security cannot be established, and it is not a real time application. Cost associated with receiving SMS in the US.	Less than one-third of US businesses currently use SMS to communicate with customers, although a great deal of interest is being shown.

Channel	Current use	Drivers	Inhibitors	Proportion of interactions
Web chat / instant messaging	Growing as specific applications for its use emerge. Used in significant minority of businesses.	Real-time nature of web chat means it is akin to a voice conversation in immediacy. It is possible to ask security questions through web chat, although it is debatable whether the customer will feel happy about passing on this information over the web. Multiple concurrent web chat sessions can be run, cutting cost Younger generation is used to messaging.	Web chat may be too alien to the older generation who may feel pressured by the sudden appearance of a chat initiation. May encourage people to ask unnecessary questions that they would otherwise use the website to find the answer to.	2-3% of interactions into US contact centers, but potential to grow rapidly, especially in retail.
Video agents	Limited current use. Can be delivered through PC, kiosk or interactive digital TV. Canned video via YouTube is growing for product demos. Also C2B video also emerging.	Eye contact is critical for establishing trust and 60% of the communication process is visual. Opportunities for demonstrating product features. "Show, not tell" is powerful. Growth driven by 3/4G & smartphones.	Instead of live video, customers may prefer the impersonality of telephony. Agents will need training in visual presentation	Currently very low.
Cobrowsing	Currently limited. Page-pushing and joint form-filling more used in the US than elsewhere.	Allowing an agent to work alongside a customer's desktop can give more personal and effective assistance.	Can be expensive per session. Not widely understood by customers.	Interest from finance, insurance and medical sectors, used alongside web chat.
Social media	41% of US businesses offer social media as a customer service channel, predominantly through Facebook and Twitter.	Personal social engagement (e.g. Facebook, Twitter) is spilling into the corporate world. Originally used by businesses as outbound marketing / brand awareness, has developed into de facto inbound customer service.	No security or ID verification process means not all interactions are suitable for social media. High risk of negative PR associated with this channel may lead to over-resourcing at the expense of others.	Around 1-2%, but seen by senior management as far more important than volumes suggest.

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Channel	Current use	Drivers	Inhibitors	Proportion of interactions
Kiosks	Supermarkets, cinemas, banks, fast-food outlets and train stations have touch-screen terminals which can deal with financial transactions, issuing tickets, taking orders & scanning items.	Low-cost, effectively another variant of self-service, with a possible option to move to a video agent if required, although privacy issues are present. It takes an average of $3 for an agent to check-in an airline traveler, but only 14c each with a kiosk (source: Forrester Research).	Possible mechanical breakdown. Non-private. Limited functionality.	Growing, especially in the cellphone sub-sector, as well as financial services in rural areas.
Mobile app	23% of survey respondents have a mobile application (not including mobile websites) for customers to contact them.	Ubiquity, powerful processing allowing specific apps to be used, 'always-on', video and camera offer additional routes	Bandwidth has to be paid for; small screen	Around 1%.

Today's customer has numerous devices, both voice and text-based, with which they can contact the business. They may decide to query an automated system, or a live agent. They may want the answer in real-time, or prefer to receive a reply at their convenience. They may use a fixed-line phone, a cellphone, PC, letter or use a kiosk in the street or in a physical store. Of course, not all contact is one-way - the business can also initiate outbound communications with its customers as well.

The complexity of the situation increases exponentially once a new channel, device or medium is added to the customer service mix. The only constant is that - regardless of the method they choose to communicate with the business - customers want accurate, timely information delivered in a form with which they are happy. The challenges for the business are to provide a high quality of service which is consistent across the channels and to do so in a cost-effective manner. To do this, and break down the boundaries between contact channels that has been stifling the potential of non-telephony contact, a universal queue is required.

The Universal Queue

Although the 'universal queue' as a phrase is showing its age, having been around for at least ten years, as a concept it's still vital to understand.

A universal queue is a platform which automatically captures, processes, routes and reports on customer interactions and related activities based on a company's specific business criteria, providing a view of each and every customer interaction. Customer interactions through channels such as voice, e-mail, fax, instant messaging and activities such as work items are handled according to business-defined processes and strategies, avoiding the problem of rogue interactions that are left outside normal workflows, or favoring one channel (usually voice) to the permanent detriment of others.

The universal queue can set priority levels to incoming calls, e-mails and chats, and may also have the ability to blend inbound and outbound calls into a single queue to allow agents to move between media as required. This approach also facilitates a single view of the customer across all channels, which is one of the key ways to improve the quality of service offered, as well as improving the agent's confidence and morale.

Although multichannel is the current buzz, the reality is that most "multichannel" contact centers are a series of siloed interactions where customer information is not shared across channels, making for a disjointed rather than a single conversation. Today a customer web chatting must start all over and repeat information when calling into the company for additional assistance and work started on the web is lost. A true "One to One" conversation requires that all channels operate seamlessly as one conversation.

The US contact center industry has embraced multichannel customer communication, with 91% of respondents offering an email channel as well as 29% SMS, 43% web chat and 41% social media. Traditional channels such as letter and fax are still present in most cases, and 23% offer a mobile app.

The chart's real message is that channels aren't being replaced - even letters will continue to be supported - but rather augmented, and businesses have to accept that they need to develop an 'omnichannel' approach, as that's what their customers are doing. This means that the pressure to unify the view of the customer across channels is a challenge that isn't going to go away.

Figure 91: Current and future use of customer communication channels

Current and future use of customer communication channels

Channel	Use today	Will implement within 12 months	Will implement after 12 months	No plans to implement
Mobile app	23%	19%	20%	38%
SMS	29%	15%	13%	43%
Social media (as a customer service channel)	41%	11%	7%	41%
Web chat	43%	12%	15%	30%
Telephone (self-service)	57%	6%	3%	34%
Letter / white mail	63%	1%		36%
Fax	70%			29%
Email	91%	2%		7%
Telephone (live agent)	100%			
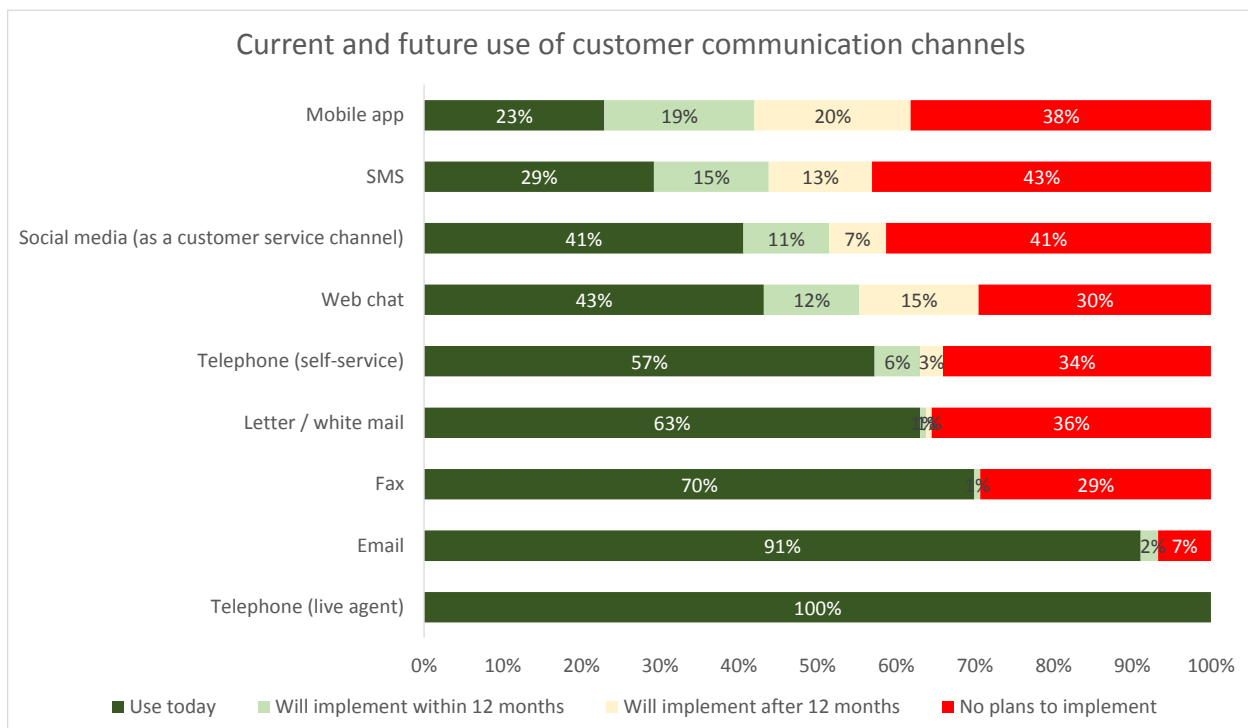
Although 33% of businesses have apps that allow you to contact them for customer service, any work performed in the app is typically lost as the customer must leave the app, call into an IVR and start the whole process over. Customer care integrated with the contact center does not exist within virtually every app out there today. Apps were originally created for marketing purposes and have not yet evolved to be true vehicles of customer service.

The proportion of inbound interactions by telephone has not changed greatly since last year - almost identical at 70.4% against last year's figure of 70.2% - but the proportion of telephony self-service interactions has reversed its recent decline, growing once again to reach double digits.

Recent years' growth seen in the email channel pauses this year as this channel drops back from 12.4% to 11.7%. However, it is far too early to say whether this is a structural change, or simply a statistical blip based only on data from this year's respondents.

Web chat, which had risen to 2.7% last year, falls back very slightly to 2.5%.

Figure 92: Inbound interactions by channel

Inbound interactions by channel

- Social media (customer service) 1.3%
- Fax 2.1%
- Letter / white mail 1.4%
- SMS 0.6%
- Web chat 2.5%
- Email 11.7%
- Telephone (self-service) 10.0%
- Telephone (Live agent) 70.4%
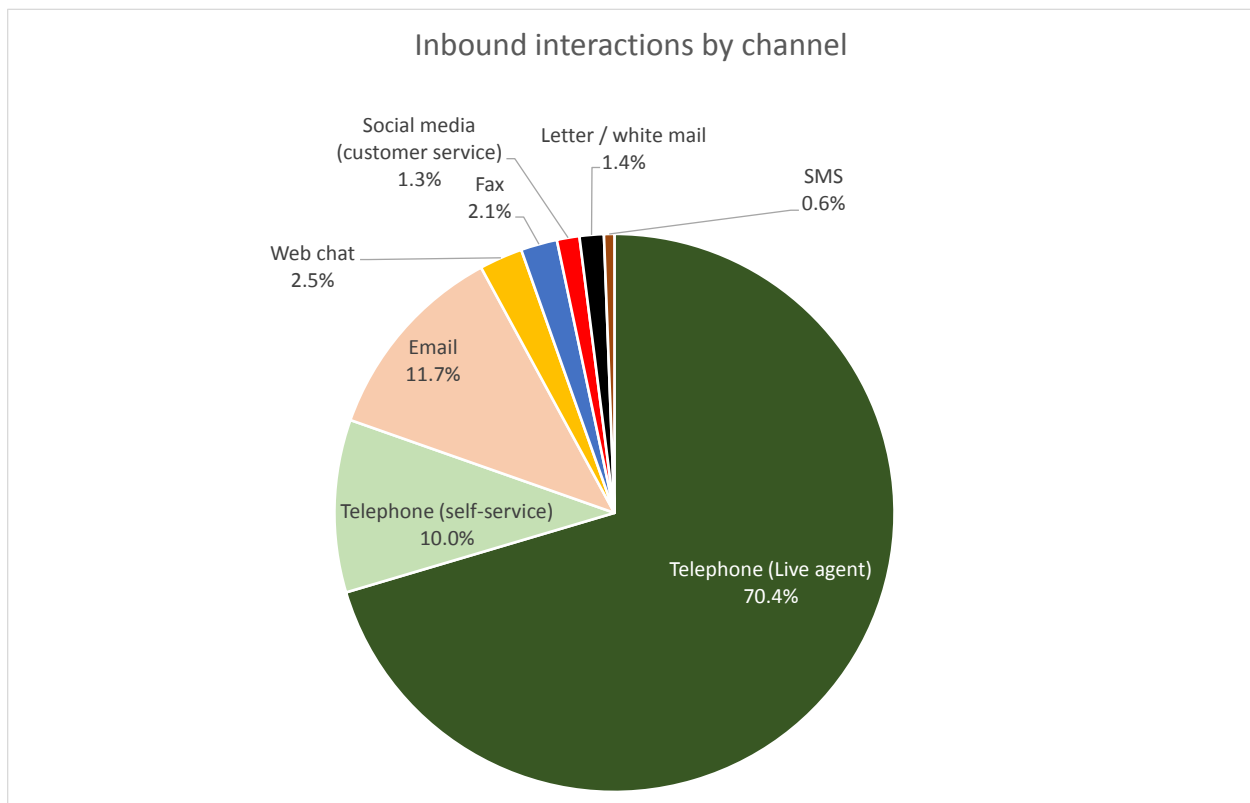
This year, we have decided to show median as well as mean averages. The mean average is a representation of what is happening in the entire industry at an aggregated level, whereas the median - the midpoint - purposefully takes out any outlying, eccentric data points, and this figure is what the 'typical' contact center might recognize in themselves.

Agent-handled calls are most important to respondents in the retail & distribution, public sector and outsourcing sectors, with respondents in finance being significantly under the average with their levels of telephony.

Figure 93: Inbound interactions that are telephone (agent), by vertical market

Vertical market	EL	FS	INS	MAN	MED	OS	PS	RD	SVCS	TMT	Average
Telephone (agent) - mean	72%	49%	68%	70%	73%	81%	75%	77%	72%	70%	70.4%
Telephone (agent) - median	75%	50%	75%	78%	84%	83%	85%	79%	76%	80%	77.8%

As not all of the same respondents take part in this survey every year, it is not always possible to have confidence that a jump or drop in the usage of a minor multimedia channel is an industry-wide phenomenon, rather than the case of a handful of early-adopters skewing the results, which is certainly possible where only a few use a channel, and where mean averages are used. As such, a question is asked to respondents about how each inbound channel will change, so being able to judge if any alterations in the use of channels is due to real changes at a contact center-level, or is more of a statistical blip caused by a different set of respondents providing this year's data.

As usual, only the traditional media of letters and fax will have a net decline in our respondents' eyes, although still have their place in the likes of the insurance, medical and manufacturing industries.

Putting these opinions into context along with the reality of the previous chart, it seems that even those channels which appeared to have been in relative, although extremely gentle decline (such as live telephony and self-service telephony) are at least holding their own in absolute terms. This suggests a net increase in total interactions, which is supported by the continuing increase in agent numbers and the growth in salaries that comes with increased demand for contact center services.

Figure 94: How do you think inbound channels will change in your contact center?

How do you think inbound channels will change in your contact center?

Channel	Increase greatly	Increase slightly	No major change	Decrease slightly	Decrease greatly	No plans to use this
Letter / white mail	1%	8%	40%	17%	7%	26%
Fax	2%	5%	44%	14%	13%	22%
Email	11%	41%	42%	1%	2%	3%
Telephone (self-service)	12%	28%	42%	2%	1%	15%
Telephone (live agent)	17%	24%	50%	9%		1%
Social media (as a customer service channel)	20%	29%	33%	1%		17%
SMS	22%	18%	37%	2%		21%
Web chat	25%	30%	25%	1%		18%
Mobile app	25%	32%	24%	1%		17%

Delivering Great Multi-Channel Customer Experiences

Connect the Customer Journey with an Integrated Customer Experience Platform

Experts often tout 'best practice' recommendations that advocate adding more channels in order to keep pace with the modern, digital and social consumer. But adding channels blindly isn't the answer to improving Customer Experience (CX). At the same time, having just voice and email channels in the contact center just won't cut it for today's consumer. According to analyst firm Ovum, 74% of people that interact with your company in 2014 will communicate on 3 or more channels.

Eliminate Silos to Carry Customer Context Across Channels

The key then is the ability to not just offer the channels your customers desire, but to also preserve the context of all interactions across those channels. For most companies, customer-facing processes and associated back-office departments are siloed from the functional departments and the lines of business. The result? The context of the customer's question or issue is not carried between channels or between departments. This means the customer's journey will be made up of:

- Countless emails, calls and chat sessions
- Numerous handoffs and transfers
- Repetition of Info and lost context with inefficient processes
- Deeply dissatisfying customer experiences that lead to customer churn and negative word-of-mouth

Your 'best of breed strategy' can become detrimental to growing your business. When trying to deliver great CX, creating a consistent experience across all of those multiple channels is critical—and a unified platform is the best way to deliver that consistent experience.

A Common Platform for Great CX

Companies that want to increase revenue and decrease operating costs must evolve their customer strategy to include the entire customer experience journey from end-to-end, understanding the context of all previous interactions and touchpoints. To do this effectively and efficiently requires a platform that brings together centralized routing of all interactions with a context-aware workforce optimization system. The platform must also incorporate context-aware routing and cross-channel interactions across all channels to deliver a personalized experience. That is precisely what the Genesys Customer Experience Platform offers.

Your 'best of breed strategy' can become detrimental to growing your business.

- Interaction Management — Channels | Desktop
- Analytics and Reporting
- Multi-Channel Workforce Optimization
- Self-Service | Campaign Management
- Routing Engine (Interaction, Work Items, Rules) | Proactive Notifications + Dialer
- SIP Communications

Genesys **CUSTOMER EXPERIENCE** PLATFORM — CLOUD | HYBRID | PREMISE

To learn more watch the videocast Connecting the End-to-End Customer Journey with a Single, Integrated Customer Experience Platform, featuring Analyst Firm Gartner and Emirates Airline.

To learn more about Delivering Great Customer Experiences Across All Channels and the Genesys Customer Experience Platform please visit Genesys.com.

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EMAIL MANAGEMENT

Email was the first of the non-voice multimedia channels to be used, and is still by far the most well-used, having been mainstream for well over 10 years. Although its current penetration rate of around 11-12% makes it a relative success, this should be placed in the context of the expectations of contact center managers who in a 1998 survey confidently expected email to account for 25% of inbound traffic by 2003.

Email should stand as a salutary lesson that it is not businesses that make new channels a success, but customers. Put bluntly, email in its first incarnation failed almost entirely. Too many businesses rushed to push customers to this new channel - commonly supposed to be cheaper than voice - without having the processes, solutions or staff to manage this properly. What happened next can be understood as a 'herd inoculation': enough customers had enough bad experiences from enough organizations that the entire channel was discredited, even for those businesses which were providing a reasonable service through email or just keeping a watching brief.

The reason for this rejection was the appalling level of service provided by many of the early multimedia businesses. With response times stretching into many days, if not weeks, the companies failed to understand that any communication with the business has a degree of urgency to it, else why would they be trying to speak with the business at all? Of course, even when a response was eventually provided, the issue might have gone away, or been dealt with by calling the contact center, meaning that customers' existing confidence in the voice channel was further reinforced at the expense of the email channel. It is also the case that email does not fit the type of enquiries that people make in some cases, such as the need for quick, simple and confidential information (such as an account balance), and the increasing requirements for identity checking places a cap on the usefulness of email as a channel for some types of business.

It took many years, much investment and the coaxing of customers to try new channels again for email to emerge as being credible. Of course, businesses and customers now both realize that email is more suitable for some interaction types than others (the rise of web self-service has meant email is no longer the only online communication method available), and complex issues such as complaints, or other enquiries requiring a formal paper trail are well-suited to email. In fact, much of the demise in the letter and fax as channels can be traced to a direct replacement by email. Email is also an excellent outbound channel, providing reassurance, great levels of detail and attachments, and is able to link to other specific areas of information via hyperlinks. As an inbound channel, it has inherent weaknesses: an inability to carry out customer authentication and to carry out a real-time 2-way conversation being amongst them, as well as the lengthy wait to get a response. In the longer term, it is likely to be superseded to some extent by more immediate online channels such as web chat and social media. It does however have the advantage over virtually every channel that there is no queue time at all - the customer writes the email and presses 'Send' immediately - a 'fire and forget' interaction.

Figure 95: Inbound interactions that are email, by vertical market

Vertical market	EL	FS	INS	MAN	MED	OS	PS	RD	SVCS	TMT	Average
Email - mean	10%	6%	10%	19%	16%	7%	9%	12%	13%	16%	11.7%
Email - median	7%	3%	9%	5%	4%	5%	4%	10%	8%	11%	6.0%

Usually, it is the retailers and TMT (especially IT) respondents with the greatest proportion of inbound traffic as email, although a handful of very high responses from the manufacturing sector means that this vertical market also posts high figures this year. The former's email volume are often driven by sales via a website, with TMT/IT's more about technical support. The finance sector does not deal with a large volume of email, mainly due to the restrictions on security, customer identification and customer data. Outsourcers have an opportunity to increase the amount of email they handle, as this would be a good way to establish contact with new clients, and fulfills a definite need.

As with previous years, emails are proportionally less important for large contact centers, and last year's big jump to 7.9% sees a retreat back down to more typical historical levels.

Figure 96: Inbound interactions that are email, by contact center size

Contact center size	% of inbound interactions that are email
Small	19.4%
Medium	10.2%
Large	4.9%
Average	**11.7%**

The cost of alternative channels - email and web chat - seems quite reasonable, being generally somewhat less than live telephony, but more expensive than a self-service session.

Figure 97: Estimated cost per email and web chat session

	Email	Web chat session
Mean	$3.82	$3.16
1st quartile	$5.35	$3.52
Median	$3.00	$2.00
3rd quartile	$1.19	$1.05

Do you need an email response management system?

An organization that has relatively small volumes of email will tend to handle it initially on an ad-hoc basis, often using Microsoft Outlook to do so. At some point, the contact center will realize that costs are going up and quality going down, and that they need to implement the more sophisticated email response management system. What signs are there that show this is the right time to do so?

- While there is no fixed figure for email volume, as it will depend on the complexity and time required to handle each one, organizations receiving greater than 100 emails per day are likely to have issues handling and tracking them

- There are a significant number of customer telephone calls that refer to emails that were sent, but which never received a response

- Prioritization and routing of emails to agents with specific skills sets is no longer a matter of a few minutes of management time

- Email handling times are not going down, despite most being about a small number of topics

- Complex emails may take days or even weeks to resolve, and different agents may be working on similar types of issue without even realizing it, thus duplicating the effort

- You lack flexibility in dealing with spikes in email traffic, as it is too difficult to bring secondary email agents to bear without damaging the voice channel's service level

- Visibility and accuracy of service levels for email channel is worse than that for the voice channel

- It is difficult to report on the content of the emails that you receive as this has to be done manually.

For businesses that handle substantial volumes of email, while it is not suggested that they should aim to answer an email in the same amount of time that it takes to complete a phone call, it is desirable to manage all interactions closely to consistent business rules, and to act quickly if service levels slip. Too often it seems, contact centers have become so used to managing the telephony queue that they neglect multimedia interactions. The result is that multimedia response times (mostly email) have historically been sacrificed to meet telephony service levels, although there have been steady and significant improvements in the response rates in recent years.

Email response handling times improve again on last year, with the proportion answered within one hour going from 26% 30%, and a further improvement in the proportion answering between one hour and one day.

Taking longer than one day to answer an email runs the risk of the customer losing patience, and going elsewhere or phoning the contact center, placing a greater cost burden on the business than if they had just called in the first place. This figure has decreased somewhat from 20% to 16%.

Figure 98: What proportion of emails are answered successfully and completely within these timescales?

What proportion of emails are answered successfully and completely within these timescales?

Legend:
- Don't know
- More than 5 days
- Between 1 day & 5 days
- Between 1 hour & 1 day
- Less than 1 hour

end-2009: Less than 1 hour 13%, Between 1 hour & 1 day 60%, Between 1 day & 5 days 8%, More than 5 days 2%, Don't know 17%

end-2010: Less than 1 hour 20%, Between 1 hour & 1 day 54%, Between 1 day & 5 days 16%, More than 5 days 4%, Don't know 6%

end-2011: Less than 1 hour 24%, Between 1 hour & 1 day 53%, Between 1 day & 5 days 16%, More than 5 days 2%, Don't know 5%

Q1 2013: Less than 1 hour 26%, Between 1 hour & 1 day 49%, Between 1 day & 5 days 19%, More than 5 days 1%, Don't know 5%

Q1 2014: Less than 1 hour 30%, Between 1 hour & 1 day 53%, Between 1 day & 5 days 15%, More than 5 days 1%, Don't know 1%

This year's respondents from the retail and distribution sector seem to be very much on top of their game, with 67% of emails replied to within the hour. For a sales-focused organization, this reduces the risk of prospective customers going elsewhere.

The outsourcing sector also handles their relatively lower volumes of email well too, driven by service level agreements and sales targets. Customers of medical companies and those sending emails to the public sector will have learned not to expect quick answers from them.

Figure 99: Proportion of emails answered within 1 hour / 1 day, by vertical market

Proportion of emails answered within 1 hour / 1 day, by vertical market
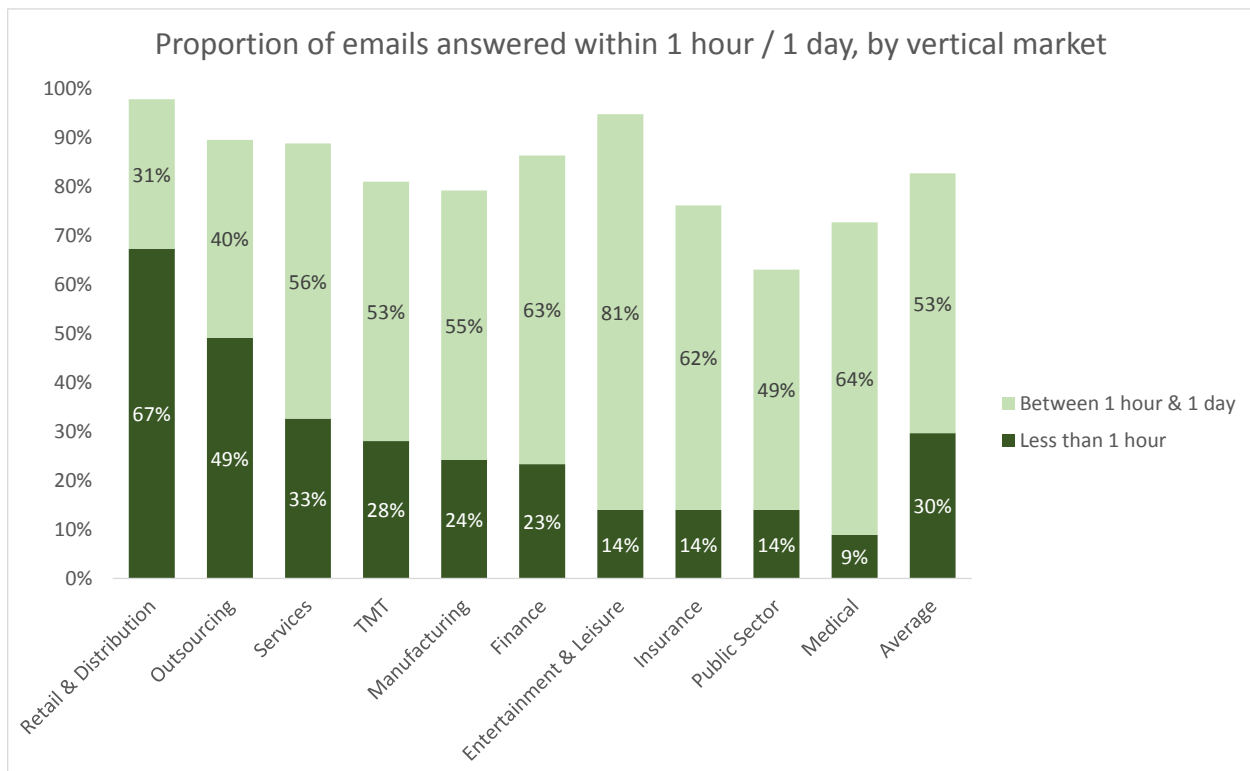
MULTIMEDIA BLENDING

There is no general agreement within the industry on how best to deal with email, although there are genuine reasons to encourage email/voice blending. On one side, there is a case made that letting agents answer email makes the job more interesting for them, lowering attrition and improving skills. The other side to this says that the skills required by email agents are different from voice agents, and that it is difficult to find the agents to do both jobs. Both sides make sense logically, and historically, of those contact centers which use voice/email blending, only around 1 in 5 have experienced problems finding the right staff for these types of role, a figure that decreased each year that it was surveyed.

The great majority of respondents in most sectors allow at least some of their agents to carry out both email and telephony. However, email requires certain skills, including grammar and punctuation, which not every agent has, even with assistance from an email management system's response template.

On average, 57% of agents in a blended multimedia environment are allowed to do both email and voice work, a figure which had been growing year-on-year, but which has declined slightly from last year's figure of 62%.

Figure 100: Use of multimedia blended agents by vertical market

Vertical market	Respondent contact centers allowing multimedia blending	Proportion of agents answering both voice and email (only where applicable)
Manufacturing	100%	80%
Outsourcing	94%	32%
Medical	89%	59%
Retail & Distribution	88%	82%
Public Sector	86%	57%
TMT	86%	72%
Services	84%	69%
Finance	80%	31%
Insurance	78%	54%
Entertainment & Leisure	57%	59%
Average	**85%**	**57%**

Those in small and medium operations are much more likely to use the same agents to handle email and telephony, probably because there is not the option to have the specialized teams found in large contact centers, which are much more likely to have a dedicated group handling email.

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Figure 101: Use of multimedia blended agents by contact center size

Contact center size	Respondent contact centers allowing multimedia blending	Proportion of agents answering both voice and email (only where applicable)
Small	98%	75%
Medium	87%	47%
Large	60%	36%
Average	**85%**	**57%**

Simply because a contact center uses the same agents for email and voice does not mean that all operations use the same level of multimedia blending. For some operations, multimedia blending is a strategic decision which has been invested in with the right levels of technology and training being provided. For others, it is a necessity, with agents encouraged to answer emails in slack call times. Small and medium operations - which in the past may not have had sufficient email volumes or the investment available to formalize the blending by forming a universal queue to deal with all types of interaction - are now as likely to use a universal queue as the ad hoc method. Many larger contact centers prefer to use dedicated email groups.

Figure 102: Methods of voice / email handling, by contact center size
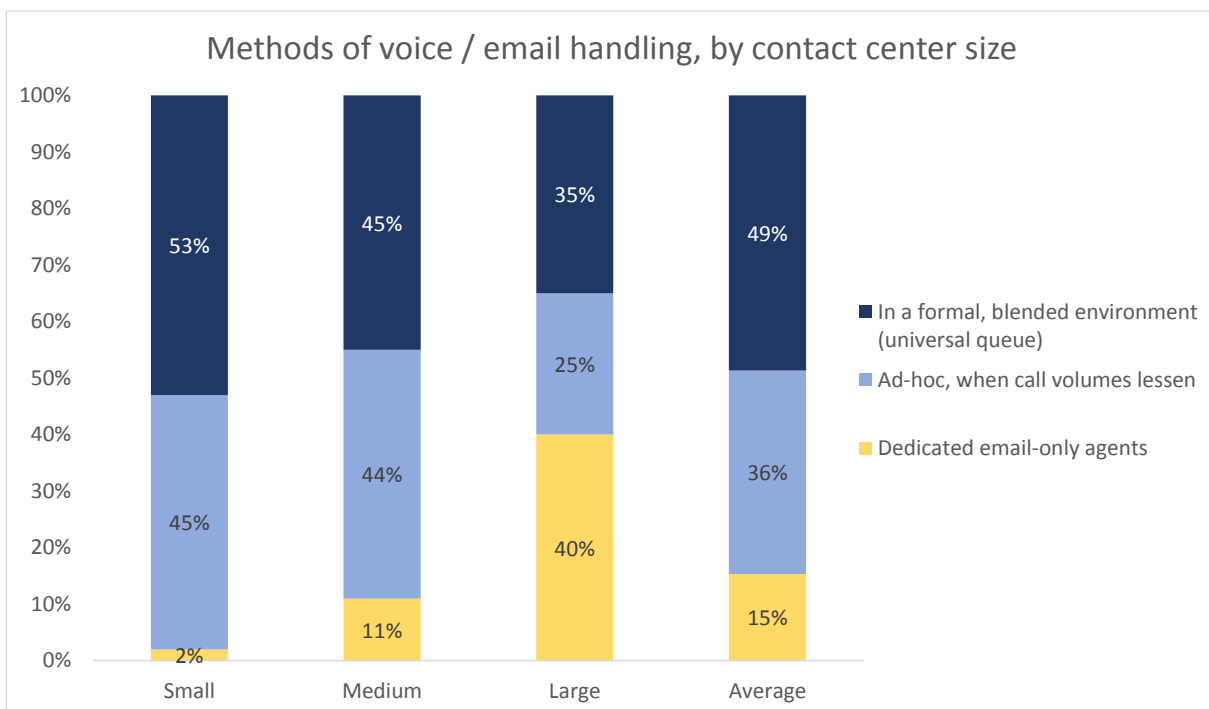
However, this preference of many larger contact centers to form specialized multimedia groups may not provide the same levels of service. The following chart seems to indicate that a formalized blending environment, such as a universal queue, has a beneficial effect on email response times. Respondents using a formal blended environment report that 45% of emails are handled within 1 hour, with a further 44% being dealt with inside a day.

The ad-hoc approach is less successful at very rapid response, with only 15% of emails having an average handle time within 1 hour, although a further 65% are handled in a day.

Dedicated email-only agents of the kind used in many larger contact centers answer an average of 19% of emails within the hour, with a further 65% handled within a day.

Figure 103: The effect of multimedia blending on average email handling time
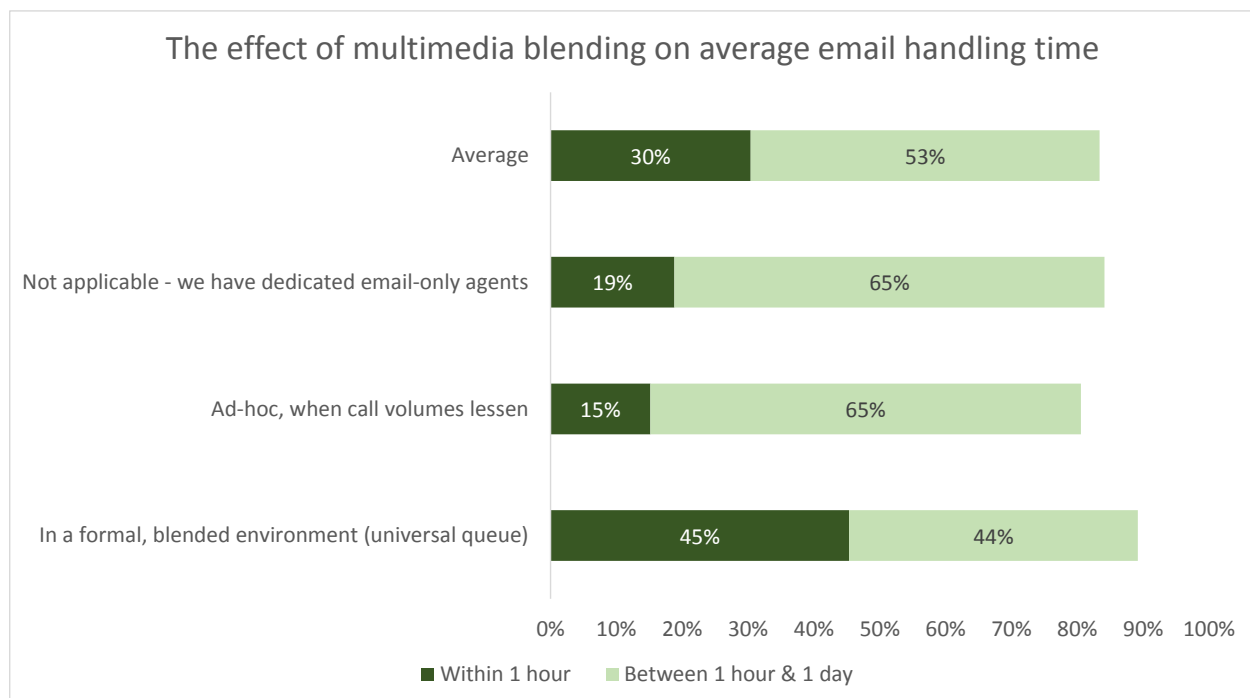
The effect of multimedia blending on average email handling time

Category	Within 1 hour	Between 1 hour & 1 day
Average	30%	53%
Not applicable - we have dedicated email-only agents	19%	65%
Ad-hoc, when call volumes lessen	15%	65%
In a formal, blended environment (universal queue)	45%	44%

CUSTOMER SATISFACTION BY CHANNEL

Around half of respondents try to track customer satisfaction across both telephony and email channels. Interestingly, 6% of respondents said that email had a better customer satisfaction rating than the telephony channel: although this may not be a particularly impressive figure, it is still higher than last year's findings when no respondent reported that this was the case.

31% state that telephony has a better customer satisfaction score than email, with 12% not seeing much difference. However, most respondents did not even compare customer satisfaction ratings across channels.

Realistically, an operation that offers a reasonable standard of both phone and email service will rarely find that its customers rate email higher than telephony, as the significant delays involved in even the fastest email service will probably be longer than those of the average telephony queue. However, despite this inherent disadvantage, email is highly suited to complex queries that may have a visual element, require written confirmation or documentation, and in those instances where time is not of the essence, with the customer preferring to accept the delayed nature of an email conversation rather than having to hold in a telephony queue.

It is also the case that the customer base in general has been educated over a long period of time to understand what email can and cannot be expected to deliver, so are more likely to have realistic expectations.

Figure 104: How does customer satisfaction differ by channel?

How does customer satisfaction differ by channel?

- Phone gets a higher customer satisfaction score 31%
- Email gets a higher customer satisfaction score 6%
- No major difference 12%
- We don't measure this 51%

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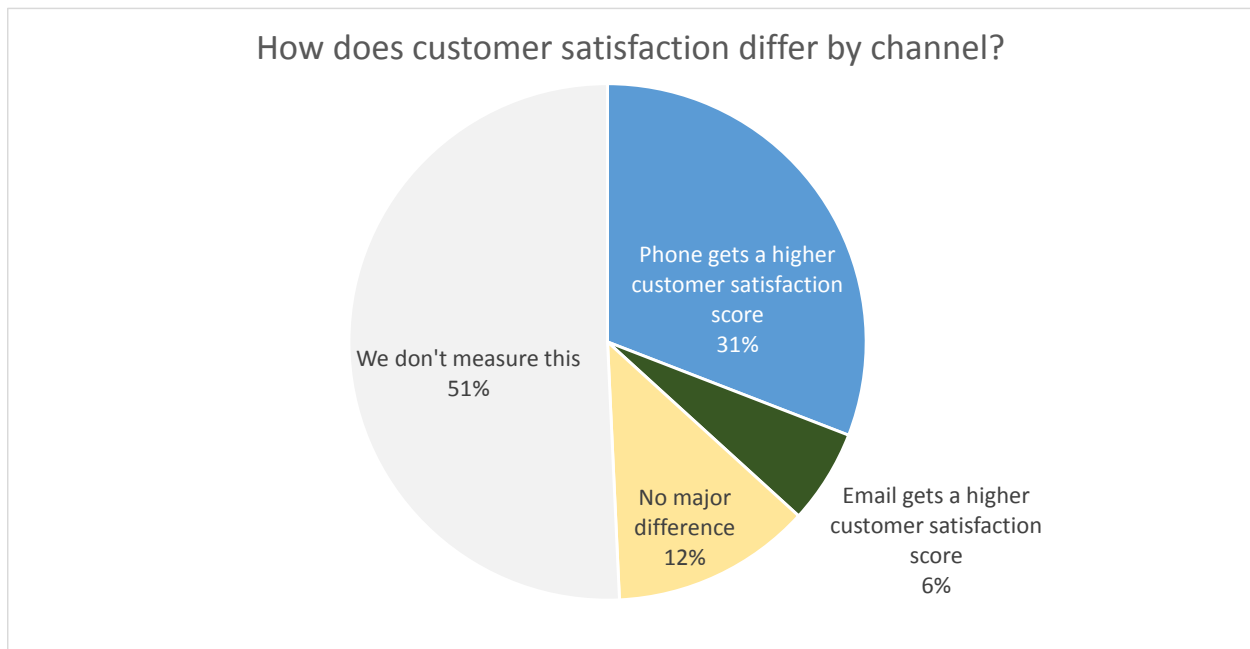
WEB CHAT AND WEB COLLABORATION

Web chat (or instant messaging / IM) and co-browsing are similar in that they offer a live assistance option to the process of web browsing. Like email, they have been around for a long time, but have yet to achieve the usage that had been predicted, although this is certainly changing quickly.

Web chat offers an organization a chance to cut costs through running more than one chat session at a time with customers, using the time that a customer spends reading and replying to an agent's response to deal with other customers concurrently. Solution providers offer the option for an agent to deal with 4 or more sessions at the same time, but whether this is a sustainable model for the agent or provides an acceptable quality of service for the customer is quite another question. Agents can respond to frequently-asked questions by using 'hot-keys', which provide templatised answers and can escalate queries if required.

Web chat has often been used as a 'point of crisis' channel, for example, to convert an online shopping basket into a sale by providing timely service, or if a browser is paused on a webpage too long, perhaps as they can't find what they are looking for. In such cases, there are two main benefits to the business to provide text chat: revenue maximization, and the avoidance of unnecessary calls.

Web chat can also act as a safety net for the customer if an online self-service attempt fails. An analogy can be made with voice self-service, where a failed session is often ended with the customer 'zeroing-out' - pressing zero to get in touch with an agent. Failed web self-service sessions may end with a phone call being made, but web chat can avoid a number of these, which is a cost saving for the business, and better for the customer as well.

The customer of the future - especially the younger generation - are often accomplished Instant Messengers, and will be keen to use the web chat option with the businesses they work with. However, web chat is in reality most useful for general information and sales purposes, as users usually aren't taken through security processes, so the agent can't help with specific account queries; the same usually applying to email. Putting some form of trusted biometric device on a PC or mobile device (such as a thumbprint reader) which then assures the businesses' system of the user's identity could possibly overcome this issue. Alternatively, and more simply, there doesn't seem to be any reason why the web chat agent can't ask the standard security questions to the customer via chat, but this is rarely done today, perhaps as some customers are wary of giving out personal details online.

A **Virtual Agent** appears to a browsing website visitor to be a human agent, offering web chat. However, it is an automated piece of software which looks at keywords and attempts to answer the customer's request based on these, including sending relevant links, directing them to the correct part of the website or accessing the correct part of the knowledge base. If the virtual agent cannot answer the request successfully, it will seamlessly route the interaction to a live web chat agent who will take over. It is possible that the browser will not even realize that any switch has been made between automated and live agent, particularly if the web chat application is sophisticated enough to pass the context and the history to the agent, although some businesses believe it is best practice to identify clearly between virtual and real agents.

Proactive and reactive chat: originally, web chat was reactive, relying upon the browser to initiate a conversation. Businesses then decided to go on the offensive, popping up chat boxes and encouraging customers to start conversations. Some more sophisticated customers are unfazed by this, but overly-insistent use of web chat can put some customers off entirely.

There are various levels of intelligence that can be used to support proactive chat more effectively. If the customer has logged in, it is possible to identify them, and take into account past channel preferences, purchase history and other relevant information in order to personalize the experience, (for example including details of relevant offers to that customer).

As an aside, some US contact centers report that those experienced in playing online games - are particularly suited to the fast-paced, text-oriented nature of web chat, and some businesses are actively recruiting such people to work as web chat agents. It is also worth commenting that although offshore customer contact has received a mixed press, many of the negative issues surrounding offshore are not applicable to the multimedia channel, such as the possible mutual incomprehensibility of accents.

Current and future role: web chat

Web chat seems to be experiencing growth in the US, with the proportion of interactions rising to between 2-3% on average, although this is over 5% in the TMT sector, almost 4% in the entertainment and leisure vertical market and over 3% in retail.

There is no reason why this growth will not continue: it works well for customers as providing an immediate response, and with multiple concurrent chat sessions per agent, it can be a lower cost channel than voice for the business to support. Solution providers report that web chat is currently being trialed by numerous businesses, often at a limited, or departmental level so they can assess the suitability of the channel for a company-wide rollout, and understand what needs to be done to ensure full implementation is a success.

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Figure 105: Customer experience of email and web chat

Email	2004 =>	2014 =>	Chat / IM	
Perceived effectiveness				Email improves; IM under-used
Channel availability				Smartphones encourage text
Ease of use				Basic keyboard skills
Low cost of use				Effectively free
Painlessness				Response improved, 2-way conv. ?
Speed of conclusion				Email better; IM is near real-time
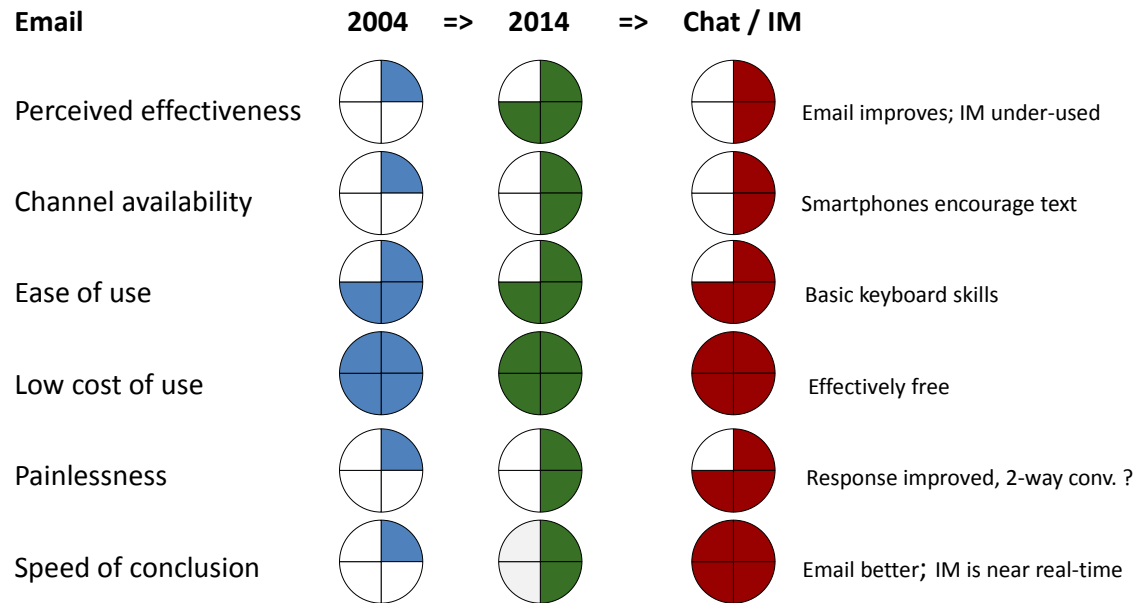
A case can be made (above) for the future rise of web chat at the expense of email. From a customer's perspective, the near real-time response of web chat is far superior to even the best email response rates (i.e. less than one hour). This speed also means that a 2-way conversation is possible, with clarification and multiple questions being available in the same way that happens in a phone conversation (albeit more slowly). Customer identity verification is also in theory possible; although, the reality may be that some customers do not yet feel secure enough to divulge password or personal information online.

Web chat's perceived effectiveness is still not as great as email's, due in large part to the unfamiliarity of the new channel to many customers, rather than anything intrinsically less effective about the channel.

The increased importance of the mobile channel, especially via smartphones, means that customers will have a way to interact with agents without having to use their mobile's call minutes. We would expect a growing number of customer service mobile apps to have a web chat option included in them in order to provide live customer service in those cases where self-service has broken down.

Tips for using chat and cobrowsing successfully

Understand the role that you want web chat to have within the customer contact mix. Do you see it as a replacement for email? Or is it more of a call avoidance strategy? Or is it perhaps a way to close the sale? Without understanding this, it'll be difficult to measure its success. Some businesses will offer web chat and cobrowsing only to their premium customers, or to those who are in the final stages of purchasing but who have stalled.

Choose the most suitable metrics for what you're trying to achieve. If web chat is about revenue, then perhaps focus on sales conversion rates, rather than average handle time, in order to encourage agents to make the most of cross-selling and up-selling opportunities.

Some customers may use web chat as an initial method to ask tentatively about products and services. The solution should provide the option to continue the conversation via a phone.

Work with the solution provider to determine what a reasonable and realistic number of concurrent web chat sessions might be. While it is theoretically possible for an agent to cope with six conversations at once, the reality is that this is unsustainable over long periods or with complex issues. It is far more realistic to expect a well trained agent to deal with perhaps three conversations concurrently, and this should be fed into your workforce planning system. However, it may be that agents who deal with both telephony and web chat find it too difficult to deal with multiple chat sessions as well, and will deal with only one chat at a time.

As with any real-time interaction channel, monitoring traffic is vital to success. Plans need to be made to handle web chat spikes and providing estimated wait times to those in a web chat queue will allow them to choose a self-service, phone or email option instead.

Plan how web chat will integrate with existing customer service channels. It is possible to run web chat as an entirely separate, siloed channel, but customers expect to be able to move between channels seamlessly. Being able to treat web chat interactions in the same way as other communication channels means that resources can be spread across channels as and when needed.

Sophisticated web chat solutions allow for 3-way chat, so that an agent can bring subject experts into the conversation as required.

Consider using a trial, in a discrete department, product or service area. This will allow you to understand what works and what doesn't, in a relatively low-risk environment. Changing a small number of variables will also provide a more accurate understanding of how web chat affects customer service levels, customer satisfaction and revenue. It will also provide information about the types of customer and queries that web chat is likely to be used by and for.

Make customers aware that you're offering web chat, by promoting it through existing, higher-cost channels such as within the telephone queue's recorded announcement.

Co-browsing (or web collaboration), which sometimes includes form-filling and page-pushing as a sub-set of functionality, is a very intensive, one-to-one channel, formerly used for high-value customers or in those cases where it is quicker and more effective for an agent to take over the reins than to talk the customer through the process. While it has been useful for certain businesses, processes and customers, it is difficult to make a case for it on a cost-saving basis alone, although it will encourage the completion rate of sales, and as such, improve profitability.

Co-browsing may be used to help customers fill out forms, or to complete online transactions, and may be done in conjunction with a concurrent telephone call or web chat. Unlike page-pushing - which is a one-way movement of information from agent to customer - and screen sharing - where the agent takes control of the customer's desktop - co-browsing is a true two-way collaboration tool. Either the agent or the customer can control the cursor or enter data into fields, and business rules can be set up so that the agent does not see or enter sensitive information.

While it is not a cheap option, cobrowsing, particularly in association with a telephone call or web chat, can be an effective way of closing a high-value sale. It is, however, currently used in few US organizations.

SELF-SERVICE

Despite the rapid growth in the use of web-based services, the importance of the voice channel has not diminished:

- Customers still find voice the most convenient, flexible and quickest communication channel in many instances, especially in older demographics and for complex enquiries

- Customers' expectations continue to rise. Not only do they seek out competitively-priced goods and services, but they require quick, efficient service as well

- The general level of awareness of identity theft as a real issue has also grown, and customers expect to see that their private and personal information is protected by those organizations with which it is shared. The voice channel still provides customers with the greatest level of confidence.

The challenge for businesses is to improve the customer experience, protect their customers' private and personal information and control their own costs. As such, the use of automated voice-based solutions has become widespread and offers a rapid service option to customers while keeping contact center costs down.

Telephone self-service as we know it has been around since the 1970's, when the first IVR (interactive voice response) units became widely-used. 'Touchtone IVR' allows customers with a touchtone phone (also known as "DTMF" - dual-tone, multiple frequency) to access and provide information in a numerical format.

Recently, there has been strong growth in the use of automated speech recognition (ASR), which allows customers to speak their requirements to the system, allowing greater flexibility and functionality.

IVR - whether through DTMF or speech recognition - has four main functions:

1. to route calls to the right person or department (e.g. "Press 1 for sales, or 2 for service…") in auto-attendant mode
2. to identify who's calling via either caller-line identity (where the caller's number is recognized, and their records brought up immediately), or through inputted information, such as account number. The caller's information is then "popped" onto the screen of an agent who then understands who the customer is and what they are likely to want
3. to segment and differentiate between customers, prioritizing against business rules in order to deliver a premium standard of service to them (e.g. minimizing time on-hold, spending longer on the phone with them, offering high-value services, etc.)
4. to deliver a total customer service interaction without having to use a human agent, saving the business money - historically, it has been calculated that 6 or 7 self-service IVR calls cost about the same as a single person-to-person call.

To learn more about IVR as a call routing solution (i.e. options 1, 2 and 3), please see the section on 'Call-back, Queue Management & Routing' in the 'Maximizing Efficiency and Agent Optimization' chapter.

This section considers IVR and speech recognition only as part of a full self-service solution, i.e. one that takes the place of an agent.

Figure 106: Advantages and disadvantages of telephony self-service

Advantages	Disadvantages
Fantastic cost-cutter: 6 or 7 IVR calls cost less than a single person-to-person call	Can be inflexible to change IVR options, due to proprietary nature of many existing IVR solutions
Captured customer data from an IVR enables key CTI (computer-telephony integration) solutions, such as screen popping and skills-based routing to take place	IVR menus difficult to visualize for customers, leading to stress and dissatisfaction. Users may feel "there is no end in sight" and become frustrated.
Frees agents from boring and repetitive work, reducing staff attrition and improving morale	Long-winded menus annoy customers, where shorter ones can reduce the options available, and thus, the functionality
Allows agents to spend more time doing high value-add work, like cross- and up-selling, and complex customer care and loyalty work	When overdone, self-service can be seen as a low-cost option aimed at helping the business, not the customer. Overuse of IVR makes customers feel as though the company does not value them
Reduces queue times and call abandonment rates, improving customer satisfaction for those needing live agent help	Expensive, proprietary hardware has kept businesses locked into existing suppliers in the past, although open standards and cloud-based delivery has alleviated this issue somewhat

Customers need to be persuaded to use IVR self-service, and you can measure success in two ways: through the "play" rate (what proportion of your customers try to use IVR), and the "completion" rate (how many can successfully interact with your company without having to involve a human agent by "zeroing-out"). Your customers need to be motivated to use IVR (i.e. there's something in it for them), and you need to design, maintain and promote the self-service application to get them to keep using it.

Simply making IVR self-service available without too much thought or effort will result in perhaps fewer than 20% of possible calls being completed without human interaction. Designing the IVR self-service experience with customers' needs in mind, marketing it as an aid for customers, rewarding the customer for using it and tuning the application to make it even better can mean up to 90% of relevant calls are dealt with automatically: a massive cost saving, an improvement in the customer service experience and a boost for the company's reputation with its customers.

It is important to plan upfront how customers should interact with the automated system, including considering how to implement error recovery. Prompts and dialog shortcuts tuned for the target audience will promote an aura of automated "Intelligence", encouraging callers to remain engaged or to easily transition to other channels. It is important to partner with a vendor that employs experienced Voice User Interface (VUI) designers familiar with IVR design and multi-channel communications.

Self-service is found across most industries - there is often at least one function that self-service is suitable for, regardless of what a company actually does - but some sectors use it more than others. Many businesses are finding that web self-service is increasingly popular with their customers, especially with the uptake of smartphones which allow web browsing on the move (see the 'Mobile Customer' section for more information).

Figure 107: Some functions for self-service, by vertical market

Self-service activity	Typical sector offering this form of self-service
Problem reporting and resolution	IT helpdesk
Account access	Banking
Product information	Retail
Online registration	Any
Order entry	Retail, travel
Balance enquiry	Banking, credit cards
Dealer or store location enquiries	Car sales, retail
Ticket booking	Cinemas, other entertainment
Real-time punctuality checks	Airlines, trains
Status checks	Retail (esp. online), IT helpdesk
Address changes	Subscription services, utilities
Form filling	Any
Brochure request	Travel, retail
Password reset	Finance, IT

There has often been wariness about telephony self-service. Many businesses wish to be seen as strongly focused upon customers' needs, and putting what can be seen as a barrier between customer and business is anathema to them. The fact is, telephony self-service can offer a true 'win-win' scenario, but only if the business focuses at least as much upon the needs of the customer as their own cost reduction.

Although self-service is in widespread use, there are business types where it can excel in reducing cost and increasing service levels. At a basic level, self-service can be seen as a function of the complexity and volume of interactions.

Self-service usage

		Simple	Complex
Volume of interactions	High	**Very high** - balance enquiries - ticket booking - utilities meter reading	**Medium** May use speech recognition - form-filling - stock purchase
	Low	**Medium** May use hosted solution - FAQs - low security interactions	**Low** Cost of system purchase and update may be prohibitive compared to using live agents

Interaction complexity

Put simply, the greater the number of simple interactions a company deals with, the more likely it is that it can benefit from implementing self-service.

- **Large** volumes of **simple** requests from customers (and who use agents simply as a means of reading the information from a screen) should have implemented self-service by now. There are estimates that 70% of calls to helpdesks are password/passnumber reset requests, which could be handled via self-service

- Where businesses only deal in a relatively **small** number of **complex** interactions, the cost of implementing a sophisticated, probably speech-enabled self-service application - and keeping the knowledge base up-to-date - may be greater than any associated salary cost reduction

- Businesses having a **small** number of **simple** interactions now have the option to have their voice self-service functionality in the cloud, paying perhaps only for the number of times that it is used. This model allows self-service functionality at a fraction of the cost of owning and maintaining a premises-based system

- Businesses which deal with **large** numbers of **complex** interactions are building and using some of the most interesting and potentially beneficial self-service applications. Examples include filling in insurance forms to get a quote - a lengthy and time-consuming business, which can last for tens of minutes, costing the business a great deal of money. Moving this to self-service can save huge amounts of money, as an agent may only need to be brought in to close the sale or clarify finer points of the policy, if at all. Stock purchase is another classic example of this: sophisticated users can buy and sell stocks as quickly as they could by talking to a human agent by communicating via speech recognition directly with a business's applications and databases.

DTMF IVR has been a notable success for many businesses, and many businesses have added to this, leveraging both the added flexibility and power of speech recognition as well as being able to share the functionality that businesses have recently developed with their web self-service applications. Of course, this is likely to come at an additional cost, and trying to find capital budget to invest in these solutions may be difficult. In such cases, businesses should consider alternative application delivery methods, such as a cloud-based solution.

Speech Technology and Cloud-based Solutions

One of the most consistently strong inhibitors against the uptake of speech recognition is the initial cost involved, as well as the expected ongoing support costs.

Given the recent economic climate, the hosted or cloud proposition has a particular appeal to organizations who don't wish to invest or tie-up large sums of up-front capital investment on in-house systems or pay for the in-house IT resource to run them. One advantage of hosting is that the need for significant upfront technology investment is lessened, providing on-tap access to extensive telephony resource, albeit of a third-party nature. Additionally, the use of cloud-based solutions means that businesses don't need continual ongoing investment to upgrade their own systems.

Like other self-service applications, automated speech has of course been more attractive for organizations with high volumes, where the cost of handling the call can even exceed the business value it represents. In this scenario, the need to reduce cost is imperative, but for speech-based self-service to work well, the technology infrastructure on which it depends must be robust enough, and the number of phone lines linked to it large enough to accommodate the maximum number of callers ever likely to contact the service, or run the risk of turning callers away, a cost which can be very high. Cloud-based speech services, where the telephony and technology infrastructure is centrally-owned and managed by a third party overcomes this capital investment hurdle, and the pay-as-you-go model adopted by most cloud suppliers means that ongoing operating costs are directly pegged to transaction volume, providing valuable operational flexibility.

More information can be found in the 'Cloud-based Solutions' chapter of this report.

VoltDelta agrees that hosted automated speech applications are cost effective solutions for businesses that tend to experience call volume spikes such as 511 traffic management systems during commuting hours. However, some vendors do fall short on their claims of handling call volume spikes once deployed. To verify that a hosted solution vendor has a robust infrastructure, be sure to ask if their testing facilities can also generate calls at exceptionally high volumes to enable stress-testing that proves recognition responsiveness as well as performance under real-world load conditions.

43% of respondents - the same proportion as last year - offer a telephony self-service channel, with the finance and insurance sectors leading the way.

Figure 108: Overall proportion of calls handled entire through self-service (only in respondents which offer telephony self-service)

Vertical market	Overall proportion of calls handled entirely through self-service _if offered_	Proportion of contact center respondents offering a full self-service option
Manufacturing	54%	29%
Finance	49%	86%
Retail & Distribution	40%	38%
Public Sector	34%	44%
Insurance	29%	56%
TMT	28%	39%
Medical	23%	17%
Outsourcing	18%	40%
Services	17%	45%
Entertainment & Leisure	15%	14%
Average	**31%**	**43%**

NB: 'proportion of calls handled through self-service' refers only to the 43% of respondents offering a full self-service option.

On average, 17% of voice self-service is handled through automated speech recognition, rather than DTMF IVR, roughly similar to last year's figure of 19%.

Proportion of self-service calls handled through DTMF IVR or automated speech recognition, by vertical market
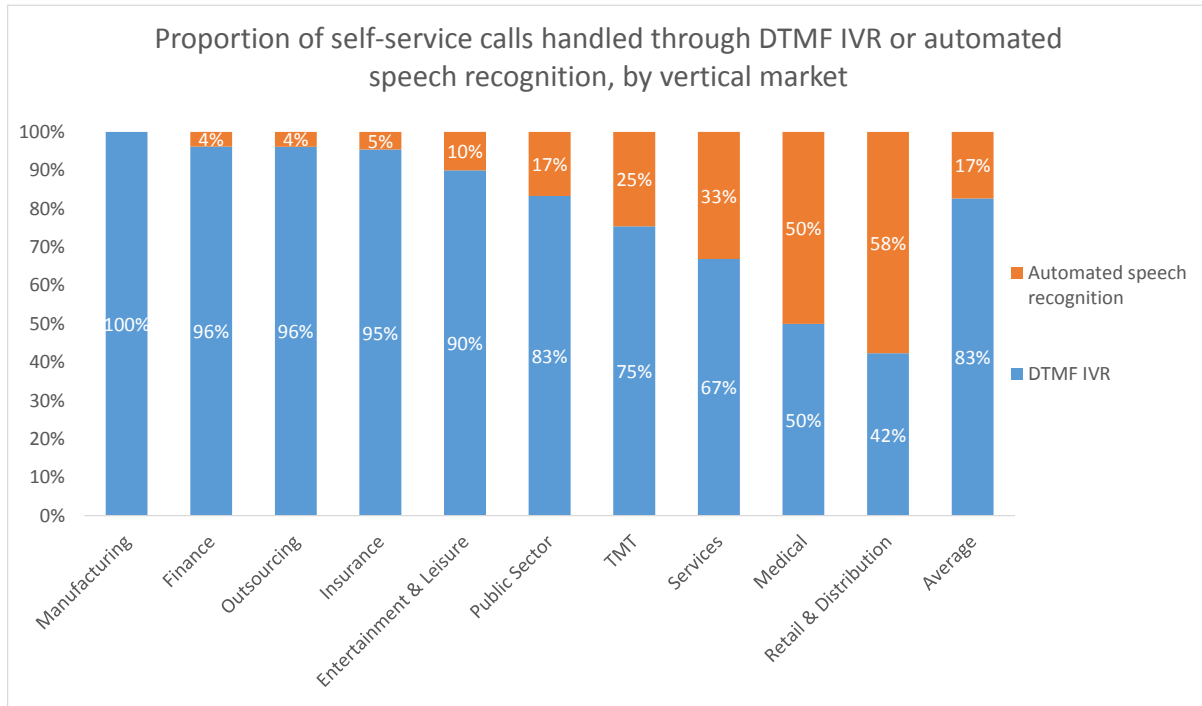
Once again, 90% of self-service interactions in small contact centers are through DTMF IVR, with automated speech recognition becoming increasingly widely-used in larger operations: 32% of self-service interactions in large operations were reported to be through ASR. This is a clear example of how the more expensive and complex ASR applications are more likely to be used by those with the resources to implement and support them, and are also the operations that can really benefit most from the power and flexibility that automated speech recognition can bring.

| Contact center size	Proportion of self-service calls handled by DTMF IVR	Proportion of self-service calls handled by automated speech recognition
Small	90%	10%
Medium	89%	11%
Large	68%	32%
Average	**83%**	**17%**

Many calls are not suitable for self-service, as they may require multiple requests within the same call, be of a complex nature or be from a caller who feels that they need to speak with a human agent. Additionally, some small businesses may have such a low volume of calls that it is not cost-effective to implement self-service.

Even amongst those respondents for whom telephony self-service is a vital part of the customer contact strategy, it's no use trying to shift every customer service interaction onto IVR self-service, as if customers don't want to use IVR, they will "zero-out" (press 0 for a live agent, or try to find a similar shortcut). And if businesses don't offer a live agent option to an irate and frustrated caller, they won't need to worry at all about providing customer service to them in the future.

It is worth reiterating that if callers agree to try a company's self-service system rather than insisting upon talking to an agent, there is an implied contract that if the self-service session is unsuitable, the caller should be allowed to speak with an agent. Few things can frustrate callers more than being hectored into using an unhelpful and irrelevant self-service system.

Figure 111: Proportion of self-service sessions 'zeroed-out' to an agent

Proportion of self-service sessions 'zeroed-out' to an agent

>20%
26%

<5%
36%

11-20%
18%

5-10%
20%
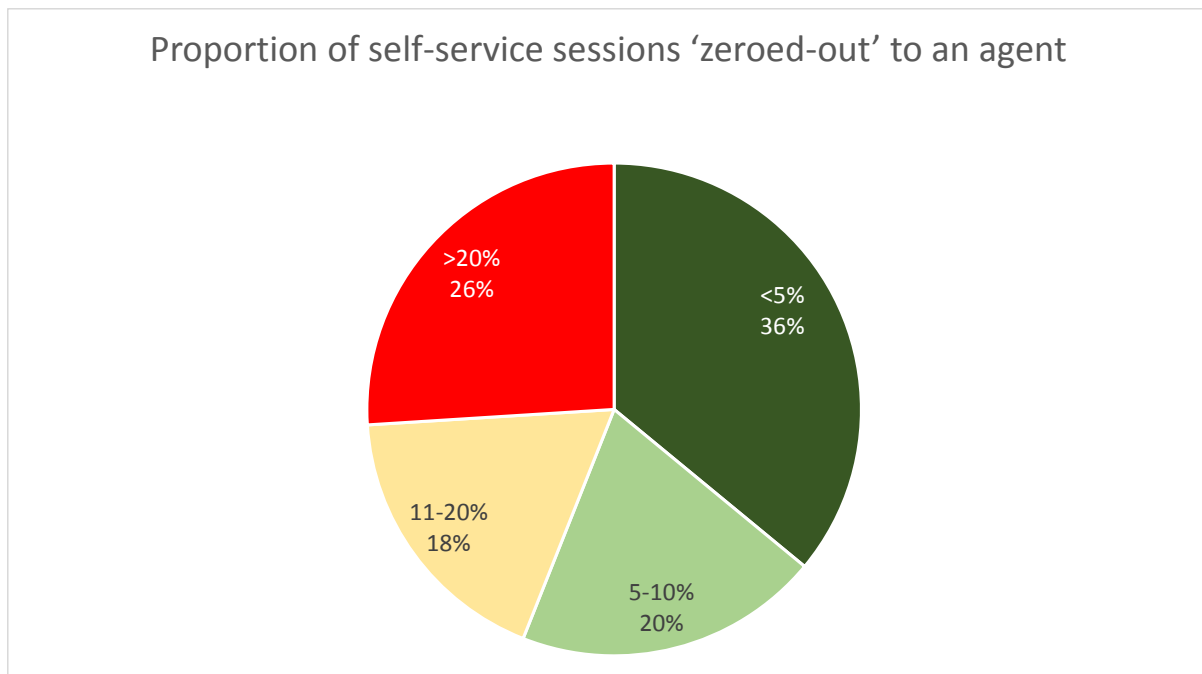
Overall, a mean average of 18% of calls that go into the self-service option are "zeroed-out": instances where the customer decides that they in fact wish to speak with an operator, which is up once again the previous year's figure (2013's statistic was 13%).

NB, 1st quartile performance for 'zeroing-out' is 1%, the median is 6% and the 3rd quartile is 25%, which indicates that there are a relatively small number of contact centers where self-service failure rates are high.

There is a broadly positive correlation between the size of the contact center and the proportion of self-service sessions that are abandoned in favor of speaking to an agent: the larger the contact center, the more often customers 'zero out'. One possible reason for this might be that larger operations are trying to do too much with their self-service. There is some circumstantial evidence to suggest that this is the case, as it is very noticeable that respondents from larger organizations tend to have far more options in the auto-attendant functionality of their IVR solution, and this tendency to offer a great deal of functionality and options may well also apply to IVR's self-service functionality as well. Overly complex or long-winded IVR functionality will tend to encourage session abandonment, and this may well be what we see here.

Due to the potential additional flexibility and functionality offered by automated speech recognition over DTMF IVR, we would expect the zeroing-out rate (which can be viewed as connected to customers' rejection of the self-service option) to be lower for speech recognition than DTMF IVR. However, once again this year, the opposite is the case:

- In contact centers where the majority of self-service is offered through speech recognition, the mean zero-out rate is 29%.
- In contact centers where the majority of self-service is offered through DTMF IVR, the mean zero-out rate is 13%.

Without interviewing these respondents in more depth, there is no certainty as to why this is happening. It is possible that customers are simply more used to DTMF IVR; that speech recognition often offers an option to speak to an agent early in the script (which is taken as the easy way out); or that customers do not know what to say to an automated system to make it work, so look to speak with a live agent. That customers may actually currently prefer to choose from a finite group of options is an interesting conundrum, and one which deserves more attention from the industry.

Cost differentials in self-service and live voice support

- The average cost of a live telephone call varies considerably, but has a mean average of $5.84
- Respondents state that the average cost of a telephony self-service session is $0.95.

Aligning People and Technology to Create an Effective Voice Self-Service Channel

It takes more than a vision to create an effective Interactive Voice Response (IVR) self-service solution in a contact center. There are many factors that contribute to the goal of achieving high self-service completion rates along with improved customer satisfaction with this communication channel. VoltDelta has highlighted some of these common factors in two case studies. Both organizations utilized highly skilled and talented people for IVR design and implementation. They also leveraged leading-edge cloud technology to easily integrate voice self service into a cross-channel customer engagement strategy.

CASE STUDY 1 – HEALTHCARE

The Situation: One healthcare provider wanted to add an IVR channel to offload their contact center agents from having to deal with questions such as claim statuses and referrals. The goal was to make the same level of information available in the IVR as was provided to agents. They also wanted to give callers the ability to communicate via their channel of choice. The IVR self-service completion rate goal was set at a minimum of 35% of the total calls. This meant that the IVR automation would have to handle some complex tasks, not just standard routine transactions.

Challenge:

- *Accuracy:* Member IDs consist of an alphanumeric string which is notoriously difficult for an IVR to interpret accurately due to like sounding letters, numbers and variations in accents.
- *Voice User Interface Menu Design:* Error recovery had to present intelligence if the ID was not initially recognized in order to keep the subscriber engaged within automation.

Solution:

VoltDelta's Voice User Interface (VUI) designers were able to identify speech patterns in the alphanumeric member ID string. If the speech recognition engine was unable to understand the caller's member ID on the first try, the IVR would ask a series of questions about the ID such as "Does the member ID start with P?" The result was:

- *Completion Rate:* 35% of all calls were answered within the IVR upon implementation, which offloads agents and provides a cost saving to the healthcare provider. With this initial success, the self-service rate will improve over the next 12 months.
- *Customer Satisfaction:* Customers that preferred to use the IVR were able to successfully enter their member ID over 98% of the time.
- *Deployment Efficiency & Expertise:* VoltDelta's reliable cloud-based platform combined with expertise in the area of Speech and VUI design, networking, security and technology integration allowed the provider to be up and running quickly.

CASE STUDY 2 – FINANCE

Situation: A leading prepaid credit card provider for consumers who chose not to have traditional banking relationships wanted to upgrade its customer care platform to more promptly and effectively engage with customers.

Challenge:

- Ensure every call is answered during peak calling spikes which are typical of this business.
- Increase self-service rates so that agents only need to focus on more complex issues.
- Integrate voice self service with the web service, SMS, and agent channels.

Solution: VoltDelta was selected to provide a cloud-based multi-channel solution because of the massive scalability and stability of its infrastructure and cross-channel platform features. The solution included:

- *Channel Integration with Centralized Management:* Intelligent call routing features were deployed to support several remote agent locations as we as provide agents with information on what transpired in the IVR.
- *Channel of Choice:* Customers have the option to pay bills using the IVR and/ or the website. Many customers opt to pay bills over the phone using the IVR instead of the website because of its convenience. Optionally, SMS text messages can be sent to customers for account transaction confirmations that occurred on the web or in the IVR.
- *Platform Reliability & Scalability:* VoltDelta's platform answers every call, including peak times when the call rate quadruples. Over 90 percent of calls are successfully resolved in the automated system without requiring live agent interaction, allowing agents to focus on customers in need of more specialized assistance.

About VoltDelta
VoltDelta is a global cloud-based contact center provider with 35 years of experience. We rapidly tailor and integrate our multichannel contact center solutions to enable you to increase revenue, boost retention and reduce operating costs with proven scalability and reliability. Our service guarantee is supported by contact center and carrier experts who are dedicated to your success.

DEVELOPMENTS IN DTMF IVR

The rise in VoIP and SIP (session initiation protocol) has allowed IVR to run on standard servers, rather than more expensive and proprietary telephony cards or specialist hardware, with media gateways and IP PBXs being supported within an open standard, commoditized telephony environment.

The pure software IVR platforms used today run on standard servers, reducing the restrictions that proprietary hardware placed upon functionality, scalability and flexibility, as well as the cost of purchasing and maintaining dedicated hardware. Some companies prefer to adopt the cloud-based method of providing IVR options to the customers: 14% of respondents use cloud-based IVR functionality, with 7% reporting the use of automated speech recognition from the cloud.

Speech-enabling IVR increases the features available to the caller. Standards-based languages such as CCXML and VoiceXML support speech recognition and improved access to relevant corporate data, the integration of which into the IVR experience supports text-to-speech and the use of caller profiling to enable personalized IVR sessions based on who the caller is, their history, their contact preferences and any other relevant information that would further assist the self-service session.

With PCI compliance so much to the fore for many businesses, we would expect to see an increased use of IVR to take card payments, whether within a call or at the end of it. With the focus of many solution providers on achieving the relevant ISO security standards, it can be seen that the vendor community is very aware of what the market requires. DTMF has the advantage of extreme simplicity, which means that it may well have an important role to play on a sector-specific basis, even with the advent of newer and more sophisticated solutions. In situations where callers need the same piece of information on a recurring basis - such as checking the balance of prepaid credit cards - customers can access the information within a few seconds by typing in the DTMF digit sequence that they have learnt off-by-heart, and it may well be that this method of accessing information is the most convenient and quickest for customers. In addition, interactions that require a simple list of digits, such as e-parking, may be more suited to the unambiguous nature of DTMF (which, unlike speech recognition, is unaffected by background noise). Of course, by far the most common application for delivering long sequences of numbers is through making a payment via credit card, and dropping a customer into a DTMF session in order to do this has numerous advantages for businesses and customers in terms of convenience, familiarity and security.

The take-up of cloud-based IVR solutions, particularly by small-medium sized companies, is driving growth within this sector. The ability to personalize IVR sessions, as well as the low initial start-up costs and limited in-house maintenance required, means that businesses that traditionally were unable or unwilling to see the benefits of IVR for their own company are now revisiting this.

Many solution providers state that they are actively increasing the power and range of the analytics solutions not just within live contact channels such as chat and voice, but also within automated IVR environments as well.

FROM DTMF IVR TO AUTOMATED SPEECH RECOGNITION

Despite the wider and more powerful functionality that speech recognition gives to an IVR system, significant inhibitors are present. It is generally acknowledged that speech recognition can be considerably more expensive to implement than DTMF IVR, and is also likely to require significant, highly-paid in-house resource to fine-tune and operate it going forward. Some solution providers note that the majority of businesses' interest in moving from DTMF to speech recognition comes when the existing telephony self-service legacy system is approaching end-of-life.

Speech-based IVR is particularly useful in cases where very long lists of items such as place names or surnames may be chosen, for which the more structured DTMF IVR is unsuited. The success or otherwise of speech-based IVRs is very affected by how callers are encouraged to use the service. It has been the case that some speech implementations have actually made life more difficult for the customer, who may not have the confidence that the system will understand their natural language request and provide very short, one-word answers; if nothing is given in the way of prompts or examples, callers may give too little or too much information as they are unsure of the sophistication or capabilities of the system, and this may be a reason for the high self-service abandonment rates seen earlier. Using prompts such as "describe in a few words why you are calling us, for example 'to start a new mortgage application'" can be extremely useful in setting ground rules for the successful use of the system.

Some solution providers offer a semi-automated option for their speech recognition-driven IVR, whereby the agent has a chance to hear one or two pertinent words from within the speech recognition session before the live call is taken, giving the agent heads-up into the context, mindset and intent of the customer before the conversation actually begins.

In previous years, the main issue that held back speech-enabled self-service was that their business wasn't really suited to automation. However, previous research has shown that more than half of the contact centers that currently offer no full self-service options could see some benefit in automating at least some part of their processes.

As such, there are likely to be issues around expenditure, operational costs and customer reaction to address for these potential users of self-service. Respondents are more concerned than previously they do not have the in-house IT resource to run automated speech self-service, and many believe that the ongoing costs and effort would not be worth it. However, the biggest inhibitor was the initial investment, which could be alleviated through a hosted model. As DTMF IVR, when badly-implemented, is a major bugbear for customers, replacing it with a quicker and more powerful alternative (ASR) could be seen as a benefit.

In all, there is still a great deal of work to be done by solution providers to deliver ASR solutions - either as a replacement for DTMF IVR, or as a new solution - through offering innovative payment and service delivery methods, and to create a greater market awareness of the success stories in this area. Against a background of potential inhibitors, there is some positivity coming from the consumer base. Because there are so many speech recognition applications now in use in daily life - for example Siri, PC-based voice recognition software, and voice-enabled hands-free dialing - consumers are now becoming more comfortable giving voice commands to an automated system. With every successful speech interaction, customers' confidence increases and speech-enabled self-service becomes a little more firmly embedded in the customer base's psyche.

OUTBOUND SELF-SERVICE

Traditionally, outbound customer contact has been heavily sales-focused, and as it relies on a live agent communication, has tended to be expensive. Leading companies now carry out a reasonable amount of live proactive outbound customer service, which tends to account for between 15 to 20% of their outbound activity. However, the same restrictions around cost apply to this process as well.

The opportunity exists for what could be called 'outbound self-service' to expand, such as sending reminders and notifications to customers through an automated process, thus significantly reducing the cost to the business while improving the overall customer experience. We could define this as being an element of self-service, because it is part of a longer process that is driven by the customers' initial action, such as placing an order or making an appointment. In a significant number of these cases, a customer will choose to seek clarification or a status update at some point in the process through making an inbound interaction. By sending a pre-emptive outbound message, the business is proactively assisting the customer to manage their interaction, making this an element of self-service.

Figure 112: Use of automated outbound communication for proactive customer service

Use of automated outbound communication for proactive customer service
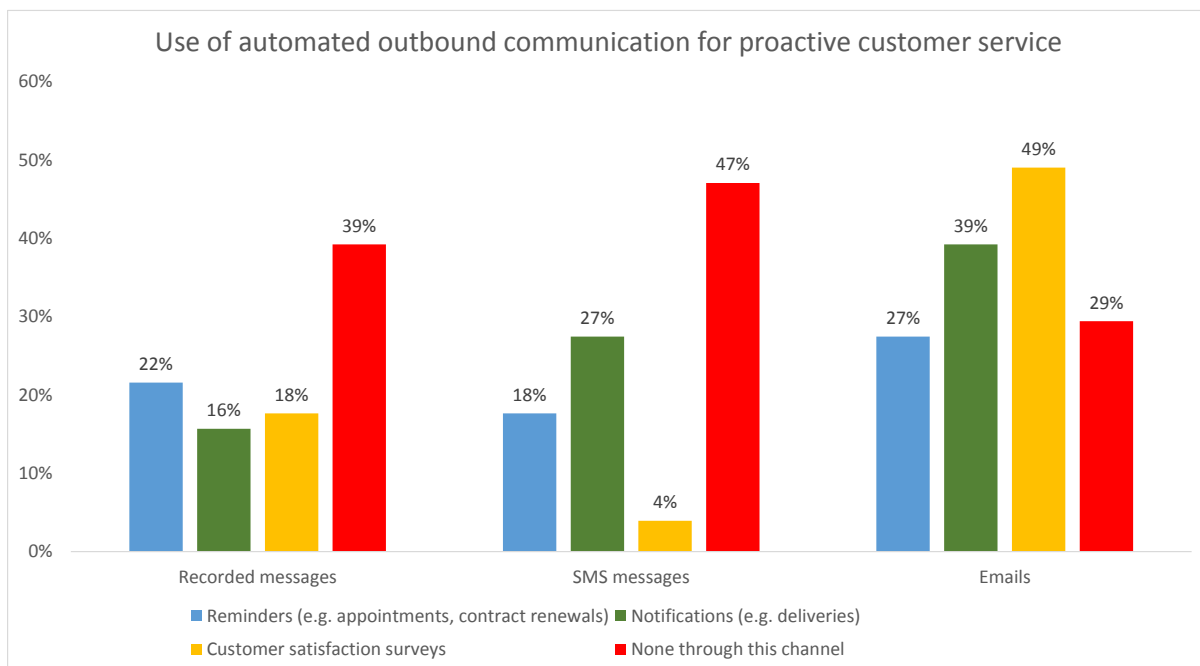
More than three-quarters of respondents do not use recorded messages for any purpose, perhaps in part because of cultural negativity surrounding recorded messages, such as those pushing financial mis-selling compensation or personal injury claims. SMS messages are used much more widely, with reminders and notifications being particularly popular for this channel, particularly in the retail and finance industries. The simplicity of SMS provides a cheap and easy route to the customer, with all of the information that the customer requires able to be sent in a small number of characters. Although not strictly part of the self-service mix, outbound customer satisfaction surveys are also a popular activity for customers to be invited to take part in, via an automated outbound channel.

VISUAL IVR

The audio-only nature of DTMF IVR places limitations upon how user-friendly the experience can be for a customer. There has always been a trade-off required between functionality and usability, which manifests itself in the number of menu options and levels that made available within the IVR system.

The rapid growth in smartphones has meant that it is now possible to offer a visual representation of IVR menus on a device which will then be used to call the business. Because it is far quicker to read text than to listen to text being spoken - some studies show that a caller can navigate a visual IVR menu between four and five times quicker than a DTMF IVR menu - the customer experience is improved without sacrificing any functionality or options. Furthermore, visual IVR can be used to send video presentations while waiting for an agent, for educational or marketing purposes, or to answer the self-service requirement (for example, pushing the relevant YouTube clip in order to show the caller how to do something).

Many businesses that use DTMF IVR have made long-term investments in this technology, and retiring the system entirely is not desirable. Giving existing IVR functionality a visual interface simply means that the IVR's path can be shown as a picture on a website or smartphone, with callers touching the selection that they require without having to listen to all of the options or to go up and down levels or branches. This has the dual benefit for the customer of being far quicker than listening to IVR menu options, and of being significantly more likely to get them the correct information or to be routed to the department most appropriate to their needs. Visual IVR menu systems integrate with existing DTMF structures and reuse the same VoiceXML scripts, meaning that any changes made to the existing DTMF IVR system will be automatically replicated regardless of channel or device.

Visual IVR offers companies the ability to develop value-added applications for their customers, rather than simply providing a visual representation of existing IVR menus. For example, in cases where very specific expertise is required, visual IVR can be used to help the caller self-diagnose where in the organization they need to be going, rather than having to speak to a front-line agent who will then have to ask them the same questions in order to route the call to the appropriate resource.

It is worth noting that despite the huge uptake in smartphones and mobile apps, it is very unlikely that customers will find it convenient to have an app for every company with which they deal. Like apps, a visual IVR option provides businesses with an opportunity to display corporate branding and deliver an improved customer interaction experience.

Business	Customer
Cost reduction through improved call avoidance and more accurate routing, improving first contact resolution and decreasing call transfer rates	Greater granularity of routing, and improved functionality means that callers are more likely to arrive at the place where they need to be. Consistent functionality shared across IVR channels and customer devices means that customer engagement and confidence in using the system will be improved
Leveraged existing IVR investments, without having to rip and replace	Significant decrease in customer effort to access self-service or call routing capabilities
Reusability of existing scripts lowers development costs	If the agent has contextual information, there is less likelihood of the caller having to repeat information
Contextual information gathered within the visual IVR session can be popped to agents, giving an improved understanding of the customer's journey, reducing agent handle time and customer frustration	As more customers are finding the correct information without having to call the contact center, this means lower wait times for the customer base in general

Building a business case for visual IVR may involve looking at the self-service 'zero-out' rate for your specific industry compared to your own statistics, considering your call transfer rate and listening to the voice of the customer via call recording or speech analytics as they comment upon their IVR experience.

Carrying out a specific IVR customer experience survey is also a good way of gaining accurate insight into what might turn out to be a significantly negative experience for some of your customer base.

SELF-SERVICE CHANNELS: E2E AND 'VIPA'S

Businesses' interactions with the customers of the future will be a highly-polarized mixture of the automated and the personalized. Moving a large proportion of interactions onto self-service will work for businesses, and having a VIPA (see below) or other third-party seek out the best deals on offer will appeal to many customers. This leads to the conclusion that many customer-agent interactions will be exceptional, such as a complaint, an urgent or complex issue or a technical query that an FAQ or customer community couldn't solve. It is also likely that whole segments of the customer base who don't want automation at all will be handled directly by live agents in many cases.

The VIPA is something which isn't yet widely available, but which is inexorably on its way, being driven by improvements in technology and the desire of the customer of the future to get the best deal with the least effort. Perhaps the most widely-used (albeit very basic) version of the VIPA is the iPhone's "Siri", which provides basic web search functionality based on speech recognition. It is still a very long way from being a true VIPA though.

'VIRTUAL INTELLIGENT PERSONAL ASSISTANTS'

Most self-service scenarios suggest a world in which customers speak directly to 'intelligent' systems. The world of the 'virtual intelligent personal assistant' (VIPA) - turns this idea on its head, postulating an e2e world where the customer delegates many business interactions to a pseudo-intelligent device.

Storing information on a VIPA device - such as personal preferences, financial details and individuals' physical profiles - is the first step, and one which is possible to do today. Customers of the future will then instruct the device to research the best deals for products and services, and to come back to the device's owner with the best selection. The VIPA would 'call' the relevant contact center (which would in fact be either a number of back-office company systems or possibly a live agent in some cases) and could even purchase the best deal without having to involve the owner in any way.

VIPAs may be used in association with knowbots and smart assistants (also called intelligent agents), which roam the web for answers to questions or situations, and could act as a third-party broker between the customer and a business. Price comparison sites act today as a type of first-generation smart assistant, but are entirely reliant on accurate and complete data inputs being provided by suppliers and the site's owners.

If VIPA technology could be relied upon to work, and standards of interoperability between VIPA and businesses were implemented, then this immediate and extensive market knowledge could create a 'perfect market' for commoditized products and services, with major impacts on existing businesses.

Advances in speech recognition and associated techniques have made it possible for more effective dialog handling without the ongoing expense and complexity associated with Natural Language Understanding (NLU) applications. These techniques help recognize caller intent with higher accuracy (especially large grammars), provide disambiguation between like-sounding words with greater confidence and reduce tuning requirements. Use of multiple simultaneous grammars with context sensitivity, such those employed by VoltDelta's CrystalWAVE technology, means understanding what callers say more often the first time, especially for complex dialogs.

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There are a huge number of definitions for social media, but the majority highlight certain aspects and traits in common, including, but not limited to:

- interactivity between peers supported by a collection of online tools
- dialogue rather than monologue
- ubiquity
- free-to-air
- user-generated content
- person-to-person communication.

On the face of it, social media seems more about individuals communicating with each other, leaving companies out of the loop. However, many organizations have been eager to step up to the plate, setting-up Twitter, Facebook and Google+ accounts (or Quepasa, Renren, Mixi etc., depending on their geographic location), as well as YouTube channels for marketing and customer support, with corporate blogs and customer communities also widely supported.

Social media started as a way to make marketing more effective, and social media analytics has focused mainly on this area as well. Now, the reality of social media is dual: it accounts for inbound customer service as well as outbound marketing, whether the business likes it or not. There is also another duality to consider: businesses can learn through direct solicitation of customer responses, and indirectly through the social media analytics process.

conversocial On top of this, social customer service can be more than inbound: proactive social customer service provides an opportunity to surprise and delight your customers by calling out to them when they indirectly mention you or use terms related to your brand. In a previous study of Tweets mentioning some of America's largest brands, we found that 97% were indirect. This means that brands looking at just direct mentions are only touching the tip of the iceberg. What's more, over one third of those indirect mentions were customer service related.

The rise of social media as a customer service channel has often been *de facto,* in that customers have actively sought out the company's Facebook page or Twitter account to communicate with it, even if the company originally had a social media presence only to disseminate information. ContactBabel expects social media to remain a minor channel in terms of overall number of interactions compared to telephony, but one with the potential to be strongly negative - to punch well above its weight - and many senior executives within most companies are treating the channel with a great deal of respect.

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A cloud solution that enables brands to manage **social media** as a large-scale customer service channel

Identify & prioritize interactions that require a response

Workflow allows agent & manager collaboration

Agent & SLA performance data in real-time

Full set of APIs for multi-channel integration

Powering Enterprise Social Customer Service

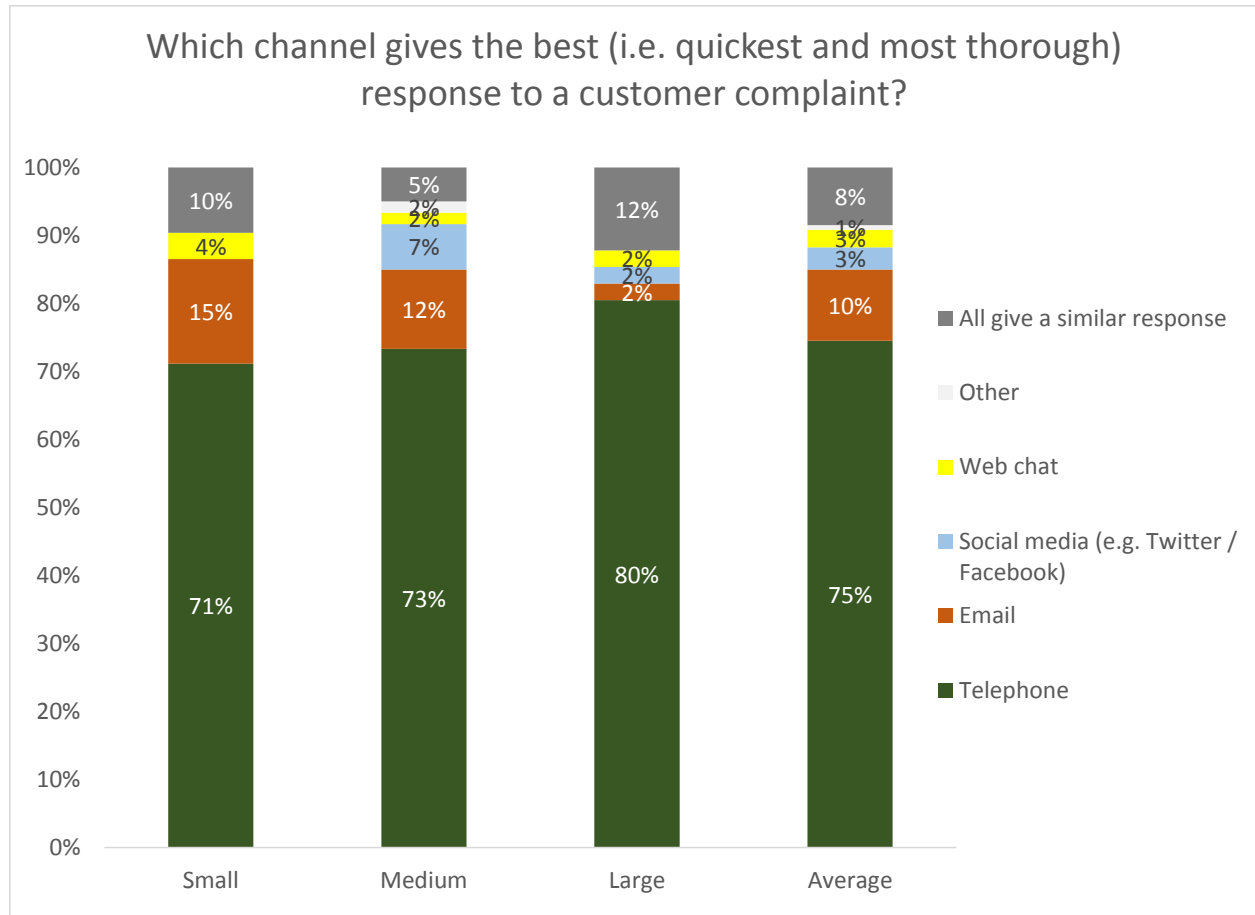hello@conversocial.com   **www.conversocial.com**

Despite the low levels of customer interactions via social media, the high-profile nature of this channel and the possible magnifying effects of negative comments means that social media is viewed as being far more important than baseline interaction statistics would suggest. Some savvy customers, knowing that their public complaint or issue will be dealt with quickly, prefer to go straight to a social media channel rather than wait in a telephone queue. Others might choose the social channel after they've had a bad experience on another channel, such as waiting on hold for a phone agent.

conversocial 40% of all Internet activity is now carried out on mobile devices, and customers now expect faster responses than ever. If you would not put your customers on hold for 15 minutes in a private, one-to-one phone environment, you should think twice about making your customers wait that long in a public environment like Facebook or Twitter.

However, as the following diagram shows, contact center professionals firmly believe that customers would usually be better off served by using the telephony channel in order to make a complaint. Amongst some respondents from small and medium contact centers however (where the proportions of multimedia traffic tend to be higher), there are significant minorities who believe that customers should go to email first, with a handful stating that web chat or social media might provide the quickest response.

Few respondents believe that every channel offers an unhappy customer the same level of response, although consistency of service regardless of channel must be seen as the target for any company that is serious about providing high-quality customer service.

Figure 114: Which channel gives the best (i.e. quickest and most thorough) response to a customer complaint?

Which channel gives the best (i.e. quickest and most thorough) response to a customer complaint?

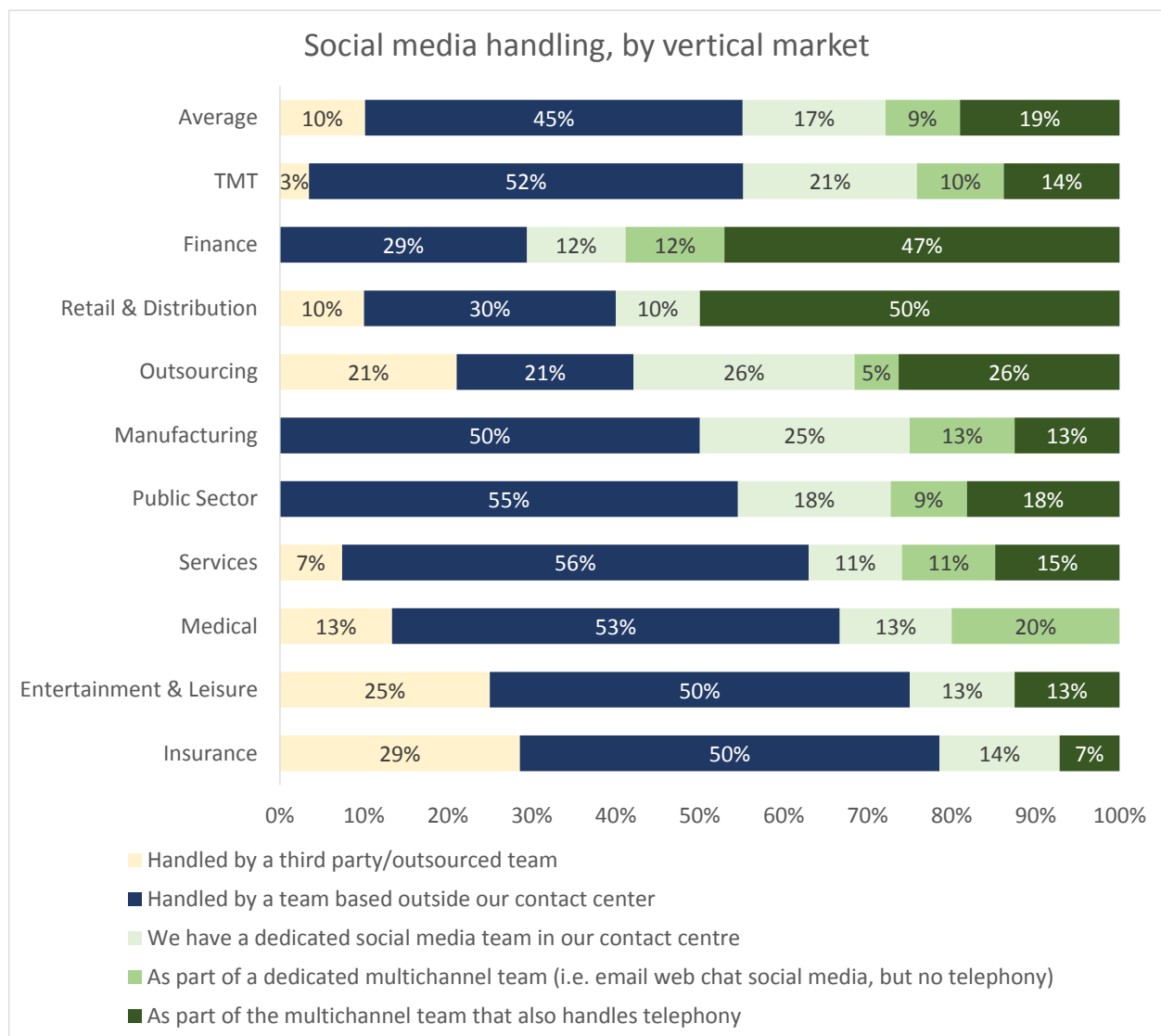| Category	Small	Medium	Large	Average
All give a similar response	10%	5%	12%	8%
Other				1%
Web chat	4%	2%	2%	3%
Social media (e.g. Twitter / Facebook)		7%	2%	3%
Email	15%	12%	2%	10%
Telephone	71%	73%	80%	75%

SOCIAL MEDIA MANAGEMENT AND OWNERSHIP

The evidence that the social media channel was originally set-up as a marketing route rather than as customer service support can be seen within this section. Despite the increasing numbers of customers choosing to use social media for customer support, 45% of respondents report that social media is handled by an in-house team based outside the contact center, usually marketing, PR or corporate communications, with 10% letting an outsourcer handle it. Some vertical markets reported that they have a dedicated social media team working within the contact center, and a minority have a dedicated multichannel team working within the contact center location, but which does not answer telephone calls.

Figure 115: How is social media managed? (by vertical market)

Social media handling, by vertical market

Legend:
- Handled by a third party/outsourced team
- Handled by a team based outside our contact center
- We have a dedicated social media team in our contact centre
- As part of a dedicated multichannel team (i.e. email web chat social media, but no telephony)
- As part of the multichannel team that also handles telephony

Vertical market	Third party/outsourced	Outside contact center	Dedicated SM team in contact centre	Dedicated multichannel (no telephony)	Multichannel with telephony
Average	10%	45%	17%	9%	19%
TMT	3%	52%	21%	10%	14%
Finance		29%	12%	12%	47%
Retail & Distribution	10%	30%	10%		50%
Outsourcing	21%	21%	26%	5%	26%
Manufacturing		50%	25%	13%	13%
Public Sector		55%	18%	9%	18%
Services	7%	56%	11%	11%	15%
Medical	13%	53%	13%	20%	
Entertainment & Leisure	25%	50%	13%		13%
Insurance	29%	50%	14%	7%	

19% of respondents state that social media is dealt with as part of a complete multichannel blended team, including telephony, which is a similar figure to last year's results. This set-up is particularly prevalent in the finance and retail vertical markets. The outsourcing sector, which due to the nature of its business tends to have a very different approach than in-house operations to much of contact center work, is most likely to have a dedicated social media team. The use of a third-party PR agency or an outsourcer to handle social media interactions is relatively rare in most vertical markets, although those in the insurance and entertainment & leisure sectors, as well as outsourcers (for whom this answer most probably just represents another department within their company), stated that they were more likely to do this.

When considering the management of social media by contact center size, larger operations are far more likely to have a dedicated social media team within the contact center. Small and medium operations may well rely on a non-contact center-based corporate team to handle their social media, with over a quarter of large operations handling social media as part of the entire customer interaction mix, including telephony.

**Figure 116: How is social media managed? (by contact center size)**

Social media handling, by contact center size

242
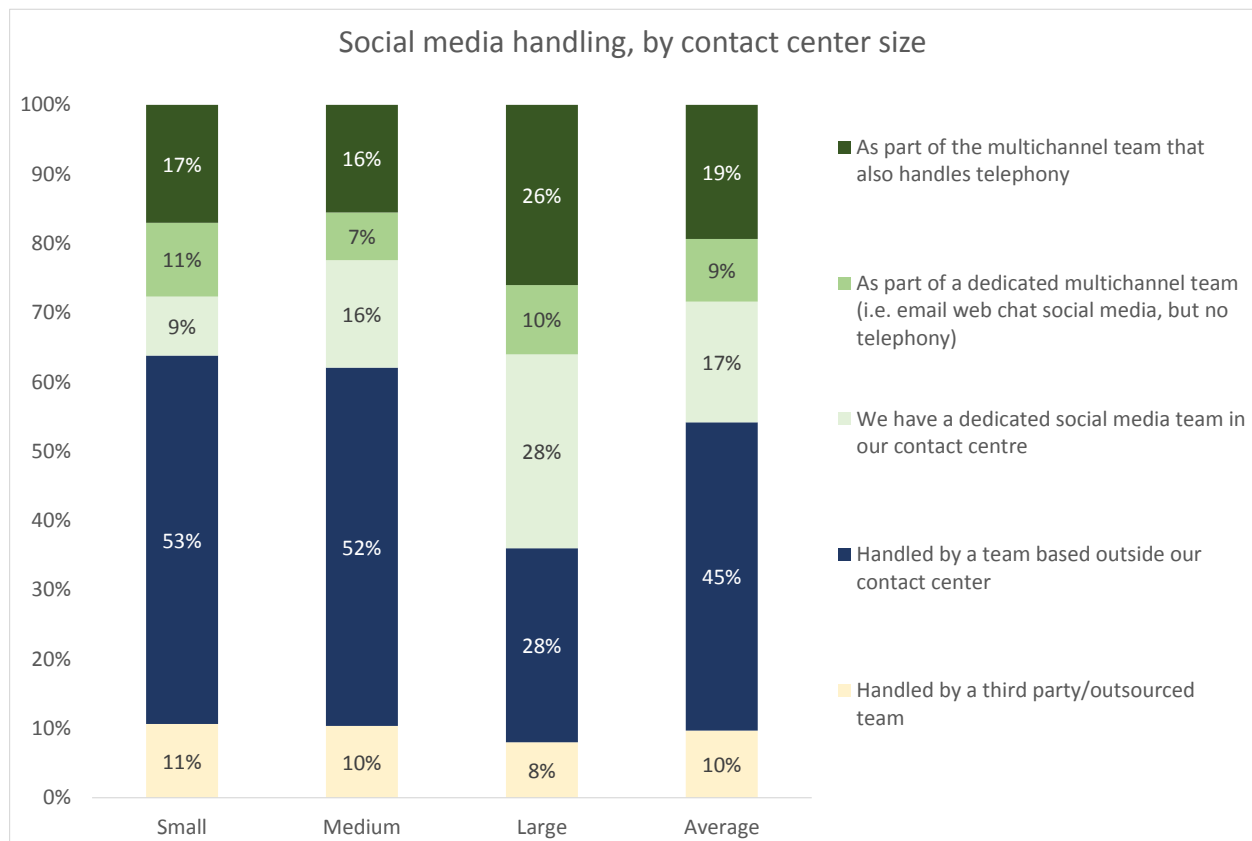
There is some debate about the best way to handle social media inquiries. While it is possible for requests via social media to be analyzed (often by keyword spotting), prioritized and then routed to the agent team most capable of dealing with these specific inquiries, it is not just the same as a phone call or web chat. An almost instantaneous response is expected, with the attendant pressure that such a service level places upon the organization, but social media does not exist within the same one-to-one paradigm as other customer service channels.

conversocial Traditional customer service software is built for private, one-to-one interactions where everything is a customer service issue. But social media mixes public and private, can be one-to-many, and combines customer service issues with general chatter and engagement. As a result, social customer service requires different approaches to prioritization, workflow and analytics.

The role of social media, and how it is managed, is heavily influenced by who holds the budget. For 85% of respondents, it is the marketing department that holds the money for social media, with the customer contact department only responsible for this channel's investment and finances in 13% of cases. Larger contact centers are somewhat more likely to hold social media budget, but such respondents are still in a minority. As social media continues its move away from being primarily a marketing channel towards being a key part of the customer contact mix, it would make sense for the contact center and customer support operation to take more responsibility for the strategy and budget of this channel, but there is little statistical evidence of this happening as yet.

Figure 117: Who owns the social media budget? (by contact center size)

Who owns the social media budget? (by contact center size)
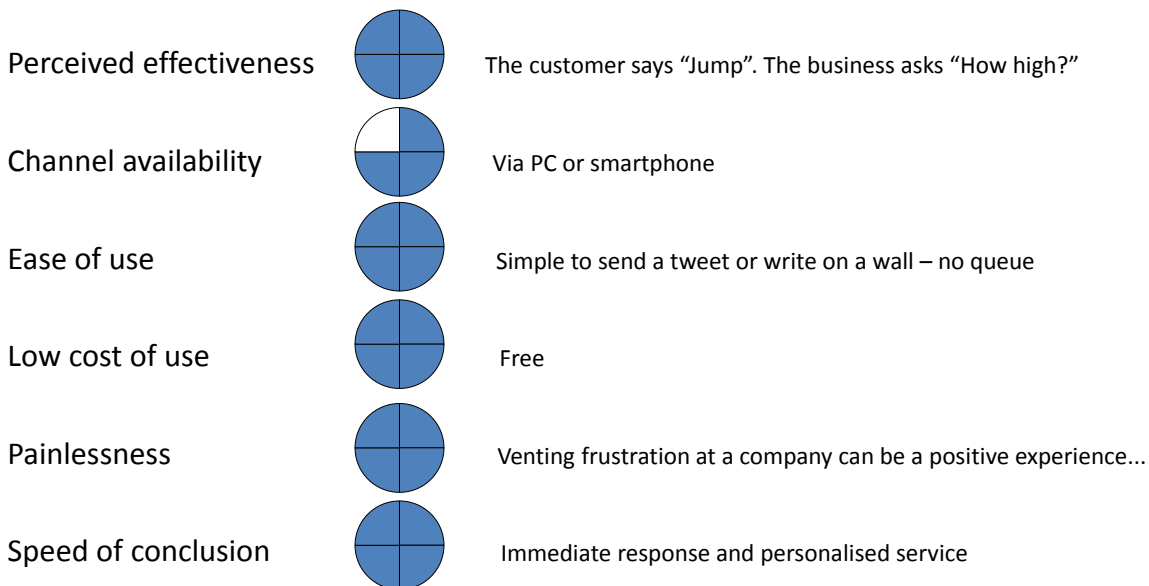
conversocial
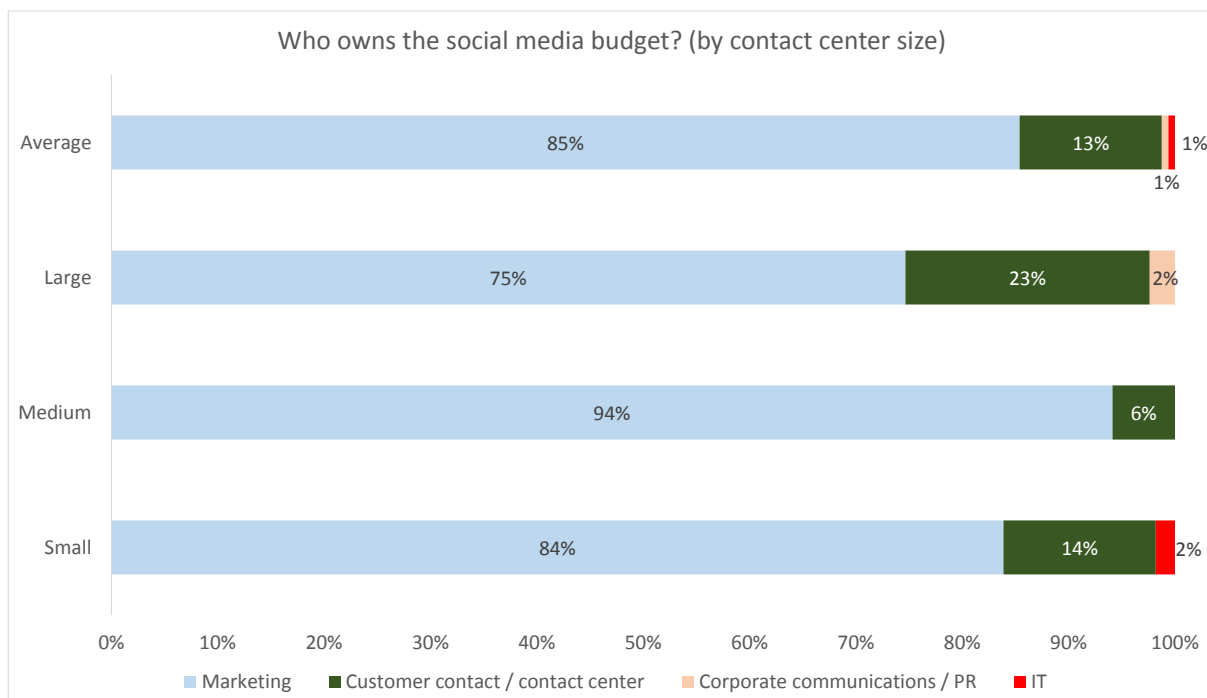
THE EFFECTIVENESS OF SOCIAL MEDIA

Uniquely, social media has taken off as a customer service channel as a result of customer demand, rather than businesses' enthusiasm for promoting a cheaper service channel. The following chart shows how channels fit customers' needs, and we can see that social media for some customers can provide a very positive experience with a very low pain point, and at virtually no cost of time or money: the customer complains, loudly and in public, so the business reacts quickly and effectively. For the customer, this is great: it is the business for whom the popular methods of social media handling are not optimal: not only do they have to carry out their business in public, reacting quickly and without being able to authenticate the customer's identity, but they often cannot handle the query without resorting to another channel such as phone or email, which provide more privacy and functionality. In such cases, they are not even seen by the outside world to be reacting quickly and effectively, or to have solved the problem.

Figure 118: Possible customer experience of social media channel

Social media

Perceived effectiveness — The customer says "Jump". The business asks "How high?"

Channel availability — Via PC or smartphone

Ease of use — Simple to send a tweet or write on a wall – no queue

Low cost of use — Free

Painlessness — Venting frustration at a company can be a positive experience...

Speed of conclusion — Immediate response and personalised service

Both customers and companies are finding out what works with social media and what does not. Crucially, as with any channel, success will only come when a channel delivers a successful experience for both sides of the equation.

The following chart shows issues about which respondents either agreed or disagreed most strongly, having being asked to score the usefulness of social media for various activities out of a maximum score of 10.

Despite respondents' insistence earlier in this chapter that social media was generally not the best channel for unhappy customers to use to make a complaint, the following table tells another story. 36% of respondents that offer social media as a customer service channel consider it to be extremely useful for acting directly on negative comments and complaints picked up from customers. In fact, this ability to address unhappy customers immediately is second only to monitoring what is being said about the company, which has grown in importance again this year.

Of concern for both businesses and customers, there seems to be very mixed opinions on whether social media is actually providing customers with a fully-supported customer service channel. 19% feel strongly that they are doing so, whereas 20% feel that they are not: 2013's equivalent figures were 25% in each case.

Earlier in the report, respondents stated that call recording and speech analytics were not felt to be supporting the business to learn more about its competitors, and there is little sense here that social media is providing this information either. It may be that businesses are focusing their efforts upon learning what their customers are saying about their own products and services, rather than worrying too much about the competition, but all of these solutions offer opportunities for competitive advantage.

Figure 119: Usefulness of social media for business activities
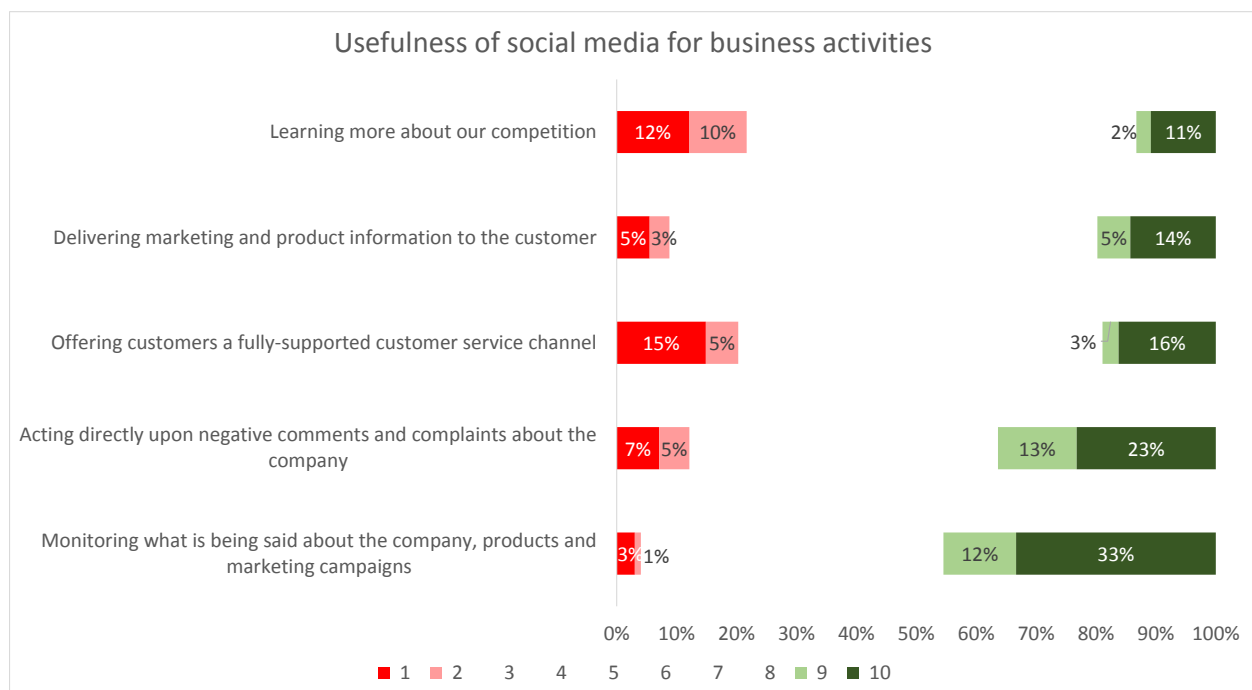
The current prevalence of more orthodox forms of self-service via the social channel are relatively limited, although companies with large numbers of Facebook or Twitter followers have been actively looking for methods to serve this segment of the customer base in an automated fashion, thus reducing costs and providing their customers with greater functionality.

In late 2013, O2, the UK mobile phone operator, made customer account information accessible via Twitter through use of the hashtag #TweetServe. Using one of nine different hashtag commands, customers can now request a range of account information, updates and special offers from the company. Users follow @O2 on Twitter, and after requesting to be followed back, are sent a verification code for security purposes. Upon successful completion of security, the user is sent the information which they have requested.

The credit card company, American Express, allows customers to synchronize their Amex card with Twitter, and to purchase special offers publicized by the company, with the customer then confirming purchase through a specific hashtag tweet without having to login or call the customer representative.

Some businesses now provide access to their knowledge base to customers on Facebook without the customer having to visit the company's actual website.

Checklist: What to Look for in a Social Customer Service Solution

Delivering customer service over social media presents an opportunity to delight customers and improve brand reputation, while significantly reducing the cost per interaction. An effective, secure, and scalable social customer service program starts with a dedicated solution that provides:

☑ **Context**
View related public and private messages as meaningful customer conversations, with a complete interaction history easily accessible for complete context.

☑ **Prioritization**
Sift through the noise to prioritize sensitive issues before they turn into crises.

☑ **Workflow**
Manage high volume of messages with efficient workflows that enable agents to balance workload and avoid duplication of effort.

☑ **Real-time Analytics**
Monitor SLA and KPI performance of the social customer service team in real time to provide a consistent customer experience and detect potential crises as early as possible.

☑ **Security**
Ensure information security and regulatory compliance with comprehensive safeguards, including granular permissions, approval workflows, IP locking and a fully searchable and exportable archive.

☑ **Integration**
Achieve a single view of the customer by integrating with CRM systems and contact center technologies.

☑ **Proactive Customer Service**
Identify and respond to customer service issues that pertain to the brand but are not addressed directly to the brand accounts.

☑ **Expertise**
Choose a partner capable of helping to implement a scalable social customer service operation in alignment with business requirements and industry best practices.

Want to learn more? Get in touch with our social customer service experts at
www.conversocial.com

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Tips on providing customer service via social media

- Despite the pressure that social media puts onto a business, younger generations express a preference for communicating with businesses in this way. They are also more likely to complain about problems on social media, so supporting a social media customer care plan is vital to winning and keeping this section of your customer base.

- Social media does not have to refer only to the likes of Twitter and Facebook. Customers are growing increasingly more sophisticated at seeking out help themselves, with many preferring to attempt to find their own solution via customer communities before contacting a business, although this can be a very hit-or-miss approach.

- Be aware that age has a particularly strong role in the choice of customer communication channels. Generally speaking, older generations will choose the phone as their primary channel, whereas younger customers will look at online channels first. Men are also far more likely than women to look for a self-service solution initially.

- 80% of customers trust recommendations from other customers. The downside to this, of course, is that customers will also take a negative criticism of a product or company very seriously.

- By keeping a Twitter feed or Facebook page up-to-date, an organization can reduce inbound call traffic at a time when a particular issue is causing a spike of calls, for example, if bad weather threatens to close schools.

- Blending social media with other forms of customer communication can mean that agents get a more well-rounded view of what customers are actually thinking. Knowledge sharing between agents, especially where new information is put in a timely fashion into the knowledge base, will assist both agents and self-service customers.

- Just because the customer has initiated a social media interaction does not mean that a business has to stay on that channel to resolve it successfully. Customers may like to receive an outbound call from the agent, as this may provide the opportunity to go into further detail, and to resolve the issue entirely.

THE MOBILE CUSTOMER

Statistics that show the number of smartphone users, volume of apps downloaded, value of mobile transactions, etc. are rising so quickly that they would be out-of-date before this report is published. It is sufficient to note that with very few exceptions, the mobile customer is relevant to every organization, in every vertical market, in every geography of the world.

The rapidly decreasing cost of mobile bandwidth, coupled with the huge improvements in mobile networks (e.g. 4G) means that businesses can be endlessly ambitious in what they are attempting within this channel, as they can have a high level of confidence that what they can imagine today will be technically possible within a couple of years, if not a matter of months.

One of the major issues to overcome within most organizations that offer self-service across multiple channels and devices is this: who actually owns the space? Telephony is established as a contact center function, and other non-voice customer channels are also falling under its auspices, but social media is often still owned by marketing, and the mobile channel is often a remit of the wider IT function. This fragmented and inconsistent ownership of multichannel customer contact functions means that maintaining the same high and reliable standard of information and service across channels has become an even more considerable challenge.

It may not be possible or even desirable for a single unified group to take charge of all such functions. However, because the customer neither knows nor cares about the internal structure of the organization, a bridge between the channels must be created to ensure that a multichannel customer experience does not break down if the initial channel cannot handle all the customer's requirements effectively. This capability is explored within the recent ContactBabel report "The Inner Circle Guide to Multichannel".

The majority of service functionality available to the mobile consumer today is unsophisticated and often divorced from the rest of the customer experience. Put simply, if the customer tries to use a mobile app or website but cannot successfully do what they want to, in many cases they will be forced to initiate a service request via another channel, such as email or phone, which will be treated by the business as a separate request without any understanding of the history, activity or effort that the customer has already undertaken.

Gathering, understanding and using the contextual data that can surround the mobile consumer will be key to pushing the uptake and functionality of this channel forward. The plethora of channels immediately available to the mobile consumer - including voice, web browsing, SMS, social media, and web chat - encourages the customer to act immediately for all their service or information requirements, rather than waiting until they are in front of a desktop computer.

Understand Needs. Solve Problems. Delight Customers.

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Transform your customer service with Oracle Service Cloud—combining Web, Social, and Contact Center for a complete cross-channel customer-service solution.

Oracle Service Cloud delivers the most complete multichannel customer-service solution, combining market-leading technologies for Web, Social, and Contact Center experiences that make your brand stand out from the crowd.

These are all supported by closed-loop marketing, integrated analytics, and a mature cloud infrastructure that handles more than two billion transactions every day for leading brands worldwide.

89%

of customers stop doing business with an organization after a single bad experience.*

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2 BILLION
TRANSACTIONS
EVERY DAY

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*RightNow (acquired by Oracle in March 2012) and Harris Interactive, Customer Experience Impact Report, Dec 2011

Research from Limelight Networks[4] shows that 80% of customers who have a poor experience with shopping on a mobile site will abandon it: some may intend to return via a PC, but many others will search elsewhere. As the author of the blog astutely comments: "There is no mobile web as far as consumers are concerned. There is only the web. And it has to perform well." Furthermore, most businesses are currently failing in this attempt, with the mobile channel lagging way behind online websites and bricks-and-mortar shops.

Businesses serving the mobile customer also recognize there is room for improvement in providing mobile customer service. A 2013 study conducted by an independent market research firm on behalf of Oracle[5] found that businesses are falling short on delivering the mobile experiences that customers want after they become customers. Only 39% of global business executives said that providing service and support through mobile and tablet devices is an area of success for them.

Those same global executives identified improving the cross-channel experience as their top priority for customer experience technology investments over the next two years. Planned investments in mobile apps topped the list for technology spending in both pre- and post-sales phases of the customer lifecycle.

Currently, offering a mobile customer experience tends to mean offering a smartphone app and/or a mobile version of a website.

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[4] http://blog.limelight.com/2011/11/new-stats-show-how-critical-the-mobile-experience-is-for-e-commerce/

[5] Oracle Corporation, "Global Insights on Succeeding in the Customer Experience Era," February 2013.

MOBILE WEBSITES

A mobile website differs from simply accessing a full website via a mobile browser, rather offering a mobile-optimized alternative which is easier to use and overcomes some of the constraints around using a smartphone to access the web, such as tiny fonts, excessive scrolling and difficult-to-press buttons.

Mobile websites should not try to offer every single item available on the full website, but rather just the information and processes that most users will want in order to act or make a decision. Ease of use is vital: text must be fully displayed on screen, buttons must be clickable and consider minimizing the use of graphics to achieve quicker load times in areas with poor mobile data services. Many devices do not support Flash, and video uses a lot of data in any case, meaning greater cost and time for the user.

Bearing in mind that a mobile site generally cannot support every type of interaction that a customer may want, businesses may consider that allowing mobile users to access the main website is a good idea. Contact details should be clear, and consider offering a seamless route from self-service into supported service, via email, web chat or telephony.

It is very beneficial to understand why customers are using a mobile site rather than waiting until they are in front of a PC. Generally, they will be more task-focused on a mobile device than a PC, so the emphasis should be on delivering quick, simple, high-volume interactions. For example, by looking at the current use of their full website, a bank may discover that a high proportion of users want to check their bank balance or view recent transactions rather than setting up automatic bill payments or ordering foreign currency. Consequently, the mobile version of the website may focus only on a small number of high-volume interaction types.

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SERVICE CLOUD

Oracle sees this need for anytime, anywhere service in its customer base. Bank customers applying for loans will use PCs when they are researching and selecting loan offers. But when they need simple answers, such as the due date for their loan payment, they want that information at their fingertips on their smartphone, probably via an app.

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SMARTPHONE APPS

A good app can provide a superior user experience to a mobile website, due to the greater level of design. However, they tend to be much more expensive to build, and unlike a mobile website, a new one has to be developed for each smartphone platform. Additionally, company apps will tend to be free to download, so there is little opportunity to make money directly from them.

Recent years have seen the smartphone platform market change considerably. Currently, Google Android has slightly more than 50% of the market, with Apple iOS at around 35%. BlackBerry and Microsoft each have less than 10%, so businesses could decide to product only two flavors of app, which would actually support over 85% of the smartphone user market.

A native application developed for a mobile device can use some of the device's capabilities to enhance the customer experience. For example, a smartphone app[6] can prompt drivers at the scene of a car accident to provide and capture the correct information, including photos. Such an app could also use GPS to give the exact location of the accident for use by the insurance company.

Industry estimates for building an app vary considerably depending on what they are trying to do, but many sources indicate that a cost of $30,000 upwards (per platform) is very feasible. The cost of developing a mobile website is less, and only needs to be done once. Whether an app is suitable for a company depends on their budget, and their customer base. It may be that the superior branding associated with apps is seen as being well worth the expense, even before factors like increased sales conversion rates are taken into account.

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[6] http://www.naic.org/Releases/2012_docs/wreckcheck_mobile_app_auto_accidents.htm

Tips on building successful apps

- Understand what the most popular self-service transactions are that your customers wish to do, and focus initially on providing the means to do this via a mobile app. This will give you a quick win, familiarize your customers with this channel, and encourage them to think positively about it.

- If any interactions require knowledge of a customer's location, the GPS capabilities within a smartphone may make this particularly suitable to put onto a mobile app.

- An app should be able to divert a large number of simple calls away from the contact center. Businesses may find that mobile apps replace some of the work done by telephony IVR, with the visual element allowing a greater depth of functionality and a quicker self-service experience for the customer.

- Consider the demographics of your customer base. Do your younger customers wish to carry out different transactions or interactions than your older customer base? If so, focus mobile functionality on the demographic that will use it most.

- If there is a problem with the app, or the customer cannot do what they wish to do, it is vital to offer a clear route into live customer service. This may be via a 'call me' button on the website, which can put the customer into a virtual queue, and can provide all the transaction-based information that the customer has already input, along with any of the other relevant customer details so that the agent does not have to start from scratch. A call-back option also means that the customer does not have to spend their own mobile minutes waiting in a queue.

CONTEXTUAL DATA: THE GREAT MOBILE OPPORTUNITY

The nature of mobile devices means that businesses potentially have the opportunity to know more about their customers and their specific requirements and preferences than ever before.

This includes:

- Customer identity: once the customer has identified themselves, such as by logging on, or through the mobile phone number, this allows the agent to access their existing customer history in the same way that would be done so on a phone call into the contact center.

- Geographical information: smartphones are GPS-enabled, allowing agents to see where customers are, and to direct them to the nearest store, for example.

- Historical activity: if the customer has been browsing a mobile website or app beforehand, the information that the customer browsed previously may be useful for the contact center agent to have to hand, in order to see and understand what the customer has already tried to do.

- Stored data: the mobile device may have data stored that identifies the customer, such as account number, that can speed up the interaction and make it more effective.

- Collected information: the mobile device may also be used to capture and share information with the business such as photographs or videos. It may be possible to automate a two-way interaction: for example, a customer may use their mobile phone to scan a QR (quick response) code on a product. Using the information on the code, as well as the customer's input into the app about what they are trying to do, the customer may be directed to the correct place within business's self-service function in order to solve the issue that they have. This can take the contact center out of the equation altogether, resulting in reduced costs for the business and a quicker and more effective customer experience.

USE OF MOBILE SERVICE FUNCTIONALITY

As the following chart shows, around half of respondents provide their website in a 'mobile-friendly' format, for example by having the most popular elements available, speeding load times, optimizing graphics, improving readability and scrolling, etc.

Figure 120: Mobile customer communication methods (by contact center size)

Mobile customer communication methods (by contact center size)
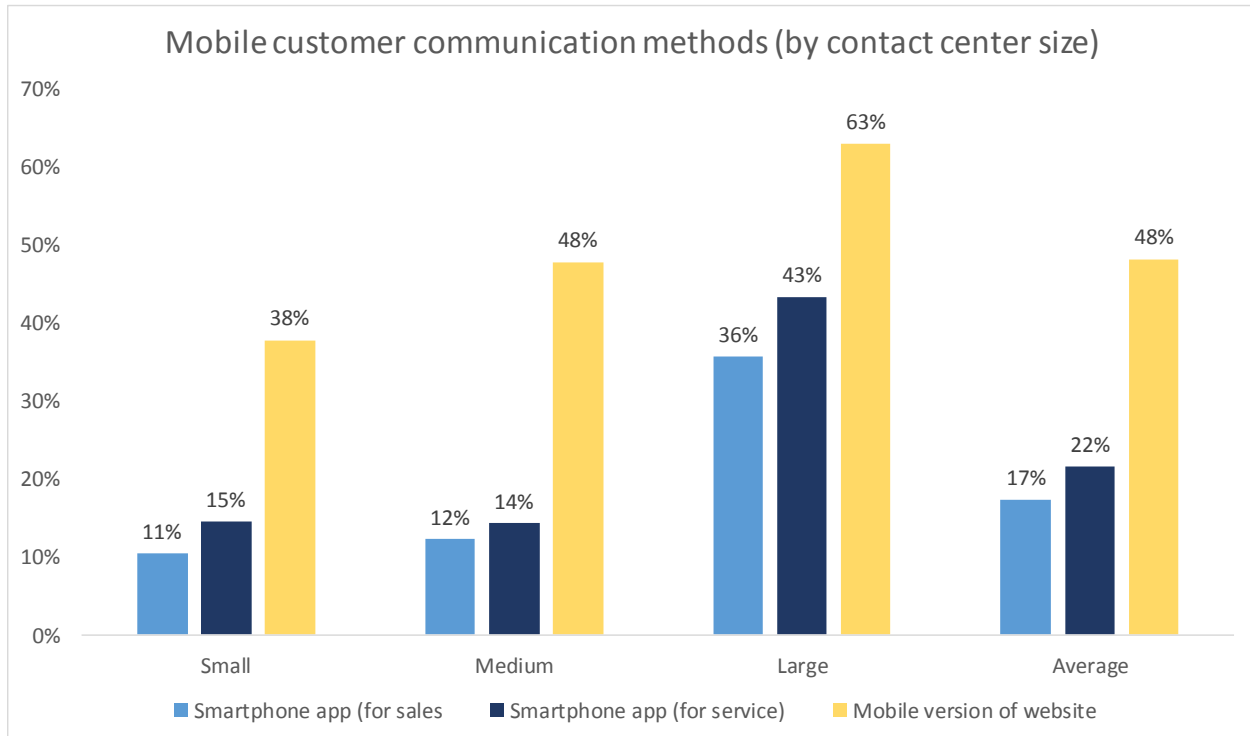
However, fewer than 1 in 4 respondents have a dedicated smartphone app, either for sales or for service, although larger businesses were far more likely to have both, especially for service. This is likely to be a function of cost and budget, and also because smaller companies are less likely to get the numbers of downloads necessary to make this an economic success for them.

Of the 40% of survey respondents that offered a mobile channel, and could answer the question, half always required customer identity verification, with the rest split evenly between not requiring identity verification and doing so only occasionally.

This is a significant increase on past year's findings, which seems to suggest that organizations are expanding the depth and functionality of the mobile applications to make them more closely resemble that available through phone-based or web-based self-service.

Figure 121: Security and identity verification via mobile channel

Security and identity verification via mobile channel

- Yes, always 20%
- Yes, sometimes 10%
- No 10%
- Don't know 11%
- No mobile website or app 49%
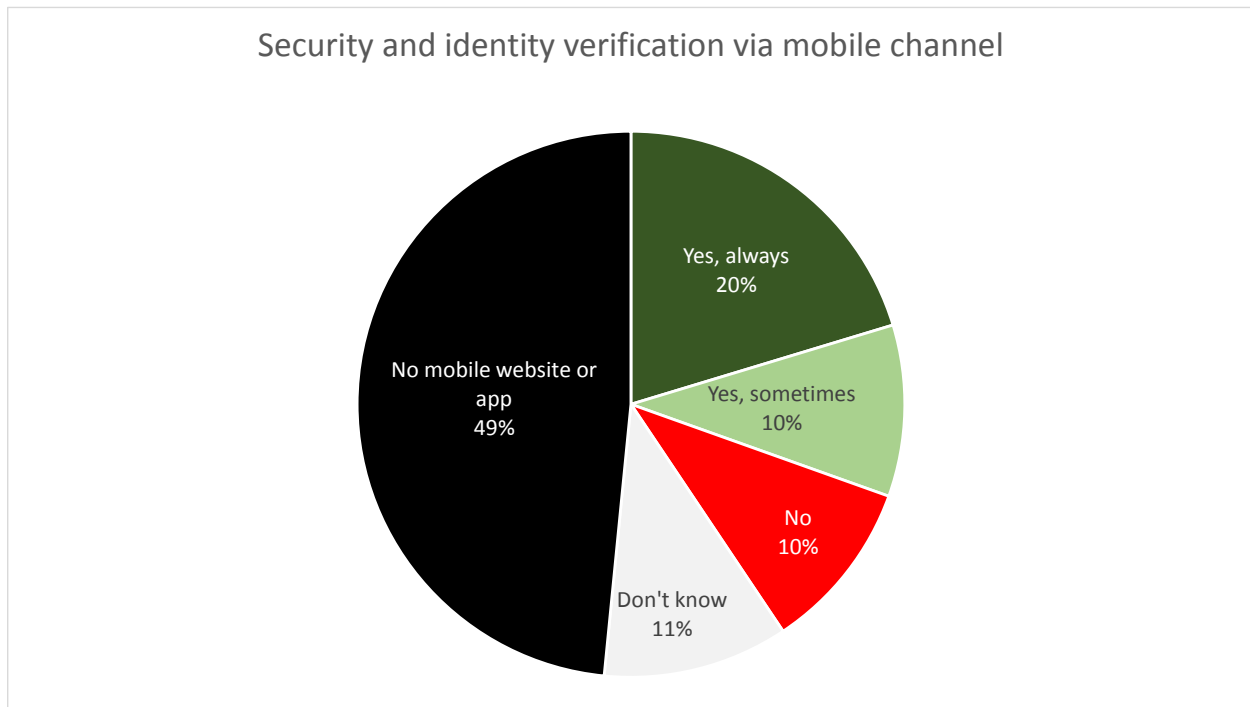
MOBILE
- IT'S NOT JUST FOR CUSTOMERS

Your contact center works hard to ensure customers are taken care of anytime, anywhere.

With the increasing use of mobile devices, you understand your customers' need to access customer service on the go. But, have you considered providing your field agents and agents and managers in the contact center with mobile access?

Think about it. Are your agents and managers unable to get their job done unless they are at their desk or lugging around a laptop?

Wouldn't it be easier and more efficient if they could make updates and provide resolutions no matter where they are?

That's exactly what the Minnesota State Colleges and Universities (MnSCU) did.
With 7 state universities, 24 two-year colleges, and 54 campuses, MnSCU serves nearly 430,000 students. Its employees are distributed across campuses and on the move, which means service and support must go where the employees are.

Agents no longer have to dread getting back to their office or booting up their laptop to update incidents from that day. They now view, update and resolve incidents through the mobile app as they close them out.

Travel and transportation, retail, healthcare, government, hospitality and media and entertainment are just a few more examples of industries that are seeing the advantages of mobile access for its agents and managers.

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CROSS-CHANNEL ESCALATION

In cases where the user needs to pass through security - and also where other reasons mean that the customer cannot complete their interaction solely through mobile browsing or using an app - businesses should consider how they will keep the customer or prospect engaged with the business.

Figure 122: Escalation to an agent via the mobile channel, by contact center activity type
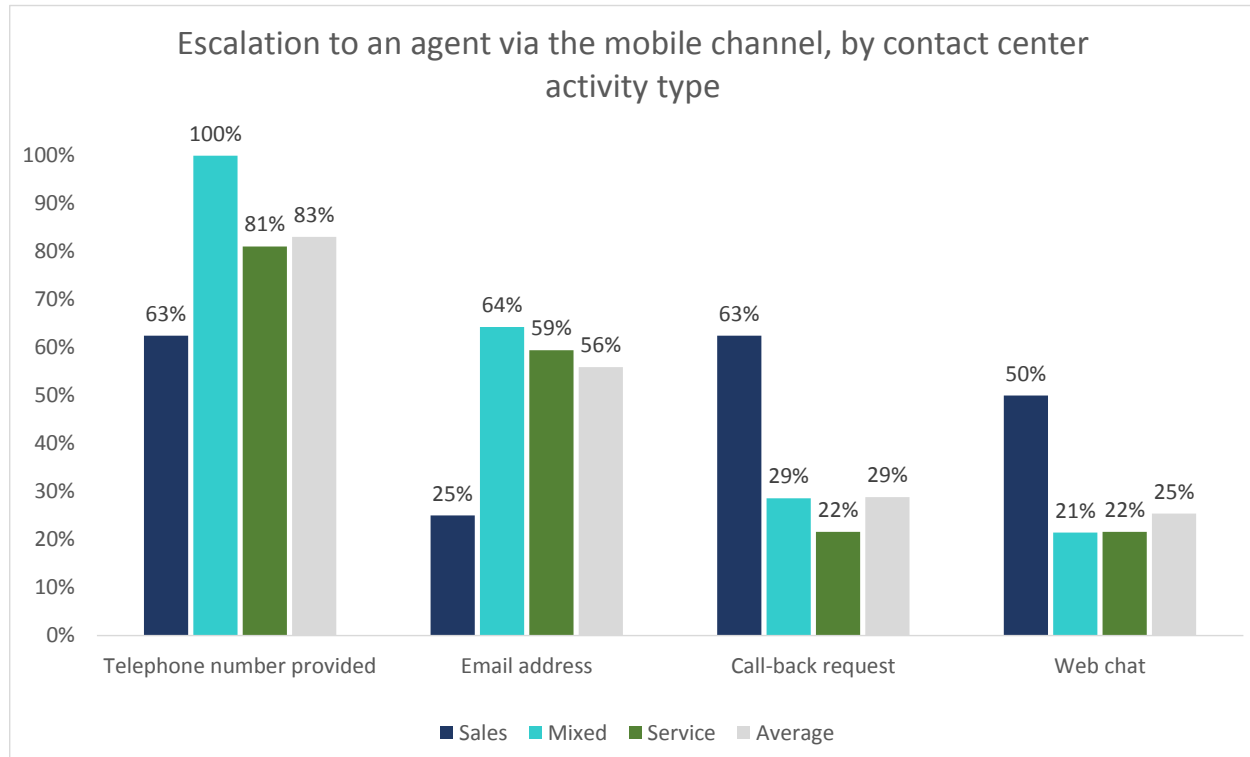
The easiest way to support cross-channel contact is to offer a telephone number on the mobile website or inside the app, and 83% of respondents do so. However, the user/ customer must often start their request again from the beginning, as many respondents will not credit the security and identification process that the customer has already been through, nor will the browsing history be passed onto the agent. Effectively, the customer may as well not have used the mobile channel at all, which is a negative for them and their attitude towards this channel in future.

Providing an email address is the second most popular escalation method, which does allow the pre-population of fields in an email form (user details, account details, type of issue etc.) although only a few respondents do this. However, email is a slow medium even when done correctly, and the user will not get an answer in real time. Sales operations prefer to encourage mobile browsers to contact them through a more immediate channel, to reduce the chance of losing a sale.

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29% of respondents using the mobile channel state that they offer scheduled call-backs to customers (a figure that rises to 63% for sales-only respondents, although it should be stated that this figure comes from a small research base). While this is a positive and proactive response, the user is often left in the same situation as if they had called in the first place, as the agent will often have to take them through security and establish what the problem is.

Only 25% of respondents using the mobile channel offered a web chat option within the mobile site or app, despite this being the channel most closely resembling the activity the user is already undertaking (i.e. using the mobile device to look for information, and typing rather than speaking). Web chat is more immediate than email, and offers a chance to move between self-service and assisted service seamlessly, with the agent being able to push links and video to the user in real-time.

A significant minority of respondents state that on escalation, an agent is provided with some information about the customer, most often the customer's name and account information, rather than anything more closely linked and relevant to what the customer was trying to do, or where they are currently located. In reality, this information will rarely be used to provide a quicker customer experience (for example, by jumping a call queue or by having details of the mobile session already undertaken screen-popped onto the agent's desktop).

Figure 123: What information is passed to an agent after escalation from the mobile channel?

Is this information passed to the agent from the mobile channel?	Proportion of respondents
Customer name	48%
Account information	41%
Customer location	23%
Browsing history	15%

VIDEO AND IVVR

Away from the mobile self-service options that are opening up, some solution providers see video agents as a step towards more personalized, high-quality customer contact. The customer will be able to see to whom they are talking, through a multimedia PC or mobile device, assuming the broadband requirements are met.

There are a number of cultural and business issues to consider:

- Customers may prefer the impersonality of non-visual contact, and may be uncomfortable with the agent seeing them in a domestic environment, which would suggest one-way video may be more popular
- Eye contact is critical for establishing trust and 60% of the communication process is actually visual. For sensitive purchases such as financial services, being able to see the financial advisor can help to establish trust and put the customer at ease. The entire contact may be captured and distributed electronically for further reference
- Verbal abuse, a major problem for some agents, may decrease in a virtual face-to-face setting, however, agents may feel their privacy is decreased if they are on camera, especially one-way, and the incidence of disturbing crank calls may increase
- The contact center environment will need to be altered to impress the customer, and voice agents will need to be trained in visual communication.

This application has potential, especially in a sales environment, and with technical support, where the agent show the customer what they mean. Various businesses - usually banks - are already using video kiosks to offer virtual branch banking services in areas where physical branches have closed. Currently, customers are more likely to find that video is not being used to show a company's agents in a live environment, but as part of a supported multimedia service experience, with the agent sending relevant recorded video clips either via chat or email.

Visual IVR

Visual IVR - the placement of visual self-service options on a screen (PC or smartphone) - adds a new dimension to the caller's experience: in addition to hearing traditional IVR voice menus and announcements, a caller can now see menu choices, and receive video presentations while waiting for an agent, during call transfers, or wherever appropriate in the self-service experience. As people can read a menu far more quickly than they can listen to it, visual IVR can provide a much wider choice of self-service options than a voice-only IVR.

LIKELY FUTURE DEVELOPMENTS IN MOBILE

Looking to the future, solution providers are keen to offer technology that ties the mobile channel in more tightly with the existing voice and data customer support channels, providing a single integrated user experience regardless of initial channel choice and any cross-channel movement by the customer. One of the key ways to do this is to offer live agent support more easily (for example, through clicking an icon within an app), which provides a context-relevant, geographically-supported and personalized customer experience. The movement between self-service and live service is currently very difficult for many customers - it is certainly not seamless - and actually may involve abandoning the mobile channel entirely as a failure in order to start afresh with another channel. As the customer has chosen originally to use a mobile channel, even a successful outcome with another channel will risk leaving the customer dissatisfied with the company, and less likely to use the mobile channel in future. There is also the danger that because the organization is unaware that a failed mobile session has been the root cause of a live contact, it will underestimate the reality of cross-channel interaction failures.

On moving from self-service to assisted service, mobile service applications should gather the browsing history, customer information and the context of the session in order to pass this to a live agent. Smartphones are enabled with GPS tracking, so businesses should look to leverage this capability to deliver better customer experiences where possible. In fact, the inherent capabilities of the mobile device offer businesses huge opportunities to impress their customers, including location-specific information, such as local broadband outages, or the ability to leverage photo-taking functionality on the phone to provide the agent with a clearer picture of the situation (which may be particularly useful for insurance claims, for example).

SMS and outbound calling also offer opportunities for businesses to deliver proactive customer service through the mobile channel, creating a positive attitude. Furthermore, location-specific device information also allows businesses to deliver timely service and relevant marketing messages which can be positives for the customer at that specific place and time.

It is not just the customer interaction points that will become more integrated. Brick-and-mortar stores are also becoming more integrated with their digital component, in order to provide correct inventory levels at store- and company-wide levels, thus matching the capabilities of their dot-com competitors while being able to take advantage of being able to provide in-store services to customers.

Like any technology, application or channel, mobile service has to be seen to pay its way. Quite apart from the importance of fulfilling a customer demand, there are numerous elements to consider when looking at return on investment:

- Call avoidance due to increased use of self-service, although the difference made to the number of IVR sessions should be taken into account: customers may simply be swapping one self-service method for another, rather than avoiding expensive live calls

- Increasing the accuracy of routing by leveraging mobile and customer data means that calls are more likely to go to an agent that can resolve them first-time, impacting positively upon first-contact resolution, call transfer rates, average handle time and customer satisfaction

- Decreased call handling time in cases where mobile browsing information and other contextual data is passed to an agent, enabling them to reduce effort duplication

- Improved customer satisfaction, and decreased customer effort is likely to lead to improved loyalty, revenue and customer advocacy

- Contextual information, such as geographical location, enables greater cross-selling and up-selling opportunities based on improved knowledge about the customer and their circumstances.

Organizations able to help with New Media and the Customer of the Future:

Calabrio powerfully redefines workforce management with software
that is intuitive, flexible and hassle-free.

Conversocial is a cloud solution that enables businesses to manage social media as a large-scale
customer service channel.

Enghouse Interactive: Deliver a superior customer experience anytime, anywhere, anyhow.

Genesys is a leading provider of multi-channel customer experience and contact center solutions.

HireIQ's solutions enable customer service organizations improve their agent retention and center performance through better, targeted hiring: read our case studies here.

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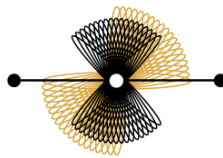
OpenSpan provides activity intelligence and desktop automation solutions that improve performance, drive revenue and increase efficiencies in customer-facing business units across the enterprise.

Uptivity Discover Suite is a unified contact center workforce optimization solution delivering services to satisfy next-generation customers.

Virtual Hold Technology (VHT) delivers solutions at the heart of the customer experience, enabling contact centers to maximize the opportunities that come from customer interaction, regardless of channel.
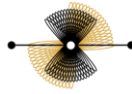
VoltDelta OnDemand delivers exceptional customer care with cloud-based multi-channel contact center solutions.

INCREASING PROFITABILITY

Not only are contact centers under pressure to reduce their costs, but many - either directly or indirectly - are also major revenue-generators for their businesses, and the recent drive to maximize profitability has made many businesses look at whether their contact centers can add more to the bottom-line. Although much responsibility for revenue generation lies with senior management, production and sales divisions, the contact center also has an important part to play in maximizing revenues through selling the right product to the right customer at the right time (aided by a CRM system or similar), and through proactive and efficient outbound selling.

This chapter considers CRM and outbound automation in depth, and also looks at cloud-based solutions, which offer contact centers new financial and operational options which can make a very significant difference to the bottom-line.

CLOUD-BASED CONTACT CENTER SOLUTIONS

Building an effective contact center can be very expensive due to the capital expenditure required to purchase, install and integrate client premises-based technology (CPE). Recent years have seen 'cloud' as a technology deployment become a credible and popular alternative to CPE, driven in large part by the success and wide uptake of CRM solutions such as Salesforce.com. The contact center technology industry has reacted by releasing cloud-based options of former CPE-only solutions, as well as raising the profile of those businesses which have been delivering solutions via hosted or network-based means for much longer.

The target audience and the overall market share that cloud providers have secured have been growing rapidly, fuelled in part by the effectiveness that those solutions can provide. A potential confusion to those researching the market, the term 'Cloud' can mean different things. Some definitions follow:

- **Cloud** is the delivery of computing and storage capacity as a service to different business, organizations and individuals over a network. It is often said to consist of:

  - Infrastructure as a Service (IaaS) - servers and storage space
  - Platform as a Service (PaaS) - operating systems and web servers
  - Software as a Service (SaaS) - the functionality of software available on demand without the need to own or maintain it.

The Cloud is characterized by huge scalability and flexibility, shared resources, a utilities approach to billing (pay for what you use, for example) and an abstraction of obvious infrastructure.

There are various deployment models:

  - Public cloud: applications, storage, and other resources are made available by a service provider, often offered on a pay-per-use model. Public cloud service providers own and operate the infrastructure and offer access via the Internet

  - Private cloud: infrastructure operated solely for a single organization, whether managed internally or by a third-party and hosted internally or externally. They require management by the organization or its third-party

  - Virtual private cloud: a deployment model that pulls in public cloud infrastructure-as-a-service (IaaS) while running the application on-premise or in a private cloud, in order to improve disaster recovery, flexibility and scalability and to benefit from Opex-based costing while avoiding expensive hardware purchases

  - Community cloud shares infrastructure between several organizations from a specific community with common concerns (security, compliance, jurisdiction, etc.), whether managed internally or by a third-party and hosted internally or externally. The costs are
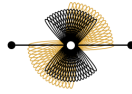
spread over fewer users than a public cloud (but more than a private cloud), so do not gain as much from cost reductions.

- o Hybrid cloud is a composition of two or more clouds (private, community or public) that remain unique entities but are bound together, offering the benefits of multiple deployment models. By utilizing "hybrid cloud" architecture, companies and individuals are able to obtain degrees of fault tolerance combined with locally immediate usability without dependency on internet connectivity. Hybrid Cloud architecture requires both on-premises resources and off-site (remote) server-based cloud infrastructure.

- **Hosted solutions:** often built from tried-and-trusted CPE equipment that has been modified to offer functionality to various separate clients at multiple locations, although has not been originally designed to be partitioned. As with reliance on any single piece of equipment, a fault at that point would cause issues for clients. Access to the hosted solutions is generally provided by fixed access links installed specifically for the purpose, but can also be via connecting to existing private WAN networks.

For more information on cloud-based solutions, please download ContactBabel's free, in-depth report, "The Inner Circle Guide to Cloud-based Contact Center Solutions".

faster

CLOUD COMMUNICATIONS SOLUTIONS

The reasons may vary, but you find yourself in need of new powerful, innovative communications abilities for your contact center and business users – and you need it now. No time to spec and procure hardware. The cloud communications solution from Interactive Intelligence cuts deployment times into a fraction of what you're used to with premises-based systems. You get up and running faster and your employees get quicker access to the most advanced communications applications available. Ultimately with our all-in-one platform and the cloud, you do everything faster.
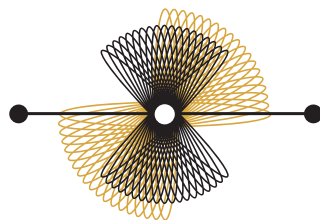
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Cloud or On-premises

WHAT TYPES OF COMPANY SHOULD CONSIDER CLOUD SOLUTIONS?

- Small and medium businesses, especially those needing rapidly deployable, easy-to-use services, such as enhanced routing
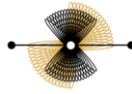- Any size company looking to start a contact center - outbound, inbound or both or move at low risk, or increase size for a temporary campaign
- Any size company looking to provide or leverage the advantages of a multi-site capability
- Enterprises that desire advanced contact center functionality and are interested in acquiring a complete solution as a service
- Businesses needing contact center business continuity plans
- Businesses needing to expand and contract quickly for peak seasons/traffic/campaigns
- Any size company wishing to gain access to technology with uncertain potential gains, such as call blending, and callback services
- Enterprises with CTI-like functionality today who wish to enhance enterprise functionality with network call queuing and network routing or other components such as outbound, call blending, workforce management, Internet or web functionality (see following box).

Profit-based calls

Contact centers need to get the most value from each customer interaction and maximize the potential of every call.

Many contact center systems can route calls by agent group or individual skills generally. However, there is also a need to route by the customer value involved: some customers are worth more to the organization than others. Collecting information about the dialed number (e.g. a number only available to Gold customers) or by information collected within the IVR session means that businesses can then route the calls to appropriate-cost offices or countries.

This adds value to the business by ensuring appropriate agent gets right level of call, that customers get right level of service they need for first call resolution, meaning cost per contact falls which makes the contact center more profitable.

Put simply, whether delivered by customer premise equipment (CPE) solutions, by hosted or network systems, or a mixture of both, enterprises always demand control, choice and intelligence in a financial framework that is acceptable. Cloud solutions offer businesses the opportunity to deal with operating costs rather than capital expenditure which will always get a positive hearing at the budget-holder level of a business, although some CPE providers also offer leasing options.

The bottom line is that a successful cloud solution should offer everything a business could achieve with CPE, but yet be available on a pay-per-use or pay-as you-talk basis (per minute or second / call / month, etc.), be scalable and reliable, and offer easily-added functionality if required. Offering functions on ad-hoc basis - rather than customer having to pay for them up-front and then maybe never using - is an ability offered with many cloud solutions. Customers can choose to 'turn on' functions when campaigns require, and then 'turn off' if needed. In comparison, on-site systems need all the functions installed to begin with.
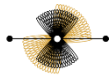
One of the major benefits of moving to the cloud is simplifying your application environment and gaining quick access to new functionality. Cloud providers such as Interactive Intelligence offer complete applications suites - from multichannel and workforce optimization to unified communications and business process automation - meaning businesses no longer must maintain multiple vendor relationships and bear the burden of costly, complex integrations. A business can add new functionality like chat or real-time speech analytics almost instantly, and pay for such features only for the period of time they're used - the breadth and maturity of the suite, in addition to who owns its components, will also have a direct impact on how simple the solution is to deploy and administer.

While these solutions already offer some inherent benefits provided by their design - such as simpler disaster recovery planning - their providers should also have the ability to offer functionality and managed services that would not be possible with CPE: the very nature of providing a service on equipment based external to the contact center means that the real time activity of that operation can be monitored. For example, a good provider of outbound dialer solutions will be able to monitor and advise on the use, management, configuration and results achieved while using their dialer services, all in real time. As the supplier / manufacturer, they should be best-placed to supply answers, support and advice on the best configurations of the dialing platforms.
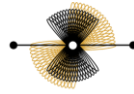
DRIVERS FOR CLOUD-BASED SOLUTIONS

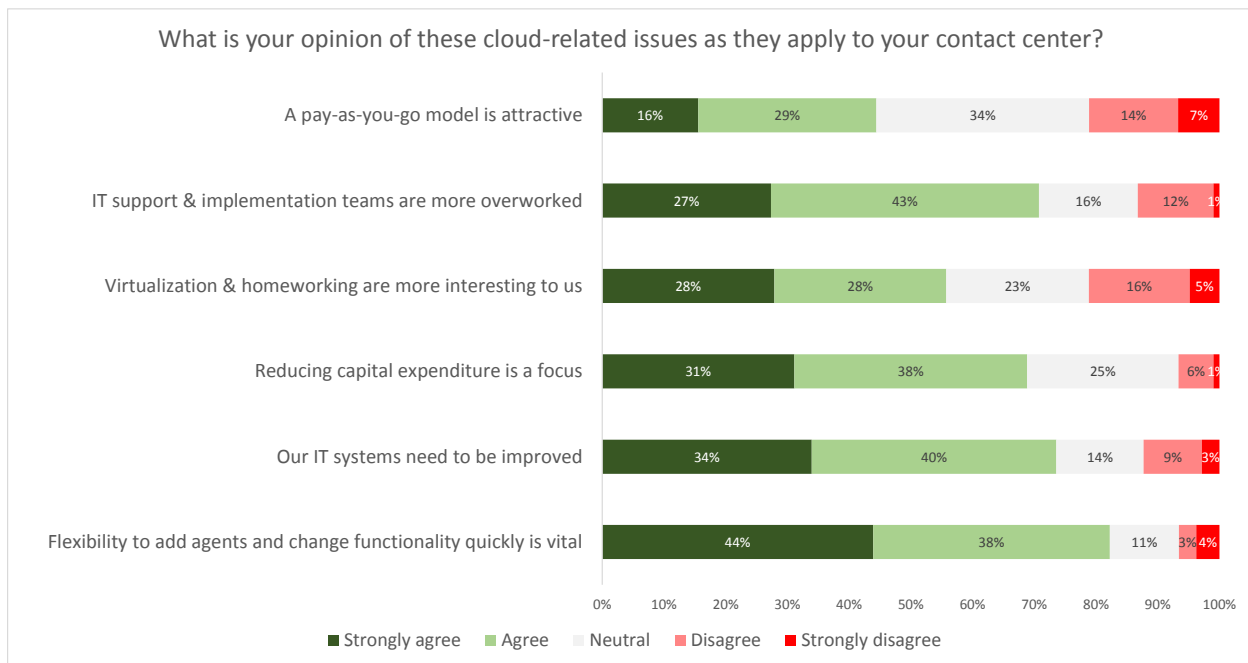In order to make a change in the way things work, there needs to be pressure exerted to make change worthwhile. After considering several potential financial and operational drivers for cloud solutions, respondents were asked how strongly they felt about a number of issues related to the choice to deploy cloud-based solutions.
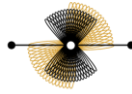
Figure 124: Opinion of cloud-related issues as they apply to the contact center

What is your opinion of these cloud-related issues as they apply to your contact center?

Issue	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
A pay-as-you-go model is attractive	16%	29%	34%	14%	7%
IT support & implementation teams are more overworked	27%	43%	16%	12%	1%
Virtualization & homeworking are more interesting to us	28%	28%	23%	16%	5%
Reducing capital expenditure is a focus	31%	38%	25%	6%	1%
Our IT systems need to be improved	34%	40%	14%	9%	3%
Flexibility to add agents and change functionality quickly is vital	44%	38%	11%	3%	4%

The ability to increase the flexibility of adding agents and changing functionality comes out on top once again, with the opportunity that cloud solutions offer to optimize user licenses being widely acknowledged as a chance to cut costs while maintaining or improving functionality.

There is also a strong feeling held by the majority of respondents that systems need updating urgently after years of widespread underinvestment, which offers contact centers the opportunity to look at other options to the traditional CPE model, as it becomes a matter of choosing which change to make, rather than deciding whether any change is necessary.

Opex expenditure may be easier to find than Capex for many respondents, and the emergence of SaaS in the CRM space has fueled interest in non-traditional infrastructure and financial models. Surprisingly, though, interest in the pay-as-you-go model is not particularly strong for more than half of respondents, except for those in outsourcing. 70% of respondents say that their IT staff are overworked, an increase on last year's figure of 55%, and that businesses are looking to move their IT systems on after some years of stagnation.

A cloud-based solution can offer a significant reduction in the level of on-site support required. As more virtualization and homeworking solutions become available and more businesses actually go ahead with this, the non-centralized model is something that is being revisited on a wide scale. The flexibility of adding agents and licenses is also important to a significant number of respondents in most sectors, especially the public sector which, along with outsourcing, seems to be under most commercial pressure to improve without having the capital expenditure means to do so.
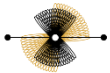
Companies with global operations benefit greatly from the ability the cloud gives them to deploy and extend applications across borders quickly - especially when little capital investment and few IT resources are required. Be sure a cloud provider can support such global objectives in full: have prospective providers paint a global picture in terms of data centers, technical operations and support centers - how many, where they're located, and how long they've been operational. Have the provider also show you how well equipped their network operations center (NOC) is to support your global operation, then ask how many different countries the provider serves customers in, how many offices they have around the globe, how many employees they have in various regions, and how many global partners they have; this information will give you a good feel for how well suited the provider is to meet your needs globally.
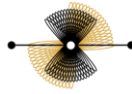
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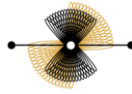
THE VALUE PROPOSITION OF CLOUD SOLUTIONS

There are several factors driving the adoption of these solutions. The first is the 'pay-as-you-go' financial model that allows business of all sizes to move away from high upfront expenditures in favor of a more manageable operational expenditure approach. Small and mid-size companies typically do not have the ready access to cash to make the necessary capital expenditures for expensive CPE. As a result, making the shift from capital expenditure (Capex) to operational expenditure (Opex) is especially relevant for these firms. Additionally, the pay-as-you-go model also simplifies overall cost management and business planning, making it more favorable than the Capex model. Recently, difficult market conditions have affected companies and finances and some organizations that would not have previously considered Opex investments (e.g. public sector, utilities companies) are now doing so, as large Capex projects were shelved indefinitely.

From an organization's perspective, the low upfront investment, instant access to cutting-edge technology and rapid results should make the model difficult to ignore. The real enabler of the low cost model is, surprisingly, a technical one; leveraging common architecture. End-users, referred to as tenants, share server capacity in a partitioned environment. This allows the hosted provider to pass on some of the cost savings from the economies of scale realized through the use of shared resources, which is of particular interest to smaller contact centers.

For larger operations, leading suppliers of cloud-based solutions allow various types of deployment, depending on the level of control and on-premise architecture that client wish to have. For example:

- Local Control VoIP - voice infrastructure components such as gateways, media servers and IP phones - together with call recordings and sensitive customer information - remain on-premise
- Remote Control VoIP - a centralized option where all components - voice infrastructure and application server - reside in a virtual data center. Calls are routed to the data center and, once a routing decision is made, are delivered to agents, requiring minimal amounts of equipment
- Remote Control TDM - a centralized option that lets you continue to leverage your existing PBX infrastructure for delivering calls to agents, with no new on-premise equipment is required. This option is very quick to deploy and requires little to no change to the network and protects existing PBX investments.

Cutting the cost

- Decreased capital expenditure:

  o Businesses can scale down future customer premises equipment (CPE) investment, with a resulting decrease in capital expenditure

  o There is also an opportunity to buy services using a pay-per-use or even pay-as-you-talk pricing model, which helps to keep operating expenses to a minimum, which seems to be of particular interest in the small / medium market

  o Additionally, issues surrounding the total cost of ownership of CPE do not arise with cloud solutions: outright purchase of equipment isn't for everyone, perhaps for reasons of budget or the ability to maintain the systems

  o Low-risk ability to start up, trial or expand functionality without risking existing business plans

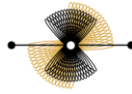 o Business retain the freedom to downscale or change targets and plans to meet demand, rather than commit themselves to long-term arrangements needed to justify the purchase approach of high-value CPE.

- Lower development costs:

  o Businesses can experience a decrease in development costs and an increased speed of implementation, as cloud solution providers will already have solutions up and running

  o Network-based providers can arrange solutions to be integrated in days, as no specialized onsite equipment or dedicated connections are required. This reduces project times and costs, and allows business to react to requirements far more quickly.

- Managing calls at the network level decreases costs:

  o There are benefits of scale available with cloud solutions, which may offer business far greater overall capacity that would normally be provisioned with onsite CPE equipment. In the case of outbound activity for example, there are invariably transient periods where dialer equipment will calculate that it should be making more calls than there are phone lines provisioned, however the shared services approach means that providers may permit these higher demand periods to be serviced. This feature can save critical agent time and improve the consistency and overall performance achieved by the dialing solution

  o Business are able to reduce associated infrastructure Capex and Opex costs, such as telecoms requirements, as only one PSTN line per agent is needed for outbound & inbound campaigns. The overcall is carried out in the network and only live calls are placed to the agent, therefore the telephony line and terminating equipment costs are reduced
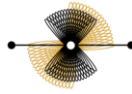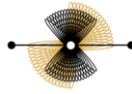
- Cloud solutions can save on staffing/resource as they are no longer needed to manage the physical technology as it is not on-site

- Call queuing at the network level also saves money. In multi-site operations - rather than pass a call down to a contact center which may not have an agent immediately available to take the call - it makes sense to queue the call at the network level until an agent is capable and available to take it. The call is then passed - once - to the agent in the specific contact center or remote location

- Infrastructure and processes which are held at network level can avoid issues which CPE resources can experience, such as unnecessary duplication across multiple sites and a corresponding increase in management costs for configuration, administration and performance checking.

Improving the service

- Open access to systems allows greater functionality and lower costs:

  - CPE systems are, in the main, proprietary. Although they may be feature-rich, this can mean that they are difficult to integrate, time-consuming to maintain and limited in scalability. A superior cloud solution should be designed to be open, offer multi-site remote management and scale easily to accommodate multiple clients with high growth rates

  - Using CPE often means that development cycles are long, and that technology imposes its own limitations on what can be achieved

  - Cloud solution providers have continually to enhance and develop their services which bestows a competitive advantage to business users who can deploy the latest technology and the often inherent advantages of improved functionality, service and reduced costs, through their contact centers. In effect, a cloud solution removes the technology stranglehold experienced by many contact centers with CPE and allows them to concentrate on their core business.

- Maximize existing resources:

  - Cloud solutions enable a business to make the most of their existing call routing infrastructure. By holding the calls in the network and allowing unlimited database lookups, the solution maximizes CPE resource usage and improves routing accuracy: the call is transferred only when the correctly-skilled agent becomes available

  - Cloud solutions permit a substantially-reduced telephony and switch infrastructure. ACD functionality is controlled via the network and inbound calls are routed through a variety of selected rules and then using a script application 'pops' the agents screen with all information collected from the call.

- Disaster recovery (DR):

  o Ensuring business continuity during outages, facility emergencies and inclement weather is a critical requirement. The cloud contact center models ensure business continuity by enabling agents to be connected to the technology platform and necessary applications from anywhere with Internet access. Even in an outage, companies maintain the ability to service and sell to the client base, undermining what could otherwise be a disastrous situation resulting in lost revenue, dropped calls and negative customer experiences

  o Cloud solutions offer complete disaster recovery and business continuance as they may be delivered from multi-site locations, with flexible and immediate switching between sites should an outage or problem occur

  o Cloud solutions can provide back-up disaster recovery protection to centers with on-site CPE, as reserve protection - although indeed, a good solution provides a high level of disaster recovery integrally, meaning clients should not require additional disaster recovery cover.

- Improve agent morale and availability:

  o Hosted self-service options such as IVR and voice portals mean businesses can save money through not having to employ line receptionists to route calls. Self-service also frees up time which would otherwise be taken up with answering repetitive questions, improving the happiness of your agents, which goes some way to reducing staff attrition

  o Real-time monitoring across multi-sites (and homeworkers) allows identification of contact center best working practice, which contributes to improved Agent/Team/Campaign productivity and cost reduction. In effect, a cloud solution removes technology from the equation when comparing productivity and efficiency in a contact center.

- Expand/move/increase or try out new functionality without the high initial set-up costs:

  o Using a pay-per-use model allows businesses to start a contact center or move at low risk or increase for a temporary campaign or try out new functionality without having to spend excessive amounts of time and money first. This is especially the case with speech recognition which can be a very expensive solution to implement

  o Pay-per-use or pay-as-you-talk tariffs also allow cost-effective coverage of peak loads and overflow based upon seasonality.

- Take steps towards a virtual contact center:

  o Cloud solutions support virtual contact center functionality, including real-time monitoring across sites, sometimes even at an agent level, critical to promote a fair and effective working environment

- o For some cloud solutions, the only requirement for the agent apart from bandwidth is a PC and a DDI phone, therefore multiple sites and homeworking can be achieved more easily and rapidly

- o Scalability is key: contact centers want to be able to gear up and down to suit business demands and cope with peaks and troughs without unnecessary expenditure, and with cloud-based solutions they can do this on a daily basis, instead of spending on capacity that they may not use for months. This is particularly relevant for campaign-based operations such as those involved in telemarketing, and for those for whom seasonality is an issue, for example, retailers

- o Network access to real-time reporting allows the ability to see performance across multiple sites down to campaign-, sale- and even agent-level.

- Keep a consistent feel to the business:

  - o Self-service and call routing scripts are held centrally, managed from a single interface, so that any changes can happen quickly and consistently

  - o Network systems can have the dialer and ACD controlled by secure website access still providing complete control to the business even though there is no CPE on-site

  - o Superior network solutions do provide their solutions as managed services. These offer the added benefit of complete management support for the supervisor and center. The network provider is incentivized to ensure that the center is working at optimum productivity levels, unlike on-site providers.
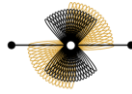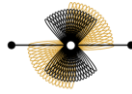
CPE OR CLOUD SOLUTIONS - OR BOTH?

There is a common misunderstanding within the industry that the choice is either CPE or a cloud solution. Where expansion is required, superior cloud solutions can be easily integrated into existing CPE ancillary systems, allowing the business to experience the functionality and advantages of a cloud solution without compromising existing investment. From a financial perspective, most cloud solution functionality is paid for as an ongoing operating cost, rather than requiring an upfront major investment: this should make it easier for contact center management to persuade the budget-holder to upgrade the systems in place.

The flexibility of cloud solutions allows a business to experience these solutions as an additional 'bolt-on', the use of which can be expanded as the current CPE reaches obsolete / depreciated / non-regulatory status, or further functionality and capacity is required by the contact center.

A perceived lack of control over operations and the security of critical customer data in a cloud environment continue to cause end-user concern as shown later in this chapter, but the reality is that a well-engineered cloud environment will have deeper security infrastructure in place than many SMEs could afford on their own. This is a significant advantage in being able to leverage the financial investment that the cloud provider has made in security standards and measures. Tenant self-administration capabilities, along with process/methodologies with enhanced security options, can play a critical role in overcoming these reservations.

Cloud solutions need at least the same level of functionality as CPE-type equipment, and there is no reason a good provider cannot offer remote web-based access to authorized users. Suppliers of cloud solutions must offer fully managed and supported services, with the trend moving towards offering proactive monitoring. On outbound pay-as-you-talk solutions, for example, there is clear synergy in between the contact center and the dialer solution provider to ensure the system is efficient, and is configured to operate at the optimum level, as this benefits both parties. This support offered by cloud providers is an essential factor in the decision-making process for businesses, and is vital to driving the non-CPE industry forward.

CHECKLIST WHEN CHOOSING A CLOUD SOLUTION

Vendor background and experience

- What is the company's history and experience in contact center operations?
- Can the company provide references and implementation examples?
- How many contact center seats are currently in production?
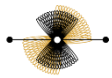
There are now more than 200 vendors offering cloud contact center services, and we agree with the criteria here to vet providers and their track records, along with evaluating a vendor's experience include analyst reports and the industry recognitions a provider has received. However, we believe the best way to gauge how much experience providers will bring to the table is to meet their teams: make a trip to see their offices, their network operations center (NOC) and their data centers, then talk to their customers if possible. We also add to be wary of any company relatively new to the cloud and/or contact center space; technically and organizationally, there is much to learn and work through to become a reliable cloud provider, and "newer" providers have yet to build sufficient résumés.

IT considerations

- Is there additional hardware or software to install on-site?
- What bandwidth and reliability issues should we address with our ISP?
- Are there additional costs required to integrate existing back office applications?
- What kind of resources & skill sets will I need to commit to the project, and when?

Network/hosting environment

- What reliability parameters are included in the Service Level Agreements?
- How can you maintain control, minimize business risk, & maximize service quality?
- How does the company address security and privacy concerns?
- How is your data separated from other clients' data?
- Do you provide 24x7 monitoring and support?
- What backup/disaster recovery procedures are in place?

Implementation expectations

- How long is the training cycle and is it administered on-line?
- Are there additional support and service expenses?
- How long and complicated is a typical implementation?

Data Access

- Can I access my data outside of the provided contact center application (e.g. sales or marketing queries and reports)?
- How does the vendor return data to you at the end of the hosting agreement?
- How do I integrate my local data and applications?
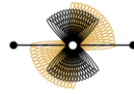
USE OF CLOUD SOLUTIONS

Respondents were asked about whether they used specific functionality, and if so, how it was delivered (i.e. through CPE, or cloud/hosted deployments).

CRM and call routing functionality were the most likely to be deployed through cloud-based solutions, with call recording functionality also used in a significant minority of instances. 46% of this year's respondents had at least some contact center functionality in the cloud.

Figure 125: Is any of your contact center functionality hosted in the cloud?

Contact center functionality hosted in the cloud
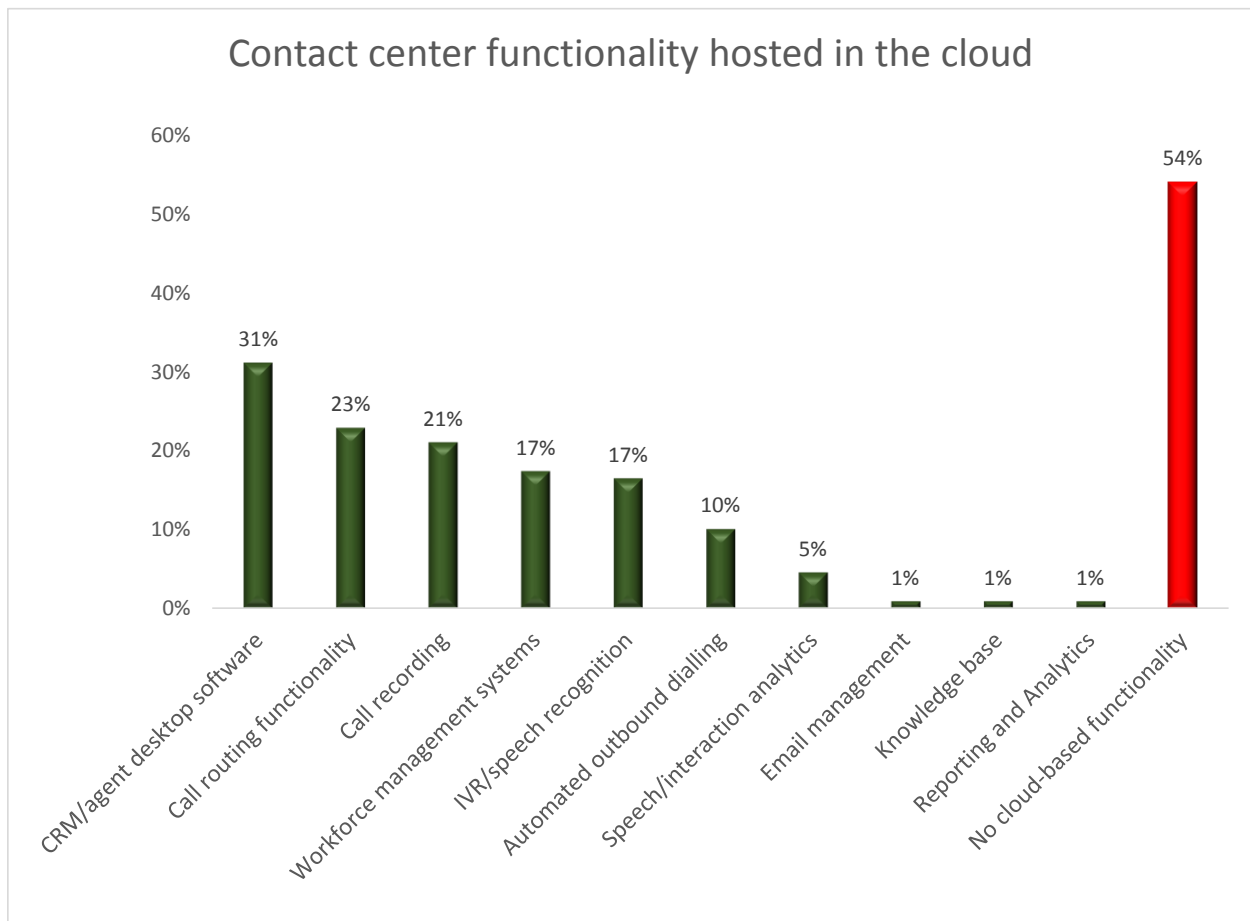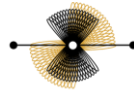
Looking at the use of cloud-based solutions by contact center size, 44% of respondents from large operations used some cloud functionality, with call routing and IVR functionality being the most popular, and automated outbound dialing was more prevalent in large operations than elsewhere as well.

Perhaps the most interesting finding from this table is that more than half of respondents from small (sub-50 seat) operations report having some cloud-based contact center functionality this year. Of this, CRM/agent desktop software was by far the most prevalent, although call routing and call recording were also well-represented relative to larger operations.

While the actual respondents to this survey (and consequently the overall statistics) vary from year-to-year, these findings suggest that cloud-based functionality - as logic dictates it should be - is widely accessible and used by all areas of the contact center industry.

Figure 126: Is any of your contact center functionality hosted in the cloud? (by contact center size)

Technology	Small	Medium	Large	Average
CRM/agent desktop software	38%	33%	22%	31%
Call routing functionality	21%	24%	30%	23%
Call recording	21%	24%	19%	21%
Workforce management systems	10%	21%	22%	17%
IVR/speech recognition	15%	10%	30%	17%
Automated outbound dialing	8%	7%	19%	10%
Speech/interaction analytics	3%	7%	4%	5%
Email management	3%	0%	0%	1%
Knowledge base	3%	0%	0%	1%
Reporting and Analytics	3%	0%	0%	1%
No cloud-based functionality	*49%*	*60%*	*56%*	*54%*

Crossing Boundaries for Contact Centers

Knocking Down Geographies and Walls

The benefits of cloud communications are well documented. Faster deployment, future-proof applications, business continuity, predictable monthly payments. When contact centers turn to the cloud, they can also scale easier, support at-home agents, and add multichannel services.

Yet there's another benefit of the cloud for contact centers that might not be as readily evident. With a cloud-based solution for communications, centers can break through two types of boundaries that often hinder operational and customer care effectiveness.

The first boundary is geography. Should a contact center expand from a single location, the cloud can minimize the complexity and cost that often curbs efficiency from a staffing standpoint. The second boundary is walls. Not physical walls, mind you, but the walls between agents in a contact center and the enterprise subject matter experts they must increasingly collaborate with to resolve customer issues. These walls exist whether the organization's contact center occupies one location or multiple sites.

However… implement a single cloud solution for a multi-site contact center operation, and boundaries disappear.

Eliminating geographic boundaries
Staffing. In effect, multi-site centers become one large contact center with an expanded, centralized pool of agents. Cross training on products and services becomes easier, agent knowledge levels and skill sets are broader, and agents are assigned more efficiently based on demand, schedule, and media channel.

Communications equipment. Organizationally, the cloud model eliminates the need for each contact center site to manage its own infrastructure. All sites pull from a common set of features that are activated merely by licensing; there is no need to install unique systems or hardware solutions at individual sites.

Consistent service level. Along with a uniform menu of contact options for all locations — an 800 number, eServices, a Facebook page, and so on — the organization consolidates queues across sites. Incoming interactions are then routed quickly to the first available agent regardless of location. Reports also span all sites and provide a clearer view of the service provided to all product areas.

ROI realized. A cloud-based contact center solution lets the organization move from capital expenditures on equipment at multiple sites to a monthly service fee for the whole of customer service. Again, the organization can license new apps and features whenever any part of customer service requires added functionality, and bypass having to source and install new systems.

Knocking down walls
There's an emerging sentiment that "the enterprise is the contact center." In the name of first contact resolution, customer service has moved beyond the walls of the contact center to include persons throughout an organization. At various times, the appropriate resource to handle a customer's issue might be a subject matter expert, a product manager, a claims adjuster, or some other specialized employee elsewhere in the business. Therefore, virtually every employee becomes a potential real-time customer touch point and service agent.

Cloud communications enable the organization to consolidate all internal resources more easily as one central asset to manage customer care. With no walls between the contact center and the enterprise, the customer service process extends to the right persons and workgroups at the right time. Knowledge is also spread across the business — seamlessly — and accessed at any given moment to resolve customer issues accurately and quickly. Ultimately, managing customer relationships falls to a much broader set of available organizational resources.

When you knock down geographies and walls via the cloud, you provide customer experience that builds customer loyalty.

INTERACTIVE INTELLIGENCE®

For more information on the cloud-based and customer experience solutions from Interactive Intelligence, visit us at **www.inin.com.**

RESULTS OF USING CLOUD SOLUTIONS

Those contact center respondents who have actually implemented a cloud or hosted solution have generally found that it has delivered significant advantages in most cases.

78% of respondents stated that cloud-based solutions had given a cheaper overall cost of ownership of their contact center technology. 64% experienced more powerful extended functionality in a cloud-based environment, with only 2% disagreeing that this was the case. 53% of respondents stated that cloud made it easier to make changes to the system, with 12% disagreeing.

These research findings have been extremely consistent for some years despite different companies taking part each year, and readers can treat these findings with considerable confidence. In fact, this year's results have shown significant increases in the proportion of contact centers reporting that they strongly agree that cloud has brought them cheaper cost of ownership and more powerful functionality.

Figure 127: Have cloud-based solutions made any difference to your contact center?

Have cloud-based solutions made any difference to your contact center?
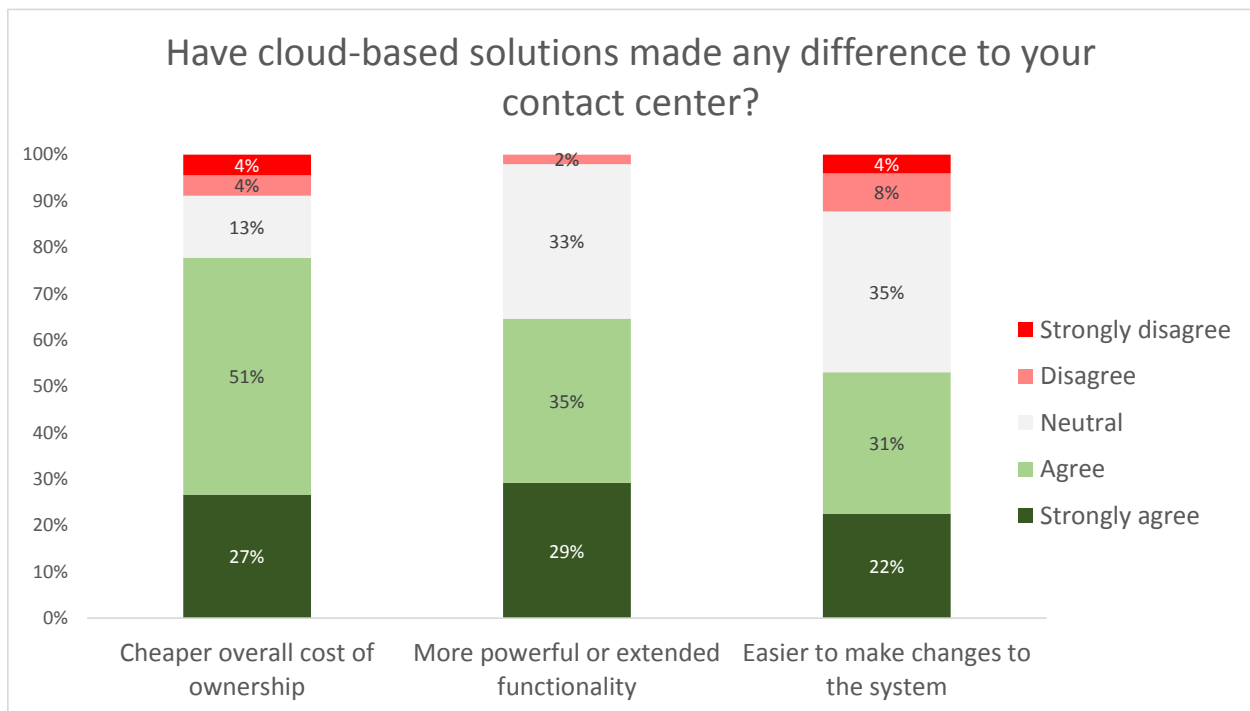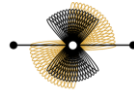
CONCERNS ABOUT CLOUD-BASED SOLUTIONS

Despite the generally positive experiences that most users of cloud & hosted solutions have reported, there are still considerable barriers to implementation that are holding back some potential users, connected with fears around data security, integration and investment.

As usual, the strongest of these is the concern that data security will be compromised by allowing a third-party to control customer details. 48% of non-cloud-using respondents state that data security in the cloud is of great concern to them, a figure which is lower but still significant amongst those who actually use cloud-based solutions (26% of these respondents are still greatly concerned about this). Solution providers should redouble their efforts to provide greater education and understanding about risks and the reality of this, as well as striving to improve (and prove) the security and reliability of their own systems. Some cloud-based solutions allow clients to keep call recordings and sensitive customer information on their own site, whereas most others provide externally-audited and accredited dedicated security that can surpass on-premise offerings.

Solution providers should continue to focus their efforts on demonstrating the strength of their security measures, and reassuring potential users of cloud- and hosted solutions that the security measures in place are actually stronger than would be feasible within a fully premise-based operation.

Figure 128: Concerns about cloud-based solutions (respondents not using cloud)
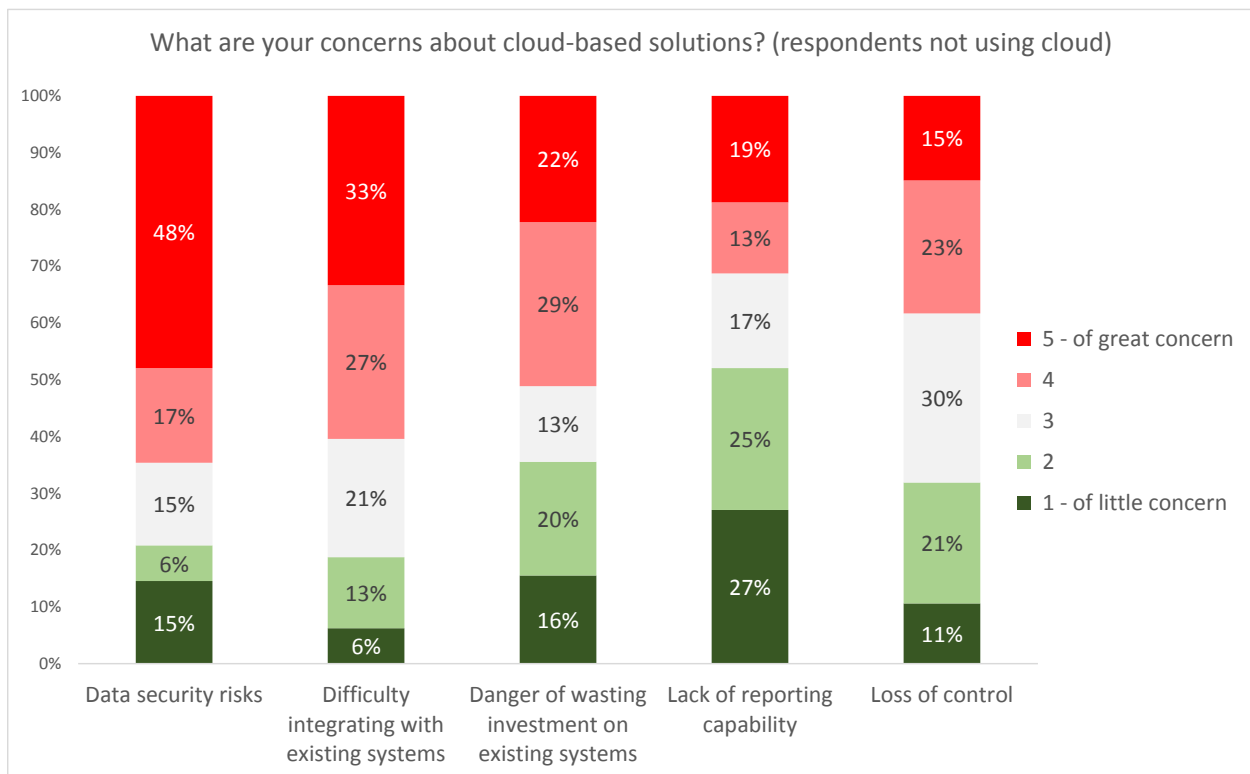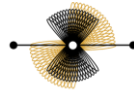
The difficulty in integrating with existing systems, and the danger of wasting existing investments is also of concern to most non-cloud-using respondents, and although most respondents rightly do not consider a lack of reporting or loss of control to be a deal-breaker, they are of concern to a significant minority of non-cloud-using respondents.

Those with concerns that existing investments would be wasted if they were to move to cloud should be aware that many vendors offer a solution that can work alongside existing CPE elements. In all, it seems that cloud-based solution providers still have a significant amount of market education, reassurance and demonstration to carry out before all of these concerns are addressed to the satisfaction of the whole market.

When considering the concerns of those who actually use cloud-based solutions, there are still significant concerns around making sure existing investments are not wasted, as well as managing potential risks around data security. It seems that over one-third of respondents have also found some issues with integrating their cloud components with their existing systems (and this is an area that should be understood fully by those looking to implement cloud-based solutions before they commit), although a lack of reporting capability and loss of control are rarely major issues.

Figure 129: Concerns about cloud-based solutions (respondents using cloud)

What are your concerns about cloud-based solutions? (respondents using cloud)
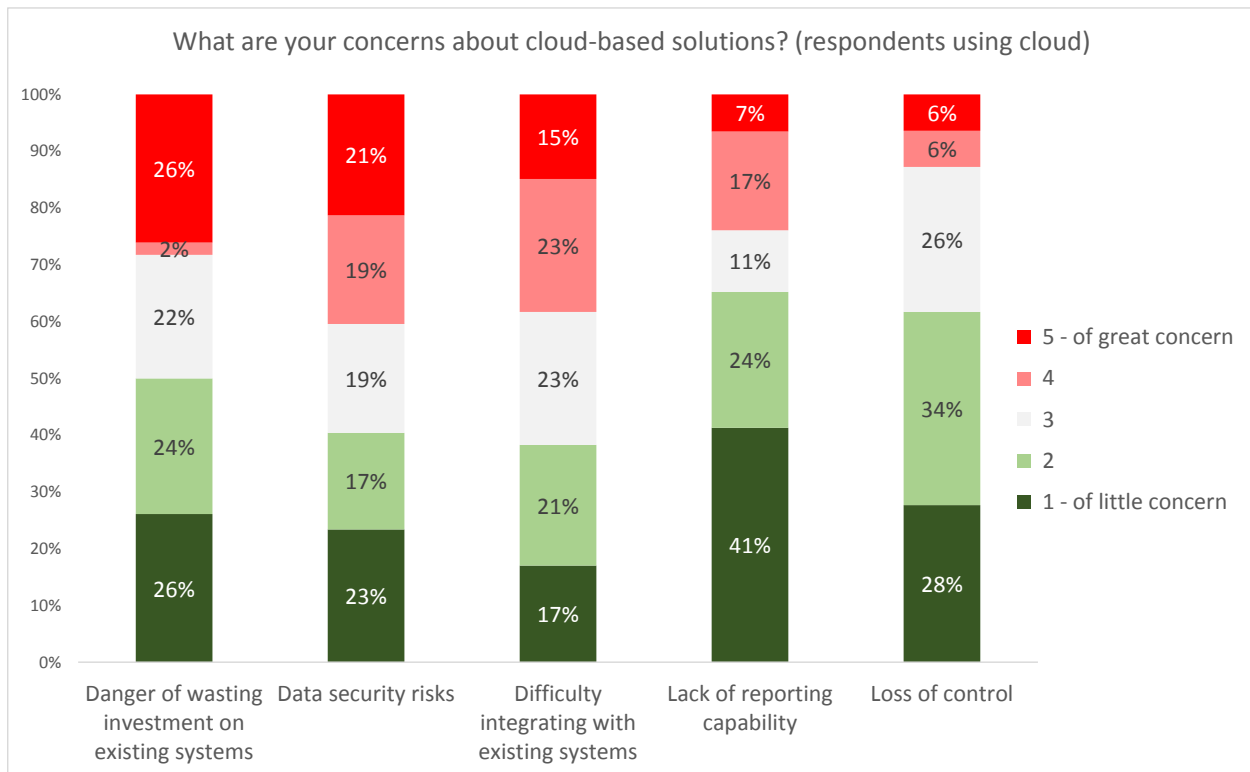
OUTBOUND & CALL BLENDING

The traditional outbound call was simply about selling more products to new and existing customers. However, legislation and customer pressure is having a continuing impact on cold calling, and the past years have seen an increasing proportion of outbound calling being made to existing customers, either to deliver customer care or proactively to inform them about events and circumstances which affect them. However, whether a statistical blip, or indicative of an actual change in outbound practices, the "Sales calls to potential new customers" activity has increased very significantly as a proportion of all outbound this year, and it will be interesting to see whether this is sustained over the next few years.

Outbound calling is fundamentally different from inbound, and - facing significant and growing cultural and legislative issues - must be managed sensitively:

- the nature of outbound is intrusive and usually driven by the needs of the business rather than the customer (except in cases of call-back requests and for proactive outbound service)

- this means that customers are more likely to be defensive and wary of the purpose of the call. Trust needs to be built very quickly in order to overcome this negative start point: having the right information about the customer to hand will improve the experience for both agent and customer

- outbound work can be very hard on agents: few people actively welcome most outbound calls, and persistent refusal, lack of interest and rudeness can be very wearing for agents, especially if productivity-enhancing technology such as dialers are being used. Management should consider ways of alleviating agent stress, through sensible scheduling and call blending, judicious use of technology, focused training and improving working environments, amongst other ways

- especially where the technology exists to do so, it can be tempting to treat outbound calling campaigns as an exercise in maximizing call volumes and (theoretically) revenues. However, this can result in brand damage and high staff attrition rates through over-pressured and exhausted agents delivering poorer quality interactions

- there has been a tendency to use offshore contact centers for low-value outbound sales campaigns which would otherwise be unprofitable to run. However, the same high standards of training and support are needed by offshore agents to do their job properly: too many businesses simply put the agents on a dialer with an inflexible script in front of them and then wonder why their customers and prospects become negative towards their brand

- tough legislation has emerged which is reducing the amount of cold calling which businesses can do. Cold calling is illegal in Germany, and the Do-Not-Call register in the US and the Telephone Preference Scheme in the UK allow customers to opt out of receiving any sales calls at all in theory.

Call blending is an element of outbound calling which has had to fight against the conventional wisdom of the traditional contact center industry, which implies that the more one can segregate the contact center into a series of production lines, the better-run the operation will be.

Call blending gives the ability to deliver both inbound and outbound calls seamlessly to the agent, regulating outbound call volume based on inbound traffic. When inbound traffic is low, outbound calls are automatically generated for a specified campaign. When inbound traffic picks up, the dialer dynamically slows the number of outgoing calls to meet the inbound service level. Results can include increased agent productivity, streamlined staffing, and improved customer service. However, this process needs to be understood and managed carefully, as not all agents are adept at dealing with both inbound and outbound calls.

Sales to both new and existing customers are obviously still key reasons why companies carry out outbound calls, and the hybrid method - customer service leading to a cross-sell/up-sell opportunity - is seen a good way of circumventing the increasing numbers of people registering for the Do Not Call Register. However, businesses must be careful not to pester customers or abuse the relationship they have built up with frequent calls about products and services that are not tailored to the customer. Increasingly, turning an inbound service call into a cross-sell or upselling opportunity has become a widely-use tactic.

OUTBOUND ACTIVITY

Outbound activity is reported to have changed somewhat this year, although it is too early to say whether this is a industry-wide change, or an accidental factor of the respondents involved in research this year.

The traditional outbound activity of trying to sell to prospective customers (rather than those who have already done business with you), is back in number one position, at 31%. It displaces proactive customer service, which is a strong brand builder as well as an effective call avoidance tactic. In total, the three sales related activities - to potential customers, cross selling and up selling to existing customers, and renewals to existing customers - account for almost half of outbound activity, compared to less than 40% last year.

Debt collection decreases once again, having been much higher in the depths of the economic downturn.

Figure 130: Outbound activity
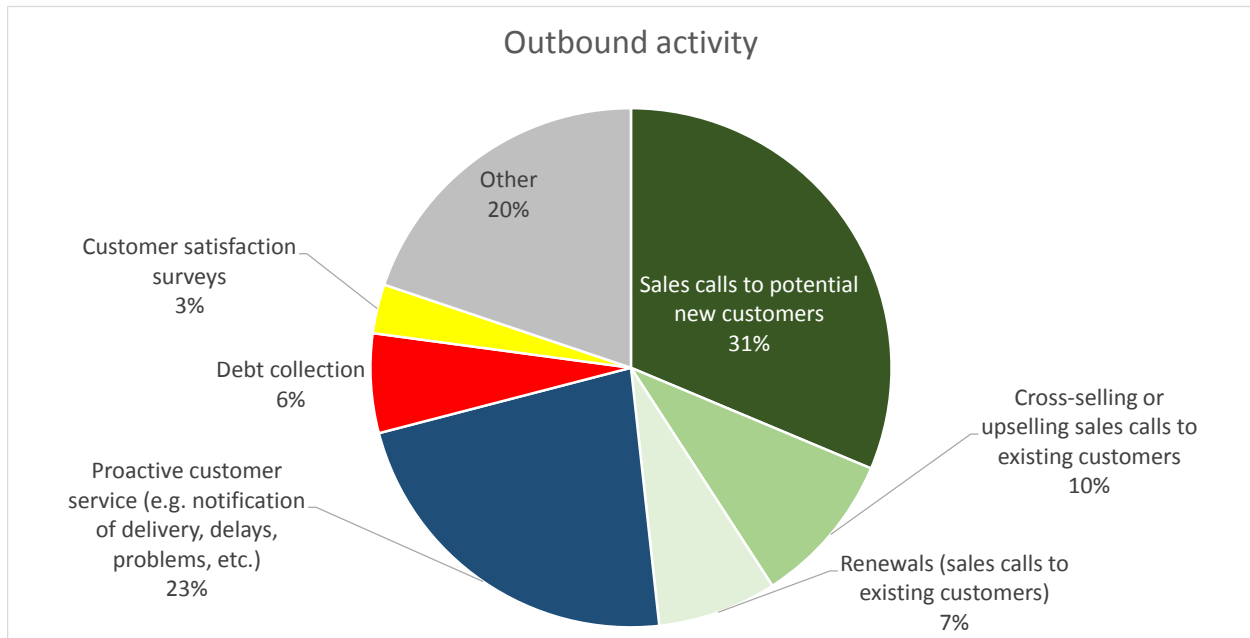
Of those vertical markets that provided enough responses to this question from which to draw some conclusions, the finance sector was heavily involved in proactive customer service; outsourcers - unsurprisingly - reported that over 80% of their work was sales related; and TMT was heavily involved both in trying to win new business and also provide proactive customer service.

Around 90% of outbound calling is done by agents, with 10% done via automation. The opportunity exists for automated outbound service to expand - such as sending reminders and notifications to customers through an automated process - thus significantly reducing the cost to the business while improving the overall customer experience. Many customers will choose to seek clarification or a status update at some point in the buying process through making an inbound interaction. By sending a pre-emptive outbound message, the business is proactively assisting the customer to manage their interaction.

Figure 131: Use of automated outbound communication for proactive customer service

Use of automated outbound communication for proactive customer service
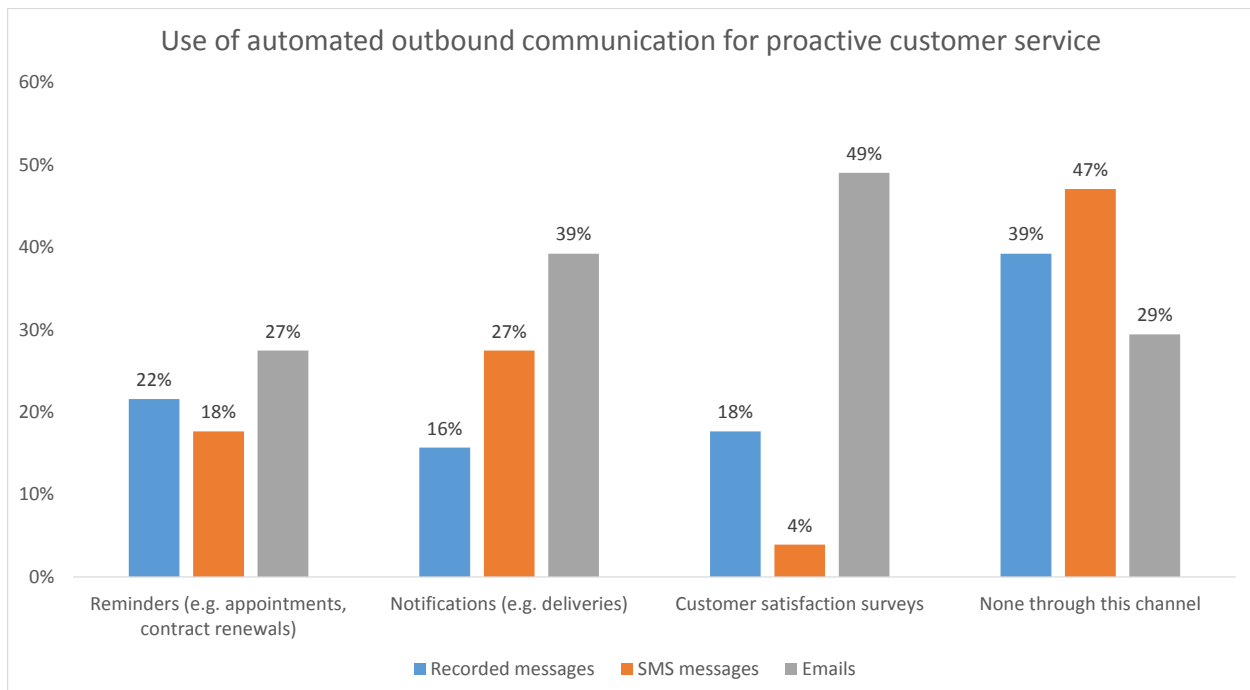
39% of respondents do not use recorded messages for any purpose, which is much lower than the equivalent figure within the UK, where cultural and regulatory inhibitors are somewhat stronger.

SMS messages are used by more than half of respondents, mainly for notifications and reminders.

Outbound customer satisfaction surveys are also a popular activity for customers to be invited to take part in via an automated outbound channel, usually via email, which is also a popular way of notifying customers about events.

THE USE OF OUTBOUND DIALERS

52% of respondents do not use a dialer to automate their outbound calls and of those that do, 44% use a cloud or hosted solution, with the rest using their own dialer.

Larger contact centers are more likely to be using their own on-site dialer, with cloud-based solutions the deployment model of choice for smaller contact centers.

Figure 132: Use of cloud/hosted or CPE dialers, by contact center size

Use of cloud/hosted or CPE dialers, by contact center size
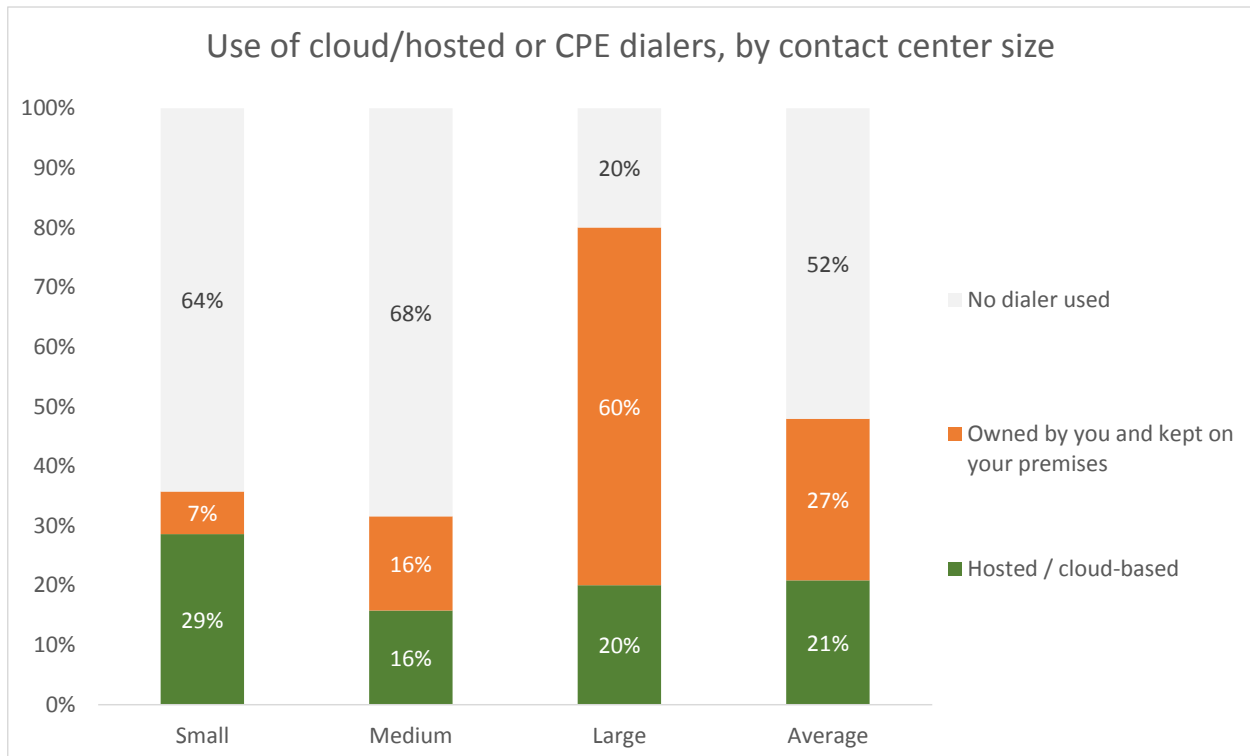
CALL BLENDING

A contact center handling different processes involving customer service, sales orders, and outbound telemarketing, will have different groups of agents with specific skills for these areas. Some agents are more capable and adaptable than others, and can be used as blended agents. For example, these agents may have a primary responsibility to handle inbound calls, but when the inbound call volume drops, the dialer will send a message to these agents indicating that they have been switched to outbound mode and start offering outbound calls to them. Where relevant, a CTI-type link will prompt a script for the outbound calls to run on the agent desktop and - depending on the call volume in the inbound queue, the agents will be switched automatically, improving productivity. However, if there is a constant switching from inbound to outbound and back again, the agent may lose concentration and the productivity may go down.

A structured blended environment, where agents are moved seamlessly and dynamically between inbound and outbound, is used in 35% of respondents' operations, although large contact centers are far more likely than smaller operations to use this type of structure. Small operations are more likely to operate blending on a manual, ad-hoc basis.

Figure 133: Use of call blending by contact center size
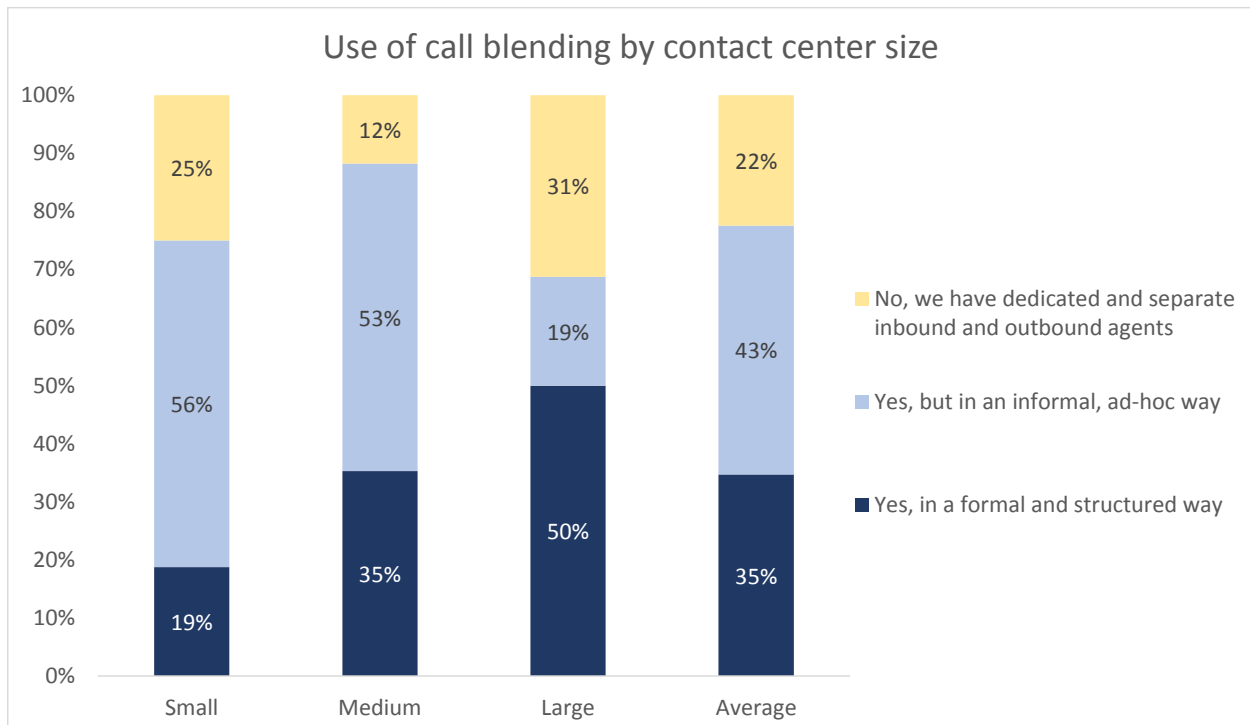
It is interesting to put the use and type of call blending against key contact center performance and operational metrics, such as average speed to answer, which is - as usual - considerably less in formal, blended environments than in dedicated and more ad-hoc environments, as agents are moved between tasks quickly and seamlessly.

Figure 134: Average speed to answer, by call blending environment type

Call blending environment	Average speed to answer (seconds)
Blending used in a formal and structured way	27
Blending used in an informal, ad-hoc way	36
Dedicated and separate inbound and outbound agents	65
Not applicable - no outbound calls made	52

THE ROLE OF MOBILE TELEPHONY IN OUTBOUND CALLING

With 80% of US cellphone users expected to have access to a smartphone by August 2014, with this figure growing rapidly. This means that a large proportion of customers will want to contact businesses through these devices, whether via the telephony element of the device, or via the company's website or mobile app. Taking into account the use of tablet computers and handheld games consoles to access the Internet, the 'mobile channel' may actually be the first port-of-call for many customers, especially those in the younger demographics.

The dual, mutually-supporting drivers of high-speed mobile networks and the proliferation of smartphones means that provision of services via a mobile channel offers businesses and consumers the opportunity to make a step-change in the way that they communicate with each other. This new world of communication allows businesses to consider whether functionality like multimedia streaming and videoconferencing could give them a competitive advantage in the customer service world.

Gathering, understanding and using the contextual data that can surround the mobile consumer will be key to pushing the uptake and functionality of this channel forward. The plethora of channels immediately available to the mobile consumer - including voice, web browsing, SMS, social media, and web chat - encourages the customer to act immediately for all their service or information requirements, rather than waiting until they are in front of a desktop computer.

Research from Limelight Networks[7] shows that 80% of customers who have a poor experience with shopping on a mobile site will abandon it: some may intend to return via a PC, but many others will search elsewhere. As the author of the blog astutely comments: "There is no mobile web as far as consumers are concerned. There is only the web. And it has to perform well." Furthermore, most businesses are currently failing in this attempt, with recent research[8] around the shopping experience showing the mobile channel lagging way behind online websites and bricks-and-mortar shops.

In the US, the majority of current call plans make the recipient pay for an incoming call, which means that the caller has to be sure that the recipient actually **wants** to receive the call. Despite this, survey respondents make 33% of their outbound calls to cellphones, a further increase on last year's figure of 28%, which itself was a big jump on 2012's 16%.

Respondents this year report paying a median average per-minute rate of 2.0c to call a landline, against 2.2c per minute to a cellphone.

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[7] http://blog.limelight.com/2011/11/new-stats-show-how-critical-the-mobile-experience-is-for-e-commerce/
[8] http://www.prweb.com/releases/2013/6/prweb10789229.htm

The same double pricing structure is also applied to SMS messages, meaning that the current low usage of business-to-customer SMS (and the lack of interest in growing this channel) is very understandable, with SMS being perhaps best suited to proactive customer service, where being sent information such as notification of travel delays or a danger of being overdrawn is actually worth a customer paying for. It is worth noting however, that respondents stated that SMS is one of the most interesting potential technologies to be implemented within the next couple of years.

See the **'New Media and the Customer of the Future'** chapter of this report for more about the role of SMS.

Further information about servicing the Mobile Customer can be found in **"The Inner Circle Guide to Multichannel Customer Contact"**, and **"The Inner Circle Guide to Self-Service".**

Both reports are available free of charge from www.contactbabel.com.

Organizations able to help with Increasing Profitability:

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Enghouse Interactive: True Multi-tenant contact center platform for contact center service providers
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Hire IQ
Smarter Hiring. Faster.

HireIQ's solutions enable customer service organizations improve their agent retention and center performance through better, targeted hiring: read our case studies here.

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inContact's cloud call center solution provides the ability to dramatically improve customer service delivery, add new revenue streams, enhance call center efficiency and reduce operational costs.
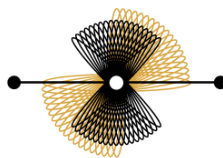
INTERACTIVE INTELLIGENCE
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At Interactive Intelligence, it's what we do.

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STAFFING MANAGEMENT

With staffing accounting for up to 75% of a contact center's operational cost, issues such as attrition, recruitment and training are always towards the front of any contact center manager's mind. This section looks at how time and money are spent on the human element to contact centers.

This chapter contains detailed information around contact center HR benchmarks such as attrition and absence.

"The US Contact Center HR and Operational Benchmarking Report" also gives detailed analysis of salaries, bonuses, training methods and costs, segmented by vertical market, contact center size and contact center activity type where relevant. Historical trends are observed with a view to predicting what future standards will look like.

The report also contains operational benchmarks such as speed to answer, call abandonment rates, call duration, call transfer rate, cost per call, agent occupancy, target service levels and first-call resolution rates.

ATTRITION

Throughout the studies that ContactBabel has carried out over the years, whether in the US or Europe, staff attrition has consistently been quoted as one of the major worries of contact center management. Along with staff absences, a high level of unchecked attrition has a two-headed effect: first, it raises recruitment and staffing costs; second, it has a ripple effect that can cripple a contact center's ability to provide an acceptable level of service, creating a negative customer experience, and placing massive stress on those agents who are left.

For many years, attrition has been one of the greatest challenges facing the industry, and one which has rarely been addressed with much in the way of a truly radical approach. The recession did reduce attrition considerably, but this was only a temporary respite: with no structural change to the industry, its recruitment and training methods, management techniques or job types, the same problems have emerged as the economy recovers.

Successful and sustainable reduction of attrition has two main factors - that the successful candidates are suited to, and competent for the work which they will undertake, and that the work and conditions in which they find themselves will be conducive to a long-term stay. Organizational behavior research over the last several years suggests that the emotional makeup of work teams has a dramatic effect on critical organizational outcomes such as job performance, attrition, customer satisfaction and leadership. Identifying a job candidate's emotional makeup - or "affect" in academic speak - can have long-lasting and significant implications for how effective the overall organization can be. Using programmatic methods to measure this can also improve the overall effectiveness of the recruiting organization within the company.

Solution providers experienced in analyzing attrition state that that understanding the 0-to-90 day attrition data is critical to being able to reduce attrition. Most organizations believe that a substantial amount of their annualized attrition occurs in the first 90 days after recruitment, and statistics further within this chapter tend to support this, especially for larger businesses. This strongly suggests that there are frequent errors made in the selection of the type of people employed, who are all but doomed to failure by their unsuitability for the task. Businesses should collect information on the sorts of behavior and characteristics of people likely to do well in each role - preferably analyzing the people who are successful in the roles already - and pre-screen applicants against those criteria.

Hire IQ
Smarter Hiring. Faster.

Assessing incoming candidates against profiles of known excellent performers can have a dramatic impact on early stage attrition and overall long-term center performance. This notion of "outcomes-centric screening" has proven to reduce 90-day attrition by as much as 60% and increased post-training performance by 200% or more amongst those companies that have employed such a strategy.

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Getting a high proportion of the right sort of people through the doors and onto the induction course can greatly reduce early attrition which is a problem that can be alleviated at the recruitment stage, rather than leaving it until the candidates are already in the business before noticing the issues.

Staff attrition in small doses can be good for a contact center, bringing in fresh blood and enthusiasm. However, high levels of staff attrition have some serious side-effects:

- Increases recruitment and training costs
- Decreases the average agent competency as there are so many 'learners'
- Affects the quality of the customer experience, as the agent may not know how to answer the query correctly first-time
- Adverse effect on contact center performance indicators, including first-time resolution, call transfer rates, queue time and call length
- Bad for the morale of the remaining staff
- Inexperienced staff are more likely to miss cross-selling and up-selling opportunities
- Increased pressure put on team leaders and experienced agents
- Difficult to bring on-board new systems and ideas, as the agents are struggling with what is already in place.

Attrition rate: the total number of agents leaving the contact center in a 12-month period, divided by the average number of occupants during the same 12-month period, expressed as a percentage.

*Respondents were asked to include all external attrition - whether voluntary (i.e. the agent choosing to leave) or involuntary (e.g. end of contract, employment termination, redundancy, etc.) - but **not** internal transfers elsewhere within the organization.*

After 2008's very high mean attrition rate of 42%, rates declined significantly in 2009, down to a mean of 34% and median of 24%, showing that the economic downturn has taken some of the HR pressures off. Data at the end of 2010 showed that the economic downturn had continued to impact on staff movement, with attrition levels dropping further to a mean average of 32% and median of 20%. In end-2011, attrition continued to fall, to a mean of 27% and a median of only 16%.

2013 saw a small rise in attrition, suggesting that the industry (and possibly economy) were getting back on their feet to some extent, and looking to grow. While the mean stayed the same at 27%, the median grew to 21%.

2014's results are very similar to the year before: the mean is once again 27%, although the median has dropped very slightly to 19%. As usual, this masks a very wide spread of attrition rates, as demonstrated in the chart below: while 13% of respondents have attrition rates in excess of 50% per annum, the same proportion have an attrition rate below 5%.

Figure 135: Agent attrition ranges
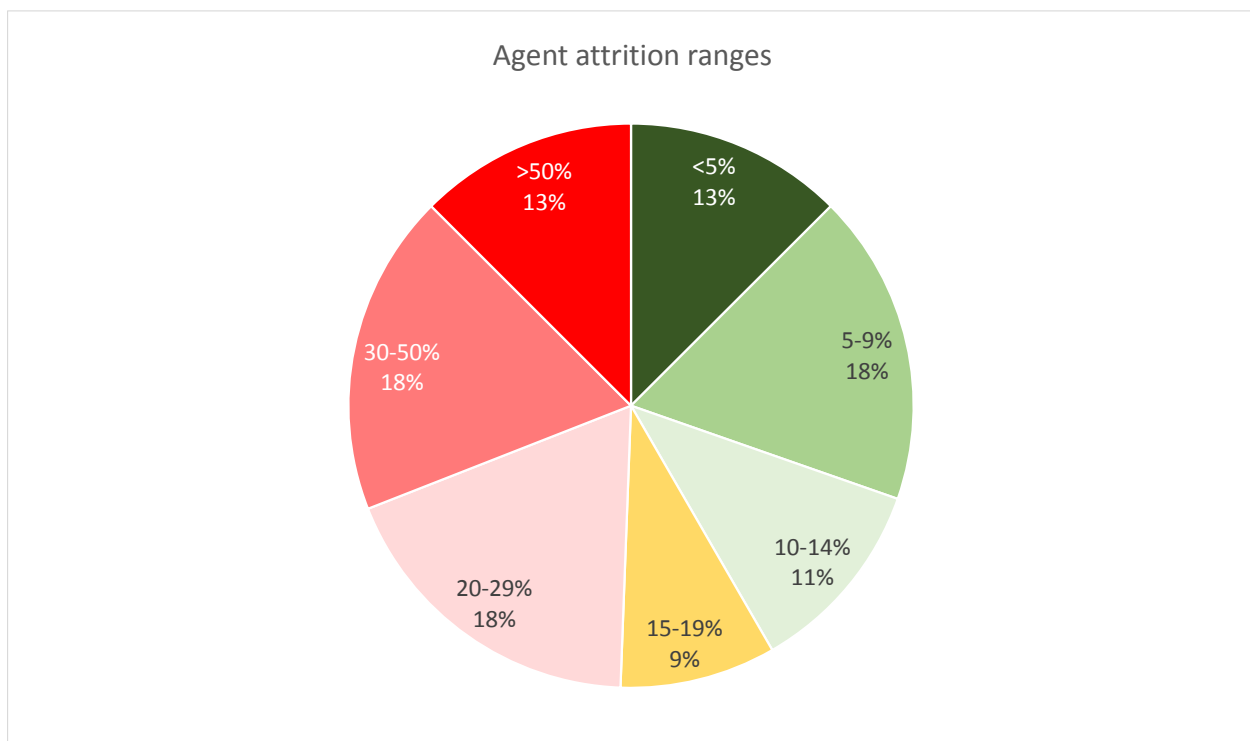
There are numerous factors that impact upon a contact center's agent attrition rate, including vertical market (or the type of business that agents are involved in); contact center size; and whether the work is inbound or outbound, which will be analyzed further in this section.

AGENT ATTRITION BY VERTICAL MARKET

The outsourcing sector has a consistently high attrition rate - driven mainly by low salaries and lots of outbound telemarketing work - and this year, it has a mean average of 56%, far higher than most other sectors and a slight increase on last year's figure of 53%. The median is somewhat lower at 38% (from 42%), although this is still the highest of any vertical market, reflecting that this is generally a sector-wide phenomenon. For outsourcers - which tend to pay lower salaries - there is an acceptance that large volumes of outbound calling will often come at the cost of high staff attrition, and that this is something which just has to be managed, and such respondents will tend to be more geared-up to cope with high staff turnover.

The public and medical sectors once again report median attrition rates in single-figure percentages, and manufacturing respondents have very low attrition rates as well this year.

Figure 136: Mean and median agent attrition by vertical market

Annual agent attrition rates, by vertical market

- Outsourcing: Median 38%, Mean 56%
- Entertainment & Leisure: Median 31%, Mean 39%
- Retail & Distribution: Median 19%, Mean 27%
- Finance: Median 19%, Mean 24%
- Insurance: Median 21%, Mean 23%
- Services: Median 22%, Mean 23%
- TMT: Median 13%, Mean 20%
- Medical: Median 8%, Mean 19%
- Public Sector: Median 8%, Mean 19%
- Manufacturing: Median 6%, Mean 15%
- Average: Median 19%, Mean 26.8%

■ Median ■ Mean

As survey respondents change from year to year, we include another question to highlight whether any year-on-year changes are a factor of the industry as a whole, or simply due to a blip caused by specific respondents.

The proportion of respondents reporting an increase in their attrition over the past 12 months is very similar to the proportion reporting a decrease. This tends to support the headline finding that attrition levels have altered very little at an industry-wide level.

Figure 137: Changes in agent attrition rate in the past 12 months, by vertical market

Changes in agent attrition rate in the past 12 months, by vertical market
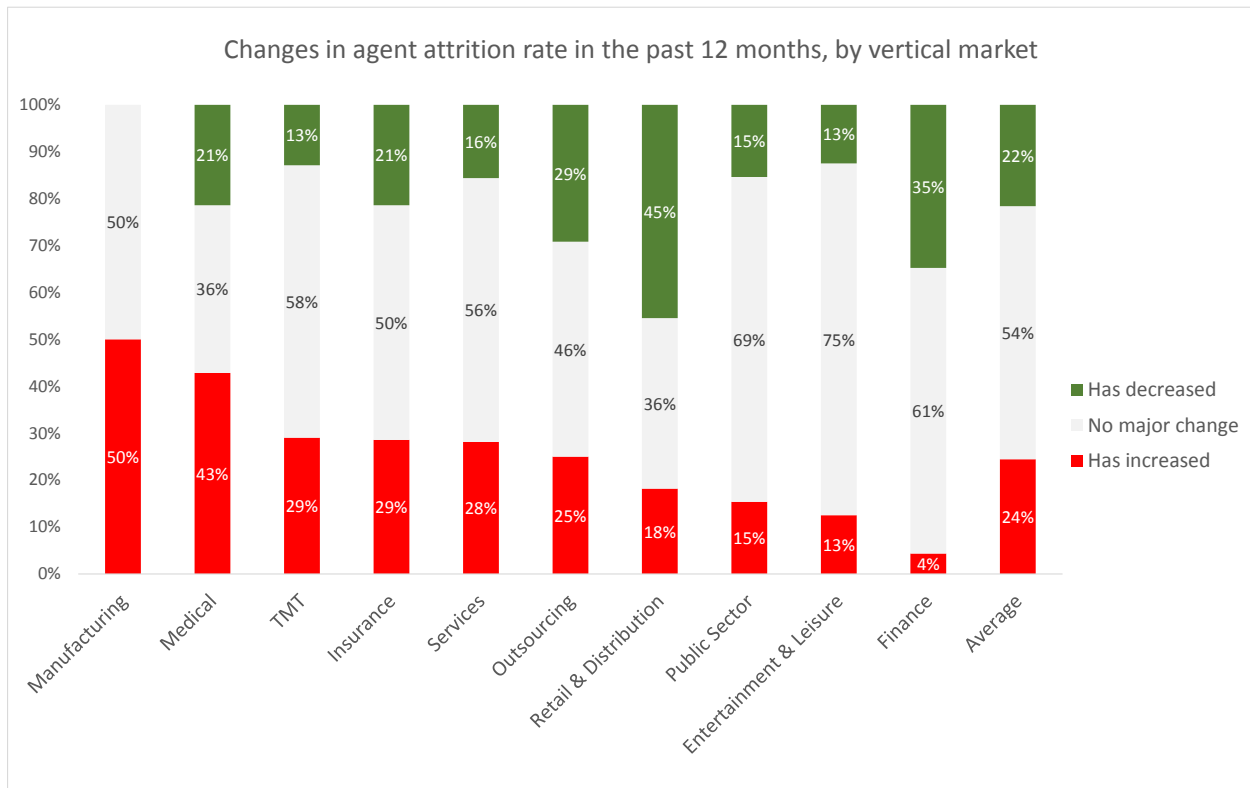
AGENT ATTRITION BY CONTACT CENTER SIZE

Previous ContactBabel studies carried out in the US and UK have shown that larger contact centers are more likely to have high attrition rates, and this is very much the case this year as well, with respondents in large operations experiencing mean staff attrition rates of 49% on average, compared with 17% for the sub-50 seat operations.

Figure 138: Agent attrition rate by contact center size

Agent attrition rate by contact center size
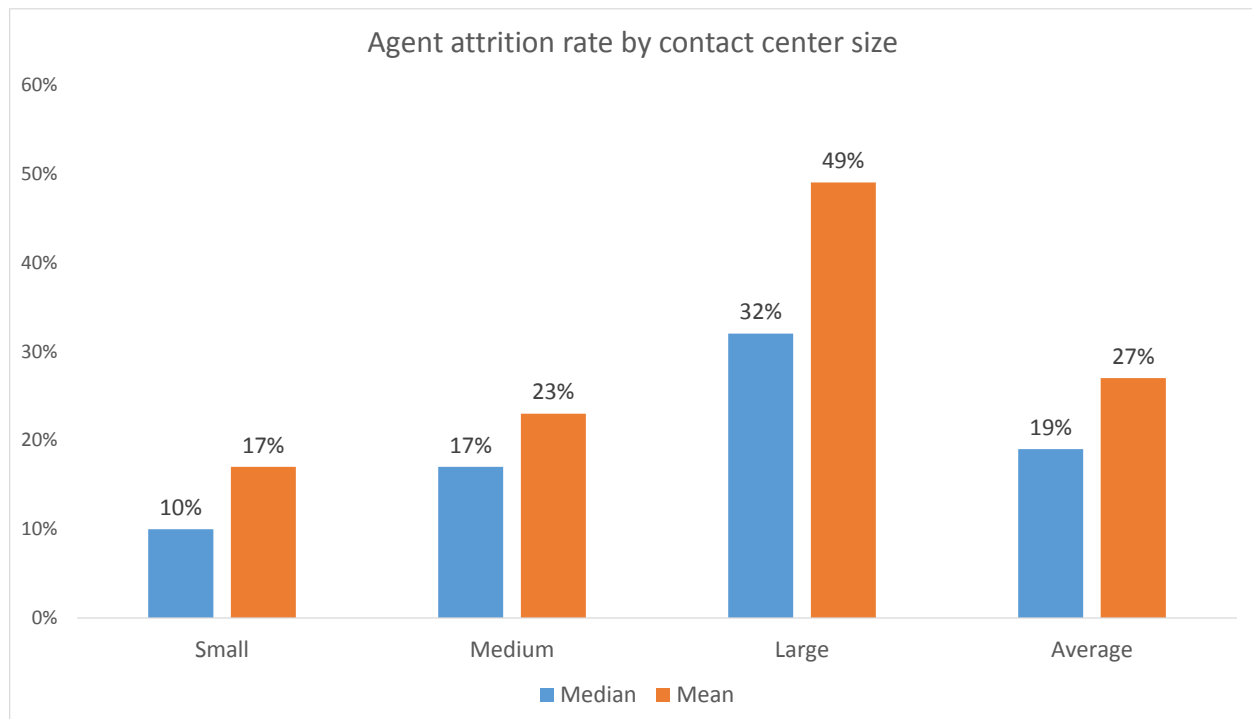
AGENT ATTRITION BY CONTACT CENTER ACTIVITY TYPE

Conventional wisdom states that outbound customer contact is a very difficult, high-pressure job, which leads to stress and burnout, and thus high levels of attrition. Statistics from these studies used to bear this theory out, although recent years' findings have seen little difference between exclusively inbound and outbound operations. Some respondents that carry out a mixture of inbound and outbound report spectacularly high levels of attrition, even in excess of 100%.

Figure 139: Agent attrition rate by contact center activity type

Agent attrition rate by contact center activity type

	Inbound	Mixed	Outbound	Average
Median	16%	22%	17%	19%
Mean	24%	38%	21%	27%
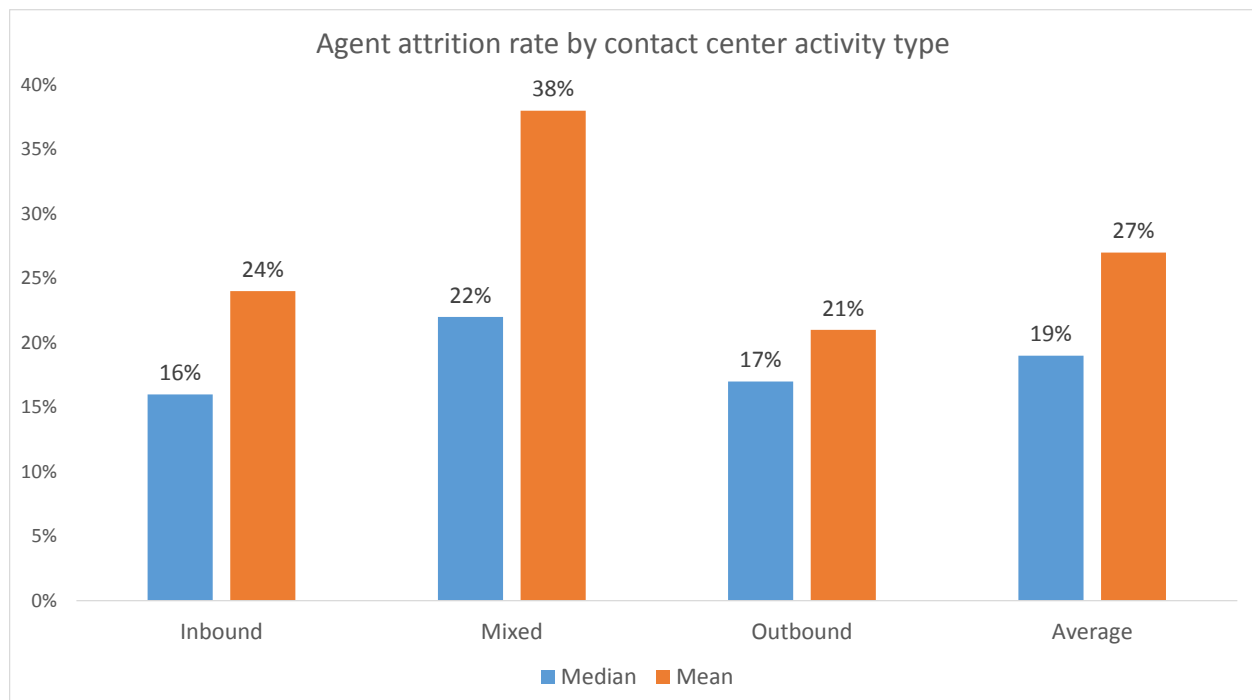
CAUSES OF STAFF ATTRITION

In the mid-2000s, the stress of the work and the repetitive nature of some contact center activity were cited as key by a significant proportion of respondents for agent attrition, and they remain important, ranked at second and fourth. However, contact centers seem to be giving a collective shrug by putting 'just the wrong type of person for the job' into no.1 position, as if there's nothing they can do about it.

Psychometric testing and the assessment of behavior and character as well as competency will go a long way to stopping the wrong type of person for the job at source.

Figure 140: Reasons for agent attrition (ranked in order)

Rank	Reason for staff attrition
1st	Just the wrong type of person for the job
2nd	Excessive pressure or stress
3rd	Lack of promotion or development opportunity
4th	Repetitive work
5th	Competition from other contact centers
6th	Low pay
7th	High numbers of temporary / seasonal staff
8th	Abusive or unpleasant calls
9th	Poor working environment and conditions

Interestingly, in an industry which outsiders often deem as a dead-end job, the lack of opportunity to move up the career ladder is marked on average as being the third-greatest cause of staff attrition.

As for other causes, much of the repetitive work is being alleviated by using self-service (whether voice-driven or web-based), and the blending of tasks (especially email and voice) has been proven many times to counteract boredom.

Following on from the previous data, which indicates that recruiting the wrong sort of person is the main problem, this table shows that some large operations seem to have problems with agents leaving the job very early.

59% of respondents from larger contact centers report that more than 20% of their new agents leave within the first six months, a figure which is far higher than those from respondents with small and medium-sized operations.

Figure 141: Proportion of new agents leaving in the first 6 months (by contact center size)

Proportion of new agents leaving in the first 6 months
(by contact center size)

	Small	Medium	Large	Average
Over 40%	7%	10%	15%	10%
31-40%		4%	11%	5%
21-30%	4%	10%	33%	14%
11-20%	16%	29%	22%	23%
0-10%	73%	47%	20%	48%
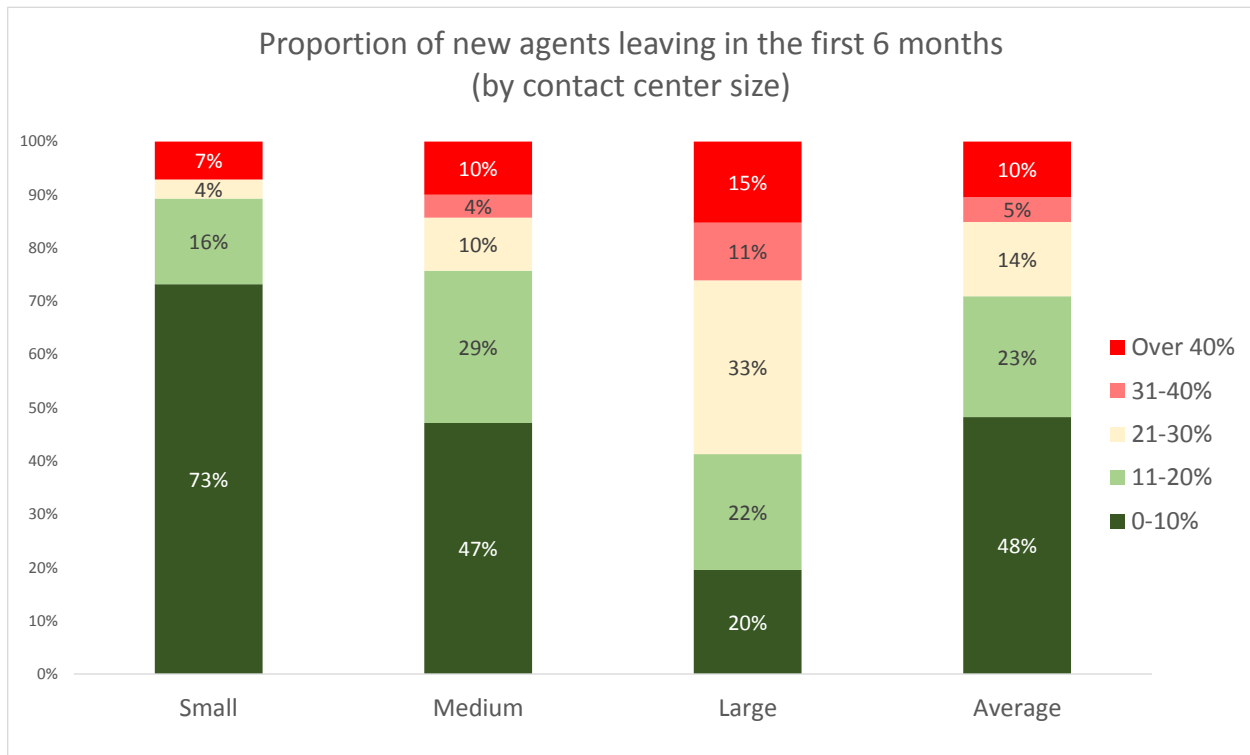
Outbound respondents have more of a problem with new agents leaving, with 21% of respondents reporting than more than 40% of their new agents left very soon after joining: outbound calling is a very difficult job, and is not for everyone.

Figure 142: Proportion of new agents leaving in the first 6 months (by contact center activity type)

Proportion of new agents leaving in the first 6 months
(by contact center activity type)

	Inbound	Mixed	Outbound	Average
Over 40%	9%	9%	21%	10%
31-40%	5%	3%	7%	5%
21-30%	12%	21%	7%	14%
11-20%	21%	27%	29%	23%
0-10%	53%	39%	36%	48%
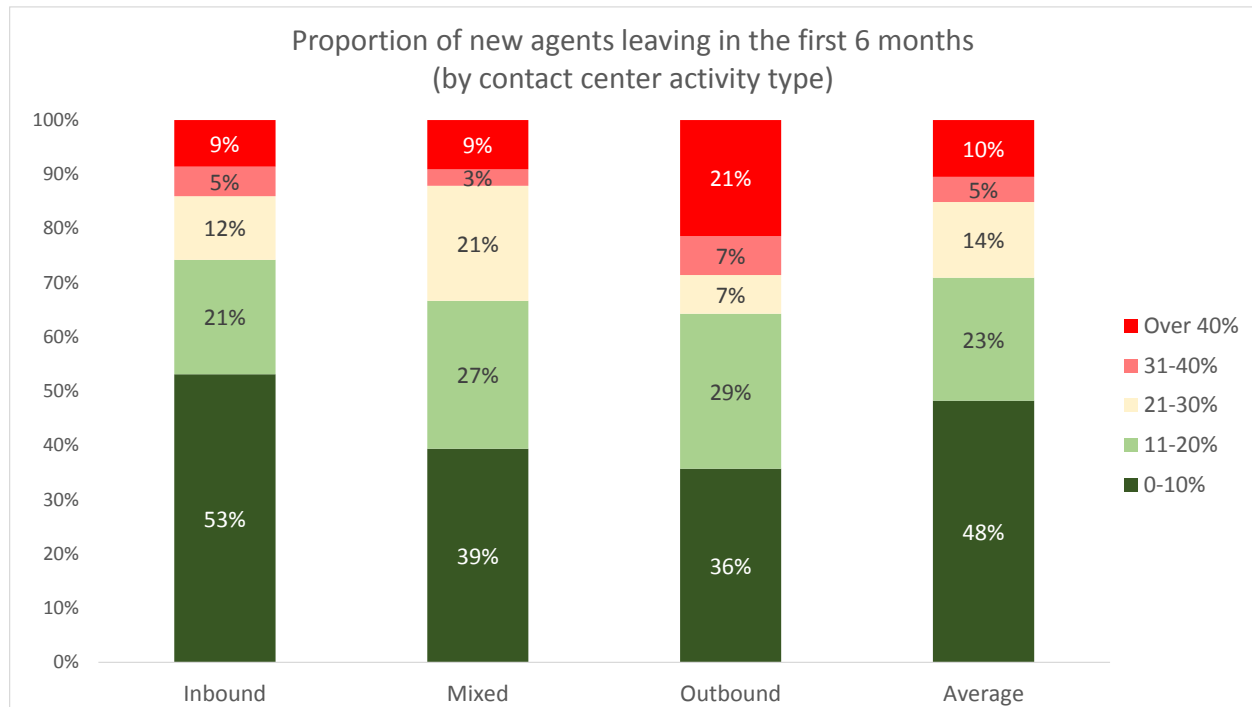
As the following chart shows, most agent attrition - 62% - comes as a result of the agents wishing to move to another job, with 38% of agent attrition coming from the business side. Attrition figures within this report do **not** include those agents who move into a role elsewhere within the organization.

Figure 143: Voluntary / involuntary attrition, by vertical market

Voluntary / involuntary attrition, by vertical market

	Voluntary	Involuntary
Average	62%	38%
Insurance	54%	46%
Medical	55%	45%
Services	55%	45%
Retail & Distribution	59%	41%
Manufacturing	61%	39%
Finance	62%	38%
Outsourcing	65%	35%
TMT	67%	33%
Entertainment & Leisure	71%	29%
Public Sector	72%	28%
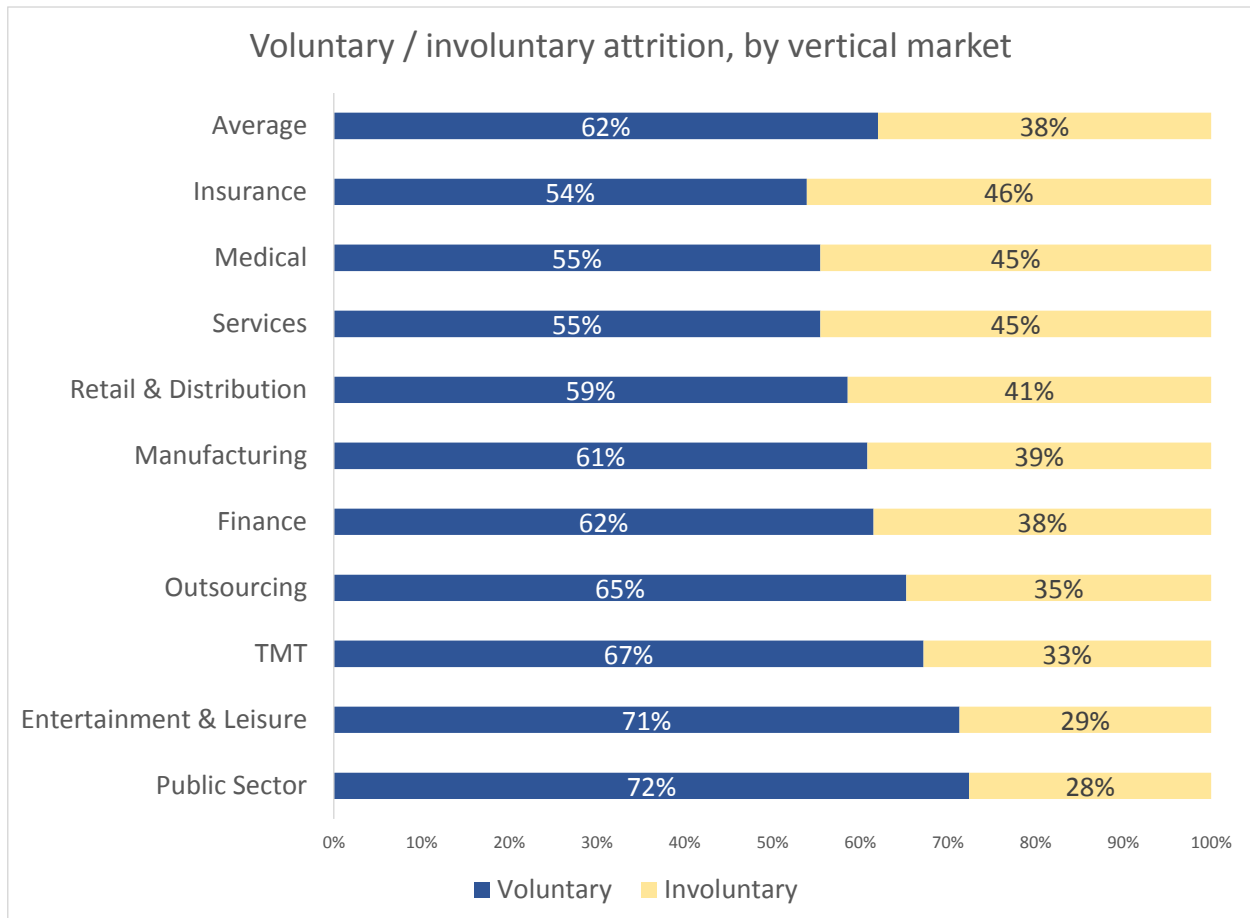
ABSENCE

In a tightly-run operation like a contact center where costs and performance are closely managed, significant levels of staff absence can cause major problems with contact center performance and the customer experience. Even just a slight increase in absence rates can mean a major difference to how well the contact center performs on that day. Staff end up over-worked and stressed, and more likely to take time off as a result. Morale suffers, which increases staff attrition, overwork and thus, further absence.

There are many causes of absenteeism, including:

- The absence of a recruitment process that allows operations to identify unreliable or unsuitable applicants
- Poor front-line leadership - many team leaders are just not able to manage their teams and help prevent absenteeism, a fault of incorrect training and/or recruitment at this level
- Low morale in the contact center, meaning the workforce think that missing work is acceptable.

There are also other factors that influence absence, including:

- Mandatory overtime
- Antisocial hours
- Lack of schedule flexibility and choice
- Insufficient mentoring or supervisor support, especially during the transition period after training
- Large team sizes (20+ per team).

Short-term (no-show) absence - this is the average number of agent days lost through short-term sickness and unauthorized absence as a percentage of contracted days annually. This is included in this year's report.

*Long-term absence - this includes long-term sickness, maternity leave, sabbaticals and other long-term absences where the business is able to plan for the absence. This is **not** included in this year's report.*

This year's mean absence rate is a rather worrying 10.4%, although the median - the typical midpoint average - is a more manageable 7%. Those respondents in the outsourcing, medical, insurance and entertainment and leisure sectors are experiencing higher-than-average rates of absence this year, with those in finance, TMT, public sector and manufacturing having absence rates significantly below the industry-wide median average.

Figure 144: Short-term absence by vertical market

Short-term absence by vertical market
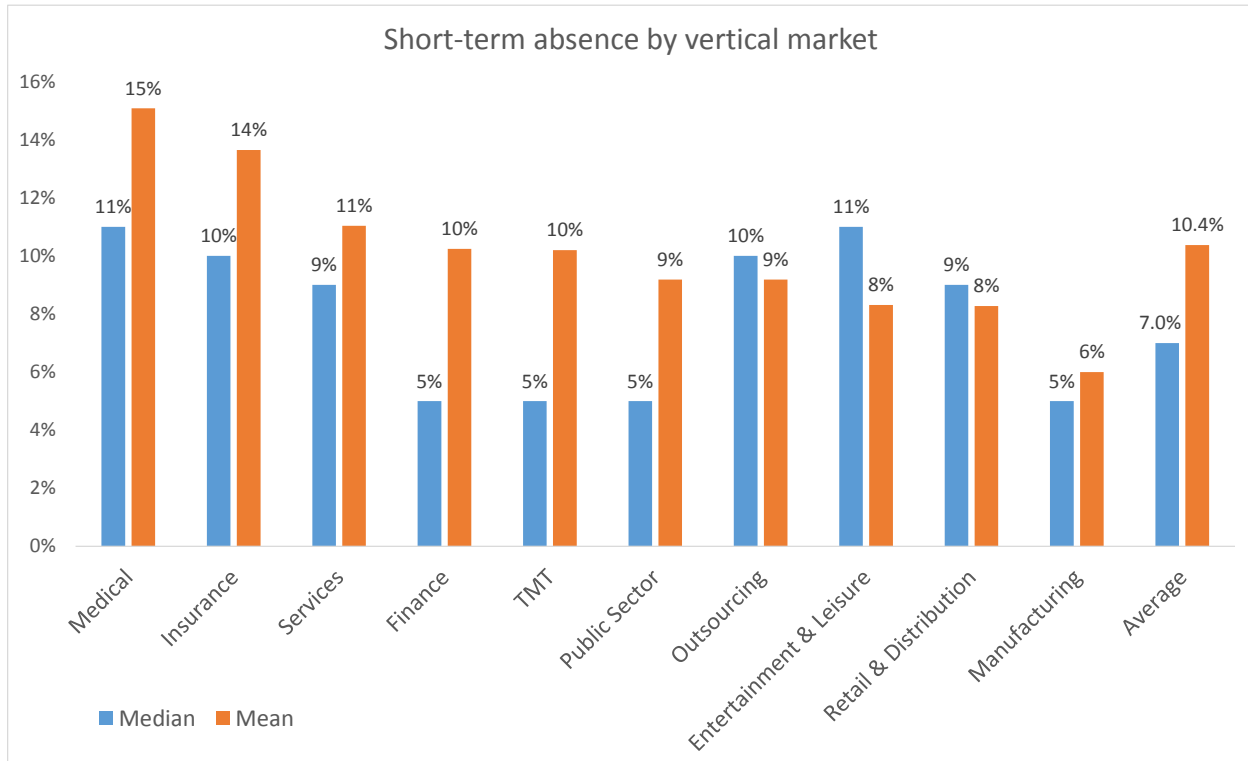
As has been the case in many previous years, smaller contact centers seem to experience far lower rates of staff absence.

Figure 145: Short-term absence by contact center size

Contact center size	Agent absence rate (mean)	Agent absence rate (median)
Small	8.7%	5.4%
Medium	10.0%	8.8%
Large	12.5%	10.0%
Average	**10.4%**	**7.0%**

Conventional wisdom would expect to find that those in high-pressure outbound jobs would have higher unauthorized absence rates. This is much less the case this year, although operations that mix inbound and outbound report far higher absence levels than those in either pure inbound or outbound environments.

Figure 146: Short-term absence by contact center activity type

Contact center activity type	Agent absence rate (mean)	Agent absence rate (median)
Inbound	9.8%	5.9%
Mixed	12.4%	10.2%
Outbound	10.6%	7.4%
Average	**10.4%**	**7.0%**

RECRUITMENT

There is a definite pattern to the effectiveness of recruitment methods: the closer you get to the candidate, the more likely you are to make the right decision. The average contact center role is slowly changing into something requiring higher skills - a high level of IT, business and communication abilities are needed in many contact centers now and this trend will certainly continue - yet agent salaries are not taking this into account. Coupled with this is the popular view of contact centers as career dead-ends, not helped by the biased and erroneous media view of contact centers (and by extension, their employees) as an unpopular and unloved part of modern life. Improving the contact center "brand" is a vital part of the industry's future success, which will feed directly into the recruitment process.

While most contact centers do not admit to having problems with staff recruitment, many of the same operations have problems with staff attrition. The case could be made that high-attrition operations **do** have a problem with recruitment, but they just don't realize it. Having filled their job roles, the recruitment process is deemed to have been a success, but how many of these new recruits turn out to be no-shows, leave before the induction course is complete, or shortly into the job? These recruits are gauged to be part of the *attrition* problem, when in fact, they are indicative of a *recruitment* problem. As such, businesses should try harder to understand what skills and attributes successful agents are already demonstrating in this role - empathy, resilience, reliability, sales technique, technical capability, etc. - and seek to recruit more people with this specific factors and behaviors.

Recruitment has traditionally been about asking the question "Can the applicant do the job?". Having the skills to carry out the task is obviously important, but most skills can be learned, and in an environment such as a contact center - where both tasks and environment are not suited to everyone - other factors are perhaps more important. This is borne out by the findings earlier in this chapter, which indicated that the main reason for staff attrition was that they were just the wrong type of person for the job.

Hire IQ
Smarter Hiring. Faster.

Seeing that job fit is the number 1 reason for agent attrition makes it incumbent upon contact center organizations to invest more during the recruitment process to ensure alignment between the job candidate and the type of work. The same emotional affect constructs that apply to the creation of effective work teams apply here as well. Some candidates will be better suited, for example, to Sales work than Customer Support jobs, and identifying this early in the recruitment process will create a better match between candidate and job, resulting in reduced attrition and increased performance.

Firstly, the business must understand the competencies, characteristics and behaviors that are most suitable for the contact center positions that they are trying to fill, for example:

- dependability
- customer focus
- empathy
- problem-solving
- the ability to understand and follow instructions
- a focus on a goal.

Successful agents will also require some hard skills, although many of these are more easily-learnt. Through judging competencies objectively, and using a combination of processes (for example, telephone and face-to-face interviews, with upfront psychometric analysis to determine the likelihood of the prospect being a long-term success in the contact center), the business reduces the risk of high attrition and growing costs, and can focus upon its strategic goals.

The most effective form of recruitment method is consistently said to be a face-to-face interview, with phone interviews, assessment centers, contact center simulations and skills-testing also effective. There is a definite split between how directly the company interacts with the candidate and how successful the recruitment method is. Those that keep the candidate at arm's length - through standard application forms, recruitment agencies and resumes - have a lower success rate, with studies having shown that half of applicants admit to stretching the truth on their resumes, and 10% lie outright.

The vast majority of respondents using personality testing report high levels of success through this method, reflecting the awareness that it is the type of person at least as much as what they can do that is crucial to being a successful agent. Many contact centers employ large numbers of recent university graduates, whose biodata and work experience may not show much of the applicants' actual abilities. In such cases, getting a better scientific idea of what makes the candidate tick, and being quite sure about their personality traits will reduce the high risk associated with recruiting straight from higher education.

By tracking the in-job performance of applicants who scored either well or poorly in pre-job assessments, businesses can improve their ongoing recruitment techniques. For example, agents who have high assessment test scores often have higher revenue-per-call ratios, lower average call lengths and lower attrition rates than those who scored lower in pre-job character and personality assessments. The behaviors, personality traits and characteristics that a top agent is most likely to have can then be identified, and the results fed back into the top of the recruitment process. This allows the recruitment process to seek out the types of people who have already been proven to succeed in that role.

Innovations in Agent Hiring and Retention - Strategies for an Improved Customer Experience

Despite significant investments in self-service technologies over the years, industry research indicates that a large majority of customer interactions still involve a contact center agent. Furthermore, customers are better informed than ever before – they often research solutions and alternatives before ever engaging an agent. Therefore, an agent's communication, language and critical thinking skills are essential components to delivering on the customer experience promise.

Staffing your contact center to deliver an exceptional customer experience begins by ensuring your sourcing, screening, selecting and onboarding strategies are aligned to this objective. It also requires strategic thinking and innovative approaches to the process of recruiting and hiring call center agents.

Hire with the end goal in mind. Talent acquisition teams are frequently under pressure to fill classes quickly, often resulting in new hires who are either poorly qualified or who turnover early in their tenure or both. Correlating key business outcomes (e.g., tenure, customer satisfaction, sales conversion, first call resolution, etc.) with candidates' pre-hire assessment results will result in better quality hires who will stay longer once on the job.

Automate the process. A recruiter-led telephone screen is often one of the first gates a candidate must pass through, yet this process is highly inefficient, time-consuming, labor intensive and costly. Using virtual interviewing technology enables candidates to complete an early-level phone screen at a time of their convenience – even at times when recruiters aren't working.

Collaborate and calibrate. Talent acquisition and call center operations should meet regularly to validate quality-of-hire and to ensure that new hires are achieving the goals relevant to your organization. Virtual interviews are recorded so they can be shared with other members of the recruiting team as well as the hiring manager ensuring complete alignment throughout the organization.

Accelerate the process. It can often take as long as 45 business days for a company to screen and select candidates. During this time, candidates may entertain – and accept – other job offers, leaving companies to select from a smaller pool of less qualified applicants. Engaging candidates immediately and moving them quickly through the hiring process increases quality-of-hire.

Companies that have adopted this approach to agent hiring have realized significant benefits including:

- 84% reduction in time-to-hire
- 60% increase in 90-day retention
- 10% improvement in training graduation rate
- 27% improvement in measured customer satisfaction

To read more client case studies, please visit: http://www.hireiqinc.com/case-studies/

THE COST AND PURPOSE OF RECRUITMENT

In previous years, a raw average cost per recruited agent was quoted in this report, which was usually between $2,500 and $3,000. Closer inspection of these data suggest that it is misleading to provide a single figure for contact center recruitment cost, as there is an extremely wide spread of costs across the industry.

27% of respondents from large operations report that they spend less than $500 per head recruiting a new agent: yet 22% state that they spend more than $4,000. These data make interpretation and analysis of recruitment costs a very complicated matter, with little certainty or pattern emerging.

Figure 147: Cost of recruiting a new agent, by contact center size

Cost of recruiting a new agent, by contact center size

Size	Less than $500	$500 - $1,000	$1,000 - $2,000	$2,000 - $3,000	$3,000 - $4,000	More than $4,000
Average	19%	23%	21%	14%	8%	15%
Large	27%	14%	22%	8%	8%	22%
Medium	20%	28%	18%	16%	6%	12%
Small	10%	26%	26%	16%	10%	13%
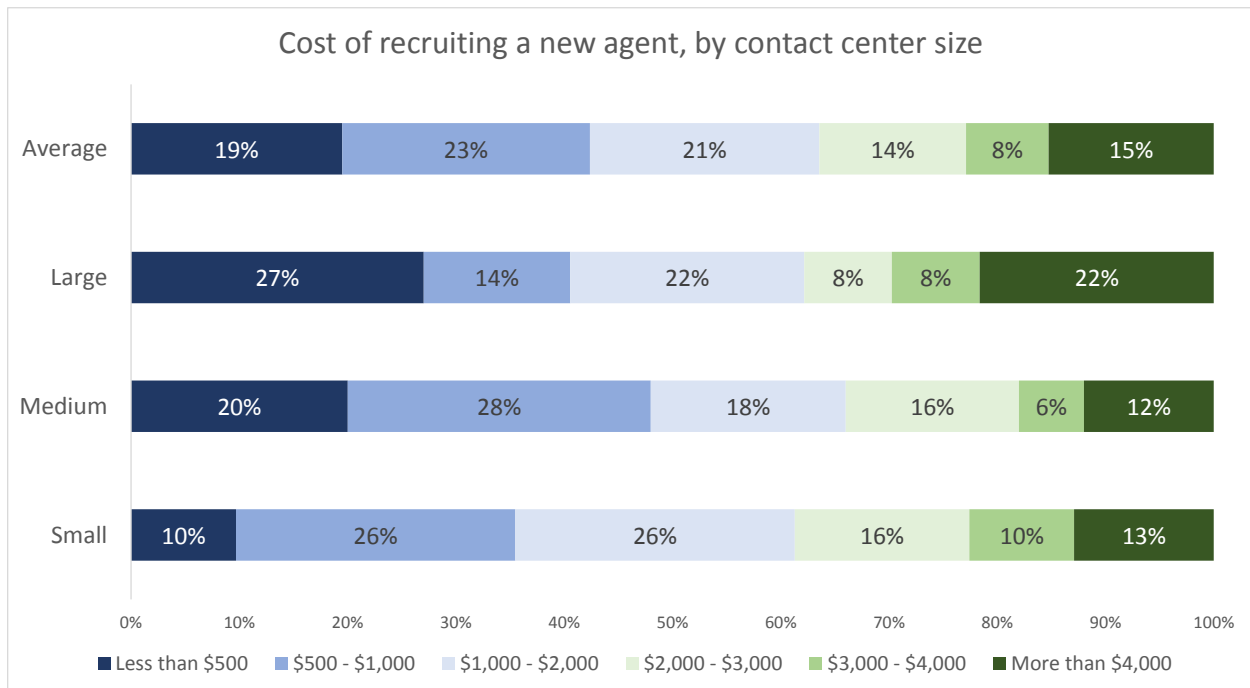
At a contact center activity level, it is still difficult to discern a pattern. While 50% of respondents from sales operations report that they spend less than $1,000 per head on recruitment, there is a further 25% that state that they pay in excess of $4,000.

Figure 148: Cost of recruiting a new agent, by contact center activity

Cost of recruiting a new agent, by contact center activity

Activity	Less than $500	$500 - $1,000	$1,000 - $2,000	$2,000 - $3,000	$3,000 - $4,000	More than $4,000
Average	19%	23%	21%	14%	8%	15%
Service	19%	23%	22%	16%	3%	18%
Mixed	15%	23%	31%	8%	19%	4%
Sales	30%	20%	5%	10%	10%	25%
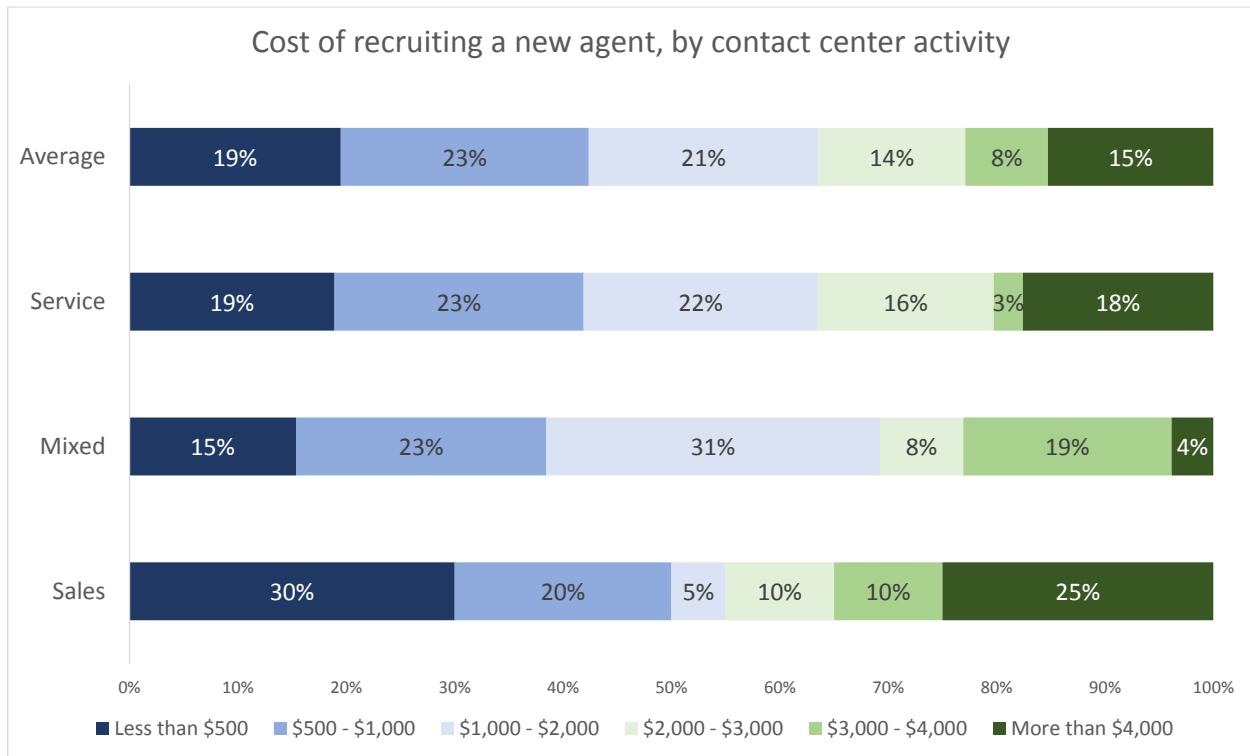
When looking at contact center activity type - inbound, mixed, or outbound - a more definite pattern begins to emerge. 86% of respondents from outbound operations state that they pay less than $1,000 per head on recruitment, with one quarter of inbound respondents saying that they pay in excess of $3,000.

Figure 149: Cost of recruiting a new agent, by contact center activity type

Cost of recruiting a new agent, by contact center activity type

	Less than $500	$500 - $1,000	$1,000 - $2,000	$2,000 - $3,000	$3,000 - $4,000	More than $4,000
Average	19%	23%	21%	14%	7%	16%
Outbound	43%	43%	14%			
Mixed	27%	18%	32%		5%	18%
Inbound	16%	22%	19%	17%	4%	21%
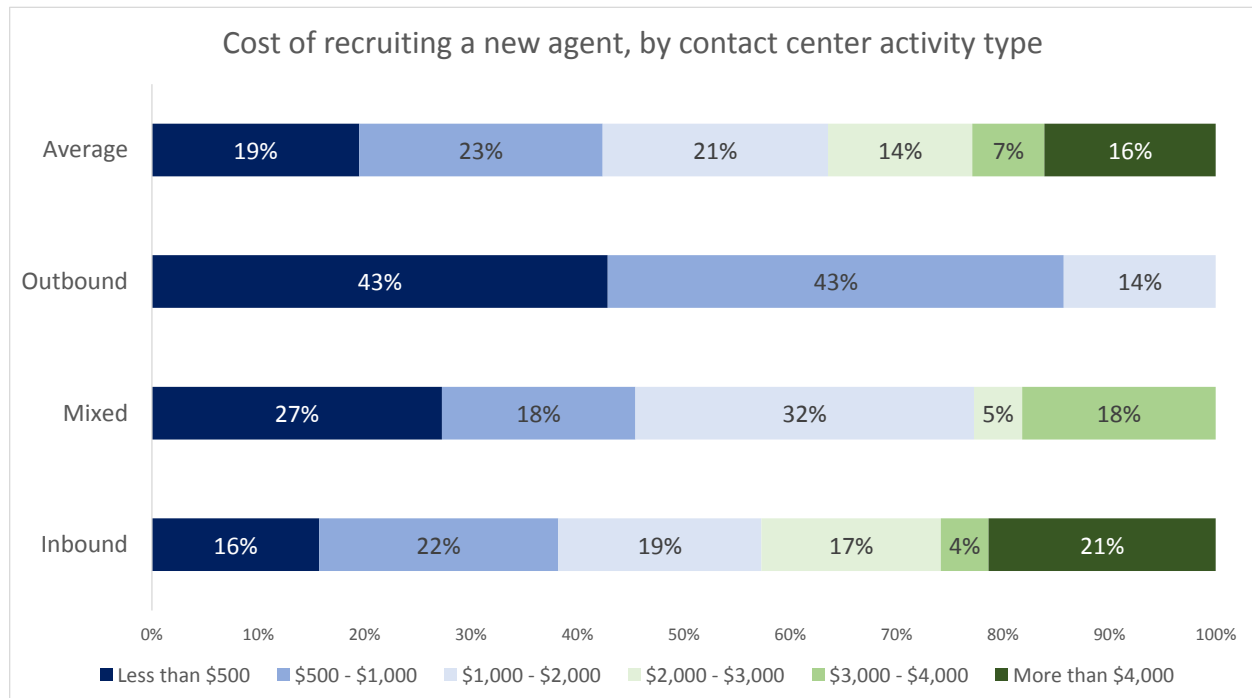
It may seem an odd question to ask "what is the purpose of recruitment?", but it's important to know, as there are two types of recruitment: the replacement of staff who have left (caused by attrition), and new staff positions (caused by contact center growth). In the case of the former, much of this recruitment cost is wasted, as - with the exception of replacing an incompetent or undesirable agent - the contact center is certainly no better off than where it was previously and may now have an inexperienced agent to train up: it is running, simply to stand still.

The finance and insurance sectors believe that they spend the greatest amount of effort on replacing agents who have left, with TMT and services stating that they spend the least this year. In all, 64% of recruitment effort is spent by contact centers just to stay where they are.

25% of respondents stated that **empathy** - the ability to see another's point of view - is the no.1 most important attribute for a contact center agent to have, with a further 29% placing it 2nd or 3rd. This is a characteristic which is hard to learn, and which is ripe for identifying in the recruitment phase through personality testing, for example. Empathy is important for an agent to display in order to make the caller feel that someone is listening to and understanding them, and that they are trying to solve their issue, rather than just seeing the caller as a nuisance. As such, empathy is vital for improving customer satisfaction and loyalty, cross-selling and up-selling.

Figure 150: The most important abilities or characteristics of a successful contact center agent
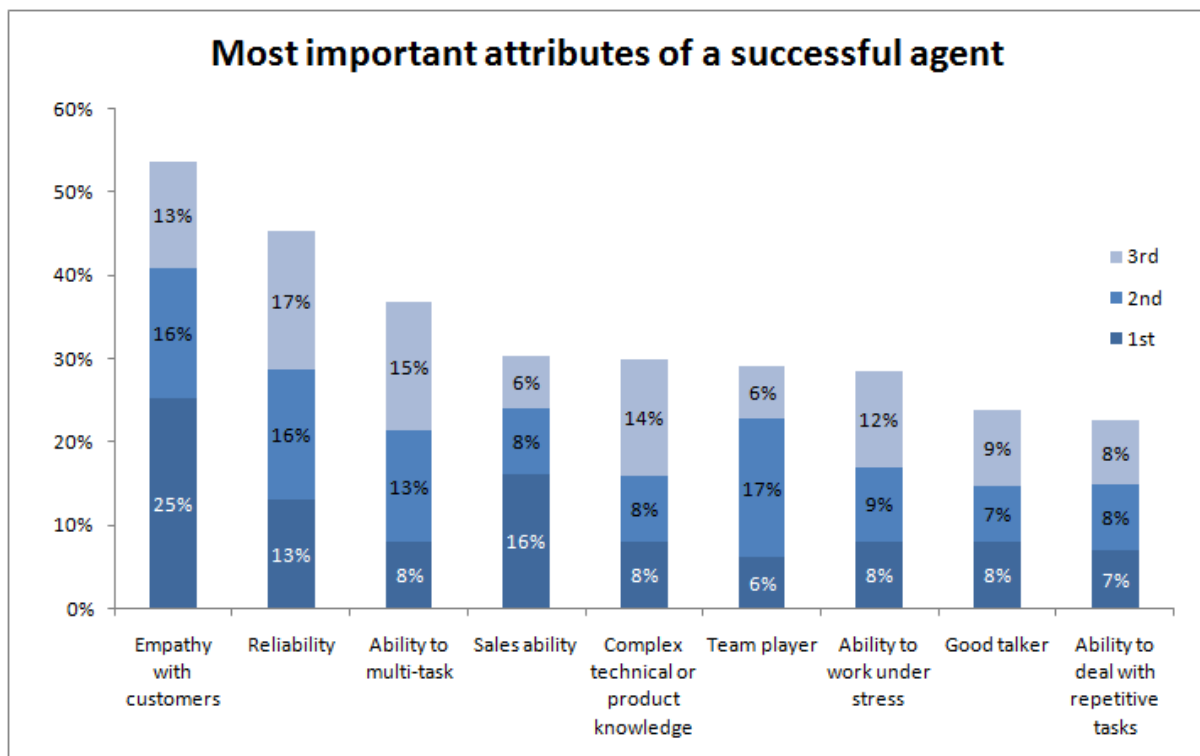
Despite, or perhaps because of, investments in self-service technologies over the years, customer interactions have become more complex, requiring a more advanced skill set beyond reading a script and working a computer. Customers are better informed, are more aware of their choices and therefore demand a higher level of service than ever before. Job candidates who demonstrate excellent communication, language and critical thinking skills are those who are more likely to deliver an exceptional customer experience.

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The attribute of **reliability** appears second most-often in the top 3 agent requirements. Reliable agents have low absence rates and keep working away at their tasks, a trait which the process-focused contact center prizes highly.

Amongst other traits, **sales ability** of course was rated no.1 in most sales-focused environments, and the **ability to multi-task** was often placed no.2 or 3.

Perhaps surprisingly, 29% of respondents stated that one of their top 3 requirements was for the agent to be a **team player**. Making and answering calls is by its nature, a solitary role, albeit one usually surrounded by other people, but the impact upon morale, and thus performance that a team player can have is prized highly.

Being a **good talker**, the **ability to deal with repetitive tasks** or **stressful working environments** did not feature particularly highly with most respondents, all factors which the layman might think were vital to contact center agents.

The picture painted of key attributes of successful contact center agents is one of a versatile, reliable good listener - nothing flashy or highly-strung, nor a simple automaton which is happy to plod on doing the same thing for hours. It should also be noted that the increasing volumes of relatively simple interactions which are being handled by self-service, whether through the phone or the web, means that the average call that is handled by agents is getting progressively more difficult and complex.

SALARIES

New agent salaries have decreased by a mean average of 4.9% in the past twelve months, but this should be viewed in the perspective of a sharp increase of over 9% last year, which is almost certainly a statistical blip caused by a tranche of high-paying organizations taking part in that research.

Contact center manager roles appear to have dipped significantly this year, but again, this should be put in the context of a double-digit percentage increase that was reported last year, but which was unlikely to have been the case industry-wide. We believe that the statistics below probably provide a truer representation of the reality of the industry as it stands today.

Figure 151: Contact center salaries and changes

Role	2014 mean average salary	Change 2013-14
New agent	$27,542	-4.9%
Experienced agent	$34,777	0.2%
Team leader / supervisor	$43,977	-4.1%
Contact center manager	$67,580	-6.9%

As different businesses respond to this research survey each year, an extra question is asked about how that particular business's salaries have changed, allowing us to state with some confidence whether the industry-wide salary changes is actually caused by a structural alteration in the industry, or whether a greater sample of top-paying companies have taken part. Last year's big jump seems mostly to be down to the latter option, as only 7% of those respondents reported agent salary increases over 5% p.a.

This is further borne out by the following chart, which shows that this year's respondents tended to grow the average salaries healthily, if not spectacularly: if it were the case that salaries had indeed dropped by 5% or 6% in the past 12 months, this chart would indicate that.

Figure 152: Changes in contact center agent salaries in past 12 months

Change in contact center agent salaries in the past 12 months

Have decreased by less than 5%
1%

Have decreased by more than 5%
2%

Have increased by more than 5%
13%

No change
40%

Have increased by less than 5%
44%
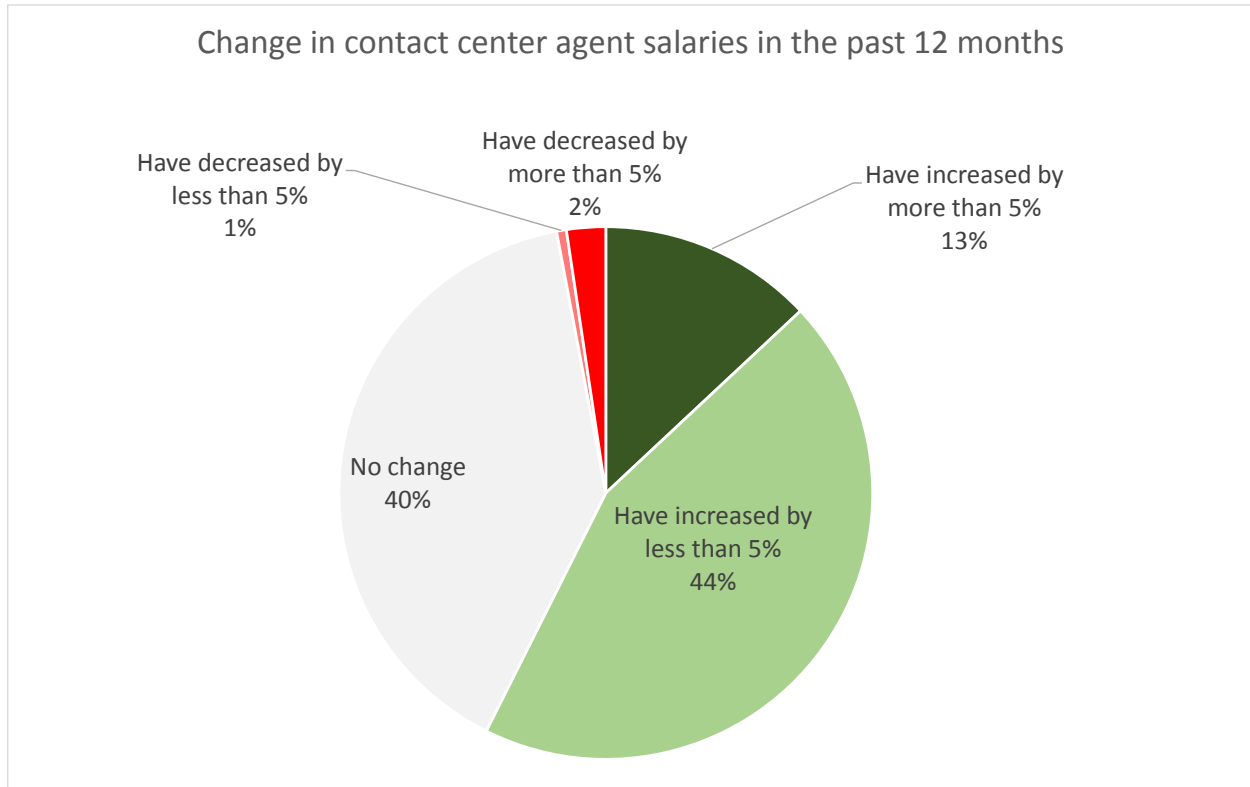
More detailed analysis of salaries and bonuses, including historical patterns and segmentation by vertical market, contact center size and activity type is included in "The US Contact Center HR and Operational Benchmarking Report (2014)".

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Organizations able to help with HR Management:

Calabrio powerfully redefines workforce management with software
that is intuitive, flexible and hassle-free.

Enghouse Interactive: Extend agent workspace beyond the traditional call center
and into the back office.

Genesys is a leading provider of multi-channel customer experience and contact center solutions.

HireIQ's solutions enable customer service organizations improve their agent retention and center performance through better, targeted hiring: read our case studies here.
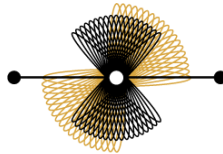
At Interactive Intelligence, it's what we do.

OpenSpan provides activity intelligence and desktop automation solutions that improve performance, drive revenue and increase efficiencies in customer-facing business units across the enterprise.

The Oracle Taleo Cloud Service enables enterprises and midsize businesses to recruit top talent, align that talent to key goals, manage performance, develop and compensate top performers, and turn today's best performers into tomorrow's leaders. Learn more.

The Clarity by Uptivity workforce management solution enables easy, efficient scheduling of agents with the right skills at the right time.

"When the contact center is meeting its customer service goals, the benefits are seen throughout the contact center: agent morale is up, while vacancy is down, and instead of hearing complaints about the hold time, agents are hearing, 'Thank you.'" - Virtual Hold Technology customer California Public Employees' Retirement System (CalPERS).

VoltDelta OnDemand delivers exceptional customer care with cloud-based multi-channel contact center solutions.

STRATEGIC DIRECTIONS

Much of this report is about how contact centers are performing today, but this final chapter looks at the strategic decisions and issues that contact centers face.

Traditionally, HR issues such as attrition have been what make contact center managers most concerned, but the past years have seen a growing feeling that the technology in place is letting the operation down, or at least, preventing it moving forward to the extent that it needs. Contact centers are also aware that they have to modernize their processes as well as the technology, but as ever, cost, time and the need to keep the operation running smoothly make this sort of strategic thinking very difficult, especially in a situation where many contact centers still do not have much in the way of a champion at the higher levels of the business.

The need to measure and improve customer satisfaction, and its impact upon profitability, has become an obsession throughout the industry, which is positive for customers and businesses. A recent phenomenon has been the explosive growth in multichannel communications, and the dawning realization the customer contact of the future will not exist in a siloed environment, but as part of an omnichannel strategy.

"Adding additional service channels beyond voice-such as email, chat, mobile and social-is a huge driver for cloud adoption," notes Mariann McDonagh, inContact CMO. "As customers demand more convenient and more personalized service across many different channels, companies can leverage the agility and flexibility of the cloud to differentiate the customer experience."

The industry is still growing in terms of increased volumes of interactions and even headcount, and more needs to be done to increase the effectiveness of agents. Self-service levels have been low across much of the industry, but more is now being done via the web and mobile channels (as well as through new technologies such as visual IVR) to take low-value work away from agents, freeing them up to do more profitable and difficult work.

For businesses where self-service is not seen as a viable option, great opportunities still exist to trim unnecessary elements of the calls, from identity verification through system navigation to post-call wrap-up: consistently high levels of wrap-up time and non-call time is worrying: often 40% or more of an agent's time is spent doing something other than communicating with customers. Agent desktop optimization - putting the right things on the desktop at the right time in the conversation, without disrupting the underlying system functionality - is gaining in popularity, especially in very large contact centers with multiple, complex processes and legacy systems. Interaction analytics offers businesses a major opportunity to understand why customers are calling, and to gain real business insight that will impact at the heart of the business.

Yet the background against which the technologies and HR issues that contact center management now talks about is that of customer satisfaction and improved customer experience. This is the common ground where senior executives and contact center operations can now meet and discuss how to head in the right direction together. Much of what respondents to this survey have talked about is colored by improving customer satisfaction, the almost-certain driver of where the contact center industry is headed long-term.
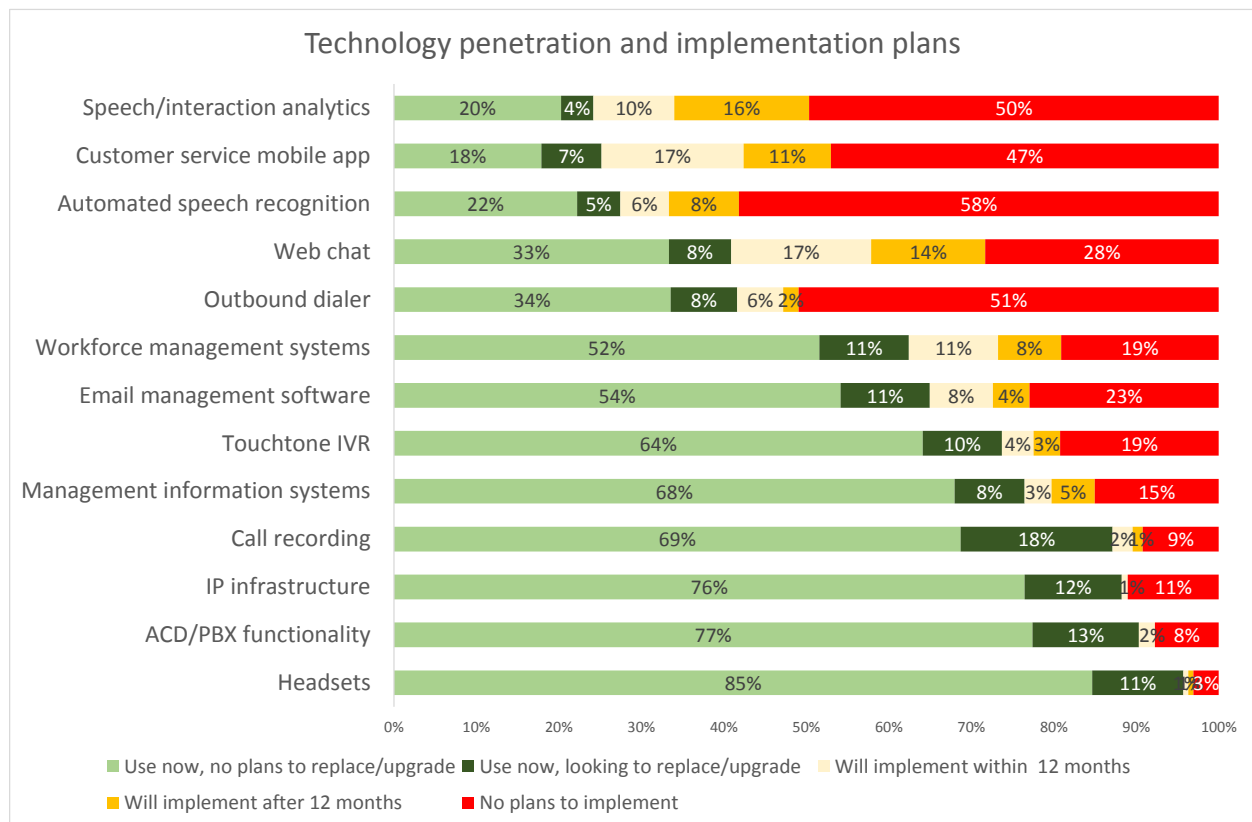
TECHNOLOGY USAGE AND PLANS

The following chart shows respondents' current and future use of specific contact center solutions. Telephony infrastructure and call recording systems are the most likely to be upgraded or replaced in the next year.

In terms of new implementations, multimedia in general seems to be a focus, with web chat and mobile customer service being singled-out in the short term, with interaction analytics and workforce management also receiving attention. In the longer-term too, web chat, speech analytics and mobile customer service solutions were seen as likely investments, which is a pattern very similar to last year, perhaps showing that businesses are serious about these solutions.

Figure 153: Technology penetration and implementation plans

Technology penetration and implementation plans

Technology	Use now, no plans to replace/upgrade	Use now, looking to replace/upgrade	Will implement within 12 months	Will implement after 12 months	No plans to implement
Speech/interaction analytics	20%	4%	10%	16%	50%
Customer service mobile app	18%	7%	17%	11%	47%
Automated speech recognition	22%	5%	6%	8%	58%
Web chat	33%	8%	17%	14%	28%
Outbound dialer	34%	8%	6%	2%	51%
Workforce management systems	52%	11%	11%	8%	19%
Email management software	54%	11%	8%	4%	23%
Touchtone IVR	64%	10%	4%	3%	19%
Management information systems	68%	8%	3%	5%	15%
Call recording	69%	18%	2%	1%	9%
IP infrastructure	76%	12%	1%		11%
ACD/PBX functionality	77%	13%	2%		8%
Headsets	85%	11%		3%	

Recognizing that the reality of contact center investment does not always match the intention shown in the previous chart, the following gives closer analysis of the IT investment priorities of respondents over the next two years. Viewed together, these data are likely to give an accurate picture of likely investment.

Analyzing the areas that contact centers are focusing their IT expenditure upon is quite complicated, as there is rarely exact concurrence or use of the same phrases, so similar types of expenditure have been grouped together.

Figure 154: Most important areas of IT expenditure in the next two years

Expenditure type	1st	2nd	3rd
CRM	14%	7%	2%
IP	10%	6%	4%
Workforce Management Systems	8%	12%	4%
Multichannel	6%	12%	5%
Self-service	6%	3%	5%
ACD / Routing	6%	3%	4%
Interaction Analytics	5%	9%	9%
Mobile	5%	7%	4%
Hardware upgrade / replacement	4%	4%	2%
Social	4%	3%	2%
IVR / Speech Recognition	4%	2%	4%
Business Intelligence/ MIS	4%	1%	7%
Homeworking / Virtual Contact Centers	4%	1%	2%
Back Office	4%	0%	4%
Chat	3%	6%	7%
Outsourcing / Decreasing Headcount	3%	3%	0%
Headcount	3%	0%	5%
Knowledge base	3%	0%	2%
Desktop	1%	3%	7%
CTI	1%	1%	4%
Training	1%	1%	4%
Cloud	1%	1%	2%
Dialer	1%	1%	0%
PCI Compliance	1%	0%	0%
Interaction Recording / QA	0%	9%	12%
Customer Satisfaction Monitoring	0%	3%	4%

CRM (including improvement to the core customer management systems as well as company-wide CRM) is in no.1 position once again this year, although only 23% of respondents put it as one of their top 3 priorities compared to 46% last year, indicating greater interest in a wider set of solutions.

As has been the case for many years now, moving to an IP environment has been the one of the most popular priorities amongst respondents, although as with CRM, far lower proportion of respondents put this in their top three (20%, compared to 44% in 2013), supporting the findings of the 'IP & Convergence' chapter that IP infrastructure is commonplace now.

Workforce management, especially in smaller contact centers, is strong this year, being a top 3 priority for 24% of respondents as the need for multichannel scheduling and forecasting increases.

"Moving contact center and workforce optimization systems to a complete cloud solution is a game-changer because it makes very sophisticated tools more accessible and affordable to contact centers of all sizes," Mariann McDonagh said. "One exciting new technology that is available in the cloud is speech analytics which can be used to more clearly and quickly identify the root cause of a customer service problem and take action. No longer having to do needle-in-the-haystack-type search to pinpoint the root cause of a customer issue frees up resources, time and capital. It's not guesswork anymore."

The movement to support multimedia - perhaps made more urgent by the enthusiasm for social media and mobile management (both of which have increased their priority amongst respondents in 2014) - looks likely to attract funding, with very significant support as a level 2 or 3 priority. Web chat also maintains its strong position.

Self-service again maintains its importance in this year's survey, although it is part of a larger omnichannel strategy, rather than a standalone solution.

Interaction analytics has maintained its level of interest this year, with 23% of respondents making this a top 3 priority, building on its strong showing in 2013 (22%).

It is also worth noting that although no respondent puts interaction recording/quality assurance as the number one priority, 21% see this as either the second or third priority for investment within the next two years.

Great Wolf Resorts

Increasing Customer Satisfaction and Reducing Agent Labor Costs With inContact

As the premier family entertainment brand and an icon in the hospitality industry, Great Wolf Resorts is focused on "creating family traditions, one family at a time." Its 12 resorts raise the industry standard by combining quality accommodations with the finest in family recreational activities, all under one roof. The themed vacation packages provide more than 2.5 million guests each year with the ability to customize their experience to enjoy specialty restaurants, several recreational activities, spas and their well-known indoor waterparks.

With its centralized contact center, Great Wolf Resorts has been taking advantage of inContact's cloud technology since September 2012. The inContact solution enables Great Wolf Resorts to:

• Scale procedures for growth from 75 contact center agents to over 150 agents at peak

• Standardize customer feedback mechanisms and increase CSAT scores to 89%

• Project outcomes and make decisions by implementing a simulated contact center environment

• Provide a preferred work environment and support agent growth

• Manage over one million calls and 250,000 web chats each year

• Generate $100 million dollars annually through its contact center

Forecasting for Success

With the adoption of inContact, Great Wolf Resorts successfully reduced agent labor costs and have also experienced a 10-second decrease in average handle time. In order to predict the impact of inContact and demonstrate future success with Workforce Management (WFM), LeMere's team set up a WFM Lab that acted as a mock contact center. In the lab, they applied a variety of scenarios and tested multiple full-time/part-time shift block combinations. The Great Wolf Resorts team wanted to know how each decision would impact their agent labor costs, efficiency and revenue.

With inContact fully implemented, LeMere's Workforce Manager, Nick Cooper, is able to test new ideas in the WFM Lab. He examines how a newly developed staffing model runs in the lab for a week or two. Then, only when he is happy with the result and secure in its impact on the business does the team consider it for production. LeMere projects that Great Wolf Resorts can save upwards of 15% in agent labor costs with some of the workforce modeling.

Great Wolf Resorts.

"We wanted to get up and running at a steady state, but we also needed to know what made the most sense for our business. It took time, but it was worth it. We were able to provide real examples to senior leadership and say, 'In this scenario, we will save $5,000 per week.' That's pretty powerful."

— Jim LeMere
Director of the Customer
Contact Center
Great Wolf Resorts

PRESSING MANAGERIAL ISSUES

Survey respondents were asked to rank nine managerial issues in the order of their importance to them. Improving customer satisfaction was rated in the top 3 by 60% of respondents, with increasing revenues and achieving set metrics not far behind. Decreasing costs was found in fourth place, with staff attrition and maintaining headcount being seen as relatively unimportant by most respondents, compared to the other issues that they have to face in any case.

Surprisingly, improving first call resolution rates was seen to be the top priority for only 5% of respondents, with a further 26% putting it in second or third place: almost the same proportion of respondents however placed this as one of their bottom 3 priorities, which is not a particularly far-sighted attitude to take.

Figure 155: Most pressing managerial issues

Most pressing managerial issues
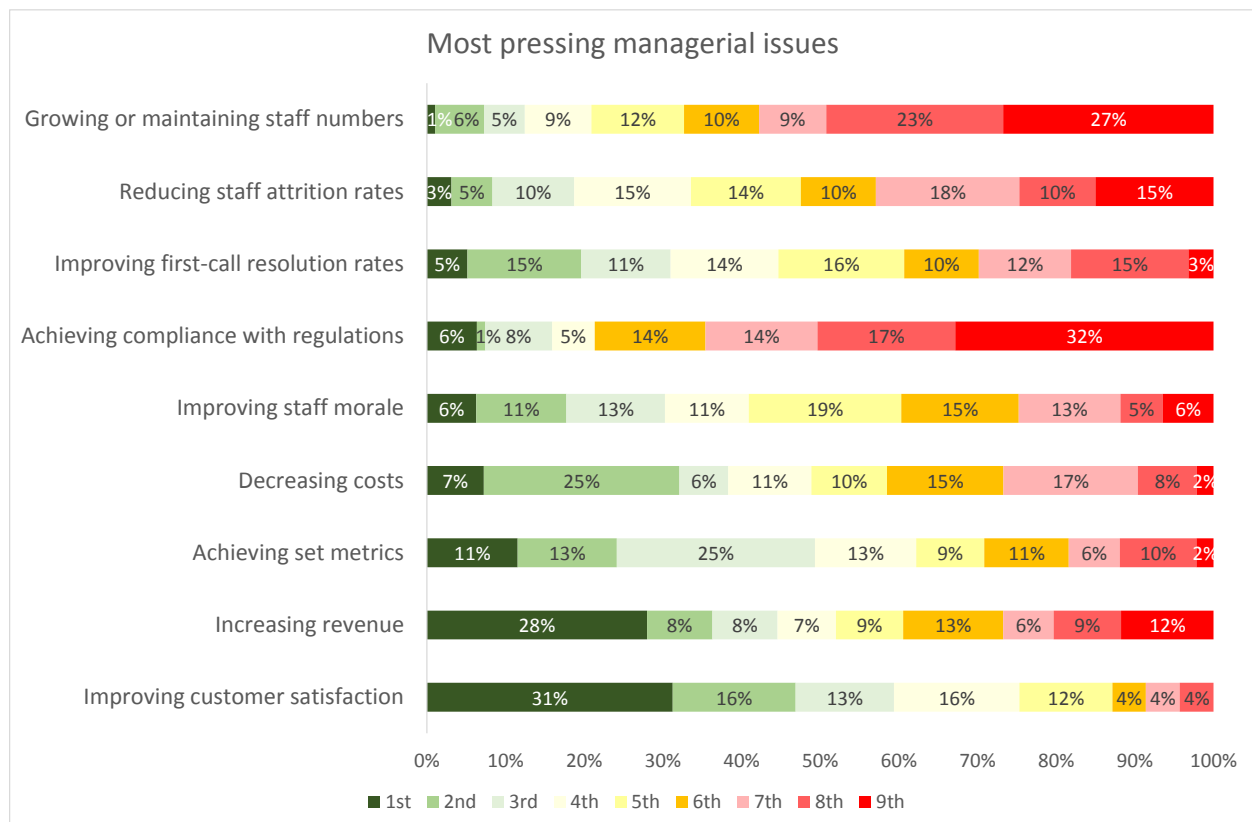
INDUSTRY TRENDS

Respondents were asked how important specific industry trends would be to them in the future. The focus on customer experience improvement, as in previous years, rates the highest by a considerable distance. This strong showing perhaps indicates that many other issues, concerns and trends within the contact center are being viewed in the light of customer satisfaction. For example, "I'm concerned about contact center productivity" really means "I'm concerned about how contact center productivity is impacting upon our customers' satisfaction".

There is a wide and growing acknowledgment that business processes have to change, and the work that the contact center does will need to be more closely coupled with the back office and also the wider business. This was felt especially strongly by the respondents for which the contact center is only a link in an upstream and downstream supply and delivery chain, such as manufacturing and retail & distribution.

Improving the desktop to make it easier for agents to do their job was rated as important especially by finance respondents. These agents often have to deal with multiple systems within a call, and also often have long wrap-up times as well as the excessive training requirements caused by dealing with labyrinthine systems.

It is very noticeable that issues around compliance with legal regulations maintain importance, with 22% of respondents scoring this as a maximum. As we would expect, finance and insurance respondents are very focused on compliance, as is the public sector.

Web and mobile self-service makes a real jump in 2014, being placed as the fifth most important trend, after multichannel, which has also risen by two places this year. The retail sector is particularly focused on these trends, as they offer new opportunities for new sales, cross-selling and up-selling.

Social media dropped from fourth to seventh place in the list of important industry trends this year, although retailers again are keen to include this is part of their omnichannel customer contact mix.

Retailers, finance and insurance respondents are also very enthusiastic about telephony self-service, which will be given a shot in the arm by the advent of visual IVR for smartphones.

Figure 156: The importance of industry trends, by vertical market

Vertical market	EL	FS	INS	MAN	MED	OS	PS	RD	SVCS	TMT	Average	% scoring this as 10/10
Customer experience improvement	9.2	8.3	9.3	9.7	8.5	8.0	9.2	10.0	8.3	8.9	**8.8**	52%
Business process optimization	8.0	7.8	8.2	9.0	6.9	6.5	8.5	9.0	6.9	7.1	**7.5**	23%
Agent desktop optimization	7.6	8.0	6.8	6.7	6.6	5.3	6.7	7.3	6.6	7.1	**6.8**	19%
Multichannel	6.0	7.0	6.0	6.6	6.5	6.3	6.8	9.0	6.5	6.7	**6.6**	17%
Web/mobile self-service	4.6	7.5	7.8	5.1	5.6	4.5	7.8	8.7	6.5	5.9	**6.2**	17%
Effect of legislation/compliance	5.5	7.3	8.2	5.4	7.8	5.4	7.5	4.7	5.8	4.0	**6.0**	22%
Social media	7.0	5.9	6.2	5.4	5.3	6.4	5.0	8.3	6.5	5.7	**6.0**	13%
IP/unified communications	6.8	7.3	4.8	3.4	6.2	5.5	6.4	6.0	6.2	6.4	**6.0**	11%
Telephony self-service	3.4	8.0	7.3	3.4	6.0	4.1	6.5	9.7	4.4	5.8	**5.6**	10%
Cloud/hosted solutions	5.4	4.6	3.2	4.0	4.5	4.9	6.0	7.3	5.8	5.5	**5.1**	8%
Site consolidation/virtual contact centers	1.7	3.2	5.8	2.9	5.0	4.8	3.3	9.0	5.3	5.3	**4.7**	9%
Domestic outsourcing	1.7	3.2	2.5	2.3	3.7	6.0	3.5	4.3	3.0	2.7	**3.3**	8%
Offshoring	1.0	1.9	1.3	1.1	1.6	2.4	1.5	1.0	3.1	2.8	**2.1**	4%

Looking at data segmented by contact center size, telephony self-service is - as would be expected - more positively thought about by large operations with a potentially greater cost saving, with the same logic applying to mobile and web self-service functionality as well.

Offshoring and domestic outsourcing are also of far more importance to large operations, which also believe that a multichannel in general and social media in particular are significant trends for their operations.

**Figure 157: The importance of industry trends, by contact center size**

Contact center size	Small	Medium	Large	Average	% scoring this as 10/10
Customer experience improvement	8.8	9.3	7.7	**8.8**	52%
Business process optimization	7.5	7.8	6.8	**7.5**	23%
Agent desktop optimization	6.3	7.6	6.3	**6.8**	19%
Multichannel	6.5	6.4	7.1	**6.6**	17%
Web/mobile self-service	6.2	6.1	7.0	**6.2**	17%
Effect of legislation/compliance	5.6	6.1	6.9	**6.0**	22%
Social media	5.4	6.0	7.0	**6.0**	13%
IP/unified communications	5.8	6.2	6.0	**6.0**	11%
Telephony self-service	5.3	5.4	6.7	**5.6**	10%
Cloud/hosted solutions	5.4	4.8	5.1	**5.1**	8%
Site consolidation/virtual contact centers	3.8	5.5	4.7	**4.7**	9%
Domestic outsourcing	2.5	2.7	5.4	**3.3**	8%
Offshoring	1.6	1.9	3.4	**2.1**	4%

THE CONTACT CENTER AS A STRATEGIC ASSET

There is a roughly 50-50 split between whether contact centers are seen as strategic assets or operational cost centers by the organization's executives, which goes some way to explaining why so many operations are not asked to share their insight with the wider business.

Few insurance respondents feel they are seen as strategic, whereas those in the outsourcing and retail sectors are more likely to do so.

Figure 158: Does your executive board see the contact center as a strategic asset or operational cost center? (by vertical market)

Does your executive board see the contact centre as a strategic asset or operational cost centre? (by vertical market)
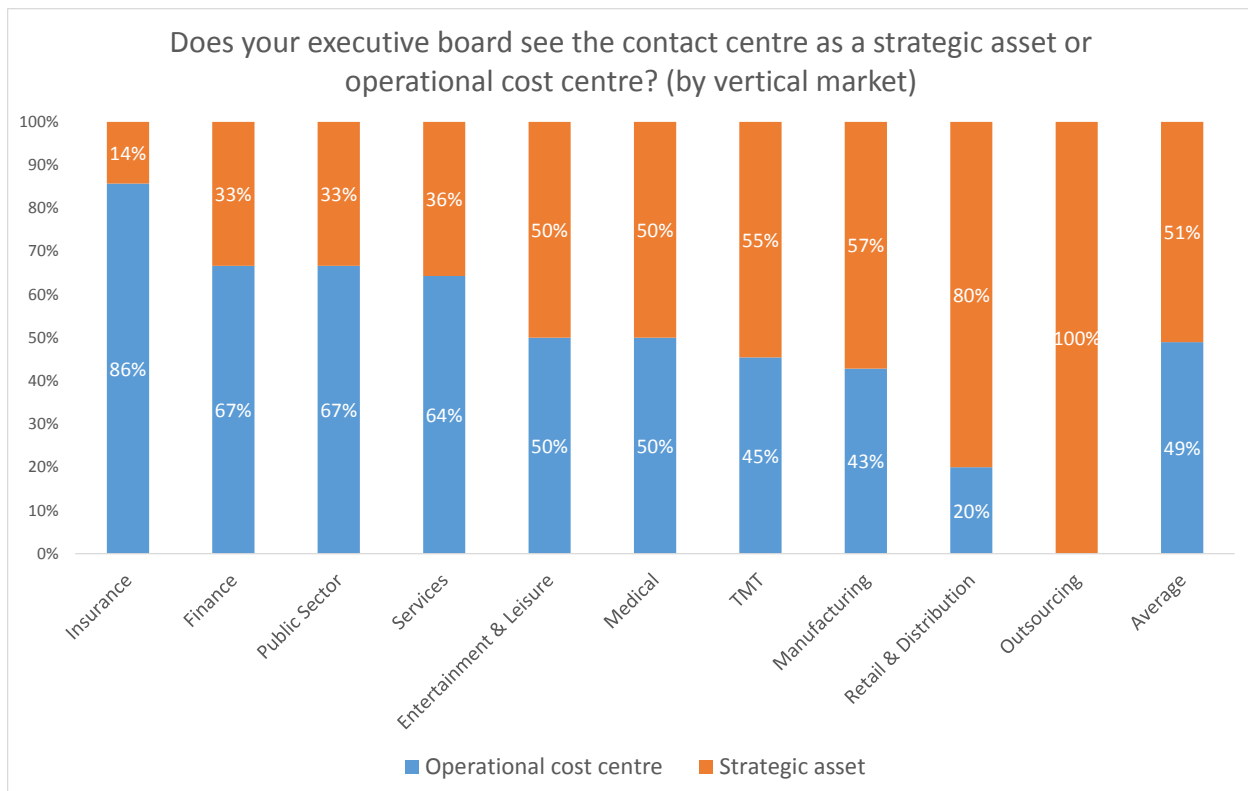
Finally in this report, we look at how the contact center is encouraged and supported to provide actionable insight to departments or functions elsewhere in the organization. The majority of respondents believe that their contact centers give some insight to other areas of the business, although there are a substantial proportion of businesses which do not learn at all from the customer comments that are given directly to their front-line staff, which seems unbelievable.

"The new buzz in business is about service-level differentiation - that is, the practice of delivering a higher level of service to high-value customers," Mariann McDonagh said. "Cultivating high-value customers is important because they are the most likely to drive growth, both through their own purchases and through referrals of friends and associates. The contact center will be at the heart of that working with marketing and sales to identify which customers need to be treated differently, to determine how the customer service process needs to be personalized, and then use the cloud to optimize the service experience and simplify day-to-day call center operations."

For many organizations, the contact center is the place where the customer meets the business and can tell them just what is really happening. Solutions such as interaction analytics are adding to the actionable value of these conversations, but it should be the case that 100% of businesses are set up to learn what their customers think, and how they can improve.

Figure 159: Does your contact center provide structured and actionable insight to the wider business?

Feedback process	% of respondents using this
Website errors, anomalies and improvements	67%
Feedback to your product development team, based on customer comments	59%
Broken or sub optimal processes outside the contact center	55%
Feedback about your marketing campaigns	47%

Organizations able to help with Strategic Directions:

Calabrio powerfully redefines workforce management with software
that is intuitive, flexible and hassle-free.

Enghouse Interactive: Flexible deployment model, improved operation performance,
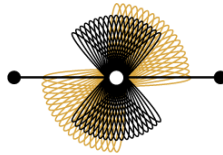and lower total cost of operations

Genesys is a leading provider of multi-channel customer experience and contact center solutions.

HireIQ's solutions enable customer service organizations improve their agent retention and center performance through better, targeted hiring: read our case studies here.

At Interactive Intelligence, it's what we do.

OpenSpan provides activity intelligence and desktop automation solutions that improve performance, drive revenue and increase efficiencies in customer-facing business units across the enterprise.

uptivity

Uptivity Discover Suite contact center workforce optimization solution delivers exactly what clients need with unparalleled service at lower total cost of ownership.

vht
virtual hold technology

"Quality in a service or product is not what you put into it - it is what the client or customer gets out of it" - Peter Drucker

VoltDelta
CONNECTING PEOPLE & INFORMATION

VoltDelta OnDemand delivers exceptional customer care with cloud-based multi-channel contact center solutions.

ContactBabel is the contact center industry expert. If you have a question about how the industry works, or where it's heading, the chances are we have the answer.

The coverage provided by our massive and ongoing primary research projects is matched by our experience analyzing the contact center industry. We understand how technology, people and process best fit together, and how they will work collectively in the future.

We help the biggest and most successful vendors develop their contact center strategies and talk to the right prospects. We have shown the UK government how the global contact center industry will develop and change. We help contact centers compare themselves to their closest competitors so they can understand what they are doing well and what needs to improve.

If you have a question about your company's place in the contact center industry, perhaps we can help you.

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