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# THE INTELLIGENT CONTACT CENTER: USE DATA TO DRIVE EFFICIENCY & MAXIMIZE CUSTOMER EXPERIENCES

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This report highlights the building blocks and benefits of transforming a traditional contact center to become more intelligent.

### What Drives the Need for Intelligent Contact Centers?

Changes in customer behavior and expectations have created tectonic shifts for businesses. Innovative firms such as Amazon, Uber and Airbnb have transformed their respective industries through efficiency and customer-centricity. Meanwhile, previously high-powered firms such as Blockbuster, Circuit City and Toys ‘R Us have disappeared because they weren’t able to keep up with evolving buyer expectations. These changes particularly impact the contact center where traditional ways of doing business are not enough to meet and exceed evolving customer expectations.

Between March and April of 2018, Aberdeen conducted a global survey of 302 businesses across all industries on the key trends and best practices influencing customer care programs. Findings show that the ability to keep up with newer technologies and channels – in other words, the pace of innovation – is the number one challenge impacting today’s contact center programs, as shown in Table 1.

Table 1: Keeping up with Customer Expectations is the Top Challenge

Top Challenges (n=302)	All Respondents
Struggle in implementing new technologies and channels to address changing customer behavior	36%
Inability to deliver seamless customer experiences across all channels	32%
Struggle in finding and retaining qualified customer support staff	32%
Increasing contact center operational costs	29%

Source: Aberdeen Group, April 2018

Note: This question was asked as a multi-choice, meaning that companies might struggle with one or more of the challenges depicted above simultaneously.

The findings from the above table mean that contact centers are not immune to the broader marketplace pressures. In fact, they struggle to adapt to the new ways of doing business – a dangerous signal that customer care leaders must monitor in order to ensure the relevancy and financial stability of their firms.

Among the other challenges influencing modern contact center activities is the ability to *orchestrate* customer interactions across all channels (e.g. web,

### Definition: Intelligent Contact Center

For the purposes of this research, Aberdeen defines an ‘Intelligent Contact Center’ as firms that exhibit mastery of using data (customer and operational) to deliver truly personalized and consistent interactions across all channels.

Aberdeen gauges mastery of using data to manage customer interactions by company performance across key performance indicators (KPIs) noted in Table 3. Firms that excel in this area are called ‘Best-in-Class’ as those intelligent contact centers maximize their performance through use of data.

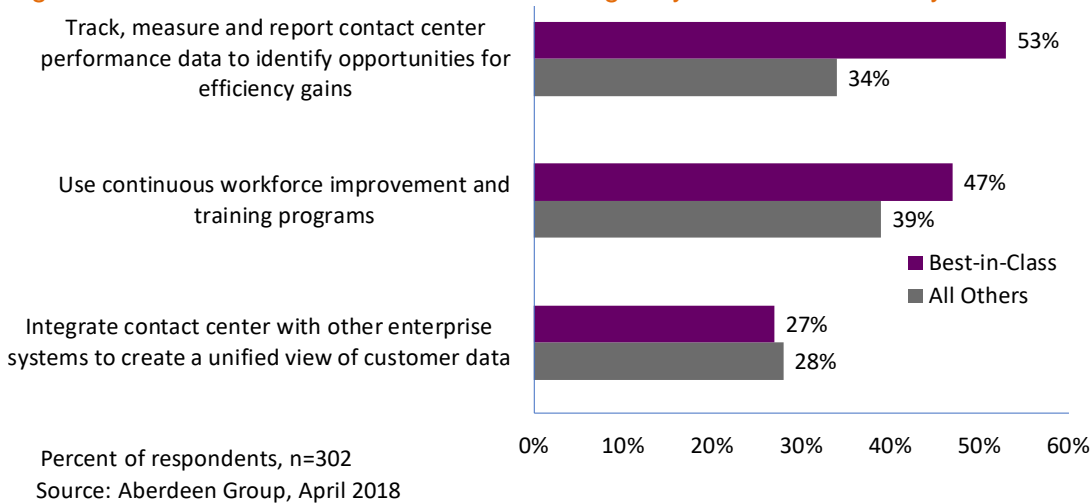
phone, and email). This isn't surprising, as the survey findings reveal that **55% of contact centers use at least seven channels in their customer experience (CX) programs**. The ability to ensure the consistency and personalization of interactions across all channels – widely defined as 'omni-channel' programs – is not easy. It requires contact centers to establish certain capabilities – highlighted later in this report – to seamlessly manage interactions across all channels.

The ability to hire and retain top-notch talent is equally as arduous of a task for contact center leaders. Addressing this challenge, as others, is vital because customer experiences are directly influenced by employees such as contact center agents. As such, hiring and retaining the right talent is a necessity for the contact center to achieve its goals.

The good news, is that despite the above challenges impacting modern contact center programs, there is a group of leading businesses that overcome them. These firms, known as Best-in-Class, (see sidebar) have found intelligent ways to use (e.g. collect, analyze, utilize and protect) customer and operational data.

The modern contact center executives are rich in data. However, Aberdeen's February 2018 [Customer Experience Executive's Agenda 2018: How to Satisfy the Empowered Customer](#) study shows that **only 13% are fully satisfied with their ability to use data to manage customer interactions**. The intelligent contact centers (see sidebar on Page 1) distinguish themselves through their mastery of delivering truly data-driven interactions. They do so through specific strategies that they execute with the help of various key capabilities and technologies. Figure 1 illustrates the top strategies used by the top performers.

**Figure 1: Best-in-Class Firms Focus on Finding Ways to Drive Efficiency**



Note: This question was asked as a multi-choice, meaning that companies might aim to accomplish one or more of the goals depicted above simultaneously.

The Aberdeen maturity class framework places companies in one of three categories based on their self-reported performance across key metrics:

- **Best-in-Class:** Top 20% of respondents based on performance
- **Industry Average:** Middle 50% of respondents
- **Laggard:** Bottom 30% of respondents

Sometimes Aberdeen refers to a fourth category, All Others, which combines Industry Average and Laggard organizations.

The top strategy driving Best-in-Class firms' activities is regular tracking, measuring, and reporting of activity results. Top performers are 56% more likely to cite this as a strategy, compared to All Others – their lower performing counterparts (53% vs. 34%). This strategy refers to regular evaluation of how contact center activities contribute towards key performance indicators (KPIs). It helps the Best-in-Class get smarter in managing their activities so they can maintain their strengths and address weaknesses.

The second top strategy – deployed 21% more widely by the Best-in-Class versus All Others – is continuously gauging the results of workforce management activities (47% vs. 39%). This means determining how employee hiring, training, and performance management practices influence KPIs. For example, by analyzing how training programs influence agent productivity, companies can determine the programs that produce less than desirable impact, and change or abandon them in favor of those that will help the firm drive increased agent productivity. By doing so, firms can minimize unnecessary costs for training programs that deliver sub-par results.

Coincidentally, almost the same percentage of intelligent contact centers and All Others cite integrating contact center and enterprise systems as a top strategy. It's interesting because the lack of a single view of customer data influenced by **disparate data silos in the business is a top reason why firms struggle with delivering omni-channel customer experiences** – a top challenge noted earlier in this report.

Given that Best-in-Class contact centers are far more satisfied with their ability to use customer data, we can note that they are farther along the maturity curve in establishing a single view of customer insights that's necessary to deliver truly data-driven customer interactions. Hence, it's not surprising to see that a lower percentage of Best-in-Class cite integrating disparate data silos as a top strategy. Many have already moved past establishing this capability, allowing them to now focus on fine tuning it to maximize results. It is, however, eye-opening that only 28% of All Others focus on systems integration as this is an essential first step they must take to alleviate the challenges highlighted earlier.

### *What Pitfalls Should You Watch Out for When Executing Your Intelligent Contact Center Strategy?*

Aberdeen asked survey participants to highlight the top challenges impacting their ability to execute the aforementioned strategies. Table 2 shows that lack of collaboration between the contact center and the rest of the business is a top roadblock, meaning that companies struggle with poor communication and collaboration within and across various business units. In turn, they risk

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**Intelligent contact centers are far more likely to have already eliminated disparate data silos to build a single view of customer insights.**

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delivering inconsistent interactions across the different departments managing customer interactions.

Table 2: Disconnect Between the Contact Center & The Rest of the Business Negatively Impact Strategy Execution

Top Roadblocks Hindering Strategy Execution (n=302)	All Respondents
Lack of collaboration between the contact center and other parts of the business	39%
Outdated technology infrastructure	26%
Lack of budget needed to update technology & processes	25%
Turnover of high-performing agents	25%
Lack of real-time access to relevant data	25%

Source: Aberdeen Group, April 2018

Note: This question was asked as a multi-choice. This means that companies might be challenged by one or more of the roadblocks depicted above simultaneously.

To better execute the strategies needed to build and nurture an intelligent contact center, firms must address the internal collaboration and communication issues impacting their ability to deliver seamless customer experiences – see Aberdeen’s February 2018 [The Business Value of Integrating UC in the Contact Center](#) study for more on this topic. This focus on addressing gaps in communication and collaboration must be complemented by addressing the other challenges highlighted in Table 2 as well – specifically, the regular evaluation of the benefits derived from existing technologies, and when the technologies used to manage customer experiences are no longer adequately addressing evolving buyer needs, companies must look for more progressive alternatives.

When evaluating new technologies, firms will have to decide how to allocate budget to technology adoption or upgrades. This process must be managed with a careful focus on the cost of implementing technology and the expected returns from it. If the benefits far outweigh the costs and if the technology is needed to keep up with customer expectations, then firms should consider investing. During this process, it’s important to also **consider the ‘cost of doing nothing’** which is the potential cost of lost customers and inefficiency (e.g. unnecessary labor costs) due to poor technologies.

### The ROI of Building & Nurturing an Intelligent Contact Center

Intelligent contact centers truly set themselves apart from their more traditional counterparts. In addition to alleviating the challenges impacting their peers,

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**When evaluating which technologies to implement or upgrade, don’t just consider the monetary costs and benefits – also consider the impact / cost of ‘doing nothing.’**

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they enjoy superior performance outcomes across a variety of KPIs, as shown in Table 3.

**Table 3: The Intelligent Contact Centers Maximize their Performance**

Performance Results (n=302)	Best-in-Class	All Others
Customer retention rate	<b>85%</b>	<b>62%</b>
Year-over-year improvement in customer satisfaction rates	<b>19.0%</b>	<b>1.9%</b>
Year-over-year improvement in first contact resolution rate	<b>17.8%</b>	<b>1.3%</b>
Year-over-year improvement in agent utilization rate	<b>12.9%</b>	<b>-0.4%</b>
Year-over-year improvement (decrease) in average handle time	<b>9.8%</b>	<b>-2.2%</b>

Source: Aberdeen Group, April 2018

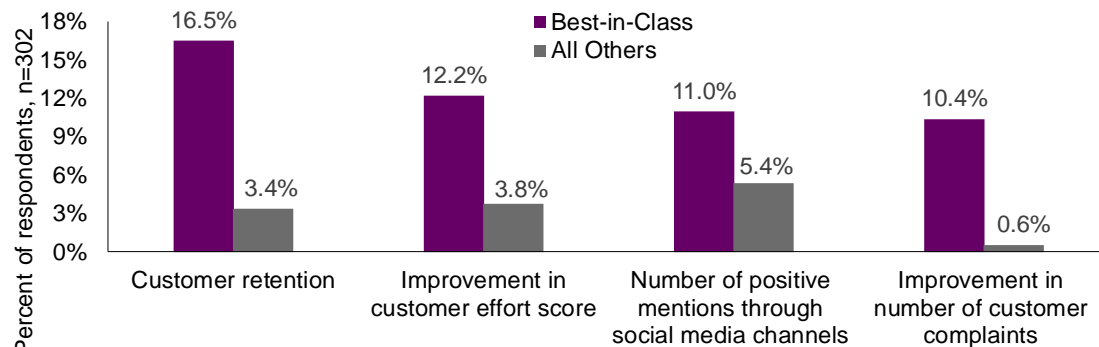
Aberdeen used the above five metrics to gauge contact center success in transforming their activities. Customer retention rate and improvements in customer satisfaction reflect organizations' ability to meet and exceed buyer needs. Table 3 shows that the intelligent contact centers achieve 10 times greater annual improvement in customer satisfaction rates (19.0% vs. 1.9%) and retain 37% more of their clientele (85% vs. 62%), compared to All Others. These results signal that the intelligent contact centers have mastered how to utilize data to generate and maintain happy, loyal customers.

Other metrics used to gauge contact center success were first contact resolution rates, agent utilization rates, and average handle times; all of which are operational metrics where improvement marks efficiency in managing related activities. The intelligent contact centers observe far superior results across these three metrics, compared to All Others. This means that they haven't just mastered how to use data to meet customer needs. They've also mastered how to use it to drive continuous operational efficiency gains (the top strategy cited by the Best-in-Class firms.)

Figure 2 provides additional perspective into the success enjoyed by intelligent contact centers. It shows that these top performers improve (reduce) customer effort by 3.2-times more year-over-year, compared to All Others (12.2% vs. 3.8%). Best-in-Class firms master using data to understand customer issues and the best ways to resolve them across all channels. In turn, this makes it easier for customers to do business with them. Indeed, Figure 2 also shows that intelligent contact centers achieve 17.3 times greater annual improvement

(decrease) in the number of customer complaints year-over-year, compared to All Others (10.4% vs. 0.6%).

Figure 2: Intelligent Contact Centers Truly Maximize Customer Experiences



Source: Aberdeen Group, April 2018

The ability to address customer needs more effectively helps top performers retain their happy customers. Data shows that these firms achieve 4.9 times greater annual increase in customer retention rates compared to their counterparts that haven't yet (16.5% vs. 3.4%). Customers who reap the benefits of these intelligent call centers share positive word-of-mouth about their experiences, which becomes a source of free marketing and brand awareness for the business.

### How to Transform a Traditional Contact Center into an Intelligent Contact Center

Transforming a traditional contact center into a more intelligent one requires several key ingredients. These include the right mix of strategies, processes, and technologies. We've seen the key strategies above. Now, let's take a look at the three key sets of processes and related technologies.

#### 1. Don't Hoard Data; Act on It

Contact centers have a wealth of data they can use to do their jobs. For example, analyzing customer self-service activities reveals the top issues that customers prefer to help themselves rectify. Similarly, analyzing average handle types by issue allows determining the issues that take longer to resolve. This, then helps firms focus on ways to make the resolution process more efficient. To turn a traditional contact center into an intelligent one, the first step firms must take is to move beyond collecting data, and begin acting on it. Using the previous example of data on average handle times, this means finding the root-cause of why agents take longer to resolve specific issues and mitigating them.

### Top Performers Use Analytical Technologies to Support their Activities

Best-in-Class firms don't just design the right strategy and use the right capabilities. They also use the right technologies to support implementing these strategies and capabilities. Below is a list of those technologies and their respective adoption by the Best-in-Class versus All Others:

**-Desktop analytics:** Best-in-Class: 73% vs. All Others: 43%

**-Dashboards to view contact center activity:** Best-in-Class: 62% vs. All Others: 44%

**-Database management:** Best-in-Class: 62% vs. All Others: 45%

**-Business intelligence:** Best-in-Class: 60% vs. All Others: 41%

**-Self-service analytics:** Best-in-Class: 55% vs. All Others: 44%

**-Text analytics:** Best-in-Class: 45% vs. All Others: 26%

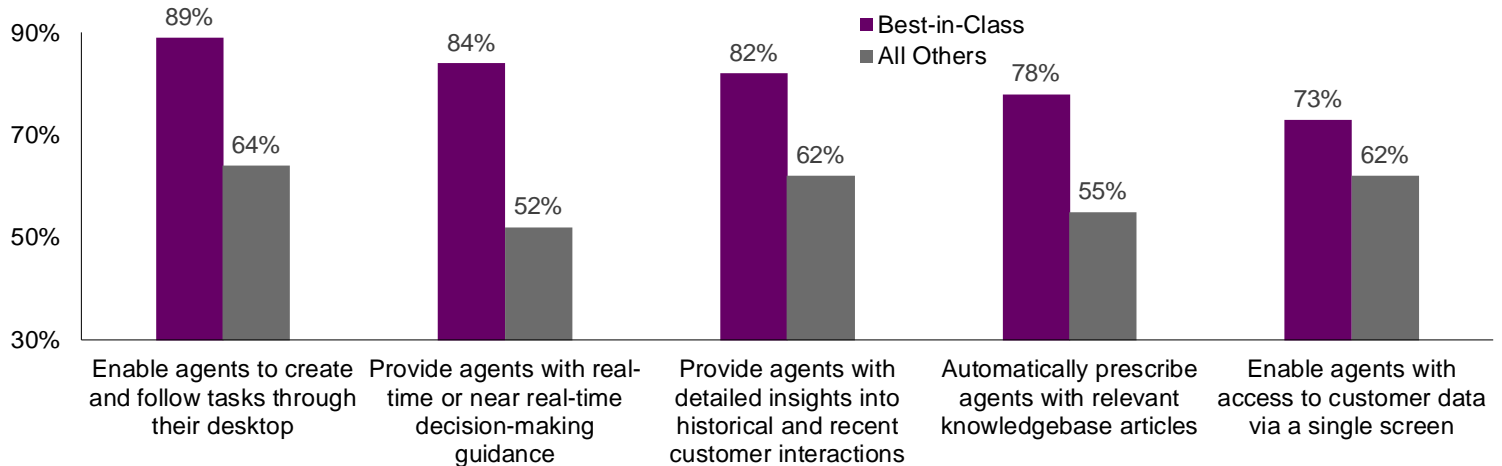
**-Prescriptive intelligence:** Best-in-Class: 42% vs. All Others: 26%

**-Machine learning:** Best-in-Class: 35% vs. All Others: 21%

**-Artificial intelligence:** Best-in-Class: 31% vs. All Others: 15%

Figure 3 illustrates several capabilities Best-in-Class firms use to act on customer insights. It shows that top performers are 32% more likely than All Others to **provide agents with detailed insights into customer journeys** (82% vs. 62%). This is important as data shows that on average, agents spend 13% of their time looking for information to do their jobs. Providing access to detailed customer insights helps agents utilize data to ensure consistency of interactions across all channels.

Figure 3: Empower Your Agents with Timely & Relevant Insights



Percent of respondents, n=302


Source: Aberdeen Group, April 2018

The Best-in-Class don't expect agents to browse multiple applications (e.g. CRM, ERP and in-house systems) to seek and find the information they need to do their jobs. They enable agents with access to relevant insights via a single screen through the agent desktop – a capability deployed 18% more widely by the Best-in-Class versus All Others (73% vs. 62%).

Customer data isn't the only type of information agents need to do their jobs. Agents must also find and use relevant knowledgebase articles to resolve client issues. To this point, the Best-in-Class are 42% more likely than All Others to automatically prescribe/recommend agents relevant knowledgebase articles through the agent desktop (78% vs. 55%). This is done with the help of several related technologies such as text analytics, machine learning and prescriptive guidance.

Specifically, text analytics helps analyze agent notes and determine the context of the issue. Companies can also use workflow analytics to determine the nature of the customer's issue shared through the interactive voice response (IVR) system or data available through the automated contact distribution (ACD) system. Once the nature of the issue is identified, the prescriptive recommendation engine recommends the most relevant





knowledgebase article automatically through the agent desktop. Considering that customer issues evolve over time, using machine learning helps track the effectiveness of each article on issue resolution and customer satisfaction over time. In doing so, it helps the intelligent contact centers recommend the most relevant knowledgebase articles to help agents minimize handle times, improve productivity, and minimize customer effort.

Figure 3 shows that the Best-in-Class don't just guide their agents with relevant knowledgebase articles. They also enable supervisors to regularly monitor agent performance and customer interactions to determine potential issues in real-time and provide agents with real-time or near real-time guidance. For example, once a supervisor observes that a customer chat session is running longer than the average time for similar issues, the supervisor can be alerted. Upon alert, the supervisor can then read the transcript of the interaction and guide the agent through voice or text to minimize the risk of the interaction running even longer. This, in turn, decreases the risk of frustrating the customer and observing sub-par agent productivity. Similarly, the supervisor might provide the agent with post-interaction coaching or training if the issue doesn't require real-time guidance.

## *2. Weave Omni-Channel Within Your Contact Center DNA*

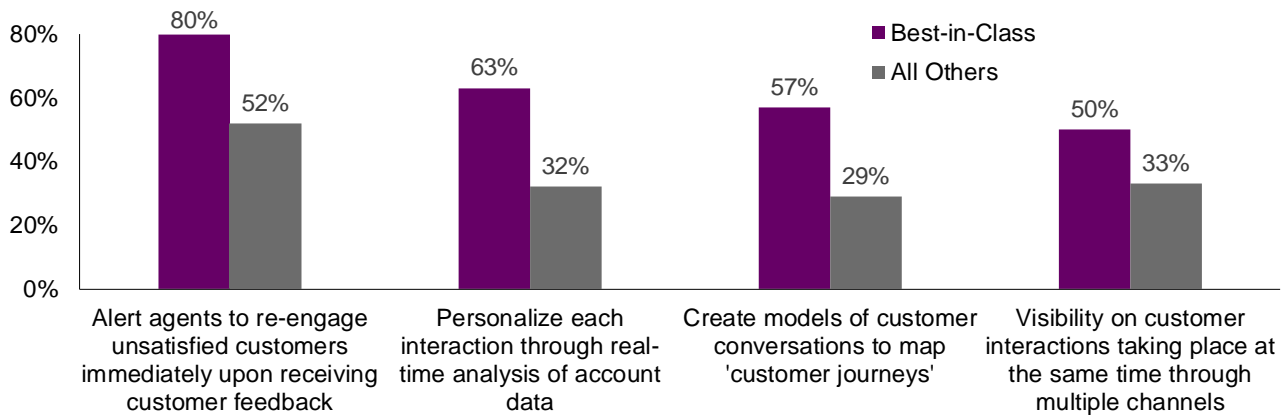
To generate actionable customer insights, contact centers must first ensure the accuracy of their views into customer journeys across all channels. Otherwise, a contact center that's not integrating the data captured through self-service interactions, for example, might not be aware that a customer changed account settings through self-service and could make the mistake of sending an incorrect bill that reflects the cost of services previous to the change. If the customer calls to get the issue addressed, the contact center agent wouldn't be able to see the change made by the customer. This will likely result with frustrating the client and a high risk of losing them. Figure 4 shows that the intelligent contact centers mitigate this risk by integrating data across all systems to build comprehensive views into customer journeys. They are 97% more likely to do so, compared to All Others (57% vs. 29%).

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**Top performers map customer journeys so they can proactively manage them to lead to desired outcomes.**

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Figure 4: Personalize Interactions Across All Stages of Customer Journeys



Percent of respondents, n=302

Source: Aberdeen Group, April 2018

Unveiling customer journeys enables the Best-in-Class to personalize each interaction using this data. For example, a customer might ask product feature questions through live chat. If the same buyer calls the contact center, enabling the agents with visibility into previous interactions would allow the agent to ask if the customer is calling for the same issue. This helps the agent personalize the interaction while reducing the handle time. Figure 4 shows that the Best-in-Class are 97% more likely to have this capability in place, compared to All Others (63% vs. 32%).

Top performers are also 52% more likely to have visibility into customer interactions taking place through multiple channels simultaneously (50% vs. 33%). Using the previous example, this would mean that the contact center agent answering customer questions on product features would also see that the customer has an active live-chat session, which would allow the agent to inform the customer that they can address the issue through the phone, and that the client doesn't need to expend additional effort to have their issue resolved. Such visibility into concurrent multi-channel interactions allows the intelligent contact centers to maximize the ability to personalize customer conversations.

Satisfying and retaining every customer is the nirvana for most CX leaders. However, in reality, almost all firms face customer satisfaction issues. It is *how* they respond to those issues that determines if they can mitigate problems and retain clients or lose buyers to competitors. One way the intelligent contact centers maximize their customer retention rates is by **alerting relevant agents about poor customer experiences**. This is enabled through use of real-time reporting and alerting tools within [voice of the customer](#) programs designed to capture customer feedback and sentiment. These programs might include post-call IVR surveys, online surveys, and email surveys designed to capture customer input on if and how the company addressed client issues. Customers

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### When Should You Ask for Customer Feedback?

Data in Figure 5 on next page shows that the intelligent contact centers are 22% more likely to capture customer input on each interaction immediately after each conversation (e.g. post-call surveys).

While this information is beneficial, capturing and using post-interaction data is also helpful as it allows customers to have a more objective lens when providing input as input provided after resolving a frustrating issue may still reflect the initial frustration and might not reflect organization's ability to properly address the issue.

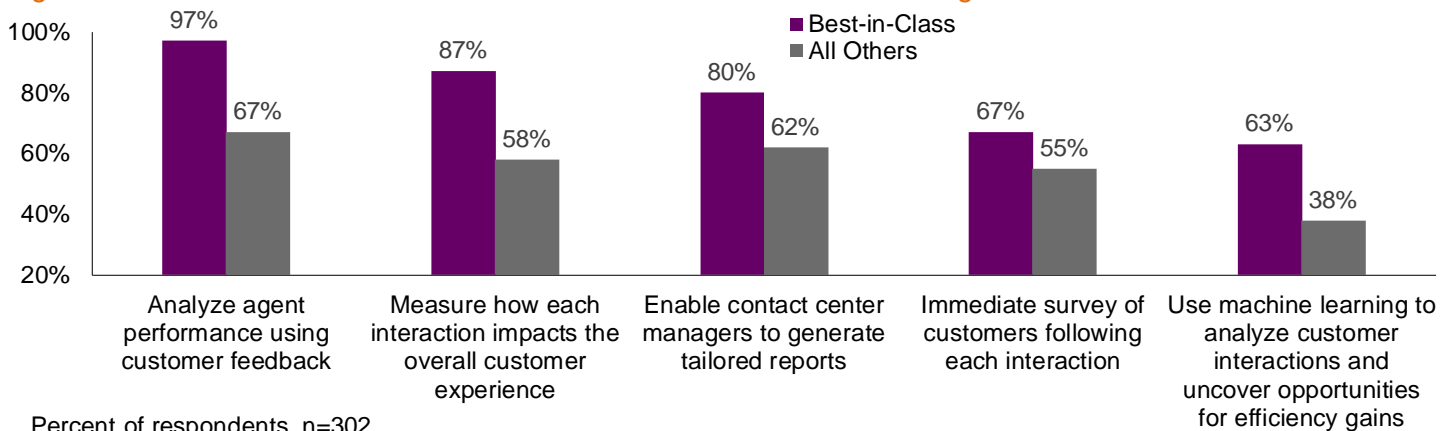
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might also share their input directly with the firm through various channels (e.g. email and web). Alerting agents upon determining a poor experience allows agents to determine if they should re-engage the client, and if so, the best way to do so. As such, it's no surprise that intelligent contact centers using this capability enjoy superior customer satisfaction and retention rates.

### 3. Use Reporting & Analytics to Drive Continuous Efficiency Gains

Intelligent contact centers understand the need to regularly gauge their performance results to ensure their activities continuously meet and exceed customer expectations. This helps align activities such as routing, agent training, etc., to be in line with the evolving needs of their buyers. To this point, Figure 5 shows that the top performers are 45% more likely to incorporate [voice of the customer \(VoC\)](#) data when measuring agent performances (97% vs. 67%). These firms are also 22% more likely to capture customer feedback on each interaction immediately after each conversation (67% vs. 55%).


Figure 5: Best-in-Class Firms Master Performance Measurement & Management



Percent of respondents, n=302

Source: Aberdeen Group, April 2018

Measuring agent performance and overall activity results through the lens of the customer allows contact centers to determine those activities that fall short in meeting buyer needs. Best-in-Class use tailored reporting tools to generate visibility into their performance. These are tools that can be customized to drill-down into specific aspects of contact center activity results. These results can include customer experiences as well as metrics reflecting operational efficiency (e.g. average handle time and first contact resolution). For example, a supervisor in an intelligent contact center can use reporting tools to analyze average handle times for specific agents to compare them against internal benchmarks. If agents' performance is below the benchmark, supervisors can then provide personalized training or coaching to help them improve their relevant skills.



To continuously uncover opportunities for efficiency gains, Best-in-Class firms utilize machine learning. They use this technology to analyze how various factors such as agents, customer traffic, routing, etc., influence measures of efficiency (e.g. agent productivity, average handle time and SLA compliance). Machine learning allows analyzing vast volumes of data with minimal to no reliance on data scientists. Hence, it enables the contact center to convert customer and operational data into actionable insights to uncover opportunities for efficiency gains.


Use of machine learning also enables using more forward-looking capabilities such as artificial intelligence which refers to using software that can mimic human understanding and decision making. This paves the way for contact centers to manage activities such as forecasting and agent routing through AI where AI can manage parts of contact center activities with minimal to no human oversight or involvement. Data shows that Best-in-Class firms are 2.1 times more likely (31% vs. 15%) to utilize artificial intelligence and 67% more likely (35% vs. 21%) to use machine learning capabilities within their activities.

## Recommendations

Keeping up with customer expectations has become a necessity for businesses to survive long-term. No other department in the business has as much influence on customer experiences as the contact center. Hence, transforming the contact center to continuously innovate their activities and become more customer-centric is vital. However, this must be balanced with operational efficiency. Findings from Aberdeen's [CX](#) study reveal that 87% of firms struggle with managing customer conversations in a truly data-driven fashion.

The Best-in-Class firms have alleviated this challenge through specific strategies, processes, and technologies that help them build and manage a truly intelligent contact center. In return, customers reward these businesses with their loyalty and increased spend. These firms also enjoy enhanced operational efficiency by improving metrics such as agent productivity, first contact resolution rates and average handle times. Driving efficiency ultimately helps these intelligent contact centers reduce unnecessary costs while improving customer experiences that help them grow their revenue. To achieve these results, we recommend you observe the key capabilities under each of the three building blocks noted below:

- [Don't hoard data; act on it](#)
- [Weave omni-channel within your contact center DNA](#)
- [Use reporting & analytics to drive continuous efficiency gains](#)



If you're not currently using any of the capabilities and related technologies for the above building blocks, we highly recommend incorporating them in your activities. Doing so will help transform your contact center into one that's well-positioned to achieve the results enjoyed by the Best-in-Class. If you already use some of these capabilities, then we highly recommend you continue nurturing their use, and evaluate how adding others can help you further strengthen your activity results and create (or maintain) a lead against competitors.

## Related Research

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*[State of Contact Center WFO 2018: Driving Customer Satisfaction Through Efficiency; May 2018](#)*

*[Knowledge Management Paves the Way for Insightful Customer Conversations; November 2017](#)*

*[Agent Desktop Optimization: Help your Agents Help Customers; September 2017](#)*

*[Agent Experience Management: Customer Experience Begins with Your Agents; September 2017](#)*

*[Cloud Contact Center: Customer-Centricity with Greater Agility and Less Cost; July 2017](#)*

### About Aberdeen Group

Since 1988, Aberdeen Group has published research that helps businesses worldwide to improve their performance. Our analysts derive fact-based, vendor-neutral insights from a proprietary analytical framework, which identifies Best-in-Class organizations from primary research conducted with industry practitioners. The resulting research content is used by hundreds of thousands of business professionals to drive smarter decision-making and improve business strategies. Aberdeen Group is headquartered in Waltham, Massachusetts, USA.

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