



# The Inner Circle Guide to First-Contact Resolution

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“The Inner Circle Guide to First-Contact Resolution (UK edition)

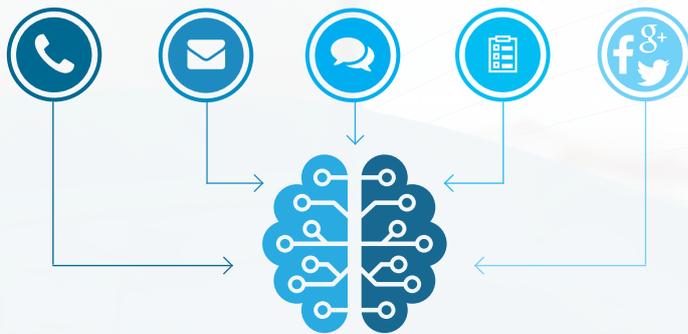
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A large version of the CallMiner logo, featuring the blue speech bubble icon and the word "CallMiner" in a blue sans-serif font with a registered trademark symbol.

CallMiner helps businesses and organisations improve customer experience and contact centre performance through key business intelligence by automating their ability to listen to every customer interaction. CallMiner's platform, Eureka, is a market leading cloud-based speech and customer engagement analytics solution that automatically analyses contacts across all communication channels: calls, chat, email, and social.

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## INTRODUCTION

The Inner Circle Guides are a series of analyst reports investigating key customer contact solutions. The Guides aim to give a detailed and definitive view of the reality of the implementing and using these technologies, an appraisal of the vendors and products available and a view on what the future holds.

The Inner Circle Guides are free of charge to readers. Research and analysis costs are borne by sponsors - solution providers in the specific area of study - whose advertisements, case studies and thought leadership pieces are included within these Guides.

Other subjects include The Inner Circle Guides to:

- AI, Chatbots & Machine Learning
- AI-Enabled Self-Service
- Cloud-based Contact Centre Solutions
- Contact Centre Remote Working Solutions
- Fraud Reduction & PCI DSS Compliance
- Interaction Analytics
- Multichannel Workforce Optimisation
- Omnichannel
- Outbound & Call Blending.

These can be downloaded free of charge from [www.contactbabel.com](http://www.contactbabel.com).

Solutions providers have **not** had influence over editorial content or analyst opinion, and readers can be assured of objectivity throughout. Any vendor views are clearly marked as such within the report.

As well as explaining these solutions to the readers, we have also asked the potential users of these solutions whether they have any questions or comments to put directly to the report's sponsors, and we have selected some of the most popular to ask. These branded Q&A elements are distributed throughout the report and give interesting insight into real-life issues.

Please note that statistics within this report refer to the UK industry, unless stated otherwise. There is a version of this report available for download from [www.contactbabel.com](http://www.contactbabel.com) with equivalent US statistics and findings.

## THE IMPORTANCE OF FIRST-CONTACT RESOLUTION: THE 'MIRACLE METRIC'

For most businesses, there is no fixed agreement on what a successful contact centre looks like: even in similar industries, around half of businesses state that a contact centre is a strategic asset, with the other half seeing it as an operational cost centre. Contact centre 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.

Having said that, most of the contact centre world has moved on from the ruthless focus on call throughput and call duration that characterised many operations a decade or more ago. It can be stated with some confidence that first-contact resolution (FCR) is one of the keys to a successful contact centre: while ContactBabel research shows that customer satisfaction rating is the most important metric, the vast majority of survey respondents place first-contact resolution as being one of the top 3 metrics that are most **influential** on customer satisfaction, far more important than any other metric. 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 centre'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 and absence 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: unlike many other metrics, it works for both customer and business – a true 'miracle metric'.

However, 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, particularly as it is as much a measure of the entire business's success rather than just an internal contact centre metric. In addition – as with any single metric – excessive focus on achieving perfection can have a negative impact elsewhere.

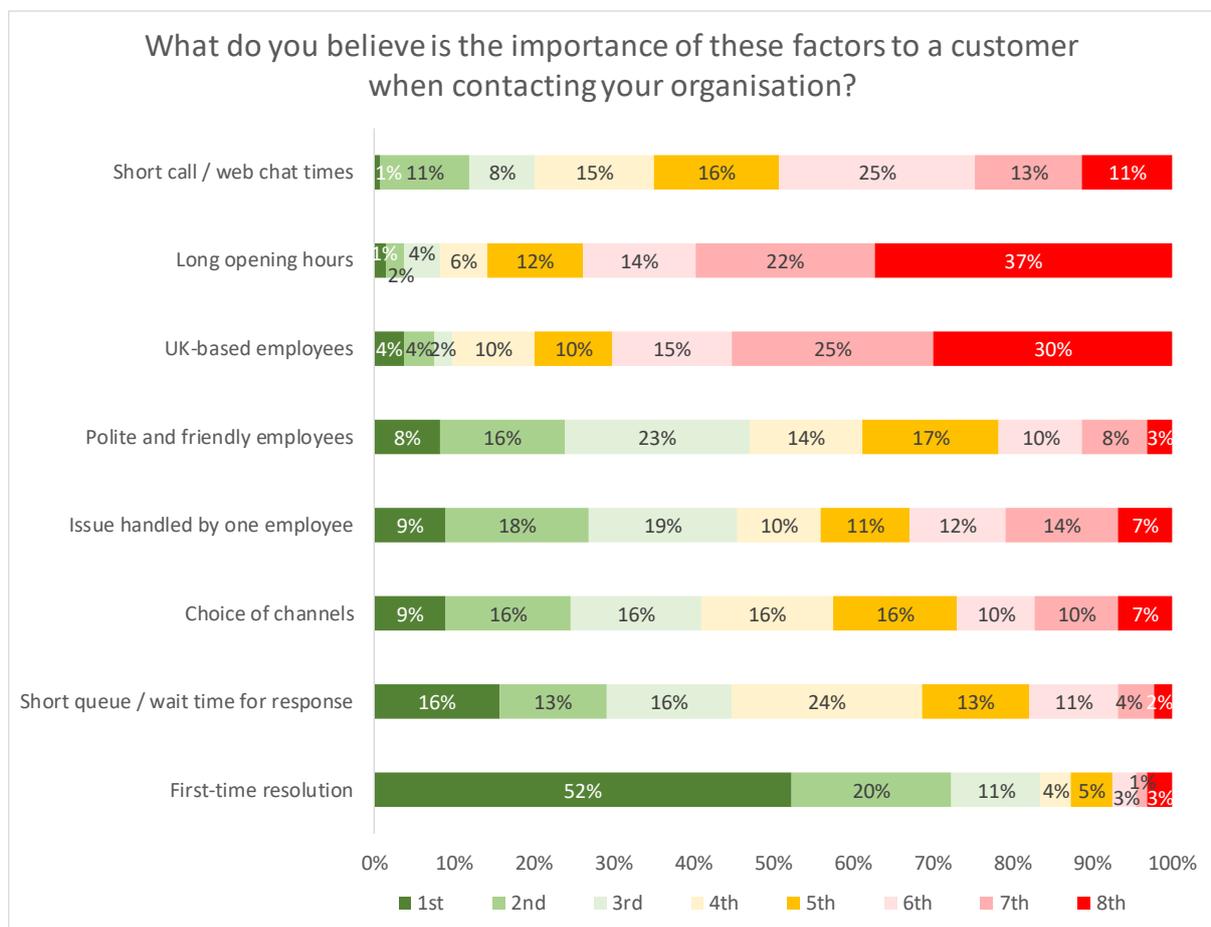
Almost nothing about first-contact resolution is simple, and this report looks at ways to measure and calculate this accurately, how to balance FCR against other business metrics, and ways to improve FCR that help the business and customer at the same time.

## FIRST-CONTACT RESOLUTION: THE VIEW FROM THE BUSINESS

It is difficult for an organisation to be confident about which of the many elements that go towards a great customer experience are actually the most important, and consequently should receive the greatest investment and resource. The following chart looks at the importance of key factors which occur within the customer experience when a customer contacts an organisation, from the perspective of the business and also from the customer.

Organisations were asked to rank by importance eight factors that could be said to impact upon customer experience.

Figure 1: What do you believe is the importance of these factors to a customer when contacting your organisation?



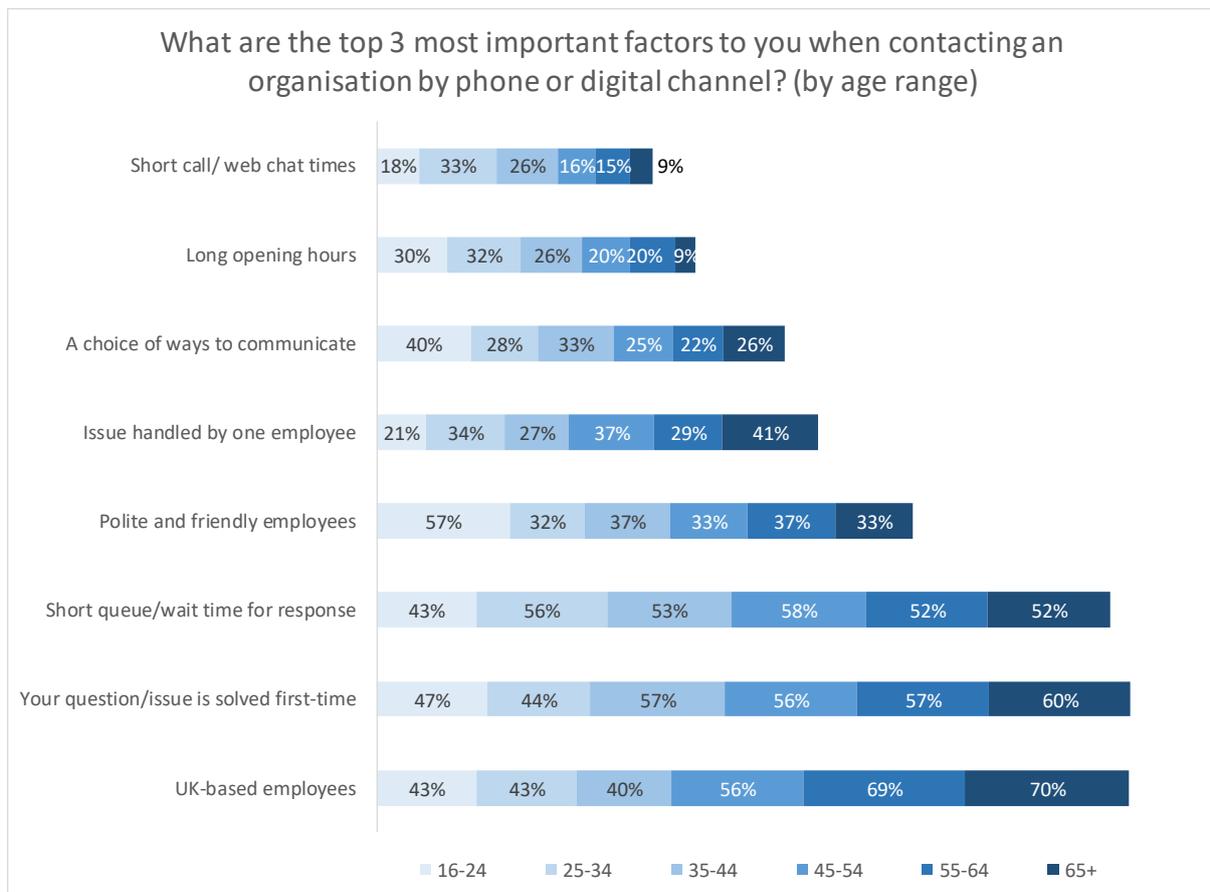
As with many past ContactBabel surveys, first-time resolution was clearly seen as being the most important factor impacting upon customer experience, with 52% of respondents ranking it in first place, and a further 31% placing it within the top three.

FIRST-CONTACT RESOLUTION: THE VIEW FROM THE CUSTOMER

ContactBabel carried out a survey of 1,000 UK consumers, one of the purposes being to identify any differences in opinion between organisations and customers about what were the most important customer experience factors when contacting an organisation.

As such, consumers were asked to state which were the top three most important factors to them when contacting an organisation, with the same factors presented to them that had been offered to organisations within the business survey in the previous chart.

Figure 2: What are the top 3 most important factors to you when contacting an organisation by phone or digital channel? (by age range)



The chart shows the importance of various customer experience factors as an aggregated bar chart, segmented by age so as to show the factors that were of most importance to customers in each age range. Aggregating the results allows an understanding of which factors were placed in the top three overall, while also providing insight on age-related opinion.

For example, 47% of the youngest age group (16 to 24 years old) stated that first-contact resolution was one of their top three most important factors, whereas 60% of the oldest age group (over 65 years old) placed this in their top three. This research shows that both businesses and consumers agree that first-contact resolution is the most important single factor impacting upon customer experience when contacting a business ('first-contact resolution' is joint first with consumers, alongside 'UK-based agents').

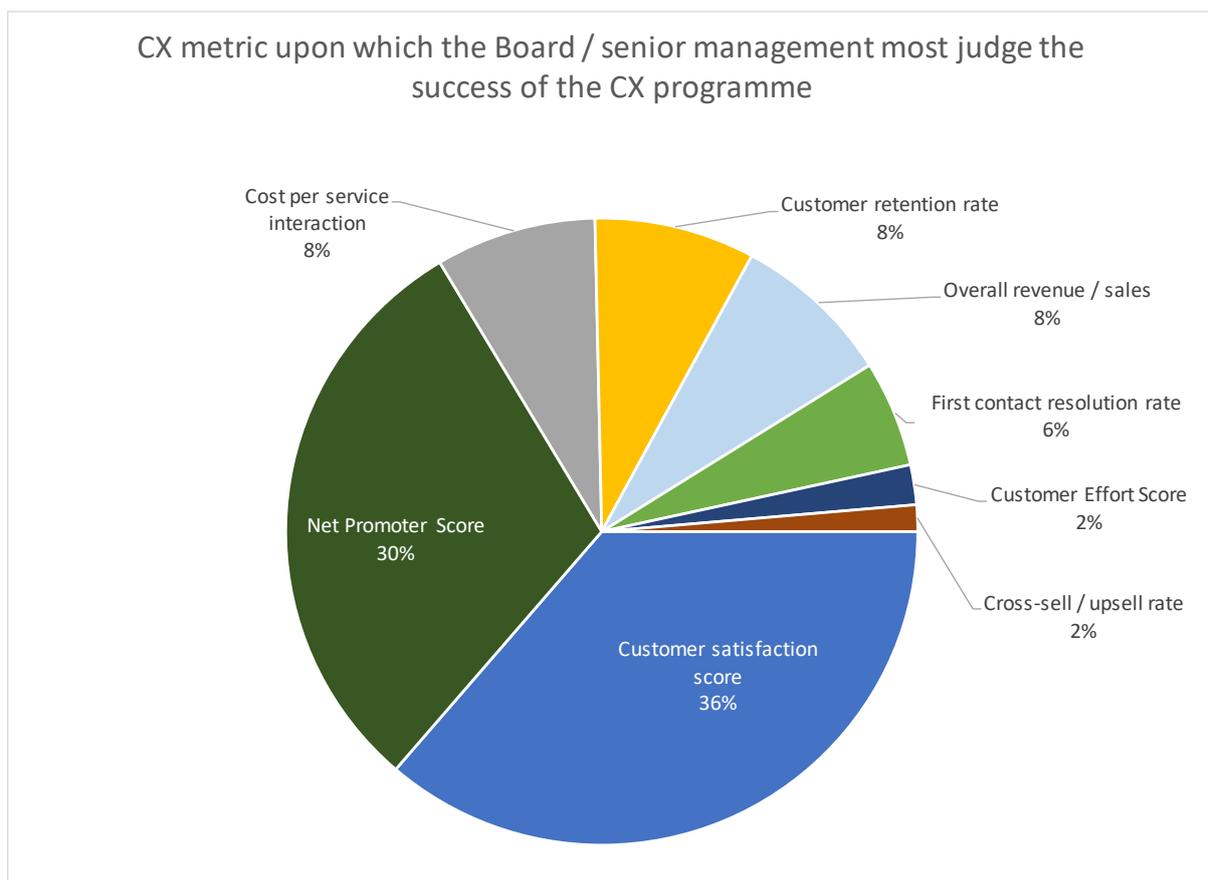
## THE IMPORTANCE OF FIRST-CONTACT RESOLUTION TO SENIOR MANAGEMENT

Business survey respondents were asked to pick a single customer experience metric upon which their board or senior management team most judged the success or otherwise of the customer experience programme.

There was a wide mix of responses, with Net Promoter Score and customer satisfaction score accounting for almost two-thirds of responses.

Of note is the fact that first-contact resolution rate was identified as being the key CX metric for senior management by only 6% of respondents, despite both the customer and business survey results showing clearly that first-contact resolution was the most important factor in influencing customer experience. This suggests that senior management are focusing on the end-product of the CX programme (i.e. customer satisfaction) rather than one of the key drivers of this customer satisfaction (i.e. first-contact resolution).

Figure 3: CX metric upon which the Board / senior management most judge the success of the CX programme

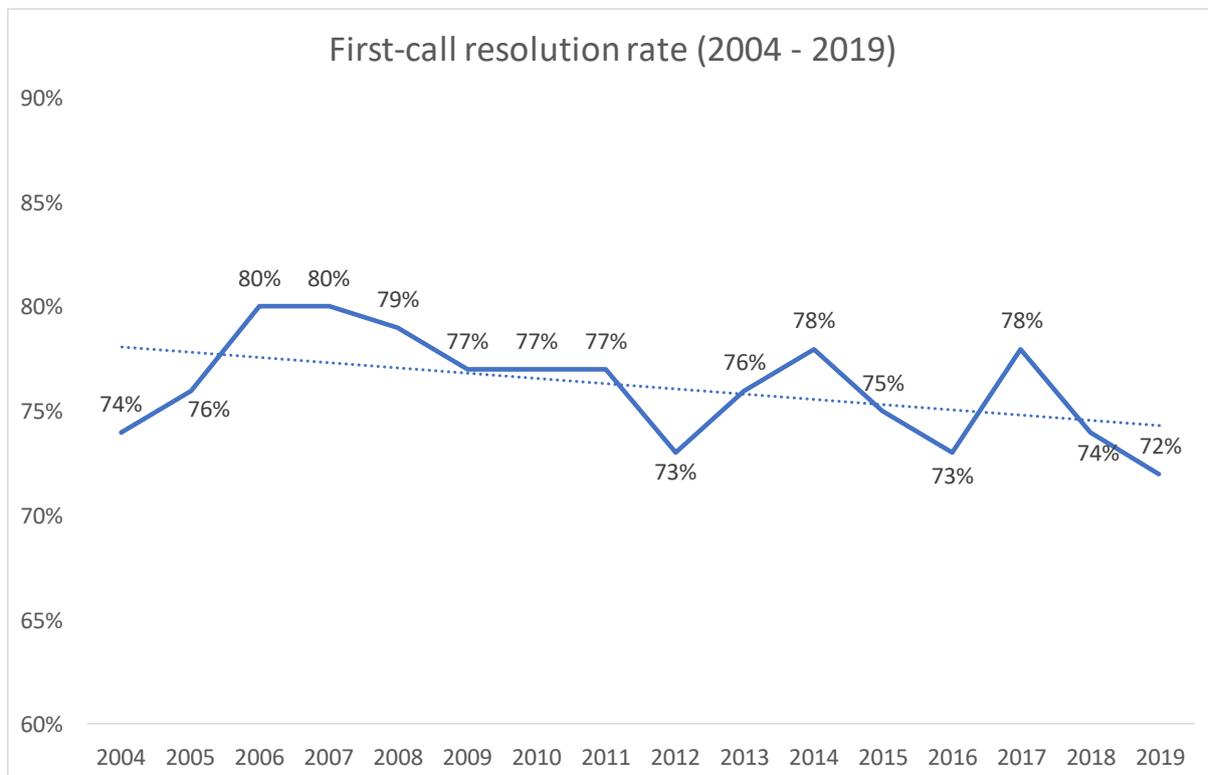


## FIRST-CONTACT RESOLUTION: BENCHMARKS

The chart below shows the changes in FCR for UK contact centres over a period from 2004. While the drops in first-call resolution rate (FCR) in 2012 and 2016 seemed to have been more of a statistical blip than a fundamental change, with the mean average over time being 75-76%, the overall trend line for FCR is actually declining very slightly: as the easier interactions go to self-service (especially online), the contact centre is left with more difficult and varied tasks.

As the contact centre adapts and invests in better ways of handling customer requests, first call resolution rate increases and parity resumes. The exodus of 'easy' work to self-service channels may not be quite balanced by immediate balancing improvements in knowledge sharing and other agent support processes that would mean stable first call resolution rates.

Figure 4: First-call resolution rate (2004 - 2019)



The first-contact resolution rate is an important metric for a business to track, 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 seven or eight years ago, perhaps half of contact centres responding to this survey did not collect FCR performance at all.

However, unlike most contact centre benchmarking metrics, many commentators agree that first-contact resolution is best off measured in isolation i.e. as an internal metric, rather than comparing the FCR of your own operation with others within your sector or of a similar size. This is because not only are all businesses different, but within each individual business are likely to be some departments where FCR varies wildly: technical support for example may have a relatively low FCR, whereas other departments which are handling simple calls are likely to see much higher FCR. It is also important to understand the effect that a good self-service system and effective outbound communication can have on reducing simple contacts: the fewer simple inbound calls received, the less chance there is of the other calls being resolved first-time, due to their increased complexity.

However for the sake of completeness, the table below shows historical FCR rates by vertical market over time.

Figure 5: Mean first-call resolution rate by vertical market (2004-2019)

Year / Vertical	FS	HS	INS	MAN	OS	PS	RD	SVCS	TMT	TT	UT	Mean
2004	82%	-	-	-	75%	72%	74%	-	84%	60%	83%	<b>74%</b>
2005	83%	-	-	-	81%	68%	76%	-	81%	68%	80%	<b>76%</b>
2006	68%	-	-	-	88%	83%	87%	-	71%	86%	81%	<b>80%</b>
2007	87%	-	-	-	84%	77%	72%	-	92%	65%	-	<b>80%</b>
2008	84%	-	-	-	81%	80%	70%	-	87%	84%	-	<b>79%</b>
2009	85%	-	-	-	76%	80%	-	85%	83%	-	83%	<b>77%</b>
2010	61%	-	69%	73%	79%	78%	90%	82%	61%	92%	87%	<b>77%</b>
2011	78%	85%	73%	87%	82%	82%	81%	70%	73%	69%	73%	<b>77%</b>
2012	78%	70%	73%	83%	78%	83%	84%	58%	62%	63%	84%	<b>73%</b>
2013	72%	81%	85%	73%	77%	81%	83%	78%	74%	53%	75%	<b>76%</b>
2014	82%	80%	73%	83%	82%	80%	86%	78%	70%	83%	67%	<b>78%</b>
2015	65%	80%	81%	71%	80%	72%	82%	67%	71%	84%	71%	<b>75%</b>
2016	75%	74%	76%	70%	74%	79%	83%	65%	63%	74%	76%	<b>73%</b>
2017	80%	80%	75%	80%	79%	82%	80%	76%	67%	77%	63%	<b>78%</b>
2018	69%	83%	70%	79%	69%	82%	70%	72%	69%	81%	69%	<b>74%</b>
2019	78%	79%	67%	80%	66%	81%	63%	66%	64%	63%	77%	<b>72%</b>

NB: FS – Financial Services; HS – Housing; Ins – Insurance; Man – Manufacturing; OS – Outsourcing & Telemarketing; PS – Public Sector; RD – Retail & Distribution; SVCS – Services; TMT – Technology, Media & Telecoms; TT – Transport & Travel; UT – Utilities

## DEVELOPING A FIRST-CONTACT RESOLUTION PLAN

Some of the steps involving the development of a first-contact resolution improvement programme include:

- An FCR steering committee should agree upon the goals and outcomes that the project is aiming to achieve (e.g. specific target FCR, reduction in number of repeat calls, decreased call transfer rate, etc.)
- FCR may negatively impact upon other metrics such as call handling time: in such cases, the relative importance of each metric to the contact centre as a whole, and individual departments, products or services should be considered
- A robust methodology for calculating FCR should be agreed upon and used consistently over time
- Agree upon methods of collection of FCR to be used across individual channels
- Involve other relevant departments that may be driving repeat calls in the discussion, as they may be required to change their processes
- Prepare to increase agent training plans depending upon what the FCR discovery phase finds
- Plan for agent incentives and performance measurement to include FCR targets
- Consider how to set realistic customer expectations for issue resolution, to avoid any callbacks within an unrealistic amount of time
- Agree upon how often to track and measure FCR rates.

## FIRST-CONTACT RESOLUTION VS AVERAGE HANDLE TIME (AND OTHER METRICS)

While first-contact resolution is undoubtedly key to driving contact centre success and positive customer experience, it is important to remember that no metric is an island: focusing on one measurement will have knock-on effects on others.

Nowhere is this more obvious than in the case of average handle time (AHT). If agents are encouraged to solve as many issues as they can at the first time of asking, this is very likely to have an adverse effect on average handle time as agents will be focusing more on understanding and fully resolving any issue, rather than trying to rush customers off the phone to keep call durations down. On the face of it, this appears to be positive but there is also the danger that some agents may spend far too much time making 100% sure that the issue is resolved which will then have a negative impact not only on handle time but also queue lengths, cost per call and call abandonment rates. As with most things, balance and moderation are key.

While average handle time seems to have gone out of fashion recently, by using both FCR and AHT it is possible to highlight the most inefficient processes or contact reasons: for example, if FCR is low and AHT is high for a specific type of customer journey or business process, this suggests that this is suboptimal and can be flagged for process re-engineering. It may also be the case that the agent desktop / CRM system is flawed and is not supporting the effective or rapid answering of customer queries, or that the agent themselves requires extra training.

The issues around focusing excessively on average handle time are well-documented: callers cut short; transferred unnecessarily to another agent (or worse, to expensive tier-2 support); neglecting to carry out the necessary after-call work correctly or follow up with customers. All of these things lead to lower customer satisfaction and a greater number of callbacks: effectively kicking the problem down the road so that it becomes more of an issue later.

It may also be the case that agents that are measured mainly on AHT do not have the motivation to educate customers about how they could solve their own issues – for example, teaching them how to use self-service – preferring instead to do it quickly themselves which will reduce the length of that call, but will do nothing to avoid future calls from that customer about the same issue.

On the face of it, it seems that FCR should be prioritised over AHT, but that call durations should not be ignored as they impact upon cost, queue lengths, call abandonment, and thus customer experience.

Despite much research evidence from ContactBabel and other organisations showing that FCR has a positive impact on customer satisfaction and experience, it is important to note that this is by no means the only factor. It is possible for well-respected brands that provide high-quality products and services to achieve high levels of customer satisfaction with fairly mediocre FCR, as the customer experience of the company obviously extends outside what the contact centre actually does. On the opposite side, a business which has high FCR but whose products and services are relatively poor will not achieve high levels of customer satisfaction (for example, a business effectively handling a very high level of complaints about useless products is unlikely to experience high CSAT).

## HOW TO MEASURE FIRST-CONTACT RESOLUTION

The first difficulty in measuring first-contact resolution is to decide what to include and what to exclude. The good news is that – as we will show shortly – first-contact resolution is a metric that is far more suitable for use internally, rather than comparing it against external benchmarks. This means that as long as a company measures the same factors **consistently** over time (and across every department and outsourcer used), any FCR results remain valid.

We have seen some consultants apply different terminology to various flavours of FCR (particularly in technical support), including:

- First-call resolution rate: % of issues resolved by any number of agents (i.e. call transfers are allowed) as long as they are resolved on the initial call
- First-contact resolution rate: % of issues resolved by the initial agent who takes the call (i.e. no call transfers allowed)
- First-level resolution rate: % of issues resolved without escalation to a higher support tier (i.e. no call transfers to Tier 2, but call-backs are allowed from Tier 1). This is often used in technical support, as the cost of support from Tier 2 and upwards is often considerably higher, and this is useful as a cost-based metric.

For clarity, within this report “first-contact resolution” will be used simply to describe the wider aim of handling an issue (whether through telephony or digital channels) without the customer having to start a second interaction about the same issue.

## CALCULATING FIRST-CONTACT RESOLUTION

To reiterate, even though there are multiple ways of measuring first-contact resolution, businesses should choose the one that makes most sense for their particular activities, and remain consistent with this choice over time. All companies are different and may measure FCR in different ways. It is important to focus more on internal improvements rather than external benchmarks.

Some of the most popular methods of calculating first-contact resolution include:

- A. The total number of contacts resolved correctly on the first attempt divided by the total number of contacts in a given period of time
- B. The total number of contacts resolved correctly on the first attempt divided by the total number of contacts in a given period of time **that can be resolved correctly on the first attempt**
- C. The total number of contacts resolved correctly on the first attempt divided by the total number of first contacts
- D. The total number of contacts resolved correctly on the first attempt minus total contacts reopened, divided by the total number of first contacts

Using data as an example, these calculations will give somewhat different results. Assuming:

- a business receives 1,000 calls per week, of which 950 could possibly be resolved at the first attempt
- of these 1,000 calls, 900 are about a new issue and 100 are call-backs about issues that have not been resolved
- of the 1,000 calls, 800 are then resolved within that call.

This gives FCRs of:

- A:  $800 / 1,000 = 80\%$
- B:  $800 / 950 = 84\%$
- C:  $800 / 900 = 89\%$
- D:  $(800 - 100) / 900 = 78\%$ .

Certain types of contact cannot be resolved successfully upon the first attempt. For example, a difficult technical question may always require escalation to higher-tier agents who will then need to call the customer back, or a mortgage application that is likely to require a number of calls as the application goes through numerous business processes.

In such cases, marking calls as a failure (which are actually as successful as they could be) because they have not been resolved first-time will make FCR less realistic, although it is obviously simpler to include them. Method B (Net FCR) takes these types of call out of the calculation (sometimes called 'carve-outs'), whereas Method A (Gross FCR) includes them. Some service teams may prefer to include 'time to resolution' as a key metric to track those types of interaction that are unsuitable for FCR.

Methods C & D look to take reopened issues out of the equation by only considering what happens with entirely new contacts. Effectively, with these types of calculation, the contact centre only gets one chance to resolve an issue first time (which logically makes sense): these methods look at how the overall issue has been handled, rather than looking at the specific outcome of each call.

It is our view that there is no single correct way to calculate first-contact resolution: it depends entirely upon the robustness of the available data, and also the nature of the contact centre's activity. To reiterate, the most important thing is to find a method that works for your business, and to stick to it.

Rather than simply looking at FCR, businesses may also wish to look at the overall number of calls required to handle a certain number of customer issues: it may be that follow-up calls may require three or four extra contacts, as well as being longer. This can identify areas of excessive cost where extra training or process improvement can make a major difference to performance and cost, which may not have been identified simply by considering FCR.

Businesses should be wary about using repeat contacts as a way of measuring FCR: while this information is relatively easy to extract from an ACD system, it may well be the case that businesses have some customers who simply seem to enjoy calling the contact centre about various issues and basing FCR on this is likely to skew the findings.

A possible checklist for questioning FCR criteria might include considering these scenarios:

- Does a fully resolved contact mean that the issue was closed **and** that the customer satisfied with the response? (e.g. a customer turned down for a bank loan is unlikely to rate themselves as being satisfied with how the call was handled)
- How do you wish to classify calls where a supervisor joined the conversation or otherwise coached within the call?
- How do you wish to classify calls that were transferred to another agent within the same tier?
- How do you wish to classify calls are transferred to an agent in a higher tier?
- How do you wish to classify calls where the caller contacted the wrong department and has been transferred?
- What about calls which are abandoned by the customer in the IVR or phone queue?
- For emails: is there maximum number of emails in a conversation before the contact is marked as not having been resolved first-time?
- What happens if there is cross-channel activity, for example a social media request which is then escalated into a real-time callback from the same agent?

- If a customer calls today about having “Issue A” with a product and gets a satisfactory response, then calls tomorrow about “Issue B” with the same product, should this be included as a successful first-contact resolution, or as a reopened issue? On the face of it, the former would seem to be most accurate so businesses may want their FCR calculation method to consider this scenario. It’s important to note that FCR and repeat contacts are different metrics and should not be confused. FCR is perhaps as much of an art as it is a science, and 100% accuracy will be almost impossible. Any outlying scenarios should be considered in the context of how important they are and how commonly they occur.

Of course, not every business will have access to all of this information easily and in a usable format, and may decide in any case that it would be better to judge first-contact resolution more from the perspective of the customer rather than through internal processes (which in itself is not entirely straightforward).

Furthermore, businesses should consider whether they wish to calculate FCR through using a time window: the amount of time that can elapse between contacts, after which the contact is considered to have been resolved first-time. Again, while this seems like a sensible and straightforward variable to apply, in reality it may be anything but: unresolved problems with monthly credit card payments may not show up until 30 or 40 days after the original issue was raised, and in cases where a different part of the operation is required to perform an action but does not (for example, the fulfilment department failing to send out an order), any callback may be many days or even weeks later. As with most things connected with FCR, it is for the business or a specific department to judge what makes most sense for them.

Internal measurement can only go so far, in that it makes assumptions that if the business has not heard back from the customer within an arbitrary timescale, then the issue must have been fully resolved. However, it may be that the customer is more patient than usual, or has given up on getting a resolution. As such, businesses should be aware that relying entirely upon internal FCR indicators is unlikely to provide accurate information or much insight into whether they are really succeeding in delivering superior customer experience: it is usually noted that internal-only FCR metrics will tend to give a higher FCR than when the customer responses are also used to calibrate the calculation.

The next section of this report will look at the various methods of gathering data for FCR purposes, one of which is gathering customer feedback. It should be noted here that while seeking customer feedback on the effectiveness of their last contact with the business is a good idea in principle, many interactions require other departments to carry out the promises made by the contact centre in order for the issue to be entirely resolved, so sending the customer an SMS or putting them into post-call IVR immediately after the call can only provide insight into the effectiveness of the agent rather than whether the issue has been entirely resolved. **The ideal form of first-contact resolution does not just measure the success of the contact centre, it is actually measuring the success of the business.**

First-contact resolution rates should also be tracked and analysed in the context of the overall number of reopened interactions. For example, if a business implements effective self-service, the first-contact resolution rate is likely to drop as more of the simpler interactions will be carried out by automation. In this situation, it is easy to imagine senior management becoming concerned about a seeming drop in performance within the contact centre, although from the customer's perspective the opposite has happened. Businesses should consider not just the proportion of calls answered first time, but also the overall volume of unresolved contacts: if this has dropped, and it is likely that any first-contact resolution solutions are working, even though the FCR is lower.

The opposite can also be the case, and it is important to understand why any change in FCR has happened: a rise in FCR (which is ostensibly positive) can be because a change in the self-service system has confused customers who now call in to have an agent handle what should be a simple matter.

A final word of warning: as with any metric, there is a danger of being seen to place too much emphasis on improving FCR, which may lead to agents being tempted to game the system through using incorrect call disposition codes for example. Using methods described later in this report which place the onus for measuring FCR upon the customer's actions and feedback, this danger is likely to be alleviated.

## END-USER QUESTION 1: WHAT'S THE BEST WAY TO TRACK AND MEASURE FIRST-CONTACT RESOLUTION?

 FCR can be a tough metric to track: How do you determine whether an issue is fully resolved during the first contact? Well, gone are the days (or, at least they should be gone) where provenly inaccurate contact disposition codes entered by agents themselves after a call should be the singular data point determining FCR.

Successful contact centre operations are using customer engagement platforms which include interaction (speech) analytics, solicited (survey data) customer feedback and social media monitoring to optimize how their contact centres collect, understand, and respond to raw data on FCR. In particular, they are leveraging omni-channel speech analytics, which captures all forms of customer interactions including chat, text, email, SMS and especially phones calls where real conversation, acoustics and incorporated metadata can pinpoint caller identifiers. Armed with these insights, organizations can consistently correlate repeat calls (customer journey experience) with specific agents, products, or issues. By identifying the reasons behind repeat contacts, you can then take action to resolve these underlying issues that affect FCR and the entire customer experience.

## FIRST-CONTACT RESOLUTION MEASUREMENT METHODS

There are numerous sources of information for businesses looking to gather data to calculate first-contact resolution, some of which are internal and some external to the business:

- agent feedback / logging
- post-call surveys
- interaction analytics
- quality monitoring
- tracking of reopened issues
- repeat calls
- repeat contact reasons.

### AGENT FEEDBACK / LOGGING

Agents can ask questions to customers at the end of the call such as “Did I fully resolve your issue today?” and “Have you called about this issue previously?”, and mark each call with a disposition code accordingly. On the face of things, in a customer-centric business this would appear to be the most accurate way of determining FCR. Agents can be trained to identify repeat calls accurately so they can tag it in the CRM system which can then be reported upon.

However, this should not be the only method of collecting FCR data:

- customers may not wish to appear ungrateful or impolite to the agent, even though they may not be entirely satisfied with the response
- if the issue requires extra processes or work through the back office (such as fulfilment), the customer will not know whether the issue has actually been resolved at the end of the call.

Of course, the system of allowing agents to mark their own calls as resolved could be prone to abuse (especially if the agent is being scored or rewarded on their FCR), and it may be wise to include the checking of resolved calls as part of the quality monitoring process, or to have the system generate the status of calls as being resolved or otherwise depending upon the actions taken within the call.

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## POST-CALL SURVEYS

For a metric which is so important to customers, it makes sense that the measurement of FCR should take into account the customer's perspective.

One of the main problems with surveys that are sent out after the interaction is that a relatively small number of customers will complete them, and results may be skewed in the direction of those who are very positive or very negative. It is also difficult to get enough answers in order to analyse FCR at the agent level. Sending the customer a summary of the interaction a few days afterwards (including what was said and any actions promised) allows them to mark it as resolved or request it to be reopened.

On the other hand, while a post-call IVR survey or agent question may get a very high response rate, at this stage of the process is only possible to gauge the success of the actual call rather than the entire issue which may require processes and actions to be carried out elsewhere in the business in order to be successfully resolved.

Many organisations use various types of survey in order to gather data which can be used in the FCR calculation process.

**IVR:** at the end of the call 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 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 the business may be alerted in near-real-time to any major problems through pre-programmed automated SMS 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 FCR and other key metrics whenever the contact centre is open.

**Outbound automated surveys** are becoming more prevalent, with more than 10m outbound IVR survey calls estimated to be made each year in the UK. After the call has been concluded, the caller's number may be put into an outbound dialler'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:** some businesses ensure that a system-generated email (or sometimes letter) is sent 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 can be an expensive way to survey customers, and perhaps only appropriate if the customer has engaged very deeply with the business on a number of recent occasions (e.g. completing a mortgage application) or with a demographic that has more time available to them, especially older people. There can be a lack of immediacy, and sending out a written questionnaire to ask about how well a single call was handled could be seen as overkill.

**Web forms** are becoming increasingly widely-used as an increasing number of customers visit a website initially to see if they can find the information or resolve the issue themselves, whether through self-service or through a digital channel.

**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 formalised and structured approach to data gathering and presentation.

**SMS:** 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 centre to use this information at an agent level. While SMS does not allow detailed or multiple questions, this is rarely an issue when collecting FCR data. SMS take-up rates are better than many other forms of feedback (at around 25-35% on average), and younger and more time-poor customers are more likely to respond, providing a wider universe of responses across demographics. This form of survey can allow the contact centre to identify very unhappy customers and schedule an outbound call to deal with the problem.

Some businesses may feel that surveying a customer after every interaction is overkill (both the customer and the business) and may instead consider including a question about ongoing issue resolution in any less frequent quality or customer satisfaction surveys that they run. The customer will then have an opportunity to describe what has happened, which will help the business identify common issues and processes that may be suboptimal.

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## QUALITY MONITORING AND ASSURANCE

A popular way of tracking FCR has been to score calls based on whether they have been resolved first-time. As the quality team listens to many calls, there is a certain amount of objectivity and expertise to this method, but at best it can only provide a rough snapshot of FCR as only a minority of calls can be listened to. This also means that the identification of the issues that are causing suboptimal FCR are less likely to be identified than they would be in a situation where 100% of calls were being analysed, as in the case of interaction analytics. Businesses may also feel that FCR should ideally be seen from the perspective of the customer, and even neutral and objective QA teams may consider that an issue is resolved when in fact it is not.

Businesses that are not already doing so may consider adding FCR to the quality monitoring process as one of the key metrics that agents are measured against, demonstrating to agents how important this is to the business.

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## INTERACTION ANALYTICS

First-contact resolution can be increased by identifying repeat callers and eliminating the root cause of repeat calls. Interaction analytics allows businesses to search for keywords and phrases such as “called before”, allowing businesses to focus on the issues, processes and agents that are causing the most callbacks. This can be supported by further analysis of conversations where the caller has indicated that they have called before, looking for categories such as billing or returning items which will give more indication how FCR can be improved by optimising processes outside the contact centre.

By monitoring and scoring 100% of calls, the opportunity exists to connect analytics, quality assurance and performance management, collecting information about first-contact resolution rates right down to the individual agent level. Automatic evaluation of all calls means that businesses will no longer rely on anecdotal evidence, and will be able to break the call down into constituent parts, studying and optimising each element of each type of call, offering a far more scientific, evidence-based approach to improving KPIs than has previously been possible.

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## TRACKING OF REOPENED ISSUES

Some workforce optimisation suites allow businesses to create rules that can count the number of calls coming from the same phone number, customer account or ticket number within a specific amount of time. While this can act as a strong basis for robust FCR figures, it is important to note that while some customers contact the business frequently, it may not always be about the same issue.

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## REPEAT CONTACTS

A very popular and relatively simple way of measuring FCR is to assume that the customer has contacted the business again within a certain amount of time, then the query has been resolved successfully. However, this method does not take into account the reasons for any repeat contacts, which may in fact not be an unresolved issue but be related to something entirely different.

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## REPEAT CONTACT REASONS

An alternate method involves creating individual FCR rates at a contact reason level (e.g. billing, fulfilment, etc.) through analysing the CRM system. Once a customer calls about a particular issue upon which the businesses is looking to focus improvement, agents can ask whether that query has been resolved or whether this is a repeat contact. This allows businesses to see whether their focus on mending broken processes is actually working at an issue level. This method also allows businesses to identify whether the problem is at an agent level or a process level.

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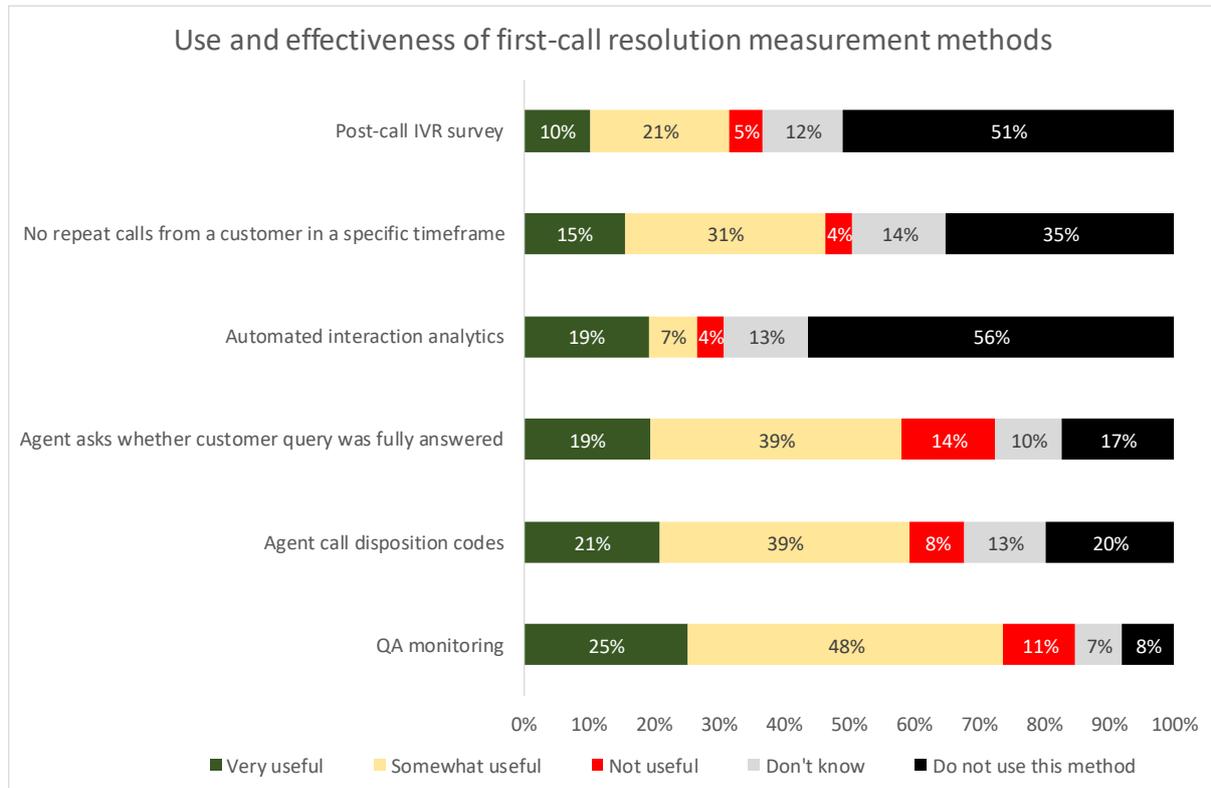
## USE OF FIRST-CONTACT RESOLUTION METHODS

A recent ContactBabel survey looked at how over 200 UK contact centres were gathering data to calculate FCR, and how useful it was to them:

- Agents provide opinions on whether the call was resolved completely, including tagging the interactions with a disposition code at the end of the call (used by 67% of respondents)
- Tracking of issues shows if they are re-opened (51%)
- Supervisors monitor calls and score based on their opinion (85%)
- Customers can be asked their views by the agent (73%) or through an IVR survey (37%)
- Analytics of interaction recordings can be used to see whether the call was actually resolved or more interactions were needed (30%).

The accurate tracking and actionable insight of FCR is one of the biggest challenges to the contact centre industry: it is key to customer satisfaction and cost management, and it is clear from the following chart that no single method of measuring FCR is seen as being particularly impressive.

Figure 6: Use and effectiveness of first-call resolution measurement methods



QA monitoring, the most widely-used form of gathering first-call resolution information, is seen as reasonably effective, but it is the automated analysis of call recordings that is considered the most effective by those respondents that use this method of calculating first-contact resolution. Other methods have their supporters and detractors, with tracking repeat calls being quite well thought of.

It is worth noting that the majority of contact centres 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. Most complaints received by a contact centre are about the failings of the wider business (usually around 80%), so focusing entirely upon the work done within the contact centre is missing the point of measuring first-call resolution.

## FCR: RETURN ON INVESTMENT

Extensive research from many different organisations show that resolving a contact at the first time of asking is almost always cheaper than cutting the call short and then having to deal with repeat contacts, not to mention the disappointing customer experience and the possibility of losing that customer altogether.

It should also be remembered that repeat calls will often take longer as a result of the customer explaining what had been said and done on the first call, with the agent also having to read through the written notes to understand the history before beginning to try to resolve the issue.

Second-line support calls can often cost between three and five times the amount that a first-line support call will cost, and escalating a call means that costs are cumulative (i.e. costing both the first-line and second-line amounts). Businesses should also be aware that repeat calls – even if handled at the first-line level – will not necessarily be handled effectively at the second time of asking, and should have resource dedicated to determining the cause of those outlying customer requests which require excessive numbers of multiple contacts, as these can severely impact upon overall cost.

Another factor to take into account when considering any return on investment for FCR optimisation is that of the cross-selling or upselling rate. A frustrated customer who has had to call back is very unlikely to be sympathetic to any attempt to sell any further products or services, which negatively impacts on customer lifetime value and also loyalty and advocacy.

A simple example of the ROI possible from improving FCR is shown here:

- 100 contact centre agent positions, handling 70 calls per day = 2.5m calls per year
- each call costs £5.00 = £12.5m per year
- 70% first-contact resolution rate
- therefore, £3.75m per year is spent on handling repeat calls
- therefore, a cost avoidance of £125,000 per year can be expected from each percentage point that FCR improves.

It is important however to reiterate that higher FCR in itself does not guarantee cost savings: the failure of a self-service solution which drives customers to use the phone for simple interactions may well increase FCR, but will certainly increase call volumes and thus costs. As such, businesses should remember that FCR should be used in conjunction with overall call volumes and the number of unresolved/resolved calls.

The effect of low FCR on agent morale should also be considered: it is disheartening for agents to feel that they cannot help effectively and to be handling large numbers of calls from frustrated customers each day. Without doubt, this has a negative effect upon morale, absence and eventually attrition, creating unnecessary recruitment and training costs.

## FIRST-CONTACT RESOLUTION AND DIGITAL CHANNELS

Industry-wide, around 30% of inbound contacts are carried out over digital channels (email, web chat, social media, SMS), and it is important that the business also tracks the first-contact resolution rates for these channels, as well as for phone calls.

Businesses should measure the current FCR across each channel and determine the appropriate targets. This should be done on a channel-by-channel basis, as they are unlikely to be uniform across channels: web chat may have a higher proportion of short and relatively simple requests, whereas email is often used for complaints and complex, lengthy queries, so it is inappropriate to apply the same blanket FCR targets.

Each channel should also be assigned a specific definition of what a first-contact resolution looks like: for example, web chats may require the customer's issue to be resolved before they end the chat session, whereas emails may require some back-and-forth clarification (in the same way as a web chat). It would seem unduly harsh to deny FCR status to a successful email interaction simply because there were more than multiple emails, so businesses may consider that any email exchange that is handled entirely within one hour should be treated as first-contact resolution, for example.

Digital channels do not only refer to those which are handled by agents: web self-service is also a major part of many businesses' customer service strategies, and is often the first place that a customer will visit to resolve a query. This places yet another complication on the measurement and tracking of FCR: if the customer has spent 10 minutes unsuccessfully searching a website, and then places a call which is resolved successfully, the business will measure this as a success for FCR, but many customers would disagree. It may be very difficult to understand and track whether a customer has attempted to solve the problem using a website (and also to understand whether it was a committed effort or merely a half-hearted flick around the site), and some businesses may only wish to consider the FCR success of their agent-assisted channels.

As with many things around FCR, there is no single right or wrong way to measure these things: the business must decide what makes most sense for them, and apply it consistently over time.

## MEASURING CALL TRANSFERS

A business implementing an FCR measurement programme will need to consider how it allocates an FCR status to contacts which are passed between agents or to other employees within the enterprise.

Even within the best-run contact centres, call transfers are inevitable and a mean average of 7.8% of UK contact centres' inbound calls are transferred between agents (excluding receptionists and other contact centre structures where all initial calls are passed on).

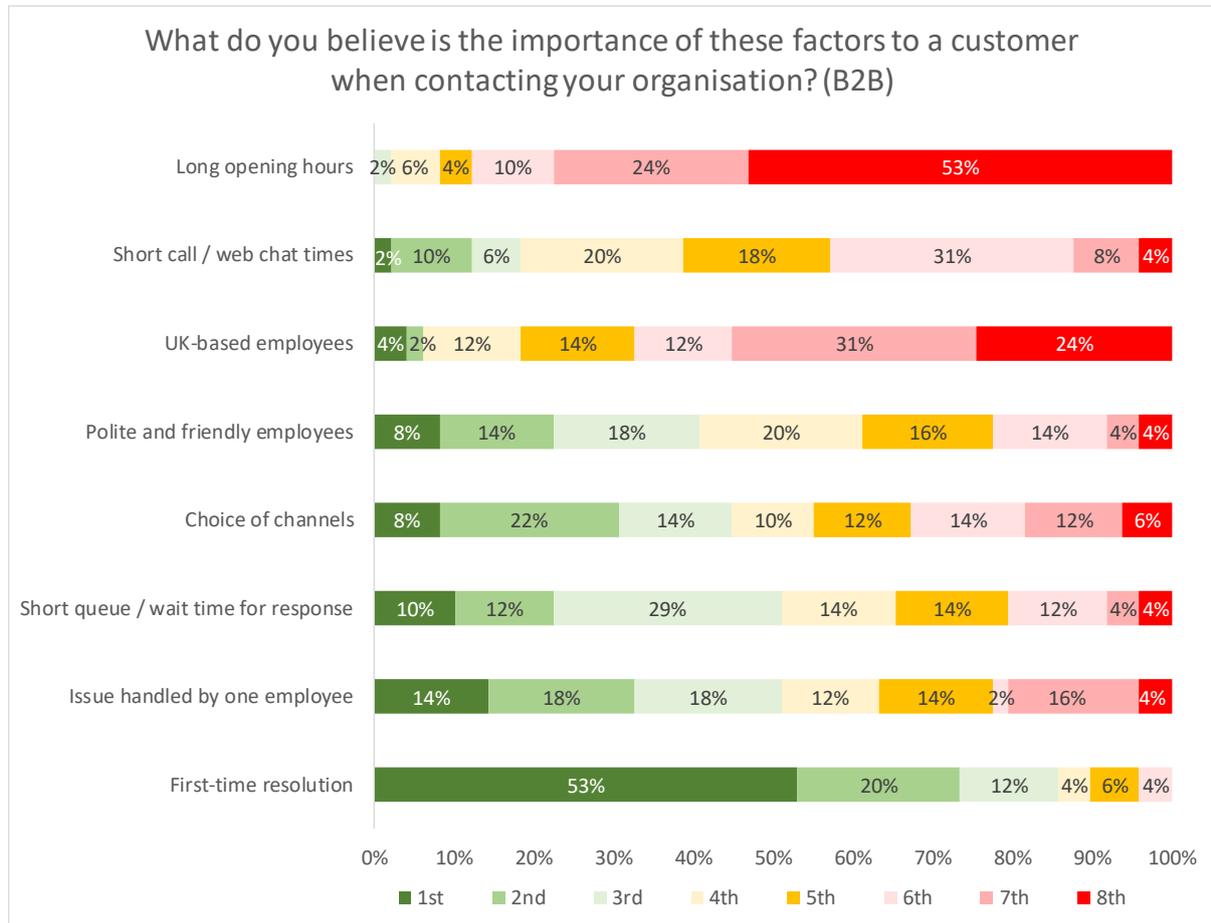
The call transfer metric can indicate training needs at the individual agent level, a failure in the initial IVR routing or a need to update FAQs or other information on a website (for example, a spike in this metric might be driven by a recent marketing campaign which has confused some customers, creating a high level of calls about the same issue). Tracking, and call recording / speech analytics in cases of sudden high transfer rates could identify the issue. This insight would also help the contact centre see which other departments are required and for which issues, helping to identify any bottlenecks or broken processes.

Figure 7: Call transfers by vertical market

Vertical market	% of calls transferred (mean)	% of calls transferred (median)
Finance	6%	5%
Housing	8%	5%
Insurance	8%	5%
Manufacturing	11%	12%
Outsourcing	5%	4%
Public Sector	3%	2%
Retail & Distribution	12%	8%
Services	5%	3%
TMT	11%	10%
Transport & Travel	18%	15%
Utilities	8%	7%
<b>Average</b>	<b>7.8%</b>	<b>6%</b>

A high level of call transfers and the subsequent being passed around more than one employee is seen as being particularly negative for B2B customers as the following chart shows, be seen as the second most important factor influencing CX in the contact centre for these types of client.

Figure 8: What do you believe is the importance of these factors to a customer when contacting your organisation? (B2B)



However it is important to note that first-contact resolution is still seen by these customers as being by far the most important factor impacting upon the customer experience, so businesses should not be overly concerned about passing a customer onto a colleague who is better placed to help.

From most customers' perspectives, a call would be viewed as being handled first-time if they have not had to put the phone down and redial. As such, moving from agent to agent is generally acceptable to customers for FCR purposes as long as the agent actually transfers them, but too often the customer is just given another phone number and has to go through all of the queueing and security again, only to have to explain the issue to the new agent. From the perspective of the customer, this is entirely unacceptable.

## IDENTIFYING REASONS FOR REPEAT CONTACTS

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 centre 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 centre to emerge, which can then be addressed more fully.

This section considers how to identify the reasons for repeat contacts, which will allow the business to focus on these areas and implement solutions and processes which will lead to FCR improvement.

## END-USER QUESTION 2: HOW CAN WE UNDERSTAND WHY WE'RE GETTING MULTIPLE CONTACTS?



First, you need to look at the whole picture. Recognize that your customers don't just call you on the phone; they're interacting with you across multiple channels, from email and chat, to social media and self-service options.

Secondly, understand that the recent worldwide pandemic is not only causing a litany of challenges for organizations who are forced to change the way they are supporting customers, but those changes themselves are producing a whole new set customer experience issues.

Customer engagement analytics, with its ability to concisely analyse both the Voice of the Customer and Voice of the Employee across 100% of all interaction types -- including even emojis, affords organizations the opportunity to truly understand the customer experience journey, and thus the root cause of repeat callers.

## ROOT-CAUSE ANALYSIS

There is little point in a business tracking first-contact resolution unless they can identify the causes of repeat contacts and act upon them. Carrying out the analysis of the root causes of reopened issues and unresolved problems is the first step to mending them.

Root cause analysis should consider:

- whether some processes are so complex that they will always require numerous contacts to resolve. If it is impossible to do so, they should be treated as 'carve-outs' and not included in FCR measurement
- whether there are a high number of calls coming into the wrong department which may indicate an issue around IVR routing
- looking at customer satisfaction and FCR surveys, what are the reasons customers are giving for dissatisfaction or failures to resolve issues first-time?
- through QA and analytics, it should be possible to understand whether agents are fully understanding the issues that customers are calling about or whether lack of comprehension is leading to agents providing incorrect or incomplete information
- For digital channels, is it even possible for the customer to have the issue resolved first-time through this channel? For example, some businesses do not allow a customer to pass through security, on a social media channel, instead insisting that they call into the contact centre
- whether there is an excessive number of contacts being escalated to supervisor- or manager-level which may indicate an issue at the agent level that could be resolved through training or greater empowerment
- the specific products or issues that are causing the most problems
- whether procedures or processes are being adhered to, and if so are they actually hindering the agent's performance
- are customers actually being given the right information, and if not, is this an issue of providing better training around technology or improving the knowledge base?

Root cause analysis may be carried out by the use of interaction analytics, customer journey analytics, dedicated FCR teams and quality assurance professionals. However, whether formally or informally, it is certainly worth businesses asking their agents directly why customers have recently been calling and to give their opinions on how more calls can be resolved first-time. This may not be a particularly scientific method, but as these are the employees at the coal-face every day, they are likely to be able to provide insight and also to note how unresolved issues and problems are changing on a day-to-day basis.

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It is likely that after carrying out analysis of the major causes of first-contact resolution, that it will be helpful for businesses to aggregate the data into larger segments such as technology, people or process.

Other helpful segmentations include:

- the product or service being offered, to see if there is anything inherently difficult within the interaction
- whether the problems are being caused within the contact centre or elsewhere within the business
- grouping unresolved issues by channel in order to understand whether any channel makes first-contact resolution intrinsically difficult or inappropriate for this matter.

ContactBabel research later in this section shows that a very significant proportion of calls have tried to answer their own queries through web self-service before placing a call to an agent. It is important when considering root cause analysis that the shortcomings of information and functionality available on the website is considered, rather than just looking at issues within live channels.

## CUSTOMER JOURNEY ANALYTICS

While surveying customers or asking agents are useful methods of understanding why customers call back, customer journey analytics may be a more structured and accurate way to understand when the failure points are within the process.

Driven by the need to get beyond the siloed nature of multichannel interactions, customer journey analytics aims to gather together the various data sources, triggered processes, and customer touch points involved the customer interaction, in order to optimise the overall customer journey. By fully understanding the customer experience, businesses can identify and rectify inefficiencies, helping to break down the boundaries between channels and between the front office and the back office in order to understand where customer journeys are breaking down, impacting upon customer experience, the business's cost and first-contact resolution.

While being able to optimise customer contact within each siloed channel, or being able to monitor the quality of an email or chat agent in the same way that businesses are now using analytics to improve the performance of a phone-based agent is useful, the real key is to include all of the stages along the customer journey. For example, understanding where potential customers drop out; the overall effort that the customer has to put in; the point at which buying decisions are made; bottlenecks in processes; the suboptimal points where customers get confused and have to place a call into the business: these are the promises that customer journey analysis makes.

Customer journey analytics goes beyond the measurement of individual interactions and touchpoints. Sophisticated analytics solutions use data inputs from multiple sources, both structured and unstructured, in association with journey maps, which are produced by employees in multiple roles within the organisation who document how various processes currently work and how they could be optimised.

In the past few years, a widespread realisation amongst businesses that the complexity of the customer journey has increased in line with the number of new devices and channels available to customers to communicate with the business has led to the initiation of customer journey projects, backed by new management positions coming under the wider 'Customer Experience' banner. This is particularly the case in larger contact centre operations, where businesses are increasingly looking at the effectiveness of back office processes that can impact upon whether the customer has to contact the business multiple times.

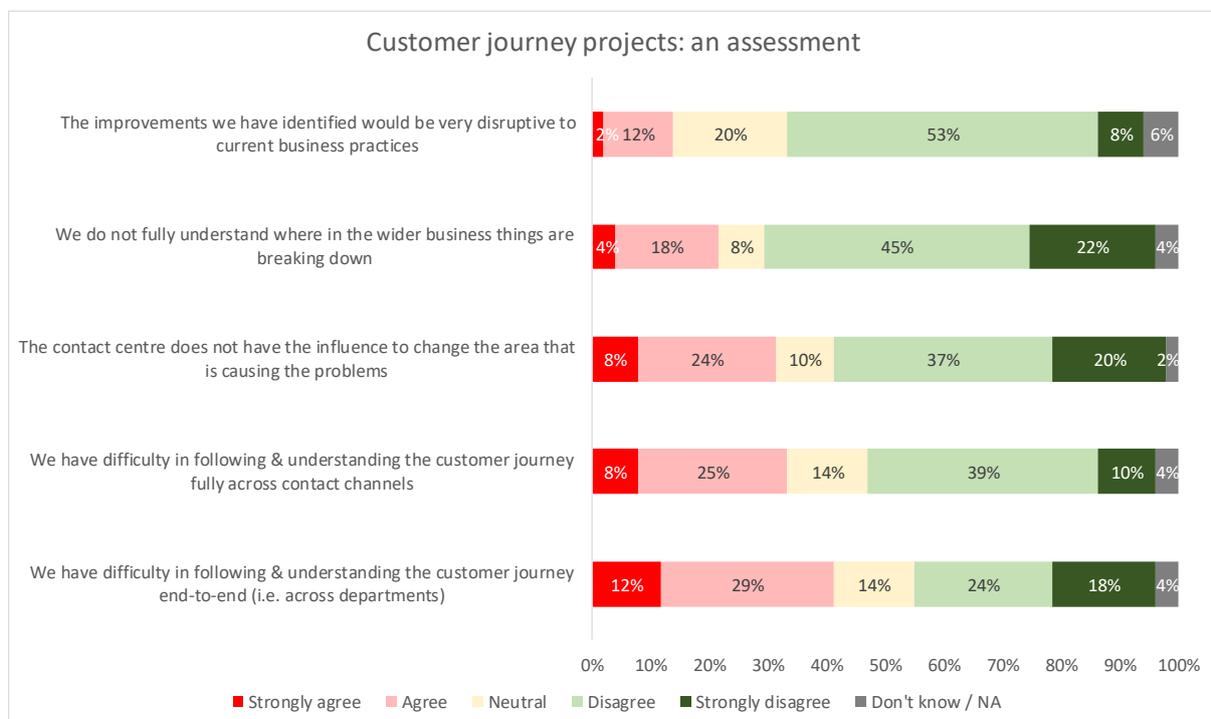
Customer effort and engagement is very dependent upon the effectiveness with which channels work together, as well as the level of first-contact resolution. Proactively engaging the customer at the appropriate time within the customer journey provides an opportunity to reduce the effort required for the customer to fulfil their interaction completely. As part of a wider omnichannel engagement, businesses must seek to understand how and why customers prefer to engage with them, optimising the flow of information throughout any connected processes and channels so that the organisation becomes easy to do business with.

From the perspective of using customer journey analytics to improve FCR, businesses may already have a good idea which procedures cause the most problems to customers, and therefore can focus their initial efforts on better understanding those. The company may discover that customers trying to do certain specific things within this procedure are far more likely to escalate to the contact centre than others, giving a good idea about where improvements should be made. Customer journey analytics can answer questions around what customers are trying to accomplish, the volume of customers that this applies to, the average lifetime value of these customers, their retention or churn rate and what impact on revenue this poorly optimised process may have in the longer term. Additionally, insights around the relative effectiveness of channels and time and rate of escalation from each may show which are more 'sticky' for customers, and which are quickly abandoned.

Respondents using a customer journey project reported generally positive outcomes and 57% either disagreed or strongly disagreed that the contact centre does not have the influence to change the area that is causing the problems.

Although only 22% of respondents state that they do not fully understand where in the wider business things are breaking down, 41% find that they have difficulty in following and understanding the customer journey across departments, with 33% struggling to follow it across channels. The inability of many companies to be able to understand the customer journey across departments supports the finding that many instances of missed first-contact resolutions are driven by 'failure demand': errors or broken processes elsewhere in the organisation which the contact centre then has to clean up. The next section of this report looks at this in more depth.

Figure 9: Customer journey projects: an assessment



## FAILURE DEMAND

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 organisation’s control, and it is a major form of sub-optimisation.”<sup>1</sup>*

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 organisation, putting the contact centre 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 centre.

The following charts show the change in the proportion of calls that are complaints, and whether the complaint is about the contact centre (e.g. an impolite agent) or the wider business (e.g. a late delivery, incorrect product etc). Critically important to businesses looking to improve first-contact resolution, in all years the target of the complaint was usually the failing of the wider business. As has been said earlier, FCR is a measure of the business’s success, not just the contact centre’s success.

For every vertical market, the majority of complaints received are not about the contact centre itself (or its staff), but rather ‘failure demand’, caused by a breakdown of process elsewhere in the organisation. However, the contact centre 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 centre again and again, becoming more irate each time, despite the real problem lying outside the contact centre. This is further exacerbated by the multitude of channels available to customers, who may choose to complain initially via letter or email, and follow up with multiple phone calls if these initial channels are not able to provide them with an acceptable response.

There is also the case that there is a blurring of responsibility between the contact centre 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 organisation 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

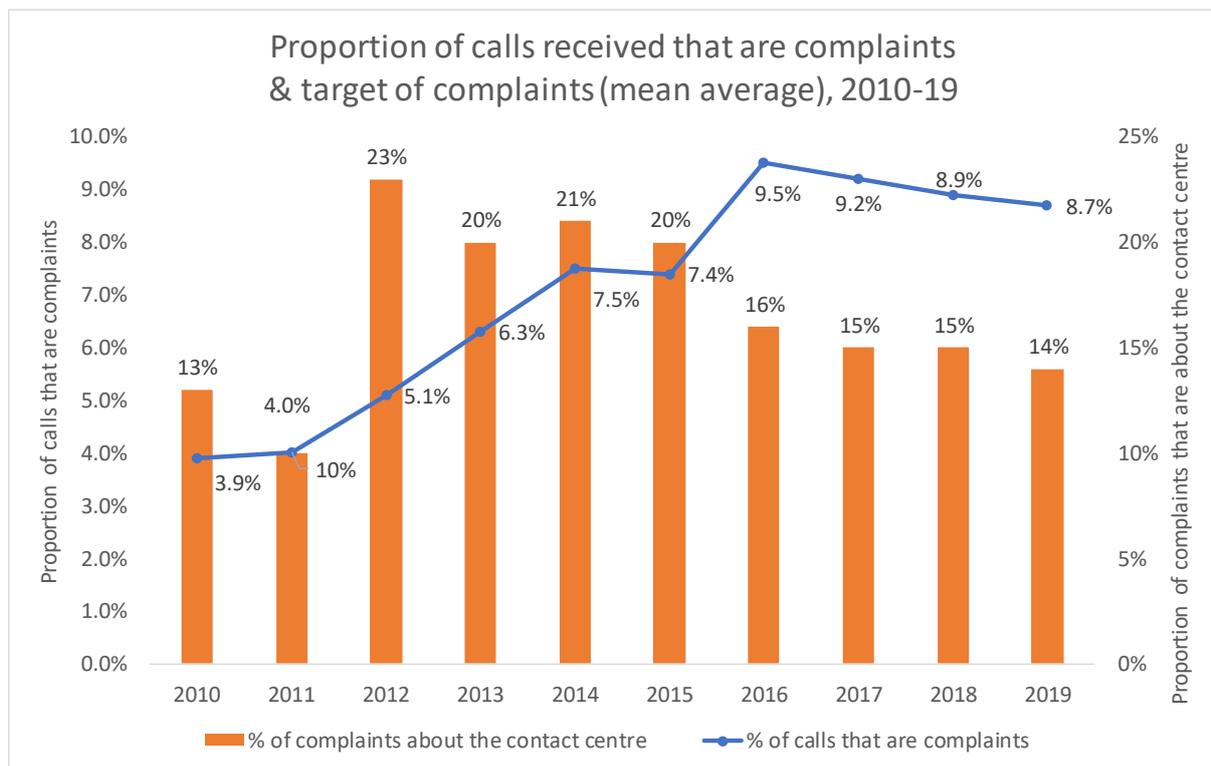
<sup>1</sup> *Freedom from Command and Control: A better way to make the work, work*, by John Seddon

tracked or reported on correctly is not a certainty, so the split above between contact centre / back-office complaints should be treated with caution.

There is also a real risk, especially within large contact centres, 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.

A clear upward trend can be seen when looking at the proportion of calls that are complaints in general, from less than 4% in 2010 to over 9% in 2016. There may be multiple reasons for this: businesses may be failing the customers more often; customers may have become more demanding; or customers may have moved away from the traditional form of complaint – the letter – and prefer to use the phone to complain instead. Certainly, many contact centre decision-makers state that the most effective channel to use for complaints is the telephone, and it may be that customers have found this out for themselves over the past few years.

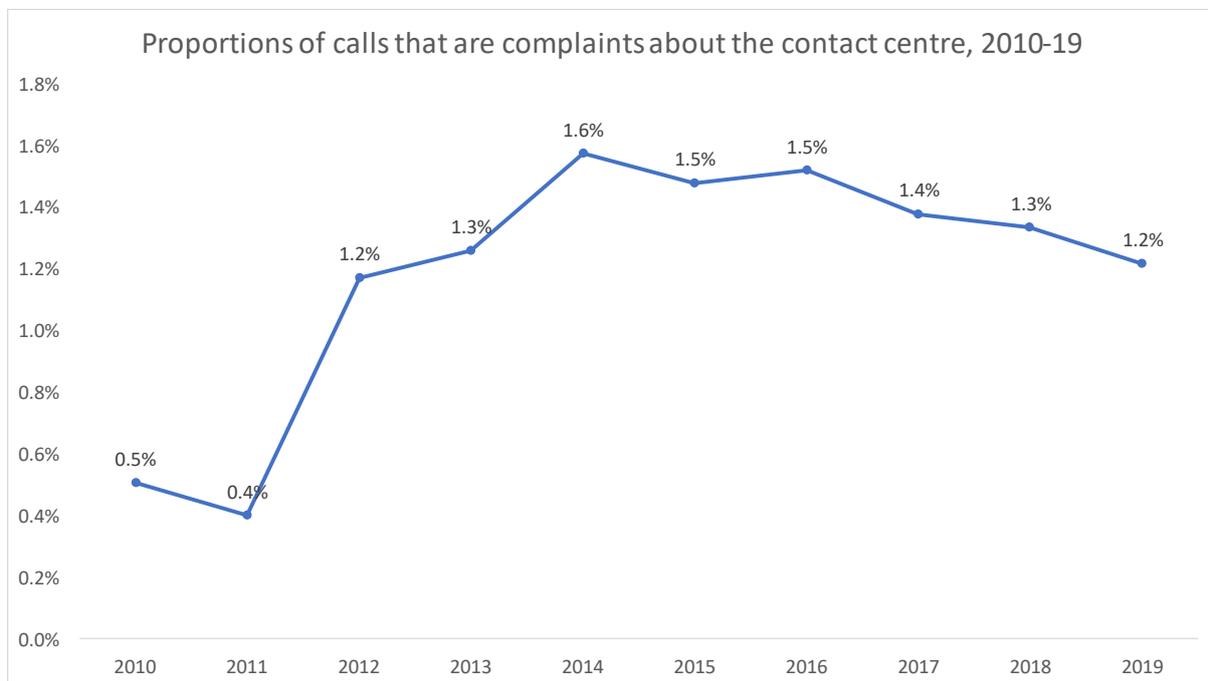
Figure 10: Proportion of calls received that are complaints / target of complaints (mean average), 2010-19



Taking the two sets of data on the previous chart – proportion of calls that are complaints, and proportion of complaints that are about the contact centre (rather than the wider business) – and combining them, gives the following chart: proportion of calls that are complaints about the contact centre. This is a figure that contact centre decision-makers should be interested in, as these complaints not only cost money to handle, but are in large part avoidable in the first place.

Since 2012, the figure of contact centre complaints has relatively steady at around 1.5% of inbound calls, although we have seen three consecutive years of very gradual decline. These figures may not seem particularly high, but with around 7bn inbound calls per year and typical cost per call in the region of £4.50, handling the 1.2% of calls that are complaints about the failings of the contact centre costs the industry around £378m per year.

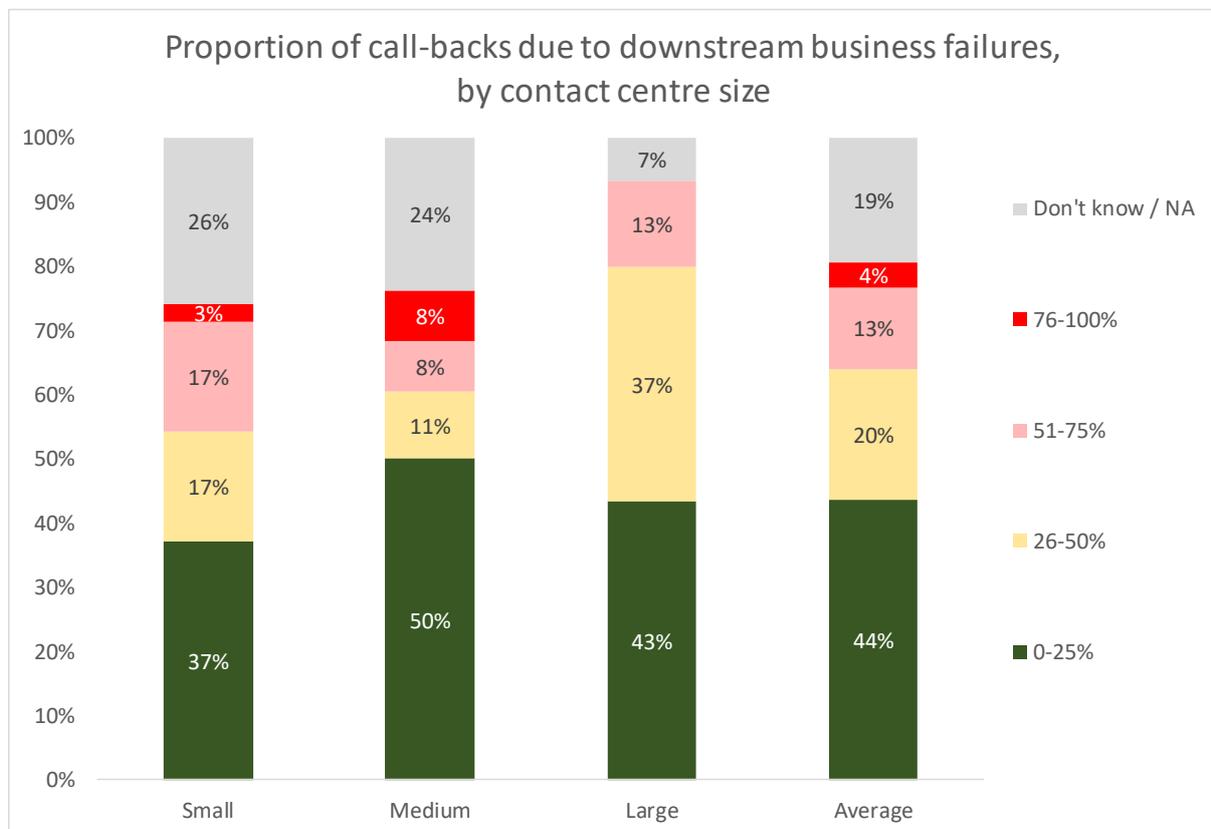
Figure 11: Proportion of calls that are complaints about the contact centre, 2010-19



Looking more widely at call-backs rather than complaints, the following chart shows that 37% of respondents report that more than half of their call-backs are due to failures in downstream processes and actions (or lack of them), showing that there is a real need for joined-up processes between the front and back-office as well as between channels.

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 centre 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 a greater use of the power of interaction analytics being directed at understanding why customers contact a business multiple times.

Figure 12: Proportion of call-backs due to downstream business failures, by contact centre size



There may well be cases where immutable corporate policies are in place that mean calls cannot be resolved first-time: for example, supervisor approval may always be required if customers are to be given a refund over certain amount, and if this is not possible to do in real-time it may require a callback.

In this case, businesses should consider either changing the policy and empowering the agent, or more likely simply remove these from FCR calculations as examples of 'carve-outs'.

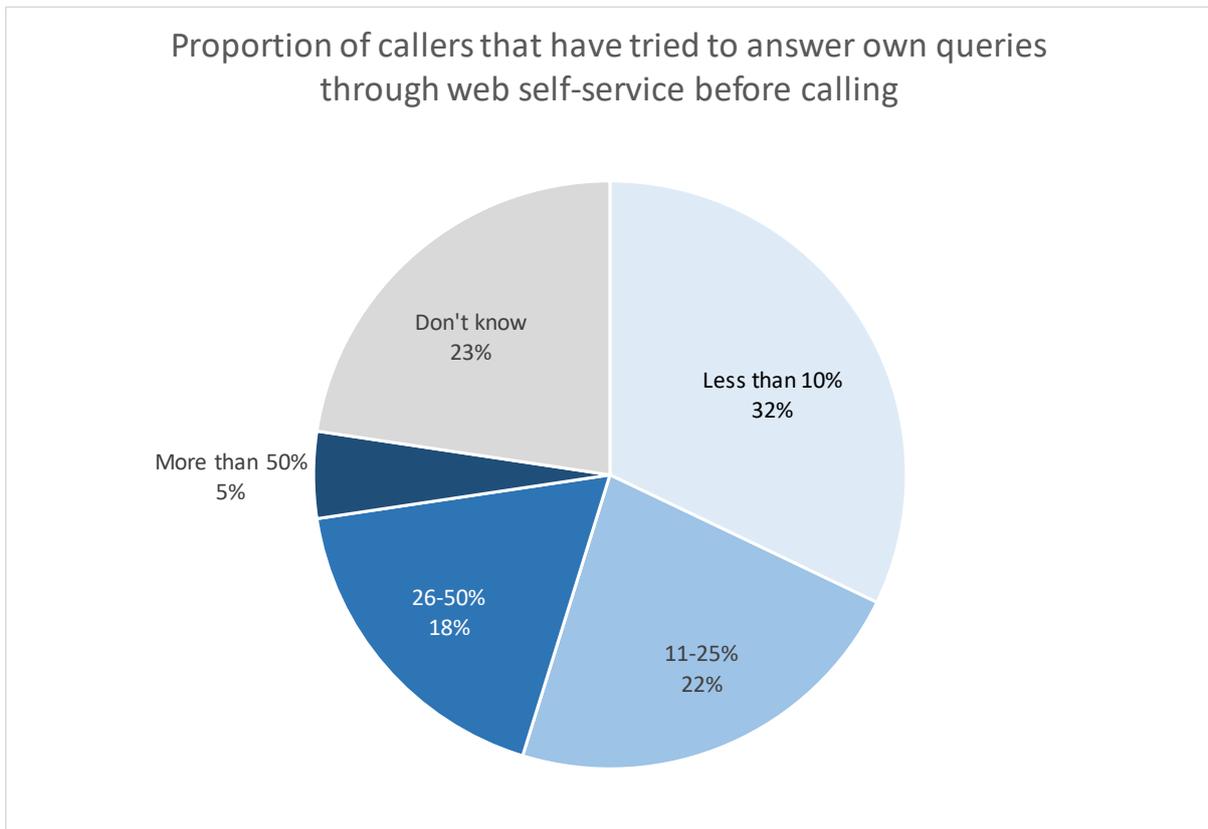
FIRST-CONTACT RESOLUTION AND THE FAILURE OF WEB SELF-SERVICE

increasing numbers of customers attempt to use web self-service to resolve the issues rather than call the contact centre. However in many cases they are unable to do this, meaning that from the customer’s perspective even if the call is resolved first-time that it does not feel like a single successful interaction.

Although 32% of survey respondents state that fewer than 10% of customers have tried to resolve issues online before calling the contact centre, 23% state that more than 1 in 4 calls come from people who have failed to complete their objective on the website first, and who may approach the call with frustration.

Worryingly, 23% of respondents using web self-service do not have any idea of its success from the customers’ perspective.

Figure 13: Proportion of callers that have tried to answer own queries through web self-service before calling



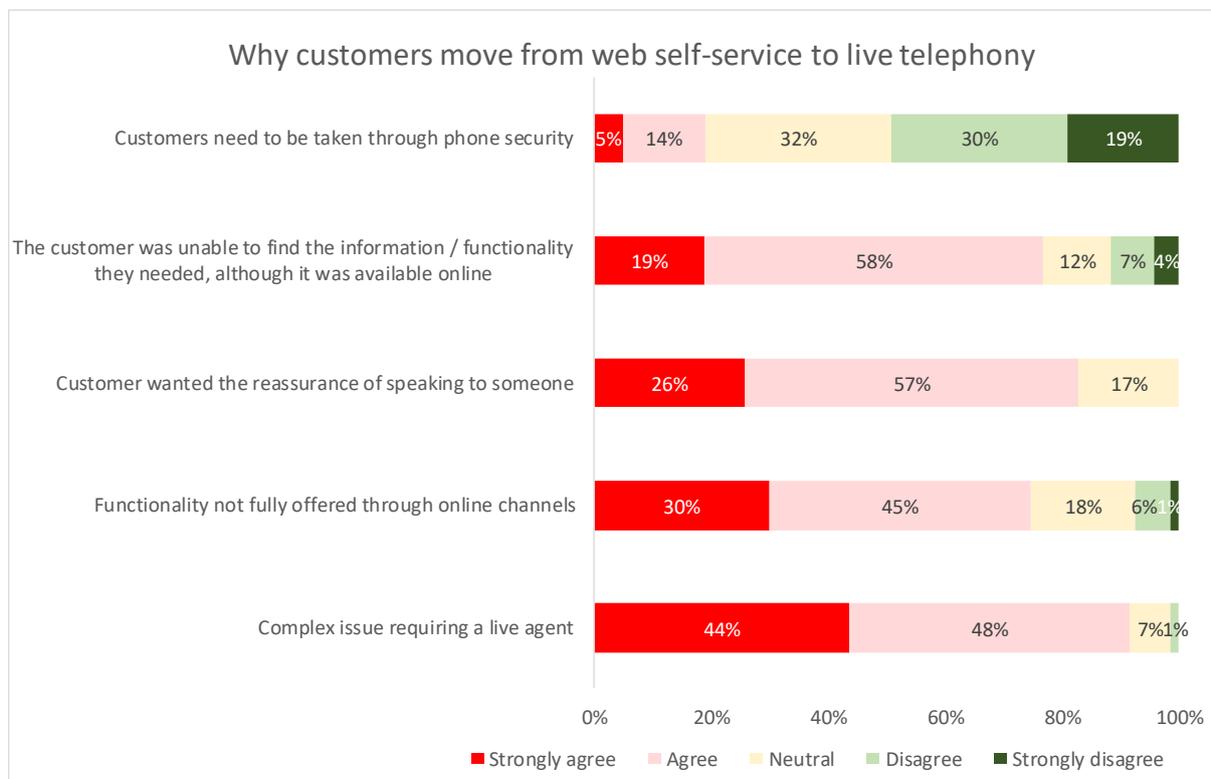
By far the most important reason for moving from web self-service to live telephony was said to be that the escalation involved a complex issue requiring a live agent to complete successfully.

83% of respondents also felt that customers wanted the reassurance that a live agent brings to a conversation.

75% stated that the functionality that the customer calling in required was not available online, but interestingly, 76% stated that they received calls about issues that could be resolved online, but customers were unable or unwilling to do so.

Very few respondents believed that website security authentication was an issue in receiving inbound calls, with the wide availability of automated password reset being a factor in this.

Figure 14: Why customers move from web self-service to live telephony



From these statistics, it looks like a significant proportion of calls coming from abandoned web self-service sessions could not actually be handled online and do require an agent’s assistance.

Businesses should be very wary about including web self-service sessions in their FCR statistics, as not only is immediate resolution impossible in many cases, but is also the case that customers will have put in a wildly varying amount of effort into their web self-service session in the first place. As such, measuring the success or otherwise of the contact centre operation using this information will be seriously prone to error.

As an aside, businesses may wish to implement the measurement of customer effort scores to give themselves greater awareness of the channels and processes where customers having to expend the greatest amount of effort, as these will often lead to escalations to more expensive live channels.

## INTERACTION ANALYTICS

Perhaps the major driver of contact centre and customer experience success, first-contact resolution (FCR) can be increased by identifying repeat callers and eliminating the root cause of repeat calls, and interaction analytics is proving one of the most successful methods for businesses to use for this purpose.

No contact centre solution apart from customer interaction analytics can provide a solid understanding of **why** customers are calling. Categorising types of calls, and then analysing them for the occurrence of similar types of words and phrases can give an insight into the reasons for customers' calls. For example, a category such as callbacks might be analysed for patterns, and it is discovered that the words 'delivery' and 'website' are mentioned in a disproportionate number of them. Listening to some of these conversations, it may be found that the website does not highlight delivery times effectively enough, leading to unnecessary calls to the contact centre, rather than the customer purchasing on the website.

Information on failure demand can be gleaned from the contact centre, 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 centres 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.

The automatic categorisation of calls, based on the types of words and phrases that typically get used within these types of calls, is a starting point. Analytics solutions can then add non-audio data, such as desktop activity or account status, and 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, analysed and passed to the marketing or pricing teams to provide them with real-life, rapid and accurate information upon which to base decisions. There can be a correlation of repeat calls with specific agents and/or products, which can lead to training opportunities. This categorisation gives a starting point for analysis, meaning that businesses can listen to the right calls rather than getting them randomly or employing large numbers of people to get insight from customers' calls.

Interaction analytics can also be used to learn more about customer contact behaviour: analysing individual customers' contact patterns can be used to develop customer profiling which may be used to identify customer groups who are more likely to call in multiple times, allowing the business to focus proactive outbound contact upon these people. It is also the case that a considerable number of repeat calls occur even though the correct information was provided initially: some customers will contact businesses multiple times because they were not satisfied with the response they received.

An example of a successful use of analytics for FCR purposes was seen in an organisation which had identified repeat issues as being a problem. Analysing 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.

Integrating desktop data analytics into speech analytics allows businesses to tag valuable data automatically - such as account ID, product name and order value - from CRM, helpdesk and other servicing applications to recorded interactions. This additional desktop data can be used to enhance automated classification, which allows more targeted and efficient analysis centred on key business issues, such as lower-than-expected first-contact resolution, as well as customer churn, differences in call handling patterns between employees, frequency of holds/transfers associated with order cancellations and upselling and cross-selling success rates.

There is an increasing requirement for omnichannel analytics, including email, text 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 optimisation is often a quick win that can provide immediate economic benefit to businesses: in the UK, a mean average of 10% of calls that go into an IVR system are 'zeroed-out' - rejected by the customer in favour of an operator - and in the US, 17% fail the self-service test.

Businesses using customer interaction analytics to review these failed self-service sessions will be able to categorise 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, menu choices were not intuitive, or did not 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.

There will come a time when all data generated within a business will be able to be cross-correlated to provide insights not only to the customer contact department but also to parties such as marketing, operations and finance, so they have greater insight about issues such as price elasticity and revenue maximisation. The ability to prove to senior management that the actions and insight held within the contact centre has a distinct and measurable impact on the entire company – and as such is not simply a cost centre - is likely to improve its visibility and credibility which should help to create a long-term holistic view and assist further investment.

The 'tell-me-why' and discovery modes of customer contact analytics will improve over time as better accuracy and more powerful processing provides richer and more joined-up data for analysis, and the inclusion of non-voice channels show the full picture of customer contact and its intent. There will also be major efforts to link analytics to proving profitability, including identifying "moments of truth" (points at which buying decisions are made, and long-term loyalty can be won or lost), and being able to predict and manage customer churn.



Intelligence  
from Customer  
Interactions

## First Call Resolution Challenges, Examples & Best Practices

Research from **The Ascent Group** shows that 60% of companies that simply measure FCR for 1+ year report a 1 to 30% improvement in their performance. And that doesn't even touch on improvements to the customer experience.

The key to improving first-call resolution is vigilance. You must evaluate current FCR, develop achievable goals, and then put a plan into place. After your plan is in place, it's important to be attentive, measure performance, and track your metrics.

- **Set Program Goals:** Your steering committee should define FCR goals and desired outcomes.
- **Train your Agents:** After setting goals, agent training is the most important step in achieving improved FCR.
- **Track Performance:** Continuously!
- **Measure on Multiple Channels:** A high FCR on phone calls, but a low FCR on chats does not a good overall FCR make. Make sure you're **measuring across all contact channels**.
- **Develop Incentive Programs:** Agent incentive plans encourage agents to work harder to resolve issues the first time.
- **Set Realistic Customer Expectations:** Updated wait times, backlog reports, monitored turnaround – all help set realistic customer expectations (so they're not expecting resolution in a day, when the standard is, say, a week).

### Examples of Improved First Call Resolution

**Speech analytics** can have a great impact on FCR. Take this example: **Aberdeen** conducted a **speech analytics** benchmark study, in which it tracked two groups of contact centres: the "leaders," which represented 30% of the sampled group, and the "followers," which were defined as the bottom 70%.

Surprisingly (but not), the Leaders using speech analytics averaged a 76% first call resolution rate; comparatively, the Followers had a 23% average FCR.

Simply put, FCR can be a tough metric to track: How do you determine whether an issue is fully resolved during the first contact? Enter speech analytics, which capture real conversation, integrate speech with caller identifiers, and in that way correlate repeat calls with specific agents, products, or issues. By identifying the reasons behind repeat contact, you can then take action to resolve these underlying issues that affect FCR and the entire customer experience.

### Challenges of Improving First Call Resolution

As with many contact centre metrics, the challenges of improving FCR reside in the *how*? How can you identify room for improvement and when you do, how can you improve FCR?

Again, this is where technology comes into play. Gone are they days (or, at least, gone they should be) when agents themselves input resolution statuses after a call. Today, using speech analytics, customer feedback, and other technology, you can streamline how your contact centre collects, understands, and responds to raw data on FCR. Then, you can make a plan (see bullets above).

### Best Practices for First Call Resolution

When it comes to first call resolution, it boils down to consistency. Once you understand your FCR goals, know how to track FCR properly, and have a plan to improve, you have laid solid groundwork. From there, encourage your contact centre to follow first call resolution **best practices**, so your goals stay current and realistic:

**Look at the Whole Picture:** Remember that your customers don't just call you on the phone; they're spread across channels, from email and chat, to social media and self-service options. Define FCR goals for each channel and assign agents with expertise and FCR ability in each of those channels.

**Leverage Interaction Analytics:** Put **interaction analytics**, and especially speech analytics, in place, and you'll have immediate insight into customer-agent communications across channels.

**Respond and React to Your Customers:** Customer feedback is your key to improving agent performance, boosting the customer experience, and in the process, improving FCR. Collect customer opinions via social media, surveys, and other methods, and then leverage that feedback to improve policies

## REDUCING UNNECESSARY REPEAT CONTACTS

There are numerous ways to improve first-contact resolution rates and decrease unnecessary repeat contacts, through using technology, improving business processes and optimising agent performance:

- routing a greater percentage of calls accurately through improving IVR choices, implementing visual IVR menus and through other IVR-driven routing improvements (e.g. routing based on customer language, previous call history, etc.)
- setting clear expectations of the time that will be required to carry out any further supporting actions, so as to avoid customers calling back prematurely
- proactively communicating with dissatisfied customers
- improving agent access to relevant customer and product/service information
- ensuring agent training and knowledge on products and services is suitable for their roles and the types of call that they are taking
- implementing a widely shared knowledge base, making sure that it is kept up-to-date and the agents are confident about how to find information
- improving automated first-line service (e.g. chatbots, web self-service). While handling a greater number of simple interactions online may actually decrease the first-contact resolution rate, there will be substantially fewer calls coming into the contact centre which means that the pressure on agents to handle calls quickly will be less, allowing them to spend more time resolving more complex issues
- encouraging and empowering agents to own the issue, rather than passing it on elsewhere
- emphasising to agents and supervisors that FCR is an important metric by sharing its performance over time and through rewarding staff for improved levels of FCR.

The following section will look at these and other methods of reducing unnecessary repeat contacts and improving first-contact resolution rates over time.

## END-USER QUESTION 3: WHAT'S THE BEST WAY TO GET A QUICK IMPROVEMENT IN FIRST-CONTACT RESOLUTION RATES?

 CallMiner® When it comes to finding ways to quickly improve first-call resolution rates, it boils down to being able to comprehensively analyse and understand both the root cause of repeat callers and the frequency or percentage of those drivers (rest assured there is more than one) of all your repeat contacts. Interaction analytics (omni-channel speech analysis) is universally recognized as the most important tool in your arsenal to assess all customer interactions and thus the reasons behind contact drivers.

Using whatever form or degree of customer engagement analytics you may be employing, once you have your repeat call drivers identified and ranked according to the volume or frequency of those specific issues, you need to evaluate their root causes. Are these drivers a result of agent performance or knowledge, process, product issues, availability, billing, product, weather or event related? Also understand that not all repeat call drivers will have a simple solution or “cure” to improve FCR. Your contact driver evaluation system must include all root cause stakeholders who can help identify the solution, cost and level of effort or LOE needed to resolve or at least improve these contact driver issues.

From there your FCR improvement project begins with identifying the highest frequency driver with the lowest cost and LOE to resolve/improve. Once you understand your FCR goals, know how to track FCR properly, and have a plan to improve, you have laid solid groundwork to realize sustainable improvement in your FCR rates.

## WEB SELF-SERVICE

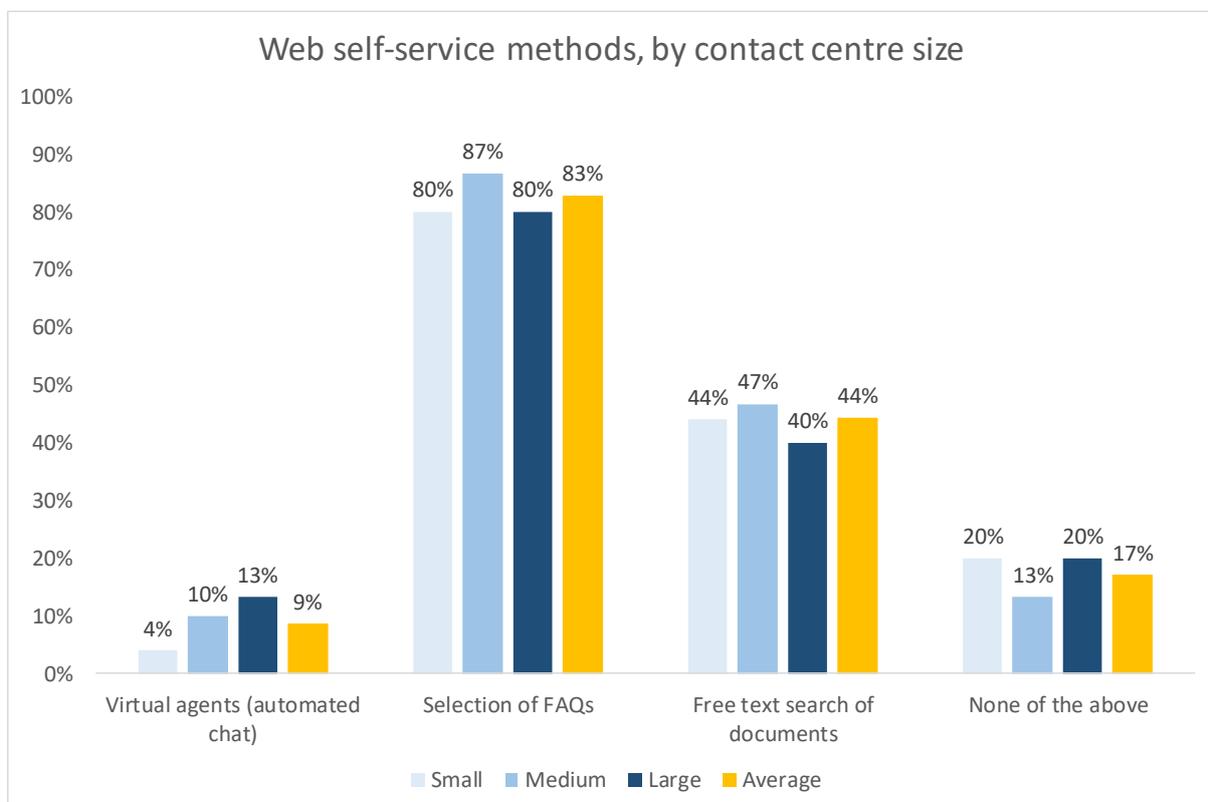
For businesses, by far the major advantage to having customers use web self-service is the fact that the cost per automated support session is estimated to be between 40 and 100 times cheaper than a live call to an agent.

Most customers will visit a website first, but if the self-service experience does not give them what they want – immediately and accurately – they will either call the business or go elsewhere. In cases where the customer is tied into an existing business, this will result (merely) in a higher cost of service and decreased customer satisfaction. In cases where the web visitor is a potential customer, a failure in the self-service process on a website will mean the almost-certain loss of a sale. In all cases, providing effective web self-service options - with a clear path to escalation to a live agent, along with any contextual customer-specific information - is in the best interests of the business.

The website can provide various self-service options for the customer, ranging from the most basic search and static FAQ functionality, to personalised virtual agents and dynamic FAQs.

By far the most prevalent functionality within web self-service is that of FAQs (frequently asked questions), which are used by 83% of respondents. The free text search of the document library is somewhat less well supported, at 44%. 17% of respondents offer no web self-service at all.

Figure 15: Web self-service methods, by contact centre size



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Virtual agents are employed by only 9% of respondents, more often those within large enterprises, and will be explored in more depth in the next section on Digital Channels.

An early section of this report looked at the failure of web self-service and its impact upon first-contact resolution, finding that by far the most important reason for customers abandoning self-service was that the issue is too complex and required an agent.

While businesses cannot hope to solve every issue through self-service, it is clearly important to focus upon those more common requests where even customers who are relatively inexperienced in using web self-service had a good chance of resolving the issue without contacting a live agent. Key to the successful take-up of self-service is that agents should be encouraged to take the time to explain to customers that they could use self-service to solve their own issues, rather than making a phone call. For agents to spend a minute or two explaining to a customer how they can do this is a good investment in avoiding unnecessary calls in the future.

## AI-ASSISTED SERVICE FOR AGENTS

The section above introduced the use of AI to help with self-service, often in the form of virtual agents. When the virtual agent / chatbot application has low confidence that it has returned the correct result, it is able to escalate the customer's query seamlessly to a live chat agent, who then has access to the self-service session history, enabling a greater chance of a successful resolution without repetition. The eventual correct response can be fed back to the automated virtual agent (and the knowledge base underlying it), which will make it more likely that future similar requests can be handled successfully through automated agents.

It is not only the customer that can benefit from this type of AI assistance. Agents cannot be expected to know everything about each product, issue or service, especially in high attrition operations where expertise is at a premium. Even where the knowledge is available to agents, they have to know where to find it. Within the call, the typical agent is likely to have to use multiple knowledge sources, which will also take longer and run the risk (especially for new agents) of missing vital information that is available but perhaps hidden away. Robotic process automation (RPA) can gather knowledge sources and provide them to the agent in a unified manner, and any updates to this information can be shared automatically across applications and systems (including self-service), providing an immediate, up-to-date and consistent source of information. RPA can assist with agent tasks in the background, provided guided assistance at specific stages of the call, including dynamic scripting and compliance hints.

The use of AI to assist agents in real time within a call offers the chance of a real paradigm change: by the nature of the job, an agent-customer interaction has always necessarily been between two people, and the level of support that an agent can actually receive within a call is very limited. Advice on learning points have been restricted to post-call reviews, rather than realistically being able to improve the outcome of the interaction in real-time. AI offers an opportunity to provide timely and effective support to every agent as necessary, actually within the call. AI can provide the agent with suggestions about next best-action, pull up relevant information from the knowledge base, make suggestions based on customer history and sentiment about optimal cross-selling and upselling opportunities, and even the style of conversation that this customer may prefer. This has a positive impact on first-contact resolution as well as customer experience, and is of particular use to less experienced agents and in unfamiliar subject areas.

AI can work alongside agents to provide relevant knowledge that may be otherwise take a long time to find, and update the knowledge bases available to humans and AI self-service systems using an automated feedback loop that is constantly improving based on actual outcomes.

It's possible to fix customer service problems before they occur: for example, sudden numerous requests about the same thing are likely to indicate a breakdown in a specific business process or the occurrence of an outside event. AI can quickly recognise that this is an issue, and deliver information solutions to an agent's screen as well as to the chatbots, and flag that changes should be made to the IVR announcement.

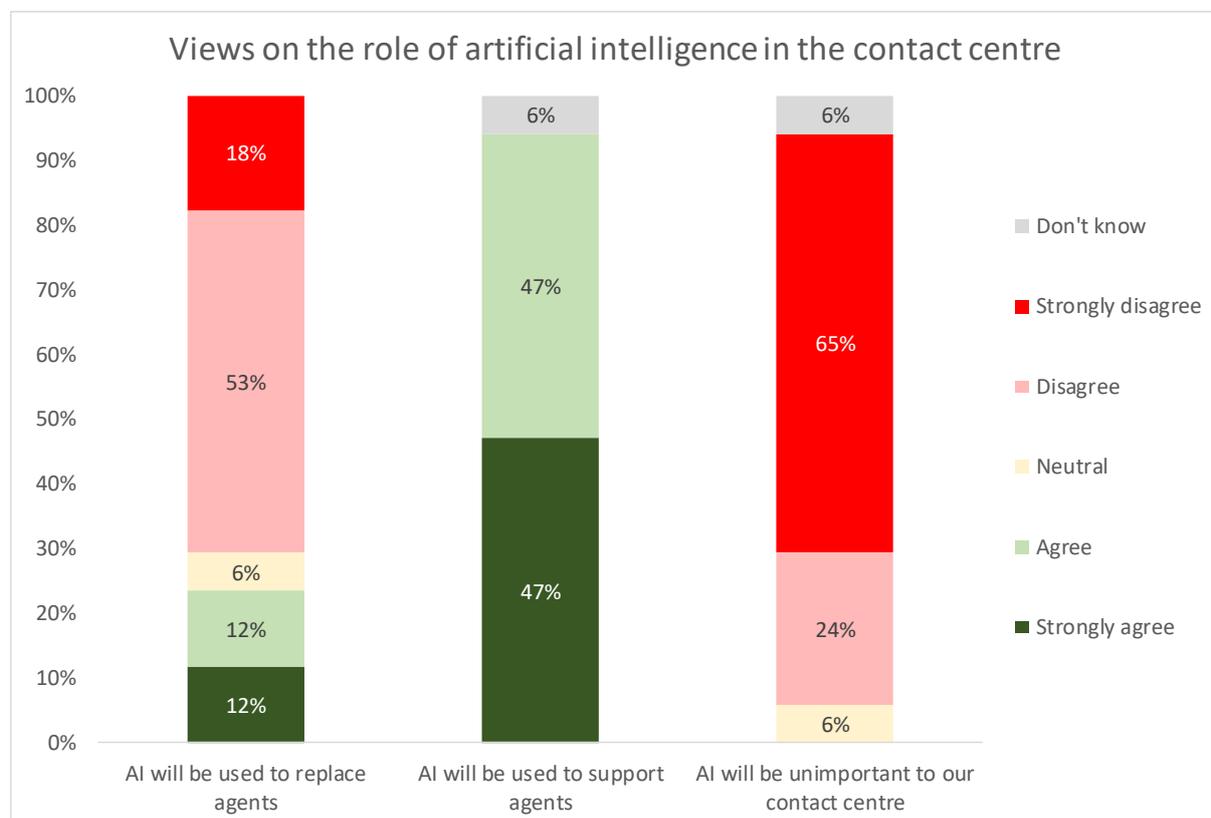
It is interesting to note that our survey respondents generally did not believe that AI would replace agents: although 24% agreed to some extent that this would be the case, 71% disagreed.

Respondents from large 200+ seat contact centres were more likely to feel that AI would replace human agents, with those in small and medium operations doubted that this would be the case.

Virtual unanimity was found when the question was asked as to whether AI would support human agents, with 94% agreeing or strongly agreeing. There was agreement across all size bands that this would be the most likely outcome, reducing risk, speeding up responses and providing customers with higher quality resolutions.

65% strongly disagreed that AI would be irrelevant to their contact centre, with general agreement that AI will affect contact centres of all sizes. This figure is growing year on year as AI becomes more widespread and the benefits better understood.

Figure 16: Views on the role of artificial intelligence in the contact centre



## KNOWLEDGE BASES

It is impossible for agents to be able to answer every query first time without having access to a repository of knowledge. For many organisations, a knowledge base started off as a list of useful documents and files, which quickly grew into a wider, less coherent collection of information sources, requiring increased levels of expert management, amendments, editing, and deletion. However, the resources required to keep these knowledge bases up-to-date are very scarce, as the people within the business that have the capabilities and expertise to do so also have their own jobs to do. Very quickly, what started off as a useful and highly tailored information resource has mushroomed into an expensive, out-of-date and increasingly less-useful collection of information of wildly varying quality. AI can assist in the management of knowledge bases by feeding back successful outcomes, and noting when the answers provided did not meet the requirement.

On an ongoing basis, feedback from agents and customers will identify gaps in the knowledge base which will need to be filled by product experts. Some knowledge bases will require full-time, dedicated resource to manage them, whereas others will rely on automated systems making dynamic changes depending on callers' and agents' requirements. It is often the case that large businesses with many products and services to maintain will have numerous editors across many departments who can make suggestions, although it may only be a small handful of people who will verify and publish this information. Businesses may want to consider allowing certain contact centre agents to create new entries based on their communications with the customer. Understanding which documents are being used the most allows the maintenance efforts be focused on the most important areas.

It is not just the publishing of information that is vital: crowd-sourcing of answers, and feedback on accuracy and success from the wider "super-user" community will help the business to fine-tune the knowledge base and train the AI. Processes to gather this feedback should be put in place, and continually revisited to check effectiveness, and it's possible to add successful answers to the knowledge base very quickly if a response from an agent (for example, via email or web chat) has been marked to be successful, and AI is an effective method of doing this regularly and consistently. Those who contribute timely and useful information - whether a customer or an employee - can be rewarded and recognised accordingly. People **want** to share their knowledge with others, and enabling them to do so easily is beneficial for all parties concerned. Businesses could measure the success of the knowledge management system by measuring the return on investment from call avoidance, by the rating or score given by readers of recommended articles, or through targeted customer satisfaction ratings.

The process of assembling the data and knowledge can be done through data labelling, which requires a tag to be put against each knowledge source (e.g. text, pictures, videos), showing what it is about, for example "a video clip showing how to change an oil filter on a specific car model".

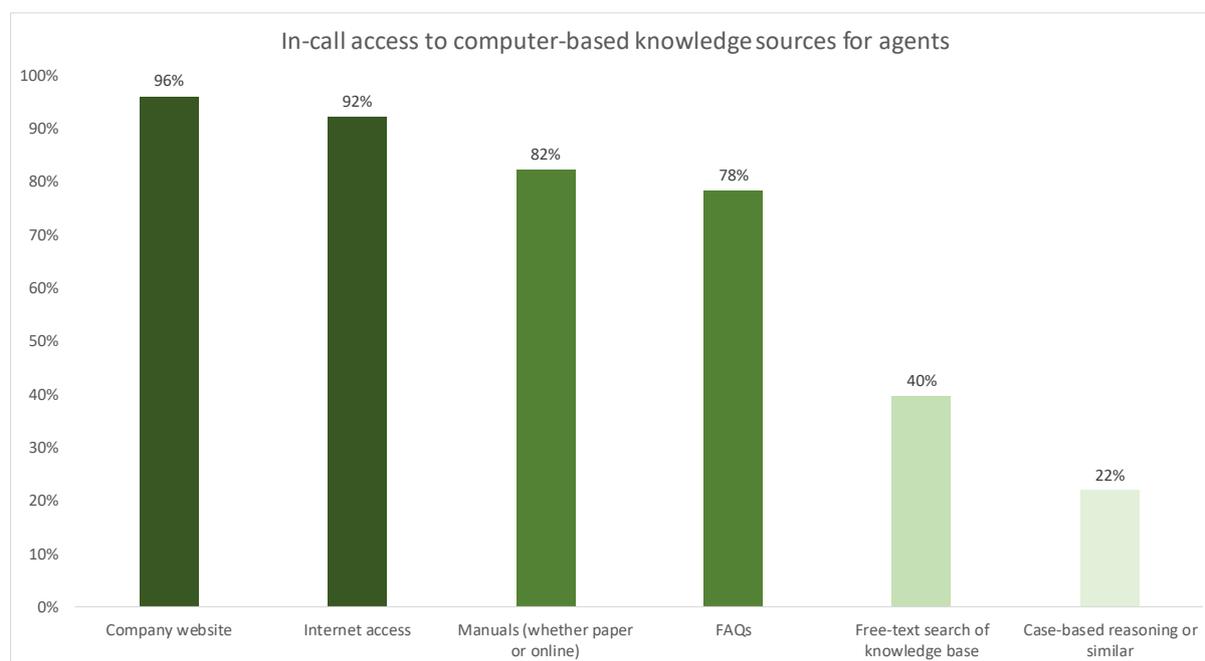
As this can require a great deal of resource, another method may be to crowdsource the collation and tagging of data from a number of sources: the agent as they go about their everyday business; a field technician solving the customer's issue; or super-customers who are happy to answer queries from other customers on a web forum. AI can also be used : a subset of machine learning, 'deep learning' is a "class of machine learning algorithms that uses multiple layers to progressively extract higher level features from the raw input. For example, in image processing, lower layers may identify

edges, while higher layers may identify the concepts relevant to a human such as digits or letters or faces”<sup>2</sup>. This requires a great deal of data, tagging, human evaluation and AI training until an acceptable threshold for accuracy is reached, and the AI-enabled self-service system can recognise and handle matters for itself.

Depending on its sophistication, the creation, uptake and maintenance of a knowledge base may require a dedicated team, at least in its initial phase, of a user experience designer, data scientist and developer to build the model, with inputs from business experts to keep the model aligned with what the commercial requirements actually are. Those looking to implement use-cases which are tightly focused upon specific high-volume queries and processes (e.g. chatbots), will need less intense support. Solution providers may have editable templates and predefined applications for many popular business processes, or even have pre-trained bots. Key to success is remembering that this is about solving a business issue, not implementing impressive technology, so it is vital that both the user interface and implementation procedure are friendly for those other than AI specialists.

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 22% 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.

Figure 17: In-call access to computer-based knowledge sources for agents



Businesses interested in how AI can help service should aim for a symbiotic relationship between customer self-service and agent assistance, the focal point of each being a knowledge base which is continually refreshed, amended and added to by agent, customers, super-users and AI itself.

<sup>2</sup> [https://en.wikipedia.org/wiki/Deep\\_learning](https://en.wikipedia.org/wiki/Deep_learning)

## REAL-TIME ANALYTICS

Some solution providers suggest that ‘real-time analytics’ should perhaps be more accurately referred to as ‘real-time monitoring and action’. Analysis (“a detailed examination of the elements or structure of something<sup>3</sup>”), refers to the discovery and understanding of patterns in data, and is currently something that by definition only happens post-call when all data are fully present. On the other hand, real-time monitoring looks for and recognises predefined words, phrases and sometimes context, within a handful of seconds, giving the business the opportunity to act.

Real-time speech analytics assists with FCR through applying the results of machine learning that have been carried out on large quantities of previously recorded conversations, providing an understanding of the actions and information that have been seen to provide successful outcomes in previous similar interactions, and relaying this to the agent within the call. Real-time analytics can offer guidance to the agent on the next best action for them to take, bring in CRM data and knowledge bases to suggest answers to the question being asked, and advise on whether to change the tone or speed of the conversation.

Furthermore, it can trigger back-office processes and open agent desktop screens depending on call events. For example, the statement of a product name or serial number within the conversation can open an agent assistant screen that is relevant to that product. Real-time analytics can also check that all required words and phrases have been used, e.g. in the case of a service request or forming a phone-based contract, so as to avoid unnecessary callbacks as not all of the relevant information was shared with the customer.

The speed of real-time analysis is crucial to its success: long delays can mean missed, inappropriate or sub-optimal sales opportunities being presented; cancellation alerts can show up too late; compliance violations over parts of the script missed out may occur as the call has already ended.

The effectiveness of real-time analysis may be boosted by post-call analytics taking place as well. For example, by assessing the outcomes of calls where specific cross-selling and upselling approaches were identified and presented to agents in real time, analysis can show the most successful approaches including the use of specific language, customer type, the order of presented offers and many other variables (including metadata from agent desktop applications) in order to fine-tune the approach in the future. Additionally, getting calls right first-time obviously impacts positively upon first-call resolution rates, and through picking up phrases such as "speak to your supervisor" or "I've called about this before", can escalate calls automatically, flag them for further QA and be used to help calculate FCR. Analysis of call recordings can also be used to track how many calls come from the same phone number over a period of time, and to identify the issues that are causing these repeat calls.

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<sup>3</sup> <http://www.oxforddictionaries.com/definition/english/analysis>

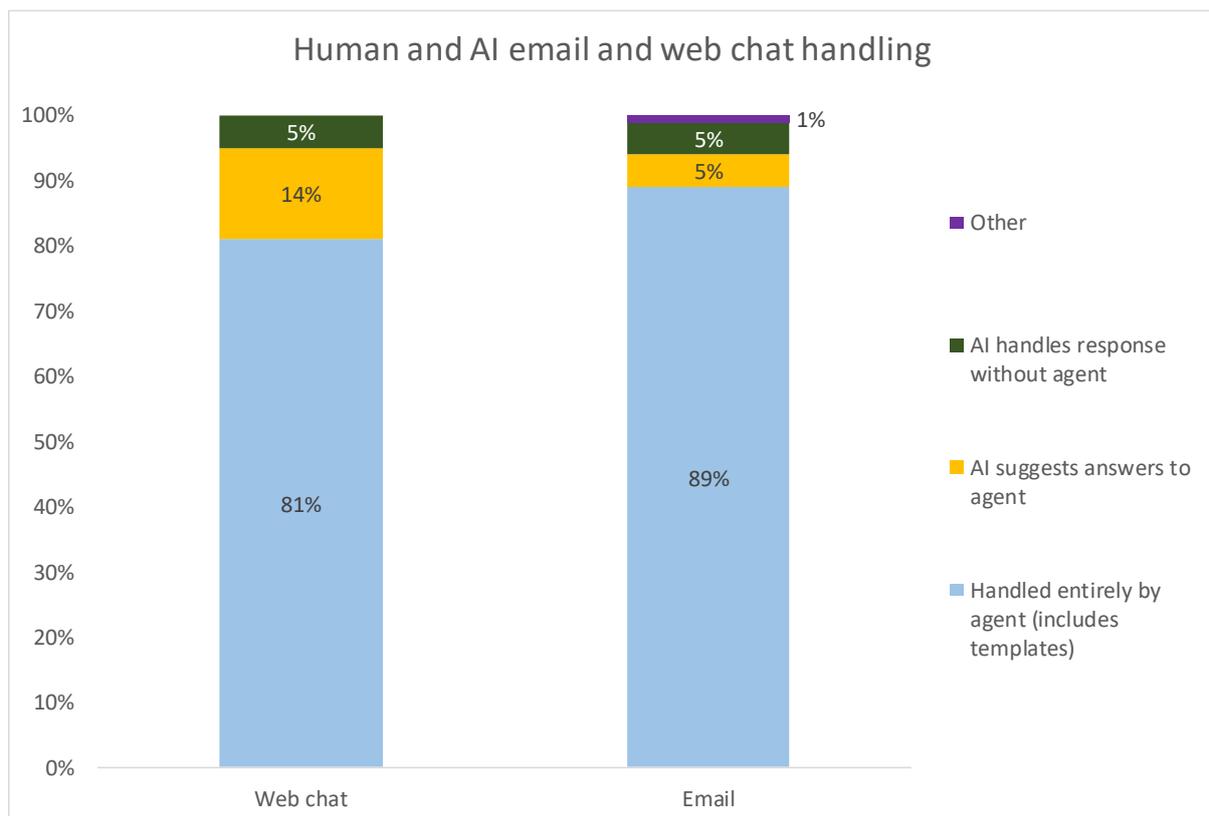
## DIGITAL CHANNELS

Perhaps the most obvious current potential use of AI in the customer contact environment is in handling digital enquiries, as web chats often take considerably longer than phone calls (due to agent multitasking, and typing time) and that many email response rates can still be measured in days.

The main reason for this slow response rate of emails, and the excessive length of web chats is that there is very little automation currently being used in the UK contact centre industry which means that the cost of an email or web chat is very similar to that of a phone call.

Digital channels may work quite well for customers, but businesses are not generally seeing the cost savings that automation can bring. Very few emails or web chats are handled entirely by AI, although a growing proportion of web chats are dealt with by AIs working alongside agents, suggesting responses which agents can then accept or amend. This way of working is most likely to be the norm in the foreseeable future, with the speed of automation and the emotional intelligence and commercial understanding of humans providing superior service at a lower cost.

Figure 18: Human and AI email and web chat handling



The virtual agent may appear 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 may then seamlessly route the interaction to a live web chat agent who will take over. It is possible that the browser will not even realise 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 many businesses believe it is best practice to identify clearly between virtual and real agents. The eventual correct response can be fed back to the automated virtual agent and the knowledge base underlying it, which will make it more likely that future similar requests can be handled successfully through automated agents.

The most sophisticated conversational AI or virtual agents encourage the visitor to engage with them using natural language, rather than keywords. The virtual agent will parse, analyse and search for the answer which is deemed to be most suitable, returning this to the customer instantly. Many virtual agent applications will allow customers to give all sorts of information in any order, and either work with what it has been given, or ask the user for more detail about what they actually meant. Having been unconsciously trained over the years to provide their queries in a way which standard search functionality is more likely to be able to handle (for example, a couple of quite specific keywords), customers must be encouraged and educated to use natural language queries in order for virtual agents to be able to deliver to their full potential.

Sophisticated AI applications attempt to look for the actual intent behind the customer's question, trying to deliver a single correct answer (or at least a relatively small number of possible answers), rather than a list of dozens of potential answers contained in documents which may happen to contain some of the keywords that the customer has used. The virtual agent application may also try to exceed its brief by providing a list of related questions and answers to the original question, as it is well known that one question can lead to another. Solution providers and users train the system to pattern-match the right words or association of words with the correct result: the application, unlike older forms of web search techniques, does not simply guess what the customer wants, or how they will express themselves. Through 'listening' to what the customers actually say – perhaps through a mixture of large quantities of audio and text – the initial set-up configuration can achieve a good accuracy rate, which really benefits over time as a positive feedback loop is established. Solutions that gather and differentiate customer requests and results from multiple channels, noting the difference between them, have an even better success rate.

Virtual agent functionality 'understands' the context of what the customer is asking, with the result being more akin to that of an empathetic human who also has had access to what the customer has been trying to do. For example, if asked "When can I expect my delivery?", the context and the required answer will be different depending on whether the customer has placed an order and is enquiring about its status, or has only a hypothetical interest in turnaround times in case they decide to place an order.

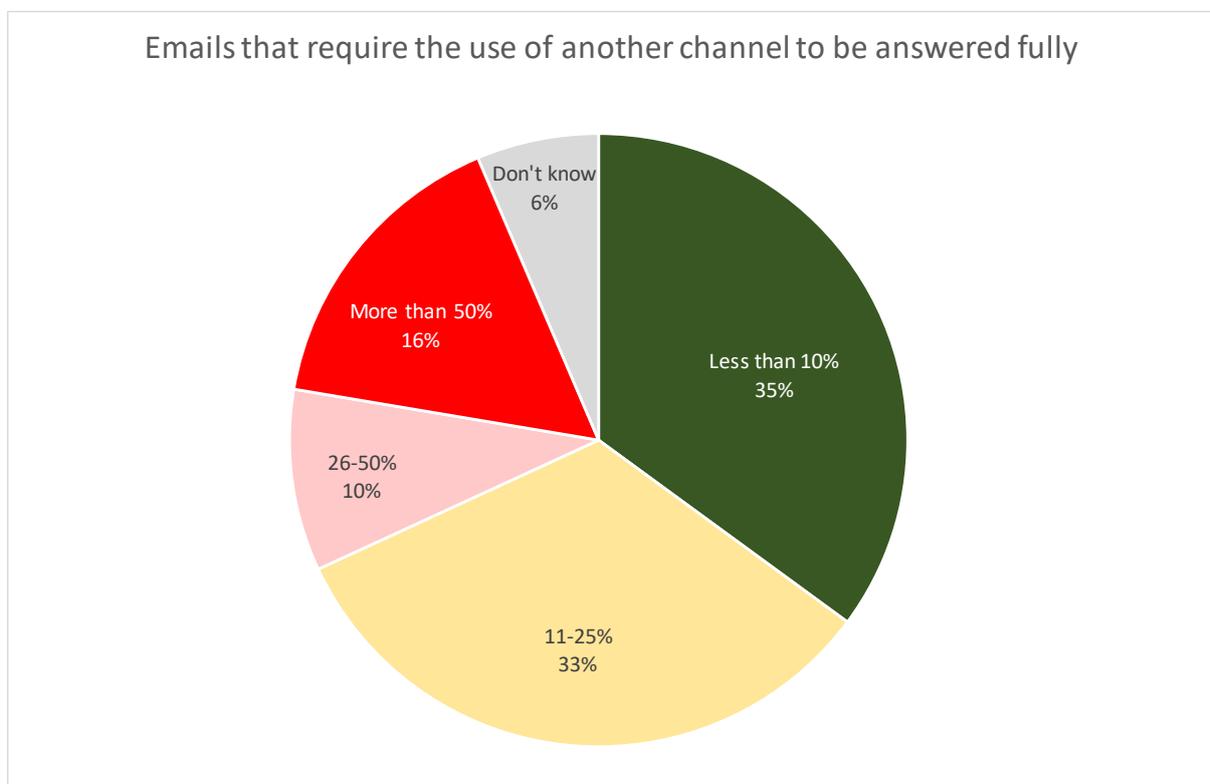
AI can also be used for email to create responses that look as though they have been written by a person rather than a machine, using natural language processing to write content, as well as understand it. Emails can be tailored based on the customer’s history and behaviour, optimising marketing messages as well as service, sending emails at a time when they have been calculated that they are most likely to be opened. Personalised emails can be sent, based on subscribers’ past email browsing activities to understand the type of content that they actually care about. This is a way in which AI can outperform human agents, who do not have the time or expertise to find patterns or draw conclusions from huge amounts of data.

As with web chat, agent-handled emails by their nature take considerably longer than a phone call to be handled correctly, and so are unlikely to deflect as many calls from the contact centre as could be wished.

The following set of charts show how successful or otherwise digital channels (email, web chat, social media) are resolving issues without having to escalate into a phone call.

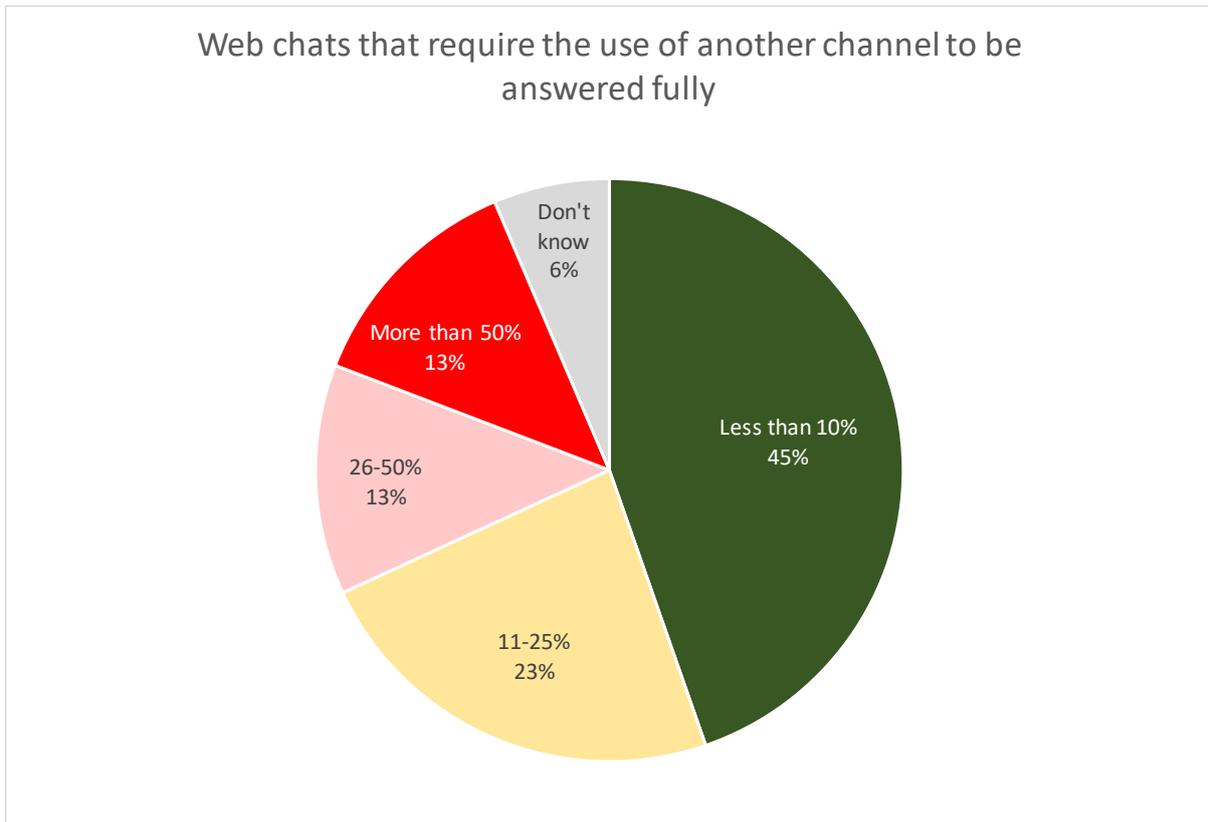
Respondents were asked to estimate the proportion of emails that required the use of another channel to be answered fully. Only 35% of respondents stated that fewer than 10% of their emails could be answered fully without recourse to alternative channels, with 16% stating that more than half of their emails needed supplementary channel assistance.

Figure 19: Emails that require the use of another channel to be answered fully



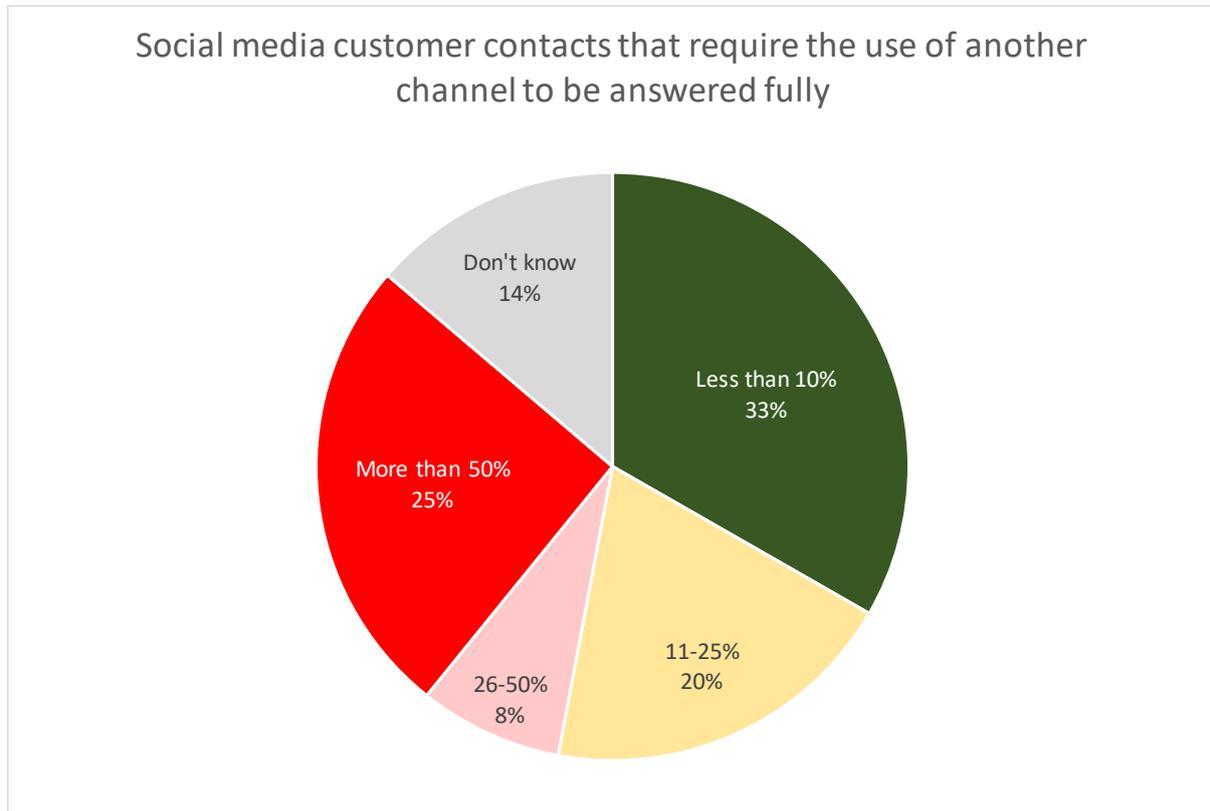
45% of respondents report that fewer than 10% of web chats require another channel to answer the query fully, with 13% stating that more than half of web chats require movement to another channel, which is likely to be negative for the customer experience.

Figure 20: Web chats that require the use of another channel to be answered fully



25% of respondents state that more than half of their social media requests have to be completed via another channel, perhaps because of the public nature of the channel, and that customer identity verification is not as straightforward as with voice.

Figure 21: Social media customer contacts that require the use of another channel to be answered fully



Clearly, the limited capabilities of many businesses' digital channels is driving a large number of customers to use another channel to resolve their issue, and this is an area that businesses looking to improve FCR should certainly focus upon.

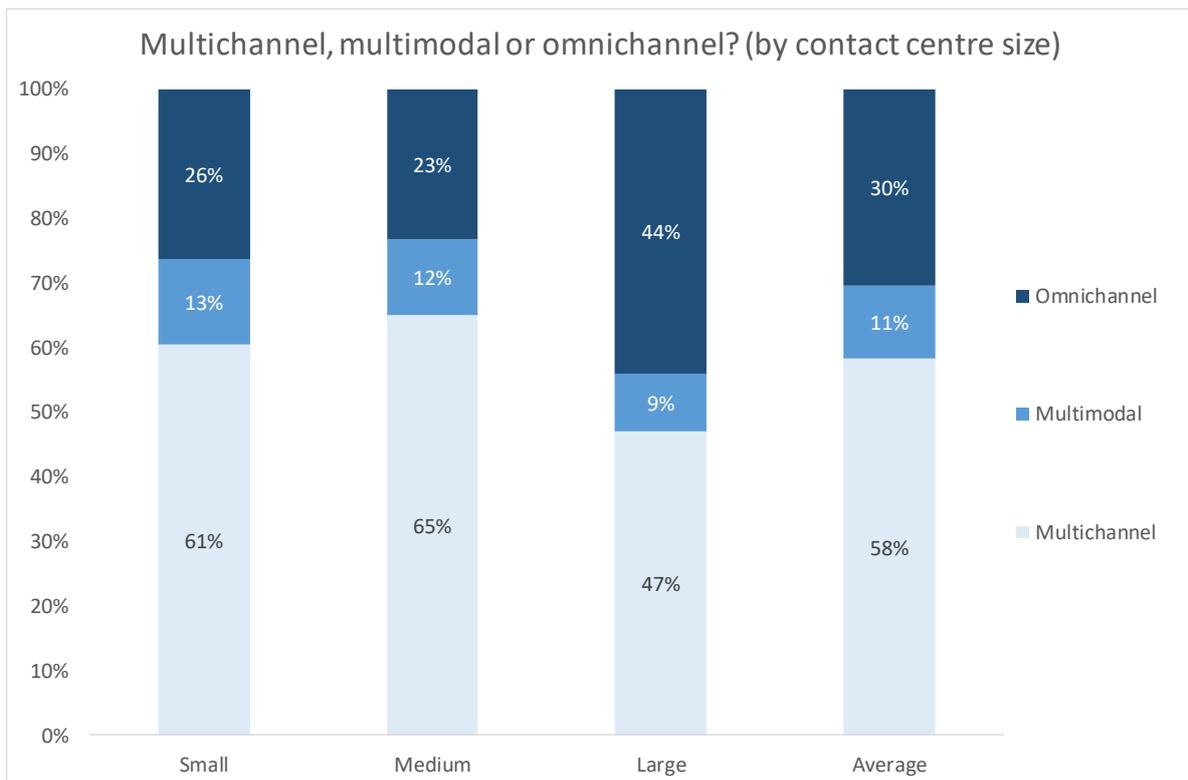
## DEVELOPING AN OMNICHANNEL APPROACH

Recent years have seen the word ‘omnichannel’ introduced as describing the goal of customers being able to contact (and be contacted) through any channel – switching between them during the interaction as appropriate, while taking any relevant data and history along with them – with a single, unified view of the customer’s journey being available to the agent. From the customer’s point of view, an interaction that starts in a web chat in which a ‘how-to’ video is sent, and results in the agent carrying out a brief call to clarify any more difficult points would certainly be seen as a first-contact resolution. However, for many companies, siloes between channels and business processes mean that true omnichannel is still some way off.

For the purposes of describing how far along the omnichannel process our survey respondents are, those who offer multiple communication channels to customers were asked to place themselves into one of three categories:

- **Multichannel:** “We offer a choice of channels to customers (i.e. several of voice, email, social media, web chat), from which they can use one in a single interaction. If they change channel, the context and history is lost”
- **Multimodal:** “We offer a choice of channels, and customers can use more than one in the same interaction (e.g. an agent can send an email or SMS to a customer while they are talking on the phone)”
- **Omnichannel:** “We offer a choice of channels, and can use more than one over multiple interactions, while retaining the history and context of the original enquiry. Relevant information follows the customer across channels and interactions”.

Figure 22: Multichannel, multimodal or omnichannel? (by contact centre size)



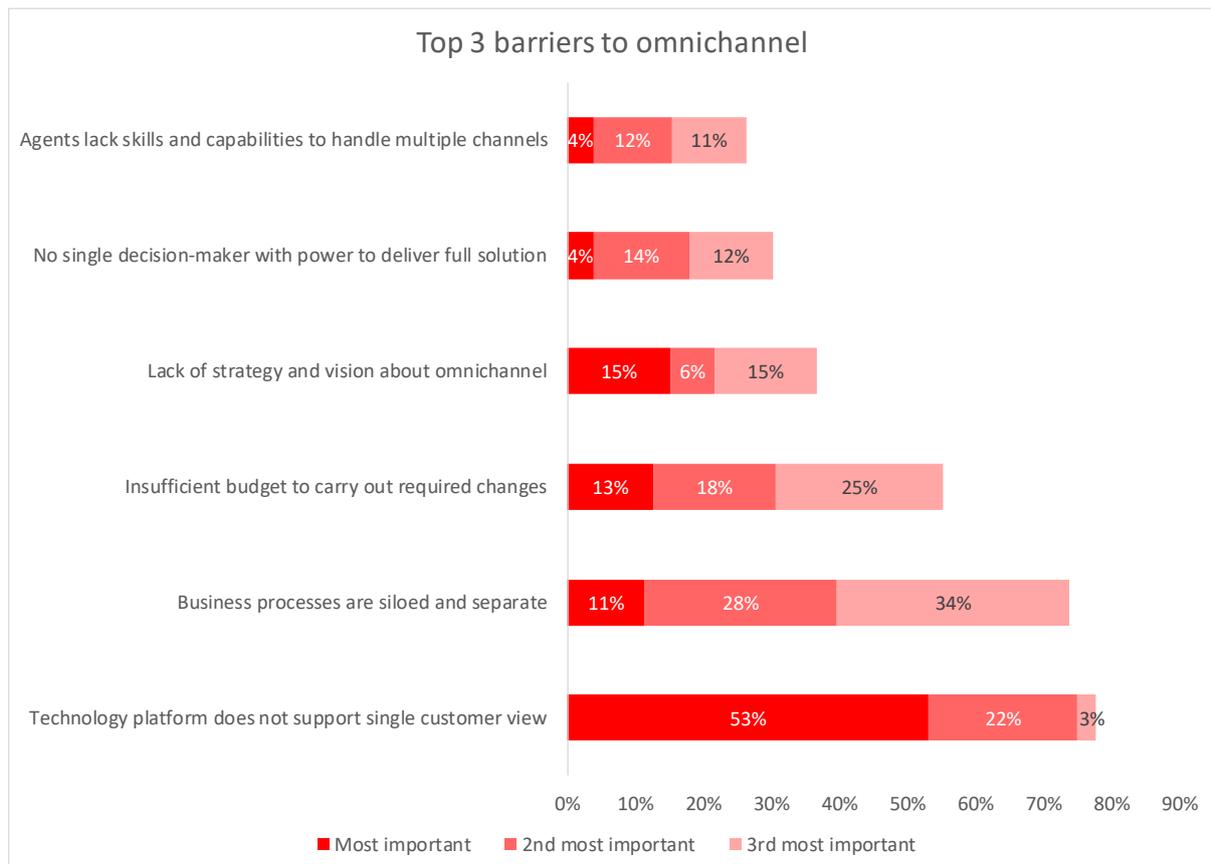
Survey respondents believe that there are two main barriers to omnichannel:

- the technology platform does not support a single view of the customer
- business processes are siloed and separate.

While these inhibitors to omnichannel are certainly formidable, they are not insurmountable. From a technical viewpoint, the starting point is to have a single integrated platform that is capable of identifying a customer regardless of the channel which they choose to use. This will involve mean evolving from the siloed, channel-focused point solutions that were put in place to handle a specific need, and using a services architecture that is extendable to different channels in the future. It is also important to have a master dataset for product and customer data which is a ‘single source of truth’ that can be drawn upon by any customer or agent through any channel.

A key aim of omnichannel is to provide a consistency of customer experience, and this requires access not only to the same master dataset, but also the same knowledge bases and business logic must be applied equally. There must be real-time data flow and updates between channels and databases, as without this, consistency is impossible.

Figure 23: Top 3 barriers to omnichannel



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Looking at FCR across individual digital channels, synchronous channels such as web chat can be seen as being quite analogous to the voice channel in that the agent and customer experience two-way communications in real-time, unlike email where the gap between responses can be measured in minutes, hours or even days.

One of the best ways to improve first-contact resolution in the email channel is to provide a template questionnaire to the customer which will hopefully gather all of the information required in order to answer the question first-time, rather than just allowing the customer to send an unformatted email. Using a template also makes it easier to categorise the types of interaction that are causing the greatest number of repeat calls or escalations to a live channel.

Email 'ping-pong' – where multiple emails are sent from both sides to clarify issues and gather required data – are negative for the customer experience, take a great deal of an agent's time and can be seen as being detrimental to FCR. Some businesses place a cap on the maximum number of emails that can be received from a customer, preferring then to take control by calling them directly.

Web chat offers significant advantages for those businesses looking to improve their FCR in that agents can handle multiple simultaneous chats (whereas they can only handle one phone call at a time) and customers who are browsing on a website appreciate not having to disrupt their thought processes by changing device (e.g. from a PC to a phone) or their mode of communication (e.g. from visual to aural).

## REAL-TIME DESKTOP INFORMATION AND RPA

One way in which first-contact resolution can be improved is to unify and automate everything needed into a single agent desktop, bringing in the relevant data automatically depending on who the caller is, their contact history and why they are calling. At the end of the call, the correct data is written back to the relevant places, and the correct processes started 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.

Robotic process automation (RPA) consists of digital software agents that handle repetitive, rules-based tasks at high speed, with great consistency and accuracy. The RPA workforce acts in the same way as human agents, working at the presentation layer level rather than requiring deep integration with systems, replicating the work that live agents or chatbots would be doing, but more quickly and without requiring any rest. RPA agents can input data, trigger processes, pass work onto other robots or humans as rules dictate and replicate data across multiple applications without making any copying mistakes.

RPA-assisted integrated desktop 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.

AI can work in association with robotic process automation solutions. For example, in the case of unstructured data such as customer emails or letters, optical character recognition can assist the entry of the customer requirements into the business system, amending databases and starting processes automatically where appropriate.

## IVR AND SKILLS-BASED ROUTING

IVR (interactive voice response) - 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 recognised, 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, prioritising against business rules in order to deliver a premium standard of service to them (e.g. minimising time on-hold, spending longer on the phone with them, offering high-value services, etc.)
4. to deliver a total customer self-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.

60% of UK contact centres use DTMF IVR, and of those which offer full self-service functionality (i.e. not just routing), a mean average of 18% were handled entirely by self-service without requiring an agent.

Figure 24: Overall proportion of calls handled entirely through self-service (only in respondents which offer telephony self-service)

Proportion of calls handled entirely through self-service <u>if offered</u>	
1 <sup>st</sup> quartile	30%
Median	10%
3 <sup>rd</sup> quartile	5%
Mean	18%

The initial IVR announcement can be used to relay information to customers that may then circumvent the need to speak to a live agent at all: businesses may discover that a certain proportion of customers are calling for a specific simple reason for which an IVR announcement may be appropriate. In the case of a service outage, information about how long this will take to be resolved eliminate a large proportion of inbound calls.

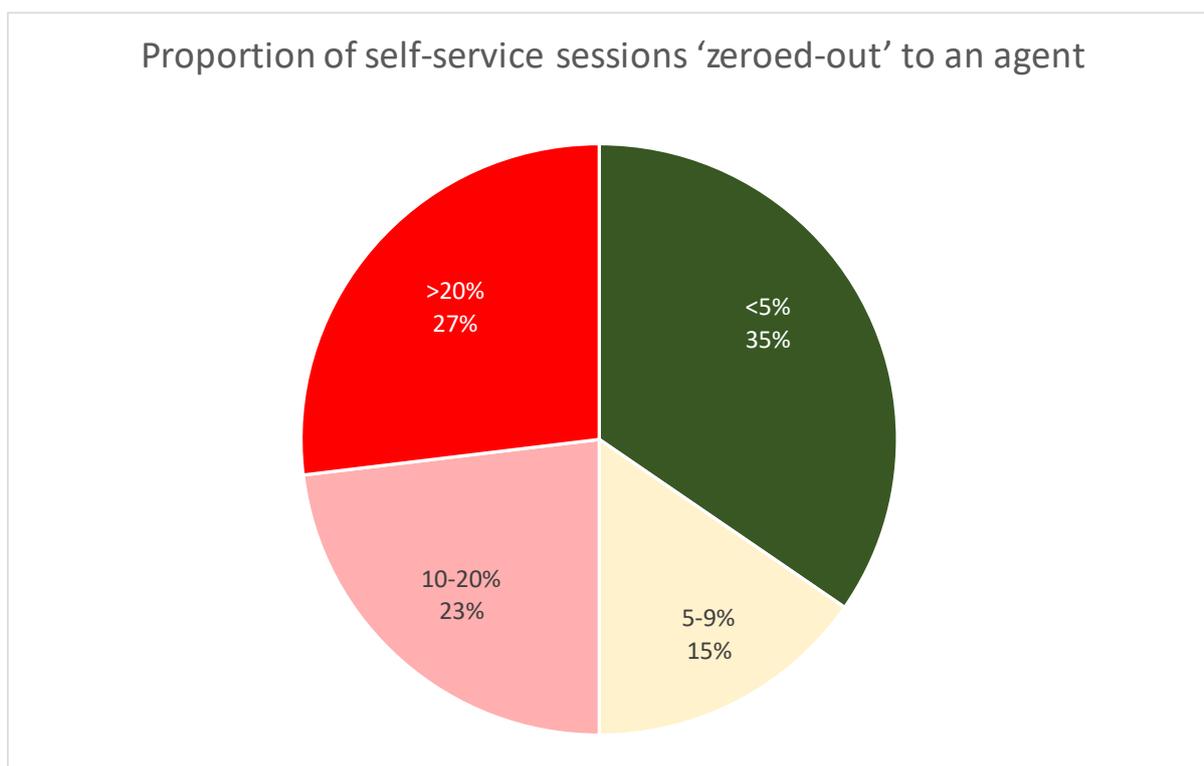
However, many calls are not suitable for self-service, as they may require multiple requests within the same call, be of a complex nature or be from a caller who feels that they need to speak with a person. Additionally, some small businesses may have such a low volume of calls that it is not cost-effective 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 telephony 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 about providing customer service to them in the future as they'll go elsewhere.

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 hectorred into using an unhelpful and irrelevant self-service system.

Overall, a mean average of 14% 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. 1<sup>st</sup> quartile performance for 'zeroing-out' is 3%, the median is 8% and the 3<sup>rd</sup> quartile is 21%.

Figure 25: Proportion of self-service sessions 'zeroed-out' to an agent



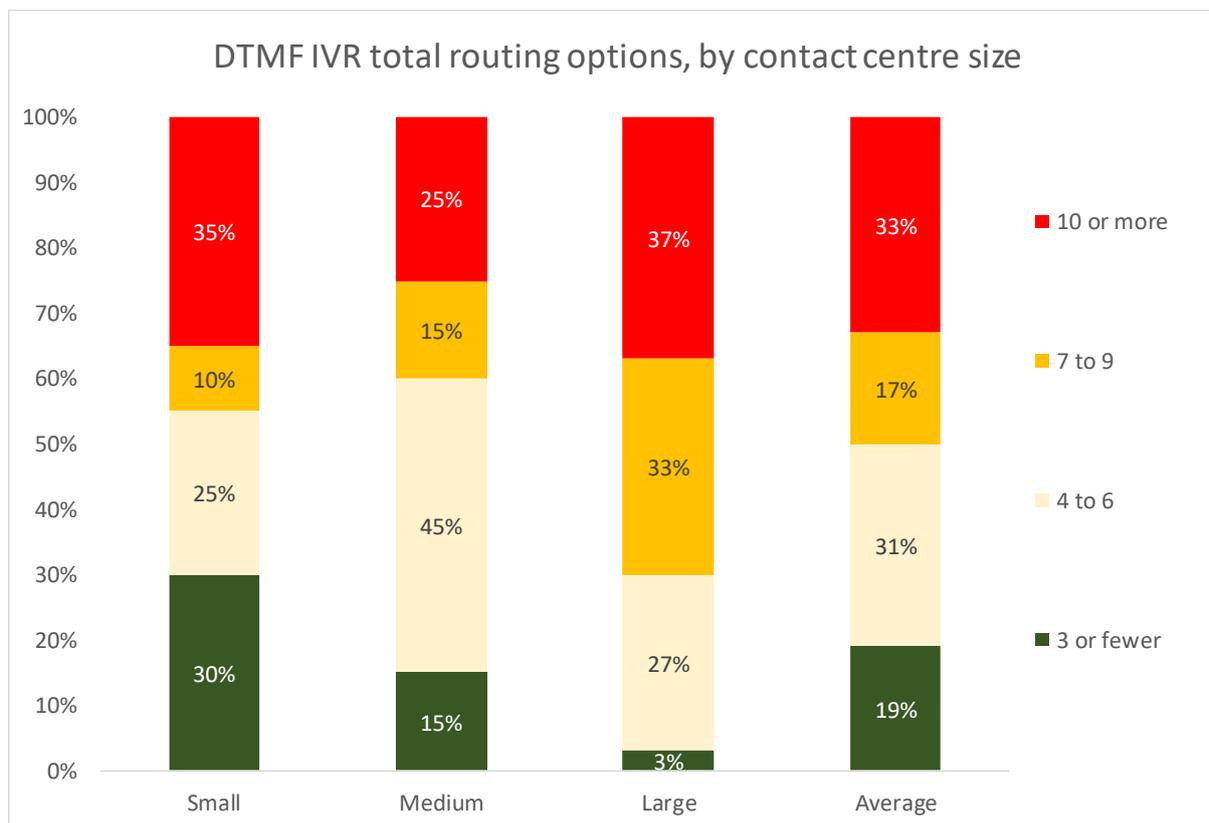
There is a broadly positive correlation between the size of the contact centre and the proportion of self-service sessions that are abandoned in favour of speaking to an agent: the larger the contact centre, the more often customers abandon the session. One possible reason for this might be that larger operations are trying to do too much with their self-service. There is some evidence to suggest that this is the case, as it is very noticeable that respondents from larger organisations 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. From the customer’s perspective, a failed voice self-service session followed by a call with a live agent will probably not counting their eyes as being first-contact resolution, as they have already committed to using the self-service channel to begin with.

Looking at the use of IVR for call routing, many businesses find that a substantial number of misrouted calls simply come from customers pressing “1” on the IVR system rather than listening to all of the options. A large proportion of these calls are then less likely to be able to be resolved first-time as they are not being passed through to the types of agent who have the relevant skills or appropriate system access.

34% of contact centres agree that one of the major reasons that customers abandon voice self-service sessions is that there are too many IVR options: perhaps not entirely coincidentally, 33% of UK contact centres use DTMF IVR report that there are 10 or more options offered to customers.

Figure 26: DTMF IVR total routing options, by contact centre size



Balancing having a reasonable number of routing options that are still specific enough to address most customers’ issues is a difficult trick to master. Logically, larger contact centres 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 centres, with 70% of these respondents reporting offering seven or more routing options to their customers. Clearly, this excessive routing choice is a major opportunity for automated speech recognition or visual IVR to improve usability and thus, FCR.

**Automated speech recognition** 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 is often a reason for high self-service abandonment rates. 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.

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. Visual IVR is discussed in more depth later in this report.

A **skills-based routing** strategy may be one of the most important tools in the FCR armoury, in that at its best, it delivers calls to the agent most likely to be able to solve the customer’s issue first time. Data tags can be assigned to agents, so that the best possible match to be made when the customer calls. Agent tags can include those connected with what the customer wants (e.g. sales, service, retention, etc.) and the skills of the agent (language, product expertise, etc.), and the requirements of customers can be analysed by considering IVR choices, the number that the customer dialled and any previous customer history.

Businesses may also consider **predictive behavioural routing** in order to enhance their skills-based contact strategy. A sub-branch of predictive analytics, predictive behavioural routing uses insights gathered from historical calls and the analysis of customer communication types in order to choose the agent whose skills and characteristics are most likely to achieve a positive response from the next caller in the queue.

Predictive behavioural routing uses millions of algorithms to decode the language used by agents and customers, in order to understand their state of mind, personality, communication style, engagement levels, empathy and transactional attributes (such as ability to overcome objections, willingness to sell, success rates, the number of times supervisor assistance is required, etc.). Through analysing historical interactions, each customer can be matched against a specific personality style. When this customer calls again, they are identified through the IVR or the dialling number, and the call is then routed through to an agent whose performance when interacting with this specific personality type has been seen to be positive. This increase in empathy and the matching of communication styles has seen these matched agent-customer pairings get significantly higher sales closure rates and better customer satisfaction scores.

By tracking agent performance across various personality types, information can be fed into the performance management process to help that agent improve, and agent capabilities should be regularly reassessed to promote optimal routing.

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## VISUAL AIDS – CO-BROWSING, VIDEO AND VISUAL IVR

It is a well-known truism that a picture tells a thousand words, and many customer issues could be solved far more quickly and efficiently if the two parties were able to see what they were talking about. While visual aids have been slow in coming into the customer interaction space, the recent explosion in the use of videoconferencing driven by the coronavirus crisis has created a huge pool of customers who are now experienced and comfortable using remote visual communication.

Solution such as co-browsing, video and visual IVR may well benefit from this increased familiarity that customers have with using visual aids, and is likely to lead to greater opportunities to improve first-contact resolution and reduce callbacks.

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### CO-BROWSING

Co-browsing (or web collaboration), which sometimes includes form-filling and page-pushing as a sub-set of functionality, is a very personalised, 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.

Co-browsing may be used for technical support, to help customers fill out complicated 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 may be useful for the agent to take entire control of the customer’s desktop in cases of technical support requiring great complexity and expertise, in many cases it is simply enough for the agent to be able to view what is happening on the customer’s screen. Remotely taking over their desktop can be a concerning experience for customers, who may be concerned about the viewing of private data and whether any malicious programs are being installed.

Businesses should consider co-browsing solutions which allow agents view-only access to the customer’s screen, are easy for any agent to use and which have auditable session recordings for the purposes of security and reporting. In this way, co-browsing is no longer the sole remit of higher-tier technical support agents, and can be used on any appropriate interaction in order to improve first-contact resolution and customer experience.

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## VIDEO

The use of video agents is a step towards more personalised, 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 centre 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 shows 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.

The widespread use of smartphones offers businesses a major opportunity to leverage their video capabilities to provide customer support. Customers can send live video to support agents who can guide customers through troubleshooting or setting up a new product. This can also be used for insurance claims, where damage can be assessed remotely without having to send a field support representative to the physical location. In particular, it has huge relevance and opportunity to provide field support at times where it is not possible to be in a customer's home. This live video support solution offers great possibilities for improving first-contact resolution in situations such as complicated technical setups where it is difficult for the customer to explain exactly what they are seeing (or to use the correct terminology) and also provides mobile and truly synchronous communication that email and even web chat cannot match.

While not a channel in itself, **WebRTC** (Web Real Time Communications) is an API definition that supports browser-to-browser applications for voice calling, video chat, and P2P file sharing without the need of either internal or external plugins<sup>4</sup>. The announcement<sup>5</sup> that Apple would support WebRTC within its WebKit engine that runs the Safari browser was seen as a major step forward for next-generation customer support, enabling voice, video and collaborative communications directly

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<sup>4</sup> <https://en.wikipedia.org/wiki/WebRTC>

<sup>5</sup> <https://webrtc.ventures/2017/06/webrtc-support-in-safari-11/>

from a website without the need for additional software. While mainstream use of click-to-video has been a very long time coming, WebRTC offers the opportunity to businesses to engage customers face-to-face where appropriate, offering the browsing customer a route straight into the contact centre without any breaking of channel or extra effort.

WebRTC allows customers to start a video or voice call from the web browser (which may be via a desktop computer or smartphone, perhaps as an escalation from an existing web chat session), which means the organization's website can then offer video or voice contact centre functionality in a seamless manner, with customers able to request live communication with the business without the need to download specific software or seek out the phone number and break off from what they are doing on the website. Two-way video communication is likely to be of more interest to mobile users, as their smartphone device already comes enabled with a camera and microphone, unlike many desktop computers which may not have this functionality or whose users have it disabled. One-way video, to protect users' privacy, is perhaps a more likely option in many instances, as is click-to-call.

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## 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 organisation 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 and enhanced self-service capabilities.

Figure 27: Visual IVR: benefits for businesses and customers

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 centre, 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 be a significantly negative experience for some of your customer base.

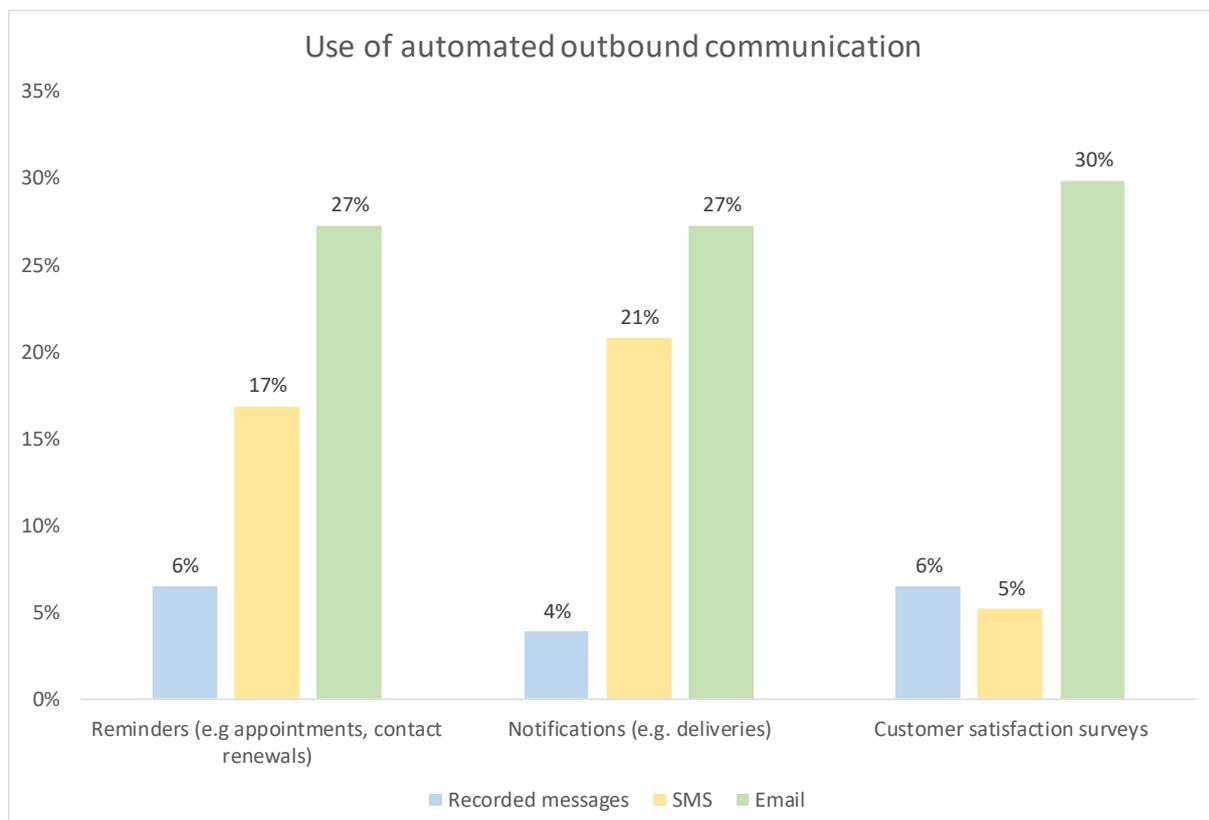
## PROACTIVE OUTBOUND SERVICE

The traditional outbound call was simply about selling more products to new and existing customers. However, legislation and customer pressure impacted 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 to inform them proactively about events and circumstances which affect them.

While the vast majority of targeted outbound contact is carried out by agents, 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. In the course of looking for drivers of repeat calls, a business may discover that there are some common issues that drive a significant number of customers to call back. For example, if a customer reports an outage in their broadband or utilities, the business may choose to send an SMS and/or automated call at regular points to keep the customer updated.

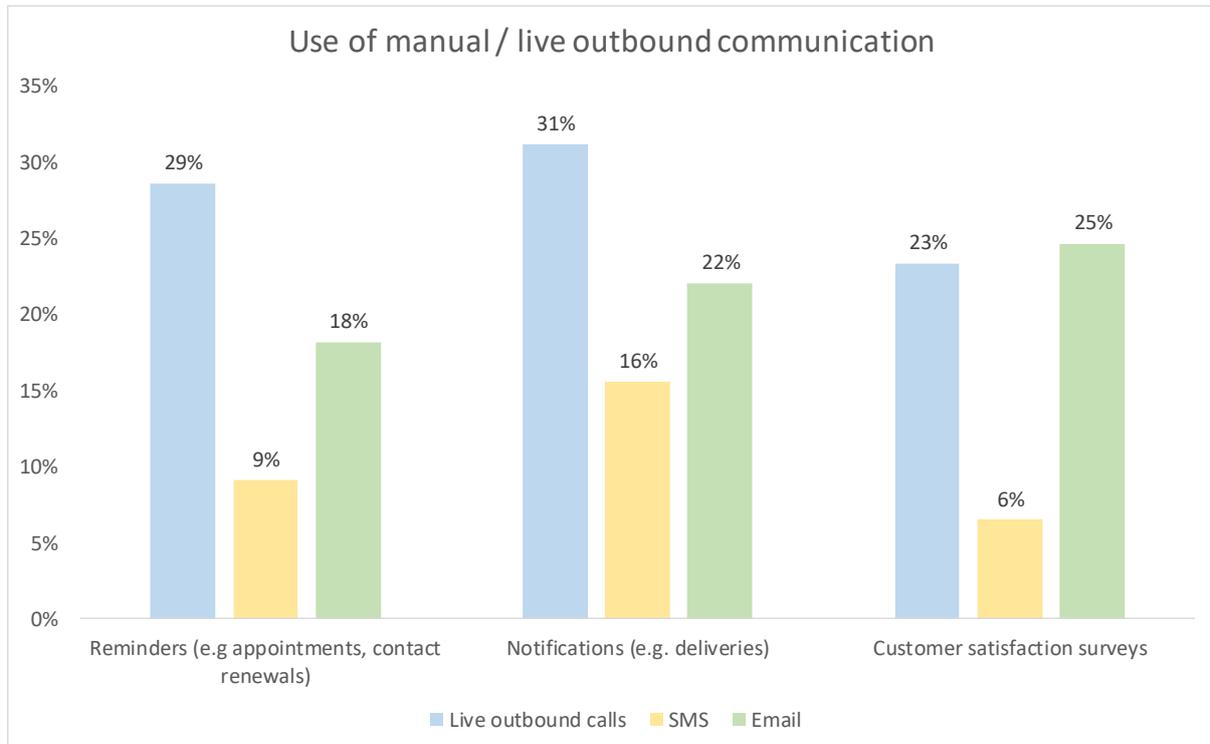
Automated SMS messages are used by around 20% of respondents this year, mainly for notifications and reminders. Email is used also for notifications, reminders and outbound customer satisfaction surveys. A small minority of respondents use recorded messages (which will usually include an IVR session to capture customer input) for these purposes as well.

Figure 28: Use of automated outbound communication



Live outbound calls are much more widely used for reminders, notifications and customer surveys, with 16% of respondents allowing agents to notify customers manually about deliveries etc. via SMS. Manual email is used in around 20-25% of cases as well.

Figure 29: Use of manual / live outbound communication

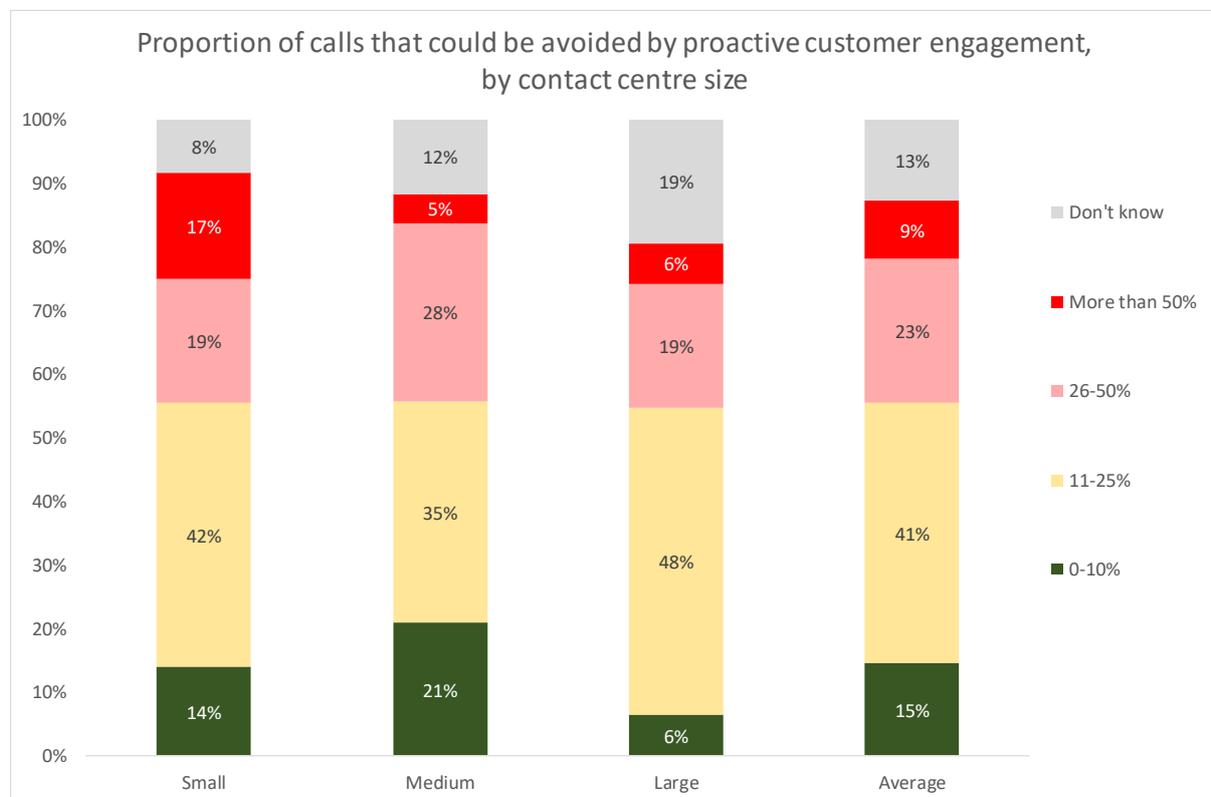


Respondents were asked what proportion of inbound calls could be avoided by engaging the customer before they felt the need to call the business.

32% of contact centres reported that more than a quarter of their inbound calls could be avoided if more proactivity was used, which would make a huge difference to costs (especially through automated outbound communication), as well as having a positive effect on customer experience.

Businesses should be encouraged to analyse the type of interactions that they receive into their contact centre, and to see if there is a cost-effective way of proactively handling these. The opportunity is certainly there for the industry as a whole to manage the inbound demand more effectively than is being done so at the moment.

Figure 30: Proportion of calls that could be avoided by proactive customer engagement, by contact centre size



Some businesses send out regular updates to customers via email whenever a process milestone is reached or agent notes are changed: this is particularly useful for extended interactions such as mortgage applications, where numerous processes happen over a period of time, meaning that customers can see what's being done, rather than raising repeat requests.

## ANTICIPATION OF CUSTOMER NEEDS

As was stated earlier in this report, the use of IVR and the number dialled by the customer (DNIS - dialled number identification service) will provide a certain amount of information to the contact centre about why they are calling.

Customer profiling – where customers are grouped according to specific characteristics, such as age, income, lifetime value or products purchased – can go beyond this, being used to assist with the analysis of the issues that these types of customer will tend to call about. This can help with skills-based routing, and also with proactive outbound customer service which may provide them with the answers to their questions before they even call in. This can also be done at a product level, where analysis of the types of issue that product purchasers call in about can be used to provide agents with likely solutions on the desktop in real-time, and also may be used proactively to communicate with the customer.

A similar approach can be used through looking at the types of call (and repeat calls) being received, and seeing if any of these call groups have a high preponderance of a certain type of customer: for example, if a high proportion of those calling in about the setup of a complex product are in a certain demographic group, then these customers will benefit from being routed to agents with particular technical or communication skills.

## KNOWLEDGE WORKERS

For many years, the larger contact centre 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. Bringing in the right resource at the right moment can improve first-contact resolution in cases where the initial agent simply does not have the experience or knowledge to help.

IP contact centre and cloud-based solutions can break down the boundaries between the contact centre and the wider business, allowing every employee to act in the capacity of a contact centre 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. The newest headsets support the 'enterprise as contact centre' model by allowing the employee to involve knowledge workers in a three-way conversation with the employee, immediately allowing a 2<sup>nd</sup>-line technical support worker to help with a difficult part of a query without an expensive, long-winded escalation process taking place.

There are significant advantages to having non-contact centre 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, shorter resolution times and fewer call-backs, as well as more intangible benefits like the ability of executives to listen to the customer first-hand and learn from the experience.

Those respondents in the TMT (technology, media & telecoms), utilities, public sector and housing vertical markets report the greatest levels call handling from non-contact centre staff (the TMT sector includes many IT helpdesks where subject matter experts can be brought in if needed).

Figure 31: Non-contact centre staff handling substantial numbers of calls, by vertical market

Vertical market	2016	2017	2018	2019
Finance	25%	20%	38%	12%
Housing	33%	57%	61%	50%
Insurance	20%	20%	19%	10%
Manufacturing	5%	15%	15%	20%
Outsourcing	15%	27%	39%	31%
Public Sector	50%	31%	42%	58%
Retail & Distribution	33%	14%	31%	29%
Services	20%	29%	38%	50%
TMT	50%	67%	63%	60%
Transport & Travel	10%	10%	0%	24%
Utilities	50%	60%	71%	67%
<b>Average</b>	<b>29%</b>	<b>31%</b>	<b>39%</b>	<b>38%</b>

Knowledge workers can be incorporated virtually into the contact centre on a part-time basis, without actually becoming a customer service agent. Although only used by 27% of the respondents who use non-contact centre staff to handle calls, 'presence management' links workers from diverse back office departments into the contact centre 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 centre.

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 centre, thus ensuring the privacy of the others in that virtual team, although this is used by only 18% of these respondents.

Over two-thirds of staff outside the contact centre who answer customer queries have access to the same level of customer information as an agent within the contact centre, a figure which is rising each year.

Figure 32: Integration of non-contact centre staff with systems and processes (only respondents using non-contact centre staff)

Level of integration with contact centre systems and processes	2016	2017	2018	2019
Same access to customer information as a contact centre agent	55%	65%	68%	71%
Can be viewed in real-time as being available or unavailable	20%	29%	21%	27%
Rota / schedule for on-call experts	10%	23%	18%	18%

## TRAINING

When new agents first arrive into the contact centre, it is an ideal opportunity to emphasise the culture of first-contact resolution to them, especially for those who have previously worked in operations that are focused more on handle time and more traditional performance metrics.

Within reason, agents should be cross-trained as widely as possible in order to expand their knowledge of the company's products and services, which will reduce call transfers and callbacks. Having agents that are able to handle support, billing and sales queries – quite apart from improving FCR – is also likely to boost agent morale and customer satisfaction as well as being able to manage call spikes more effectively. Even if an agent cannot deliver every aspect of service that the customer may require, a working knowledge of what other departments actually do will allow them to help the customer find the right resource and manage expectations.

As contact centres are usually extremely dynamic environments, new issues and problems may arise from one moment to the next. It is of crucial importance that there is a real-time communication system in place on the agent desktop so that they can be made aware of any new caller issue that they are likely to have to handle in the short term, as well as how to resolve it. This ongoing training extends to new product launches, widespread marketing campaigns and any changes in company policies or pricing which may cause a rise in customer interactions.

However, it is neither possible nor appropriate to train every agent on every possible product or scenario: businesses should analyse where they can see the greatest gains by focusing training efforts, which means that they should be aware of:

- the number and type of calls which are most frequently escalated to second-tier support
- the number and type of calls which are handled effectively first-time
- the type of calls which most often end in repeat contacts
- each individual agent's strengths, capabilities and weaknesses (e.g. empathy, communication style, ability to learn new technical facts, etc.).

It is also vitally important to provide agents with access to the correct systems, knowledge bases and any extra level of live support (e.g. supervisors, AI, etc.), as well as encouraging them to own the issue rather than worry about excessive call lengths.

To maximise first-contact resolution, agents should be trained and assessed on their communication techniques: ideally, the agent will provide all of the information necessary to resolve the customer's issue clearly and completely, as well as answering questions that the customer has not yet thought of, but which are often associated with this particular issue (thus avoiding callbacks). However, agents must be encouraged not to overcomplicate matters for fear of diluting the solution and confusing customers.

Where appropriate, calls should always be ended with the agent asking whether they have fully answered the customer's query. While some businesses may use this information to assist their FCR calculations, it is also useful in that it gives the customer a chance to clarify any confusion and to give them the confidence to ask another question without feeling that they are being pushed to end the call. Overall, a few more seconds spent on a call can make a difference to FCR and all of the benefits that it brings to both customer and business.

## SCRIPTS AND TEMPLATES

While rigid scripting has fallen out of favour with many contact centres, it can boost first-contact resolutions where there are many of the same type of customer enquiry coming into the contact centre. Ideally, web and phone self-service would be used to handle these sorts of popular enquiry, but where this is not possible businesses may wish to implement templates and scripts to guide agents to the answers and processes needed to fulfil the customer requirements at the first time of asking. This is especially useful in cases where there may be a high proportion of inexperienced agents, or for outsourced operations where teams may be handling more than one client.

## EMPOWERMENT

For an industry that was in large part based upon the “command and control” method of operating, encouraging agents to make their own decisions rather than follow a set process or script can be a culture shock for everyone. Many contact centres have been set up – deliberately or otherwise – to delineate tasks and responsibilities along very specific lines, particularly in larger operations. In practice, this means that only certain groups of agents have the capability to issue credits, remove delivery costs or late fees, provide discounts or even access some of the systems required to resolve customer’s problem. Analysis of escalations or repeat calls can point to processes and policies which, if adjusted to allow first-line agents to handle, would make a major difference to FCR, contact centre cost and customer satisfaction.

First-contact resolution requires agents to take full control of an issue, and decide the best way to resolve it themselves. The concept of ‘total contact ownership’ encourages the agent who has taken the initial call or digital contact to resolve this issue themselves: even if it is necessary to recruit a supervisor or the second-tier of support, the agent is still expected to follow the issue and make sure that it has been entirely resolved to the customer’s satisfaction. In this way, a resolution can be assured, the agent learns more about how to provide the correct answer themselves next time, and the customer receives truly personalised and dedicated service.

However, empowerment does not just mean telling agents that any call they take is now up to them to deal with first time. Contact centres must make sure that agents have the authority to handle calls outside the norm, as well as the responsibility for making sure a successful resolution is reached. Systems and processes have to be put in place to allow agents access to the right resources and information, including knowledge bases, AI assistance and access to second-tier support as and when required. This latter point also needs to be emphasised to management, knowledge workers and technical support staff: it is not acceptable for such resource to mark themselves as unavailable, leaving the agent adrift. It may also be useful for back-office staff such as warehousing or delivery to be available to agents through instant messaging.

Of course, especially in the case of inexperienced agents, there needs to be a limit to what agents are actually allowed to do in the pursuit of first-contact resolution. As every business is different, there is no hard and fast rule and the analysis of escalations and callbacks is likely to indicate to the business how potential bottlenecks can be eased while still managing risk.

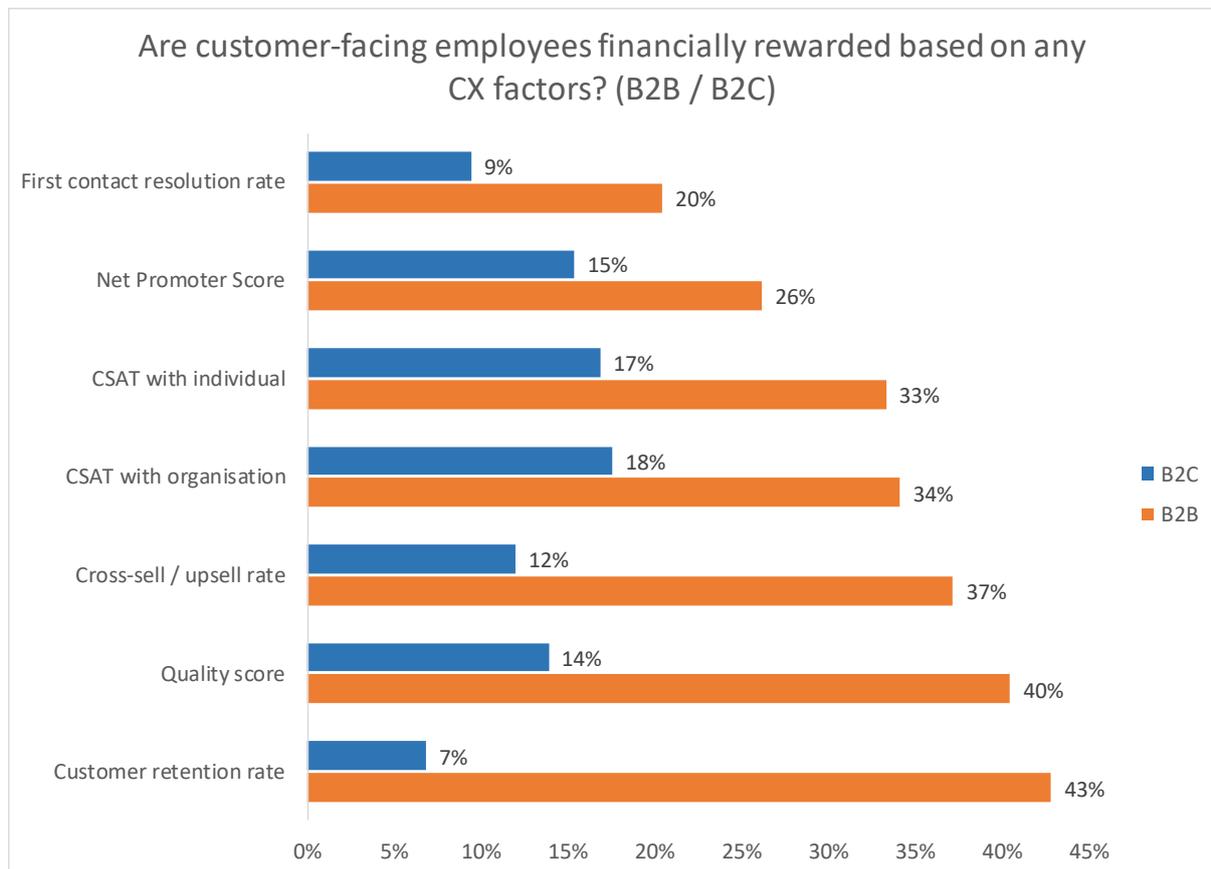
## INCENTIVES

One of the most obvious ways that agents can understand the importance of FCR to the contact centre is through rewarding them based on improvements to this metric, and of course it is important that the overall number of repeat calls is also taken into account (as improvements in self-service systems can lead to a drop in the FCR rate which is no fault of the agent).

Survey respondents were asked if their customer-facing employees were financially rewarded based on any customer experience factors.

It was disappointing and surprising to see the lack of importance generally placed upon rewarding high first-contact resolution rates or customer retention rates (especially in the B2C sector), despite their overwhelming importance to the overall customer experience programme.

Figure 33: Are customer-facing employees financially rewarded based on any CX factors? (B2B / B2C)



However, it should be noted that as with any metric that directly impacts upon financial reward or other forms of recognition, there is a real possibility that the system can be 'gamed' to boost earnings, potentially endangering the customer experience, so perhaps FCR should be only one of a number of strategically important metrics used to reward agents.

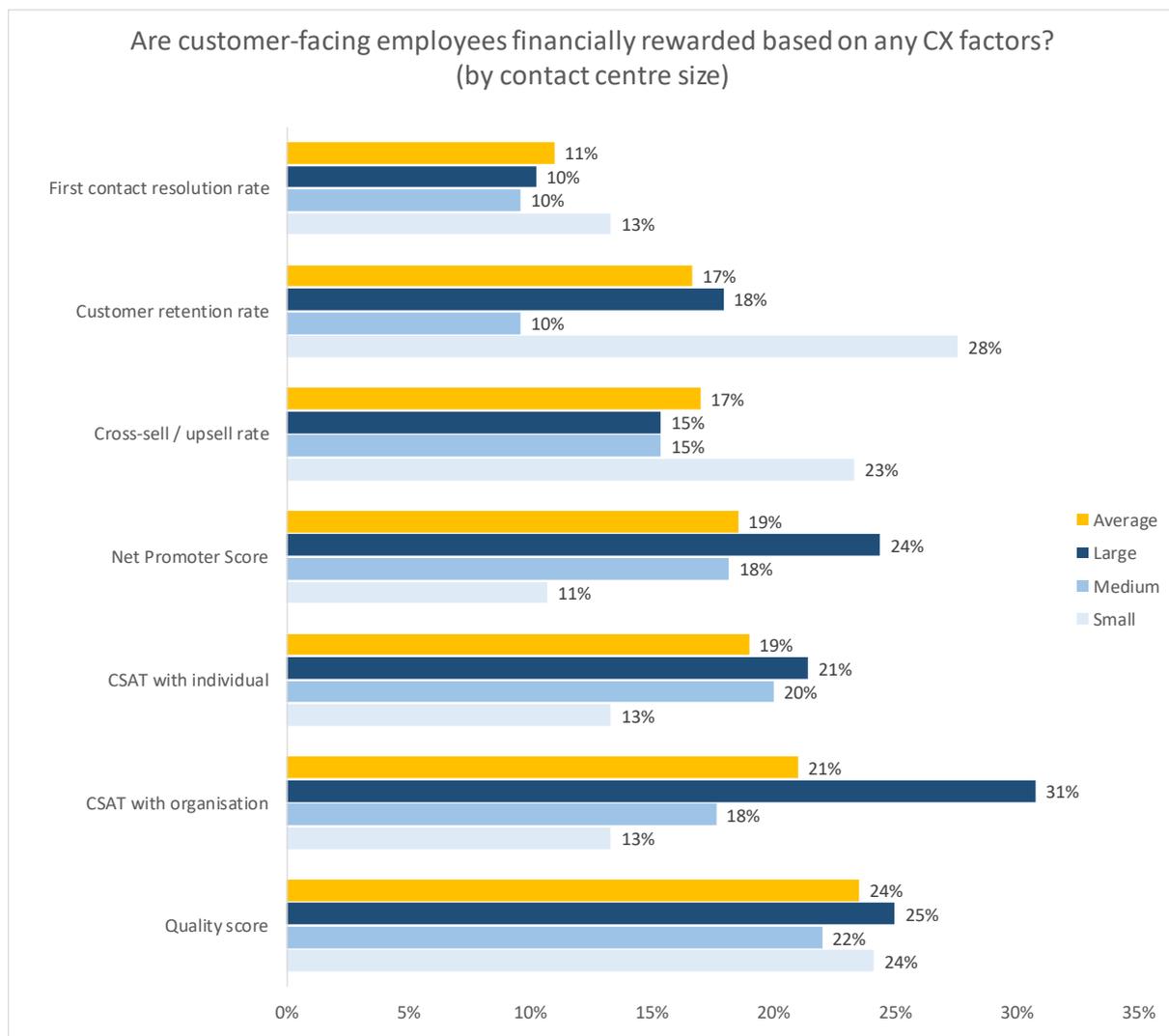
When considering how customer-facing employees - including those within the contact centre - are financially rewarded based on customer experience benchmarking scores, it is clear that those with the largest contact centres are usually more likely to reward their employees by some means.

The majority of respondents with large contact centres will incentivise their staff based on customer satisfaction (especially with the organisation), with a significant proportion also rewarding based on interaction quality scores and Net Promoter score.

However, there were only 13% of survey respondents rewarding staff based upon first-contact resolution. It may be thought that as not every aspect of FCR is under the direct control of the agent that this would be an inappropriate metric to reward and some industry commentators disagree with linking agents' bonuses with the success or failure of systems outside their control.

However, customer retention rate and customer satisfaction with the organisation are directly connected to the past performance of the business and its products and services (rather than simply being a measure of agent quality) and yet these metrics are more widely used for rewarding agents.

Figure 34: Are customer-facing employees financially rewarded based on any CX factors? (by contact centre size)



## ADDITIONAL METHODS TO REDUCE FIRST-CONTACT RESOLUTION

Not every method discussed previously will be appropriate or possible for contact centres, as FCR improvement is very specific for each type of business. Apart from those already detailed within this report, there are many others that can be used to reduce first-contact resolution:

- after identifying the main issues that cause repeat calls, businesses may decide to use dedicated teams of experienced agents to handle these issues, freeing up simpler interactions for less experienced or capable agents
- customer journey analysis may identify an excessive number of steps and effort that the customer has to do in order to achieve their goal. Removing some of these should decrease the number of times that a customer may have to contact the business
- while proactive outbound communication (e.g. sending an email or SMS at various stages of the process) can really help to avoid unnecessary calls about progress, it's important to remember that every communication received by the customer may be seen by them as a potential opportunity to ask another question. It is important to understand what customers may be thinking at each part of a process, and to provide the information pre-emptively
- businesses should look to make their operations transparent to the customer: an excellent example of this can be seen in the retail and distribution sector, where the easy availability of delivery tracking means that calls about this topic have been hugely reduced
- agents should be trained and encouraged to listen fully to the customer and take notes within the call so that they have all of the information needed. Although it will impact negatively upon average handle time, where appropriate the agent may wish to repeat the customer's issue to them and to clarify any uncertainty. Where there are complex or multiple issues, this will allow agents to address every question and demonstrate to the customer that the agent is actually listening to them and cares about resolving the issue
- another FCR-friendly approach that may have a negative impact on average handle time is to encourage agents to show the customer how they achieved that resolution, if the same functionality is available through self-service. If done successfully, the customer will never call about that issue again, and increasing familiarity with self-service may well encourage them to try this channel for other issues
- agents should be encouraged to balance the thoroughness of their replies against over-explaining to customers, which may actually confuse them further about issues that are irrelevant
- where possible, agents should be specific about the amount of time that it will take to resolve an issue or to carry out a process. For example, rather than saying merely that "you'll get an email from us with your policy details on", they may prefer to say "you'll receive an email from us which may take up to 72 hours to receive. If you have not seen this, please check your junk folder. However I can assure you that you are now fully insured with us even before you receive this email."

END-USER QUESTION 4: IN THE LONGER TERM, WHICH SOLUTIONS WILL HAVE THE MOST POSITIVE EFFECT ON FIRST-CONTACT RESOLUTION?

 In both the short and long term, contact centre industry experts universally agree that multi-channel speech analytics has the greatest impact on expediently identifying and providing actionable insights to address first contact resolution challenges.

Omnichannel analytics eliminates channel boundaries to deliver insight across voice and text-based interactions, including text with emojis, special characters, and numeric digits. Transcriptions from chat, texts, social, surveys and more are automatically categorized for intent, action and sentiment with scoring for attention and focus. By combining text and audio interactions, multi-channel interaction analytics can map customer touchpoints across channels with visualization so that channel touchpoints can be charted against a variety of dimensions such as customer experience or agent quality as contributors for FCR root-cause analysis. As a result, contact centre managers and their respective organizational stakeholders can gather remarkable insight from every interaction, measuring both initial FCR root cause analysis and the subsequent measurement of corrective action effectiveness.

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If you have a question about your company's place in the contact centre industry, perhaps we can help you.

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