WHITE PAPER | DIGITAL BUSINESS

Clearing the Customer Service Hurdle in an Automated World

NTT DATA study finds businesses need to focus their automation plans on building consumer trust in virtual agents

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Introduction

At a time when millions of consumers are comfortable telling digital assistants, such as Amazon's Alexa and Apple's Siri, to "play some classic jazz" or "call Aunt Jennie," enterprises have a great opportunity to use intelligent technologies to automate customer service. Across consumer and business-to-business (B2B) industries, companies recognize that chatbots and artificial intelligence (AI) software can save them money, and it can offer a better and faster customer service experience. Machines will handle routine transactions, such as giving out account balances or updating a password, while customer service agents will tackle more complex issues such as returning products or disputing charges.

The reality is that only a few companies have realized the vision of a combined automation strategy

Most businesses are still in the early stages of implementing intelligent automation technologies for customer contact. Even fewer have made the strategic investments in process redesign and training to optimize the harmony of humans and machines working together in customer service.

There is a major perception gap between customer expectations and what virtual agents actually do. **Businesses are overestimating the importance of speed over accuracy.** While there is a substantial group of consumers — virtual yay-sayers (pro-virtual agent consumers) — who prefer the speed and convenience of automated customer contact, most consumers are skeptical. **94% say that they still prefer to deal with a live agent.** One reason is that with today's automated systems, customers doubt that they will get the right answer. While companies have focused on how automation can speed things up by eliminating wait times and shortening call length, customers would prefer to get their questions answered correctly the first time even if it means waiting a little longer.
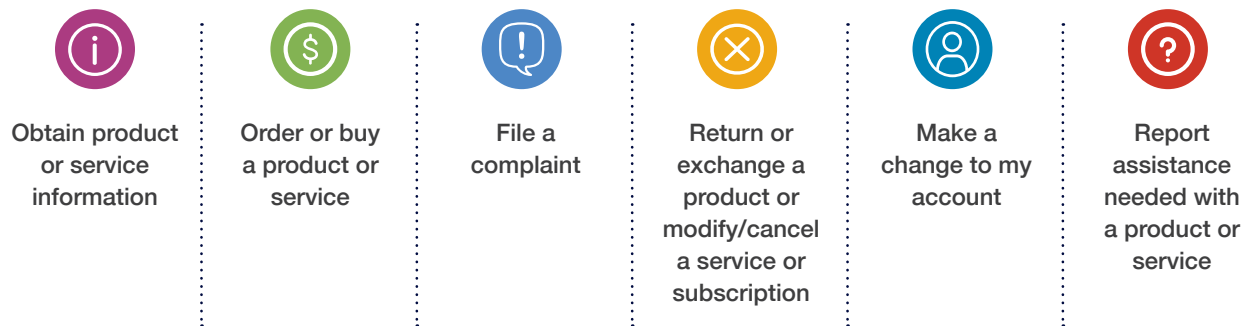
These are the major findings of new research from NTT DATA Services, which include a survey of more than 1,200 U.S. consumers and more than 100 U.S. business executives involved in decision-making, budgeting, strategy or execution of customer service (see page 19). The first half of this paper describes in detail the key findings and insights from the consumer survey. In the second part, we explain the data gleaned from the executive survey and describe the issues companies face in automating customer service as well as the largely untapped opportunities for using intelligent technologies. This analysis includes specific steps companies can take to reimagine customer contact processes using advanced digital technologies and well-trained human agents to create customer experiences that increase loyalty and provide a competitive advantage.
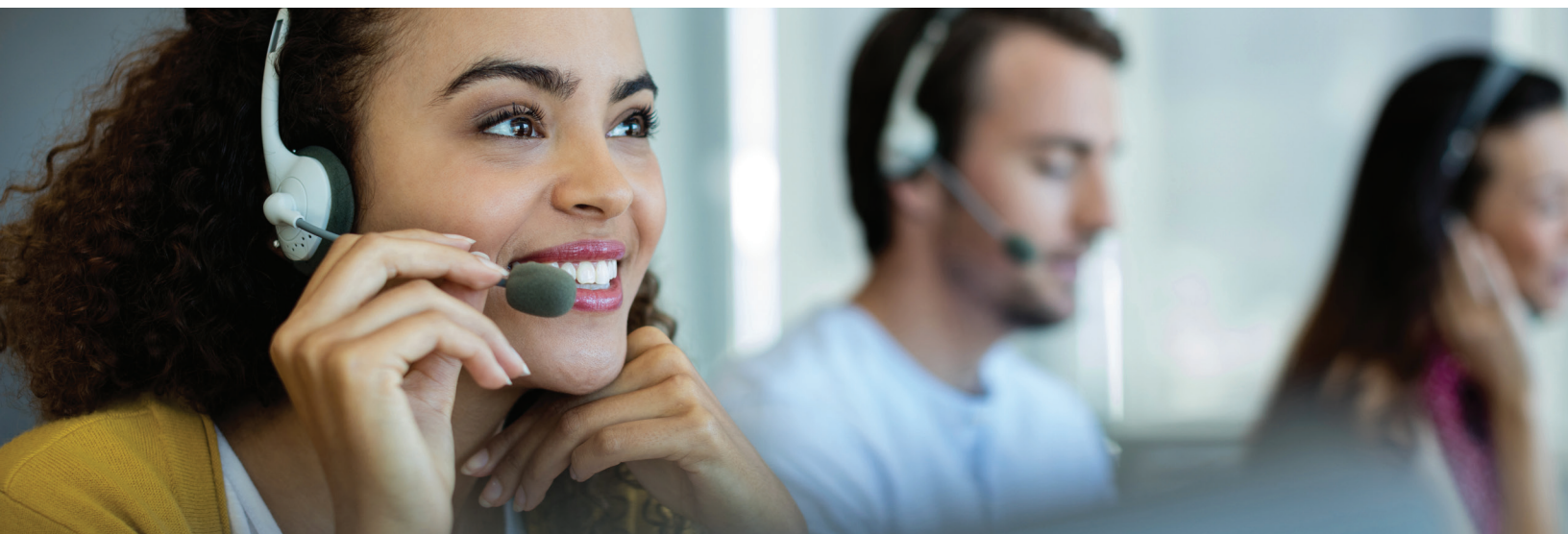
Agent:

The term "agent" refers to a customer service representative. A live agent is a person. A virtual agent is a technology program designed to act as a personal assistant (think of Amazon's Alexa, Apple's Siri, or IPsoft's Amelia) that provides customer service tasks such as placing orders, locating shipment information or updating account information like your billing address.

The nature of customer service inquiries included in the study:

| Obtain product or service information | Order or buy a product or service | File a complaint | Return or exchange a product or modify/cancel a service or subscription | Make a change to my account | Report assistance needed with a product or service |

Key research study findings:

Virtual agents are not living up to consumers' quality expectations	Quality, not speed, matters most in customer service	Customer trust in automated systems is broken
Business challenges center around leadership and the ability to manage change	Virtual agents will be the fastest growing automation technology investment	Companies are in the early stages of maturity for customer service automation
As consumer demographics change and virtual agent capabilities improve, automated customer service will evolve to be the standard for delivering many customer service activities in the future		
The agent skill set is changing and transition is more difficult than expected	There is an emerging group of consumers who are comfortable with using virtual agents — the virtual yay-sayers	

Figure 1

4

The promise of automated customer service

Businesses are investing in automated customer service to help improve efficiency, reduce wait times (a top customer frustration), and meet rising expectations for quick and reliable self-service options. People who are comfortable with technology like to interact with intelligent agents, such as Amazon's Alexa. They also prefer to deal with machines rather than live agents for simple customer service tasks.

The study finds that all consumers share similar frustrations (see Figure 2). Waiting to connect with a live or virtual agent is the biggest complaint, second only to the absence of live agent availability. This flaw is in both intelligent systems and the interactive voice response (IVR) systems. The next biggest source of consumer frustration is not being able to get a satisfactory answer or resolution during a call. Consumers dislike being shuttled from one operator to another in search of somebody with the right answer or the authority to solve a problem. Consumers also dislike repeating information every time they are switched to another agent.
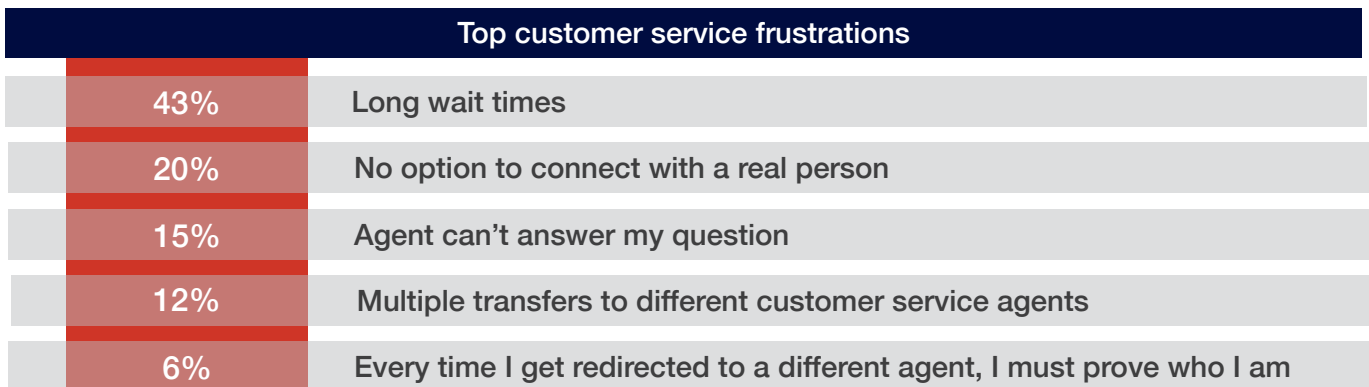
Top customer service frustrations	
43%	Long wait times
20%	No option to connect with a real person
15%	Agent can't answer my question
12%	Multiple transfers to different customer service agents
6%	Every time I get redirected to a different agent, I must prove who I am

Figure 2: Consumers are frustrated with customer service

The customer service journey

The study asked consumers a series of questions about their most recent interactions with customer service across a wide range of industries. Our findings indicate that consumers take multiple paths along the customer service journey. People still try to avoid interacting with virtual agents. 57% of people calling a business intend to speak to a person. There are also consumers who want to avoid talking to agents, and most of these customers start their journeys at a company website. There they research FAQs. If they do not succeed, 78% of these consumers then call customer service.

In analyzing 970 customer service interactions, we find that 81% are handled with a live agent. Only 2% involve a virtual agent, 16% of which are IVR and 1% are online chat. Overall, most consumers are content with their customer service experiences, as 80% of the 970 interactions are rated satisfactory or excellent. The remaining 20% range from "unsatisfactory" to "terrible."

Most consumers do not yet trust automated systems for customer service

While customers do not like waiting for customer service and want quick answers, they want accuracy more (see Figure 3). This is one reason why 94% of consumers say that they prefer to speak with a person rather than a virtual agent (see Figure 4). Consumers are particularly annoyed when virtual agents cannot give them an answer and they have to start the process over. Annoyance increases when having to shift to another contact channel like chat.

Consumers don't trust automated systems

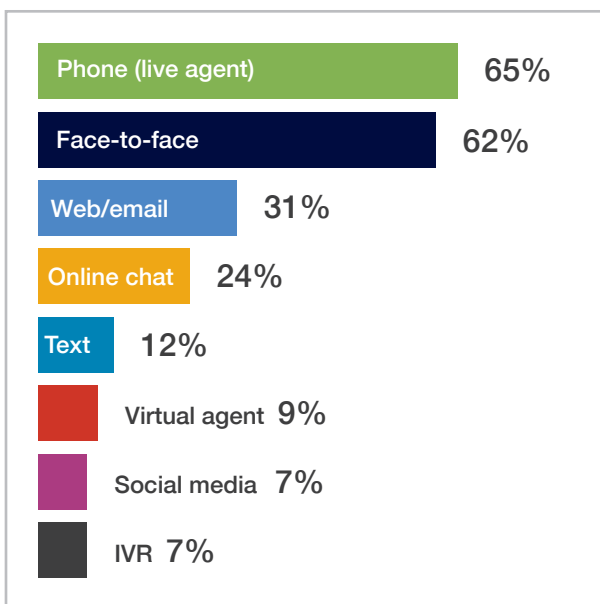|	
Phone (live agent)	**65%**
Face-to-face	**62%**
Web/email	**31%**
Online chat	**24%**
Text	**12%**
Virtual agent	9%
Social media	7%
IVR	7%

Figure 3:
Q35. How much do you trust each of these different formats for customer service?

When asked about the level of trust in different formats for customer service, only 9% of consumers surveyed say they trust virtual agents while nearly 66% trust a live agent when calling a contact center.

These findings show the gap between what consumers expect a quality customer service interaction should be, and what automated systems deliver.

Key takeaways

9% of consumers trust virtual agents for customer service

94% of consumers currently prefer to communicate with a live (human) agent

34% of consumers are frustrated by existing virtual agents

Figure 4:
Q35. How much do you trust each of these different formats for customer service? Q36. Do you prefer to speak with a live agent or a virtual agent? Q39. What are your general feelings toward customer service being delivered via virtual agents?

Major perception gap between businesses and consumers

NTT DATA's research uncovered a disconnect between what consumers expect and what businesses are delivering with virtual agents. A fundamental problem is that businesses tend to overestimate the importance of speed versus accuracy for consumers using virtual agents (see Figure 5). 77% of business executives versus 63% of consumers believe that customers will use a virtual agent if they will get the right answer faster. 86% of consumers versus 78% of business leaders say that it is important for customer service to answer the question correctly the first time. Customers are just as happy to use a virtual agent as they are a person, as long as their question is answered correctly.

| Another revealing disconnect in the data: | 62% of executives believe customers were having good experiences with virtual agents, compared with only 42% of consumers. |

Despite their differences, businesses and consumers do see eye-to-eye on some key issues. Both groups agree that consumers will choose one company over another if its customer service is better. They also agree consumers can usually tell within the first two or three questions if the virtual agent is going to be helpful.

Businesses overestimate consumers' willingness to use virtual agents	% agree: Business	% agree: Consumer
It is important for customer service to answer the question correctly the first time	78%	86%
I am willing to use a virtual agent if there is a good chance of solving my problem faster	77%	63%
I don't care if I connect with a live or virtual agent, as long as my question gets answered	61%	54%
I have experienced good virtual agents	62%	42%

Figure 5:
Q54. and Q10. Please rate to what degree you agree or disagree with the following statements?

Why (and when) consumers favor virtual agents

Today, preference for virtual agents is limited to certain types of interactions. While many consumers still prefer dealing with a live agent for customer service, the study finds that people use multiple channels of communication, depending on the nature of their inquiry (see Figure 6). For simple inquiries, such as checking account balances, updating account information (changing an address, for example) and tracking shipments, 41% of consumers say they prefer a live agent conversation. 65% of consumers want a live agent to handle more complicated issues, such as returning a product, getting product assistance or disputing a charge.

Consumers who use virtual agents for simple inquiries say they find virtual agents faster to use and easier to understand than dealing with a person. They appreciate that when a call is escalated by a virtual agent, they usually do not have to repeat the reason for their call. They say virtual agents, unlike some humans, are always polite and pleasant. Virtual agents never have a bad day or grow impatient. Consumers also say that giving a credit card number to a machine is more secure than speaking to a human agent.

Most people trust a virtual agent over a live person when giving their credit card number for transactions.
Why? Robots won't steal your credit card information.

There are common complaints about virtual agents. In addition to limited abilities for answering complex queries, consumers say virtual agents too often are unable to understand human speech. This leads to customers repeating themselves. With the recent advances in technology, the ability of a virtual agent to understand a human has improved. This year, Microsoft and Alibaba both surpassed the Stanford Question Answering Dataset (SQuAD) score for machines answering questions better than humans (82.304).[4] This will directly impact customers concerns about a virtual agent being able to understand their question.

ⓘ The nature of the inquiry determines how consumers contact customer service
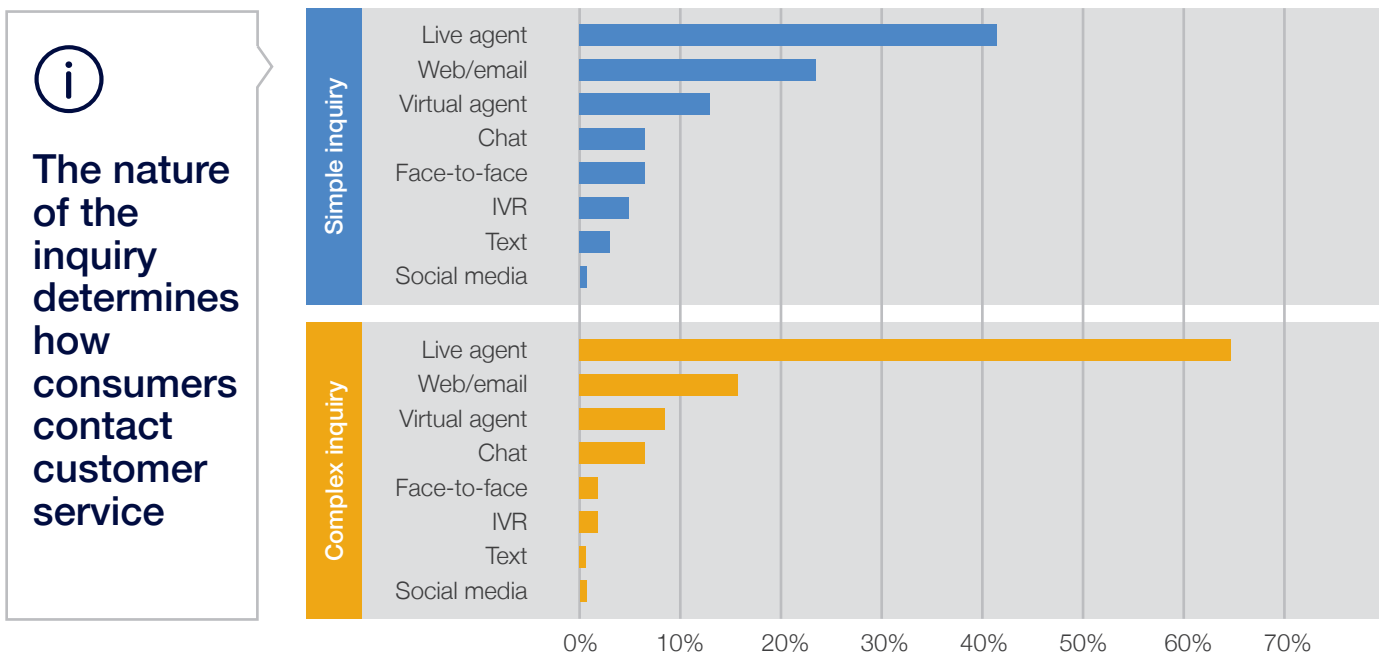
Figure 6:
Q39: What are your general feelings toward customer service being delivered via virtual agents?
Q40: Please rank how you would like to contact customer service for simple and complex inquiries.

Two types of customers emerge

NTT DATA's study finds that consumers fall into two groups when it comes to using automated customer service systems: virtual yay-sayers and virtual nay-sayers. Virtual nay-sayers have a strong preference for speaking with live agents and do not believe virtual agents can perform customer service tasks. They do not like to use intelligent assistants, nor are they frequent online shoppers.

Virtual yay-sayers tend to skew above the age of 35 (62% are 35 and up), trust that automated systems can provide quality customer service and love using Apple's Siri and Amazon's Alexa, among other intelligent assistants. Although they account for just 23% of consumers in our research, virtual yay-sayers are the most important segment for businesses to pay attention to (see Figure 7). These consumers represent a sizeable growth opportunity, and their preferences will set the bar for quality customer service now and in the future.

Virtual yay-sayers:
Willing to use technology to accomplish tasks more quickly

Virtual nay-sayers:
Prefer speaking with a live person

That bar will likely rise, because virtual yay-sayers are a challenging customer segment. They seek instant gratification, value speed, rely heavily on technology and are accustomed to buying all sorts of goods and services online — increasingly from their mobile devices. They also prefer to communicate with a virtual agent if it saves them time. In fact, **77% of virtual yay-sayers would opt for a virtual agent in any situation if there is a good chance it could solve their problem in just two minutes.** They have less brand loyalty than other consumers, and they want a wide range of choices for customer service.

Over time, technology will help turn virtual nay-sayers into virtual yay-sayers. Advances in AI, machine learning and natural language technologies will give virtual agents the capability to deliver the right answers quickly and reliably, enabling continuous improvements in the quality of customer service.

A segment of consumers is comfortable with automation and it is likely to grow

% of survey participants:

77% Nay-sayer

23% Yay-sayer

Millennials (18-34) 38%

Age 35 + 62%
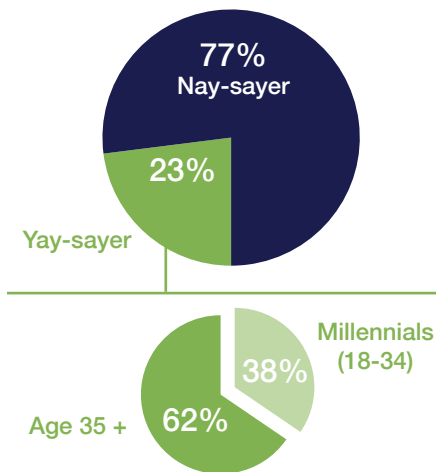
	Yay-sayer	Nay-sayer
Always prefer to speak with a live agent	22%	46%
Comfortable speaking with a virtual agent	86%	44%
Love using Siri or Alexa	74%	0%
Have experienced good virtual agents in the past	64%	35%
Willing to speak with virtual agent in two minutes with 50% chance of success than wait 15 minutes for a live agent with 98%	77%	35%

Figure 7: The emergence of virtual yay-sayers
Q7. Listed below are a number of paired statements describing alternate preferences for a customer experience. For each pair, select the statement that you feel best describes you. While you may agree with both statements, please choose only one. Q8. Which of the following best describes your views on your interactions with customer service agents? Q10. Please rate to what degree you agree or disagree with the following statements. Q13. What is your opinion of these products?

A secure link between virtual agents in the world of digitized customer care

In the near future companies will be able to leverage the functionality and capability of smartphones and virtual agents to positively impact the security of customer interactions. A company could use automated technology in a redesigned way throughout the customer care process to authenticate customers and share information. The customer service journey would begin with a customer on their Apple smartphone asking Siri to help them check the status of an order. Siri, now understanding the issue, transfers the customer to the company and the customer is connected to a virtual call agent. The customer's identity is authenticated with Siri, and with the valid transfer, the virtual agent is aware of the full context of the conversation, so it can adapt its social tone and actions accordingly. When it needs to escalate a call, it passes on all relevant information to its human colleagues so the conversation can flow smoothly without the customer having to repeat anything.

Early stages of intelligent automation in customer service

The picture that emerges from NTT DATA's consumer research is of businesses that are still in the early stages of adopting intelligent technologies in customer service. Companies have time to get automation in customer service right, and then deliver excellent experiences that will enhance brands and create competitive advantage.

The gap between what consumers expect from automated customer service and what companies deliver stems largely from the level of technology that companies are using today, and how they are implementing it. Some automated systems are too limited in their capabilities or are being used in limited ways, notes NTT DATA Vice President and Chief Technology Officer Kris Fitzgerald.

> **"You can have a high-quality, speech-enabled IVR and you can have a poor quality IVR. The same is true with virtual agents. Some virtual agents handle only basic tasks by reading a script that is prepared for them, while others are more technologically advanced with natural language processing, episodic memory and machine learning. These systems can learn and improve the longer they're on the job."**

As important as the choice of technology is the way in which it is deployed. Companies need to study customer journeys and identify where automated technology can eliminate or reduce all customer friction — not just cut wait times. This requires rethinking customer service processes to ensure consumers can move smoothly to resolution with few, if any, transfers. It also requires thinking about how human and virtual agents can work together seamlessly to provide speedy, accurate service. A carefully planned process that blends human and machine intelligence can reduce wait times, improve customer satisfaction and reduce costs.

When a virtual agent answers a call, consumers' first thoughts are:

"I hope it can solve my problem" 33%
"I hope this works" 18%
"Good, this should speed things up" 16%
"This might be a waste of time" 15%
"The company is only trying to save money"....... 9%
"This never works" 9%

Figure 8: Customers have mixed reviews about virtual agents

But the problem can be fixed. The future of automated customer care involves a direct path of listening to what consumers need and following their lead to build trust. To eliminate multiple transfers and people getting stuck in the wrong spot, companies need to rethink how customers get from question to resolution. Automation combined with human interactions can solve these frustrations.

Why have companies not done more with intelligent automation technologies in customer service?

Our research indicates that at this early stage of automation adoption there are common issues (see Figure 9). For example, few companies have taken a systematic approach to automation in customer service: 80% of business executives surveyed say they did not have a comprehensive plan to automate customer service processes, and 54% acknowledge they have made random or opportunistic investments in automation with overall defined plan — including 48% of firms with over $10 billion in revenue. On a more positive note, about half of respondents say they are developing thorough process and technology automation plans.

In our sample, most companies rate themselves at a low or moderate level of "maturity" in customer service automation capabilities. They cite gaps in readiness for automation planning, leadership, technology skills, talent and change management. Forty-four percent of companies report that automation is not a competency in customer service or elsewhere in the organization, and only 37% of firms have an automation platform, embedded automation solutions or an AI-powered automation ecosystem.

Companies are in the early stages of maturity for customer service automation …

But it's not too late

80%	Have not executed a customer service automation plan
54%	No defined structure for selecting automation technologies
47%	In the process of developing a plan for automation, or have a plan

Figure 9
Q26: How structured is your organization's process for selecting automation technologies?
Q27: Which of the following best describes your automation portfolio within customer service?
Q28: Which of the following describes how you manage your organization's security for automation tools?

Investments in automation are accelerating

Companies concede that they have a lot to learn about automating customer service, but they also realize they have to keep moving ahead with investments in intelligent automation technologies. In the next 18 months, companies that participated in this research report plan for significant improvements in automation. The fastest growth will be in virtual agents for customer service, followed by robotic process automation (RPA) and autonomics (scripted, autonomous rules-based solutions). Companies expect to make the largest investments in virtual agents in text messaging, followed by online chat and websites (see Figure 10 — this graph shows the increases in investments in virtual agents across channels, text messaging, online chat and websites are the top 3 channels that companies will invest virtual agent technology).

Level of automation via Virtual Agent in the various customer services channels

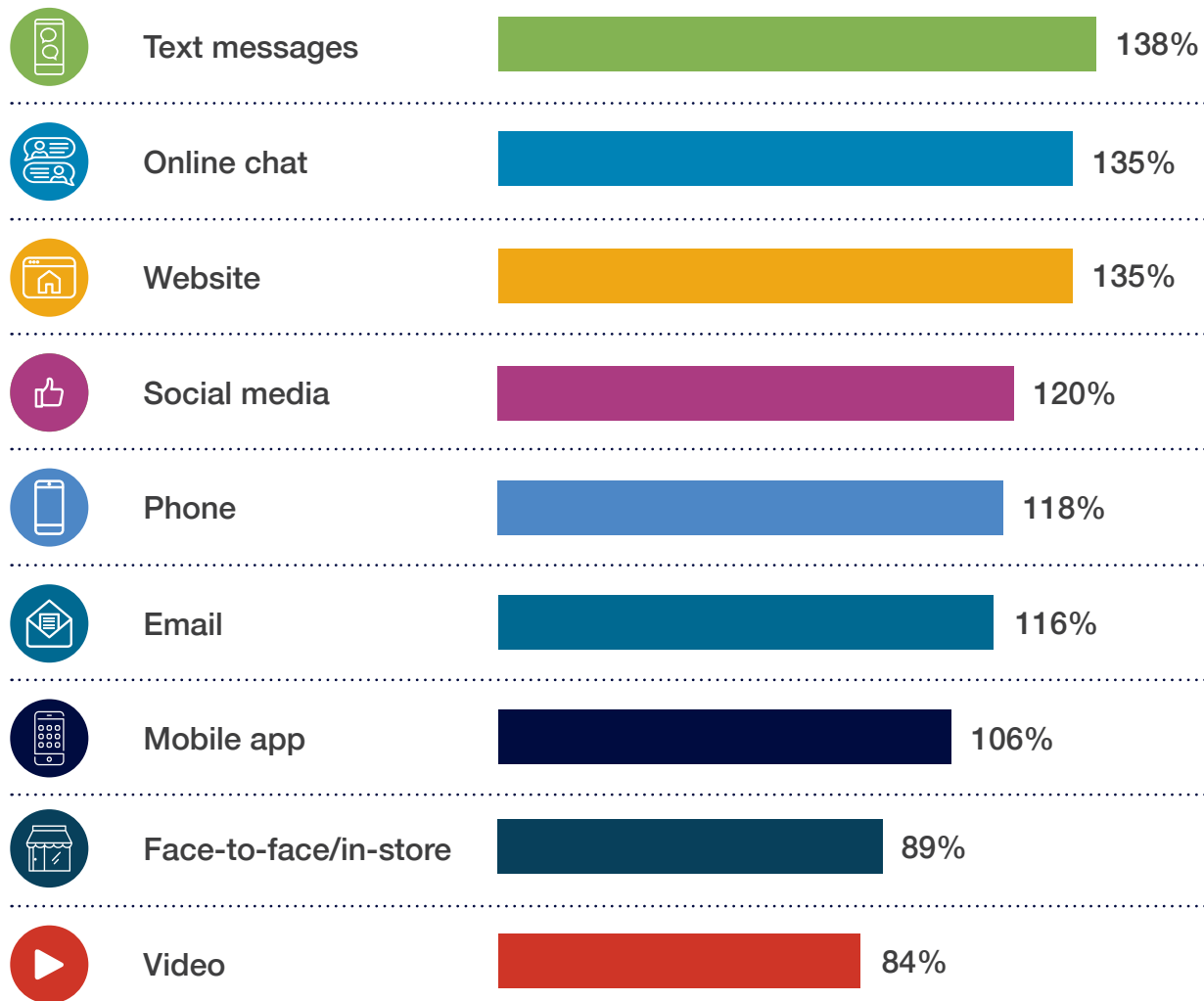| Channel	Value
Text messages	138%
Online chat	135%
Website	135%
Social media	120%
Phone	118%
Email	116%
Mobile app	106%
Face-to-face/in-store	89%
Video	84%

Figure 10: The strongest increases in investment will be in virtual agents for customer service

Clearing obstacles for successful customer service automation

More companies could advance their customer service automation efforts if they address several common obstacles. The survey identifies six barriers that stand in the way of operationalizing customer service automation: developing the data and intelligence, deploying and training people, tapping into the right ecosystem, justifying investment, understanding the full business impact, and enabling the full lifecycle.
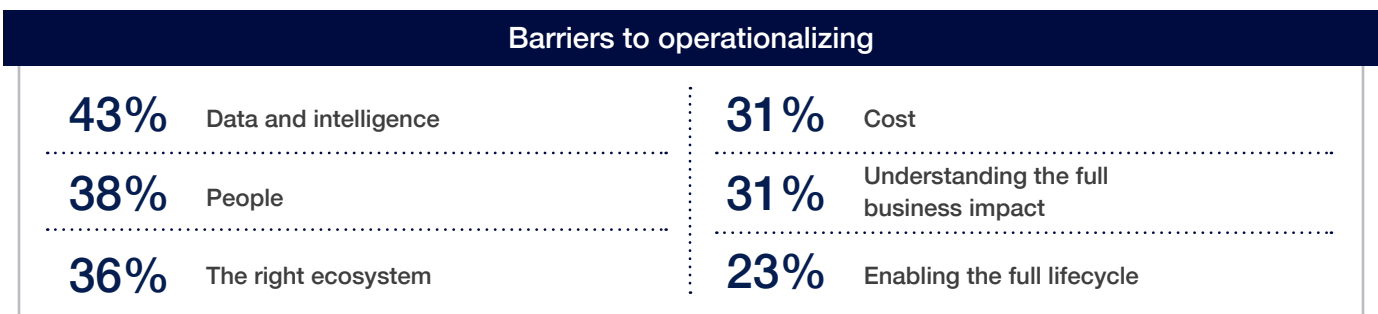
Barriers to operationalizing			
43%	Data and intelligence	**31%**	Cost
38%	People	**31%**	Understanding the full business impact
36%	The right ecosystem	**23%**	Enabling the full lifecycle

Figure 11: Obstacles to customer service automation stand in the way

1. Leveraging data and intelligence. The most fundamental challenge is data and intelligence, according to 43% of businesses surveyed. In particular, companies struggle to integrate customer service automation functions with legacy systems. Chief information officers stressed this point at a recent NTT DATA Services CIO Forum. The biggest frustration is the inability to get to data on legacy systems, the CIOs say. Accessing data on legacy systems and connecting new applications to core IT operations is a challenge across functions as companies try to use intelligent technologies to improve operations. To program intelligent agents and effect continuous improvements in customer service, companies need data from thousands of customer contacts, which requires an architecture and protocols to capture, organize, analyze and display data from other systems to support RPA, virtual agents, AI and machine learning.

B2B company uses a cognitive sales agent

Customer service agents supporting a B2B company's sales teams were stretched thin to handle customer queries and issues.

To help with the daytime workload as well as offer both after-hours sales support and daytime support in other time zones, the company installed a virtual agent.
It took a measured approach, starting with internal sales support, then moving to evenings and weekends. Calls to customer service and website queries will be answered by a virtual agent, which can interpret natural language conversations and provide accurate responses.

Aside from coverage, all sales calls now include upselling and the appropriate discounts. The virtual agent is modeled after their "best sales" agent.

2. The impact on people. Two out of three businesses that participated in this research find that transforming the customer service organization is more challenging than they expected. The two most common questions executives ask us are, "What am I really going to do about people?" and "How do I address the training and skills of the customer service representatives in the call center as well as the skills of the managers who hire the agents?"

When automation is introduced in customer service and machines are handling routine work, the role of live agents changes. Companies say their top two human resources challenges are hiring and promoting talent for the new work processes. The skill profile is changing: Agents need to be able to do more than repeat canned answers; they must be problem solvers and relationship builders. As shown in Figure 12, the leading traits that employers look for in agents for the blended human/machine call center are advanced problem-solving skills (44%) and the ability to make independent decisions (41%). To create a workforce with these traits, customer service operations need new approaches to recruiting and training. It also means some live agents will be replaced.

With the proper training, agents can be taught to work efficiently with intelligent agents, taking over when machine intelligence cannot do the job or when customers insist on speaking to a human. Live agents can create more value by building loyalty and (directly or indirectly) encouraging more sales. In our survey, 61% of companies say they are off to a good start in preparing agents for collaborating with intelligent technologies.

How you engage and incent the agents is also key. For example, one company provided incentives for customer service teams to help design new processes using automation. The employees received a share of the virtual agent's "salary." By including employees in the decision-making process and training them, the team felt valued and they were excited to take on more challenging, interesting work, the company says.

3. Tapping the right ecosystem. Understanding the automation technology landscape is a complex challenge. There are different tools for different problems as well as for different types of automation — when should you consider RPA? When is a virtual agent the solution? Different automation technologies have different approaches for modeling new processes and for breaking down the solution. It is important to have strong business process expertise to optimize the solutions the tools provide. Regardless of the type of automation tools selected for the ecosystem, it's crucial that security be built in at the beginning and carried throughout. Our study finds that 59% of firms have no formal security, basic governance or only minimal verification for automation tools. Companies must also have a unified dashboard/visualization system to manage all the automated actors.

How are companies adapting to the automation work culture?

71% of businesses find customized customer service needs require new skills

Change in skill profile is the

66% of companies agree that transforming the customer service organization is more challenging than

61% of businesses say transition support is critical

Providing training to build foundational skills like

45% of companies report communication, training, engagement and leadership alignment are major challenges

Change in skill profile is the most difficult to implement

Figure 12

4. Justifying the investment. For many companies, justifying the investment in customer service automation remains a barrier. The study finds that the top metrics to measure improvements in customer service are first-call closure rates (58%), speed to answer (57%) and number of iterations to close (28%). It also notes differences in confidence levels for each performance criteria that will have positive results. Large and medium size companies are much more confident in positive improvements in areas, such as reduction in average cost per call.

Meanwhile, 39% of companies justify customer service automation investments through return on investment (ROI), and the remaining 8% justify investments simply with payback. The study finds that large companies place much more emphasis on ROI to justify investments, while small and medium companies emphasize return on value (ROV). We believe ROI and payback may provide some insight into a short-term project's viability. However, to justify the level of investment required to transform the customer service process, companies should look at the value that is not captured in conventional ROI measurements, such as improved quality and customer loyalty.

5. Understanding the full business impact. Nearly one-third (31%) of businesses report that understanding the full business impact is a major barrier to operationalizing customer service automation initiatives. The following are a few of the many questions to consider when trying to understand the full impact of the potential effects of customer service automation:

- What are the "hard" financial gains — for example, lower labor costs and fewer tickets?
- What are the "soft" financial gains — for example, increased productivity and customer loyalty?
- How is customer experience improving?
- Is customer service able to extend coverage — for example, more hours or additional geographies and languages?
- Does the company have a way to measure impact — for example, dashboards, tracking, net promoter scores or social media sentiment?
- How will funding be measured?

6. Enabling the full lifecycle. Software does not wear out, but it can become obsolete. AI systems require ongoing maintenance and oversight by humans to make sure that what the system is learning is still useful (as well as ethical and legal). In customer service and throughout the organization, companies that implement intelligent technologies need to clearly define automation policies, principles, frameworks, roles, responsibilities, and certifications and trainings for sustainability. Businesses need to have a defined automation development and transition to production operating model that integrates with business-as-usual operations. Lastly, companies need frameworks for control, supervision, compliance and resilience plans for business continuity.

Automation delivers value to the business

As companies continue to invest in customer service automation, a fundamental question must be addressed: Is automated customer service worth the effort? Reaching high levels of customer service automation requires vision, commitment and considerable investment. Businesses are squarely focused on increasing efficiency and reducing cost when using virtual agents to automate customer service. However, many companies are also using other metrics to gauge returns, including quality improvements. These companies recognize that they are investing in better customer experiences, which is an increasingly critical requirement for competing and growing.

More than half of businesses surveyed — 53% — say they are using ROV, rather than simple ROI to assess their investments in customer service technology. ROV can be defined as the value generated by continuous improvement in processes.[3]

Companies that do not set broader goals for automaton and measure returns only in cost savings will under-invest.

We believe this leads to the frustration that consumers have with automation. By not focusing on the quality of the service as well as the cost, companies, in some cases, are making automation a barrier to customer service.

Our data demonstrates that investments — from those companies that have implemented automation in customer service — are paying off (see Figure 13). We asked what benefits companies are realizing from customer service automation. The leading answer is efficiency, followed by improved customer and agent experience, faster response times and reduced call volume; 21% of companies cite better customer relationships as a major payoff from their investments.

Investments in customer service automation are paying off

50% Increase efficiency

38% Improvement in quality of customer service by resolving customer inquiry during the first contact

30% Improve the agent and customer experience

29% Decrease response time

28% Reduction in the number of overall calls

23% Reduction in average cost per call

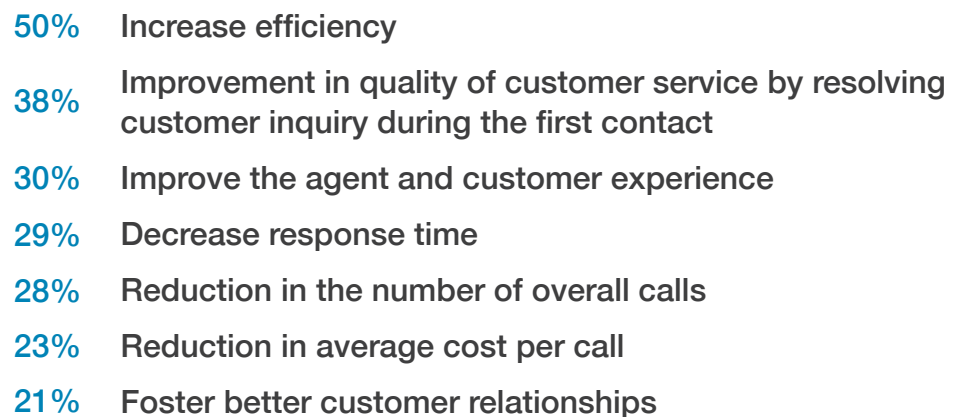**21%** Foster better customer relationships

Figure 13: Q38. How is your organization benefitting from customer service automation investments so far (both technology and process investments)? (Select all that apply)

Recommendations for customer service leaders

Based on NTT DATA's research and consulting experience, we believe now is the time for companies to automate their customer service organizations. The technology is maturing, the benefits are multiplying and a growing number of customers are ready to use intelligent machines for service. We offer four recommendations for customer-service leaders undertaking the automation journey:

1. Focus on customer outcomes. Automation gives companies an opportunity to put the customer back in customer service. Companies need to rethink how customers get from question to resolution along the customer service journey in every contact channel. Plot those journeys so customers can be assured of getting a fast and accurate response to their questions. By placing the customer experience ahead of cost and prioritizing customer retention and acquisition, companies will build trust and develop the relationships that lead to sustainable success.

2. Create a solution based on quality (speed and accuracy). Although automation improves productivity by adding capacity without adding headcount, the systems should be designed to meet quality (rather than quantity) requirements. This means aiming for both speed and accuracy — eliminating or reducing wait times and resolving customer inquiries on the first contact. System processes should be designed so that when the virtual agent cannot resolve an issue, the customer is transferred seamlessly to an agent without having to start the process over again.

3. Focus on people. Create a thoughtful approach to retrain employees and be sure to include the employees in the transformation process. When we see companies engage the team and get their input on how to effectively modify processes to incorporate automation, the response has been phenomenal. The team brings invaluable knowledge, and employees are excited to be part of the creative process. We believe automation can empower teams and increase productivity. Once automated systems are installed, workers are free to do higher value work and grow. They spend their days using their problem-solving and people skills, rather than repeating mind-numbing low-value tasks. They are more engaged and productive, and companies often see a reduction in employee churn, a perennial issue in call centers.

4. Make automation part of everything you do. Automation is a long-term, comprehensive change to customer service processes, not a point solution. Leaders should think about how to not only broadly employ intelligent technologies but also manage them over time. Understanding the software development lifecycle and the processes for managing data and agents is vital. When planning for the next software release, be sure to document and include all the latest automation process changes. A common mistake is forgetting those new changes in the next release, which causes the process to break. Managing the development and maintenance of automation — and carefully documenting changes — should be part of a customer service leader's daily job.

Conclusion

Although it is clear from our study that automated customer service interfaces, such as virtual agents, are becoming more acceptable to consumers, there remains significant room for improvement. As the use of intelligent technologies increases, consumers are becoming more comfortable with virtual agents. This improved level of comfort, however, does not change the fact that people want their customer service formats to be intelligent, responsive and easy to use — and their inquiries answered correctly and quickly the first time they contact customer service.

There is a huge opportunity, and the time for businesses to wrap their arms around their automation plans and goals is now, while customer service automation is still in the early stages. Automation will help businesses exceed customer expectations, if they get it right. Businesses must deploy a well-thought-out end-to-end strategy when embarking on automation, because it truly does impact the entire company. By embedding and enabling automation solutions across the enterprise virtual agents will help live agents (humans), increasing their productivity and delivering predictable and high-quality business outcomes quickly and economically.

The future of automated systems involves focusing on the outcomes (quality) rather than what the impact is to the business. Solutions that are quick, high quality and resolve customers' issues will rebuild consumers' trust. It is imperative that automation be part of the end-to-end internal process, not just another implementation of a shiny object.

Research methodology and demographics

Consumer

- 1,249 U.S.-based survey responses
- Required to be 18+

U.S. businesses

- 103 U.S.-based business survey respondents with a global footprint
- Director-level and above executives involved in decision-making, budgeting, strategy or execution of call center customer service
- Business unit leadership, operations, customer experience, marketing and technology

Business interview summary

103 surveys were conducted with executives involved in decision-making, budgeting, strategy or execution of customer service

Industry	Percentage
Healthcare	30%
Banking	24%
Retail	14%
Insurance	14%
Other industries	18%
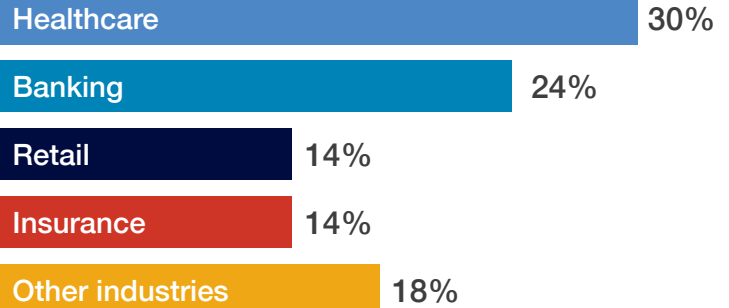
Household income

Overall mix of respondents reflects a higher income base

22%	Less than $49,999
26%	$50,000 to $99,999
42%	$100,000 to $199,999
10%	$200,000 or more

Age distribution

Even distribution of respondents across age segments

24%	18-34
39%	35-54
37%	Over 55

About the author

Kris Fitzgerald, Vice President, Chief Technology Officer

Kris.Fitzgerald@nttdata.com | 214.244.9325

linkedin.com/in/kris-fitzgerald-baa72/   twitter.com/kfitzcto

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