The Secret to Winning Customers’ Hearts With Artificial Intelligence
Add Human Intelligence

By Capgemini Digital Transformation Institute
Artificial intelligence (AI) is giving customer experience a shot in the arm. Organizations are increasingly adopting conversational chatbots for providing customer service. Airports around the world are investing in mobile androids that help travelers with directions. Hotels are experimenting with voice-assisted in-room controls. A Microsoft social chatbot in China, “Xiaolce,” already has over 200 million users, with 600,000 calls made in the first ten months since its launch.

How consumers engage with businesses is evolving dramatically. As we saw in our earlier research into AI use cases, organizations are using this technology to achieve a range of business goals, such as: influencing sales, boosting operations, driving customer engagement, and generating insights.

To understand AI’s impact on customer experience in particular, we have conducted this worldwide, cross-sector research:

- The aim: to explore how consumers perceive AI and which interactions they believe could be better delivered by humans, which by AI, and which by a mix of humans and AI.
- The approach: consumers may be unaware of how their data is used for AI or even when they are liaising with a chatbot instead of a human. To ensure, therefore, that we received informed responses from the 10,000 consumers were surveyed, we made sure that our definitions were very clear, and consumers understood the different situations where AI is being used as an intervention, or as a means of augmenting. We also surveyed over 500 executives from leading organizations, in addition to conducting focus group discussions with consumers, and interviews with industry experts and academics. The research methodology at the end of this report provides further details.

We found that consumers are increasingly more aware of when AI is being used by organizations; consumers like it, and they are becoming more prescriptive of when and how it is used alongside humans. In this report, we:

1. Explore how consumers think about AI and their expectations from organizations while interacting via AI
2. Assess how organizations use AI for customer experience and where they are missing the mark in terms of what consumers want and expect
3. Recommend strategies for augmenting the customer experience in an AI world.

Introduction

55% of consumers prefer to have interactions enabled by a mix of AI and humans.
Consumers know and want artificial intelligence, but one that is informed by human intelligence

When Google’s DeepMind AI defeated the reigning world champion in the ancient strategy board game, Go, it showed how human-AI interactions are changing. However, such celebrated and widely publicized events also create confusion, with people seeing them as a step toward artificial general intelligence (successfully performing any intellectual task that a human can). As Yann LeCun, head of AI at Facebook, explains, this is still far from reality. "We’re very far from having machines that can learn the most basic things about the world in the way humans and animals can."

In this context, one of the big questions that organizations face—when to use an AI interface or a human for interactions. While each on its own has its merits and challenges, we found that consumers increasingly want a combination of both: 55% would prefer to have interactions enabled by a mix of AI and humans. While in some instances consumer prefer AI-only interactions, and human-only interactions in some others, we find that, overall people favor a combination of both, irrespective of the financial and emotional value they associate with the products and services—something we discuss later in the report.

AI is no longer alien to consumers

An increasing number of consumers are what we call “AI-aware.” close to three-quarters (73%) say they are aware of having interactions enabled by artificial intelligence. Examples include chatbots for customer service, facial recognition for consumer identification, voice conversation via a smart speaker or a smartphone, etc.

What’s more, 69% of these AI-aware consumers were satisfied with their AI-enabled interactions. As a respondent in our German focus group observed: “I use Google Assistant and it is surprising what it can do already: that it can give real answers or control Spotify. It’s fascinating that it reacts to speech and can do so much. It’s not just a dumb robot.” AI-aware consumers see significant benefits in these interactions powered by AI. For instance, almost two-thirds (63%) point to greater control over their interactions and the 24/7 availability of AI technologies (see Figure 1).

Figure 1: AI-aware consumers derive significant benefits from AI-enabled interactions

<table>
<thead>
<tr>
<th>Benefits experienced</th>
<th>63%</th>
<th>63%</th>
<th>45%</th>
<th>35%</th>
<th>30%</th>
<th>30%</th>
<th>29%</th>
<th>1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater control over the interactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24/7 availability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faster resolution of support issues (For e.g., chatbots/ virtual agents over)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction in effort from my end in my interaction with the company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better privacy and security of my personal data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More trustworthy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher personalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Capgemini Digital Transformation Institute, AI in CX Consumer Survey, May 2018, N=5,032 consumers who know when they are having interactions by artificial intelligence and are satisfied by it.
Consumers are increasingly clear on what they want from AI.

Consumers are reassured by human-like attributes, with 64% wanting AI to be more human-like, and 62% comfortable with human-like voice and intellect; in other words, the ability to hold a sensible conversation, respond to follow up questions, contribute additional information, etc. (see Figure 2). However, consumers are also anxious and want organizations to clarify when they are interacting with a machine.

“I think if it sounded a little bit more human and real it would be better... [but] I still want to know that I am speaking to a machine,” said a participant in our US focus group discussion.

Enrico Maria Bagnasco, Head of Technology Innovation at Telecom Italia highlights, “There is reasonable fear that if the interaction is not natural enough, people will skip virtual agents and look for the human agents all the time. This would be a failure for the project. Thus, the bar is raised quite high towards a good level of natural interaction, so that the customer is at ease with the robot.”

Additionally, on being probed about human-like intellect, a participant in the French focus group suggested, “It would be really helpful to have smart recommendations for the websites you visit, like Trip Advisor for example. Something reliable and useful, as if it is from a trusted human advisor.”

Not only are consumers prioritizing voice conversations, they are also clear in the need for choice, as we heard in the German focus group discussion: “I do like the pleasant voice of Siri or Alexa. But we all have different tastes and I like the fact that we are able to choose between different voices, such as a male voice and a female voice.” Companies such as Google are already moving in this direction – Google recently announced the addition of six new voices for its Assistant product. Enrico Maria Bagnasco, Telecom Italia, adds, “On one hand, the personalities of the virtual agents will be checked by and be in line with the brand image of our company. On the other hand, we expect to have different personalities; more colloquial, more formal, maybe young voice, an older voice, and those will be activated depending upon who the virtual agent is responding to/who the customer is.”

Moreover, expectations for these AI systems to display greater empathy and emotion and to behave like humans (such as exchange of pleasantries, adding humor to the conversations) based on subtle cues is also rising, with more than half of consumers voting in favor of these attributes (see Figure 2).

**Human-like AI qualities are a hit with consumers**

Consumers prefer human-like qualities to make AI-based interactions more compelling

<table>
<thead>
<tr>
<th>Human-like voice</th>
<th>Human-like intellect</th>
<th>Ability to understand human emotions and respond</th>
<th>Ability to provide greater empathy</th>
<th>Human-like behavior and personality</th>
</tr>
</thead>
<tbody>
<tr>
<td>62%</td>
<td>62%</td>
<td>57%</td>
<td>55%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Source: Capgemini Digital Transformation Institute, AI in CX Consumer Survey, May 2018, N=10,000 consumers.
Organizations are beginning to invest to meet this demand for conversational ability. In May 2018, Microsoft acquired Semantic Machines, which is building new approaches to conversational AI as it seeks to make bots sound more human-like. Amazon continues to work and invest in making Alexa more natural in its interactions. In April 2018, Ruhi Sarikaya, head of Alexa Brain Group, announced that Alexa would soon be able to have more natural conversations, allowing Alexa to understand and respond to follow up questions.

Human-like qualities bring tangible advantages. We found that they generate significant goodwill and drive a greater propensity to spend for around half of consumers (see Figure 3).

**Figure 3**  Human-like qualities can generate significant goodwill and upside

“If interactions enabled by artificial intelligence were more human-like I would…”

- 55% Be keener to use these applications
- 50% Have greater trust in the company
- 50% Have higher emotional engagement
- 49% Have higher affiliation to the company
- 48% Have higher loyalty for the company
- 48% Have a higher propensity to spend with the company

*Source: Capgemini Digital Transformation Institute, AI in CX Consumer Survey, May 2018, N=10,000 consumers.*

64% of consumers want AI to be more human-like
The uncanny valley: human-like physical features are unwanted

The “uncanny valley” is a concept coined in the 70s that describes the unsettling feeling that people experience when they encounter androids that appear human-like but are not fully realistic.

Our research found clear evidence of the “uncanny valley” phenomenon when consumers expressed their dislike for human-like physical features in a machine. The majority of consumers (52%) said they would not be comfortable with this feature.

A focus group participant in France said: “Having a human-like AI-based robot would be too spooky, like those dolls that look like real babies,” and one in Germany said: “They are machines and they were made to help, but I would find it scary if they looked like real humans.”

Consumers want transparency in AI by design

While consumers want AI to be human-like in terms of interaction, they want to know when they are talking to an AI-enabled system and not a human. We found that two-thirds of consumers (66%) would like to be made aware when companies are enabling interactions via AI (see Figure 4). This is especially true for the Financial Services sector, where over 71% of consumers would like to be informed. “I think you always need to be told,” said a US focus group participant. A German focus group participant added, “Organizations should be clear whether it’s a computer or a real person that we are interacting with. Otherwise there’s no trust if you think you were speaking to a real person the whole time or, if you found out later, then you feel foolish.”

Figure 4  Majority of consumers want to be made aware while having AI-enabled interactions with organizations

Consumers’ interest in being made aware while having AI-enabled interactions

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>66%</td>
</tr>
<tr>
<td>No</td>
<td>17%</td>
</tr>
<tr>
<td>It does not matter</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: Capgemini Digital Transformation Institute, AI in CX Consumer Survey, May 2018, N=10,000 consumers.
We also found that consumers have clear expectations about the use of their personal data. In our research, an overwhelming 80% consumers expect companies to ensure transparency in treatment and use of data collected, in order for them to prioritize interactions enabled by artificial intelligence. This was the number-one requirement, followed by providing better deals/offers, providing priority services, suggesting more relevant products and services or offering cash rewards.

66% of consumers want to be made aware when they interact with an AI system.
“You are planning to buy a new car but not sure how to finance your purchase. You have been provided with an online option to look through a host of cars and the corresponding financing options that could be right for you, based on your unique credit history, income and other variables. You will have to share your personal information with an online virtual agent.”

What is your comfort with this interaction?

More than half (51%) of AI-aware consumers are comfortable in seeking recommendations for a new car from an online virtual agent.

51%

25%

44%

Comfort in buying a new car with help from an online virtual agent

AI-aware consumers

AI-unaware consumers

Overall

Consumers want the reassurance of a human presence

As we outlined earlier, consumers have a clear preference for interactions enabled by a mix of AI and humans. We looked at both high- and low-consideration interactions (by high consideration, we mean involving high costs or emotional investment, such as buying a car, purchasing a wedding ring). For both categories, as Figure 6 shows, a mix of human and AI interactions is the most popular choice.

Figure 6  Interaction preferences for high- and low-consideration products and services

However, in high-consideration interactions, the significance of a human presence is amplified: 45% prefer human-only interactions for high-consideration interactions, as opposed to 30% for low-consideration ones. “Sometimes it is about the situation in question, rather than just the cost,” said a US focus group participant. “I could buy a car online via a virtual assistant, if someone recommended it, even though it is an expensive product. But if I have a car accident and need to deal with my insurance company, I would find a human interaction more assuring.”

For low-consideration products and services, the willingness for AI-only interactions increases (17% compared to just 8% for high consideration).

Source: Capgemini Digital Transformation Institute, AI in CX Consumer Survey, May 2018, N=10,000 consumers.
When we looked at the preferences by age group, interestingly, we found that consumers across age groups showed similar levels of comfort for AI-human approaches in the low-consideration area (see Figure 7). We found that 53% of consumers aged 18 to 34 years were comfortable with a mix of human and AI, but also that 52% of the 55+ group were equally comfortable. This supports the idea that these interactions offer a convenience factor for senior citizens – a finding that was also evident in our earlier research on voice assistants and conversational commerce.11

Figure 7 Interaction preferences for high- and low-consideration products and services—by age

I could buy a car online via a virtual assistant […], even though it is an expensive product. But if I have a car accident and need to deal with my insurance company, I would find a human interaction more assuring.”
Our research found that nearly 45% of consumers would be comfortable in delegating tasks to an AI-enabled assistant. What’s more— around one in two consumers (48%) said they’d find the idea of a digital alter ego exciting and 46% said it would improve the quality of their life (see Figure 8). Consumers also shared the kind of tasks they would be comfortable assigning to such digital alter egos, as we heard in the US focus group, “I think I would be good with it making appointments for me such as spa appointments or car servicing appointments. I would love for the assistant to pay my electricity and other utility bills for me. I am good with anything that is going to make my life a little bit easier.”

This development raises significant questions for organizations:

- What does the rise of such alter egos mean for the future of customer to brand interactions?
- Will organizations work towards finding meaningful ways to engage with a consumer’s digital agent, once the consumer is out of the equation?
- What strategies will brands employ to appeal to such digital alter egos?
- How will an organization’s digital agents interact with a consumer’s digital agent?
- In the long run, how will brands sustain the emotional link with the end-consumer as direct interactions reduce?

**Figure 8 Consumers are excited by the idea of digital alter egos**

“The option of interacting with such a personalized assistant...”

48% Is exciting!

46% Will enhance the quality of my life

Source: Capgemini Digital Transformation Institute, AI in CX Consumers Survey, May 2018, N=10,000 consumers.
Organizations are focusing on costs and RoI rather than consumer pain points when implementing AI

Nuances around customer preferences are lost on most organizations

We have shown that consumers are comfortable with AI, but are companies meeting that need with their implementation efforts?

First, the good news. Our study of over 21 AI-enabled interactions across 10,000 consumers and 528 organizations shows some positive alignment between organizations and consumers on what consumers were comfortable with. For example:

• Consumers: 55% are comfortable interacting with text-based conversational agents/virtual assistants when it’s a company they trust.

• Organizations: A similar number of organization executives (53%) believed this to be the case.

While organizations may be in sync with consumer comfort, it does not extend to consumers’ expectations for AI interactions. Two-thirds of consumers said they want to be made aware when they are interacting with AI, but only a third of executives believe this to be the case (see Figure 9).

Source: Capgemini Digital Transformation Institute, AI in CX Consumer and Executive Survey, May 2018, N=10,000 consumers; N=528 executives.

Figure 9
More than two out of three consumers want to be aware while interacting with AI

Do consumers want to know whether they are having interactions enabled by artificial intelligence, as opposed to human-led - by sector

Financial Services
Consumer Products and Retail
Utilities
Automotive
Overall

71%
69%
65%
61%
66%

29%
35%
34%
33%
33%

Consumer view
Executive view

Source: Capgemini Digital Transformation Institute, AI in CX Consumer and Executive Survey, May 2018, N=10,000 consumers; N=528 executives.
Why is it that organizations are able to gauge consumer comfort levels but miss consumer expectations on other fronts? We found that most companies were not applying a consumer lens when designing AI initiatives. As Michael Schrage, Research Fellow at the MIT Sloan School’s ‘Initiative on the Digital Economy,’ pointed out, “For many organizations, the AI implementation approach is more “capabilities out” than “customer in.” That is to say, the organization looks primarily at its core competencies, its capabilities, and the skills and talents of its people. It invests in AI mainly to improve the efficiency and effectiveness of those things without, frankly, bringing much of a customer lens or focus to solutions.” We found that:

- Only 9% of organizations check on consumer preferences when thinking about AI implementation.
- Many appear to be treating AI-enabled implementations as yet another typical technology project. We found that as many as 62% of organizations prioritize cost of implementation and 59% of organizations prioritize expected RoI ahead of consumer comfort or solving customer pain points, which scored the lowest (see Figure 10).

Organizations are focusing on implementation costs and RoI and not on customer experience

Share of organizations who rank these parameters higher when deciding on implementing AI-enabled use cases

- Cost of implementation: 62%
- Expected return on investment (RoI): 59%
- Availability of data: 53%
- Impact on operational efficiency: 28%
- Market demand: 15%
- Impact on compliance: 13%
- Complexity of implementation: 12%
- Impact on transparency to consumer and consumer trust: 10%
- Impact on customer experience: 10%
- Consumer preference of applications: 9%
- Enterprise AI roadmap: 9%
- Pressure from competition: 8%
- Availability of in-house skills: 7%
- Solving known consumer pain points: 7%

Source: Capgemini Digital Transformation Institute, AI in CX Executive Survey, N=528 executives.

9% of organizations check on consumer preferences when designing AI interactions
An AI-enabled interaction in action

“You are travelling internationally but forgot to inform your bank. When you make a purchase on your credit card at the airport, the bank already knows about your travel because it has access to your location through the app. It uses facial recognition to authenticate your identity and lets the transaction go through without embarrassment.”

Comfort with Proactive Credit Card Monitoring

<table>
<thead>
<tr>
<th></th>
<th>AI-aware consumers</th>
<th>AI-unaware consumers</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort with PCCM</td>
<td>66%</td>
<td>46%</td>
<td>60%</td>
</tr>
</tbody>
</table>


Al-enabled interactions bring significant benefits

Good AI-enabled experience promotes greater advocacy and loyalty

Good AI-enabled experiences encourage consumers to spread positive word-of-mouth and act as advocates of companies that provide these experiences, as we also witnessed in our previous research on Conversational Commerce.12
- More than half (53%) would share their positive experiences
- Half will be more loyal to the company and share positive feedback on social media
- More than half (51%) will place higher trust in the company

As MIT’s Michael Schrage suggests this reflects what organizations should aim for, with AI and the customer experience, “For serious organizations, the key metric of success shouldn’t be organizational transformation, but customer transformation. How can you convert your best customers and your typical customers into influencers and advocates for you? Will your customers not just buy from you and be satisfied buying from you, but actively champion you and communicate that you and your brand are great to have as part of their lives? Digital transformation should be about making our customers more valuable to us, not just us more valuable to our customers.”

Consumers pay more for better experience

Greater trust and loyalty also increases customer interactions with organizations which leads to more spend. As we have reported in our previous research, more than three in four consumers (80%) are willing to pay more for a better experience, across sectors and countries (see “The Disconnected Customer: What digital customer experience leaders teach us about reconnecting with customers”). In the current research, we also found that consumers are willing to reward more business. More than two in five consumers (42%) told us that they would increase their spend if they received a good AI-enabled experience.

Overall, the AI-aware consumers hold significant potential value:
- 38% have purchased more on having a good AI-enabled experience, at least a few times
- A quarter have increased their spend by up to 10%

Focusing on the high-benefit segment offers maximum rewards

In our research, we wanted to understand which consumers offers greatest potential reward. We assessed the entire sample based on their likelihood to reward organizations if they have a good experience with AI-enabled interactions (for example, a benefit could include purchasing more products from the company). We found three distinct groups:
- High-benefit consumers (25% of the sample)
- Medium-benefit consumers (22%)
- Low-benefit consumers (53%)

We found that:
- 90% of high-benefit consumers would be willing to increase their spend based on a good AI experience, as compared to 60% of medium-benefit consumers and only 13% of low-benefit consumers
- 52% will become promoters for a company, compared to just 12% of the medium segment and only 3% of the low benefit segment.
Who are the high-benefit consumers?

We segmented consumers based on their likelihood to reward organizations based on receiving a good AI-enabled experience. These benefits include:

- Purchasing more products from the company
- Transacting more frequently with the company
- Sharing their positive experiences with friends and family
- Providing high ratings for the company and share positive feedback on social media
- Having higher loyalty towards the company
- Placing higher trust in the company

Based on consumers’ responses on these criteria, we derived three levels of consumers:

1. High-benefit consumers (25%)
2. Medium-benefit consumers (22%)
3. Low-benefit consumers (53%)

Some of the key attributes of high-benefit consumers are:

- Two out of five high-benefit consumers have AI-based interactions on a daily basis, whereas one out of ten low-benefit consumers do so
- More than four out of five high-benefit consumers prefer interactions enabled by a mix of AI and humans, while less than two out of five low-benefit consumers think so
- 81% of high-benefit consumers expect AI to provide better privacy and security of personal data, as compared to only 27% of low-benefit consumers.

![High-benefit consumers have greater confidence in AI-enabled interactions](image)

"As compared to human-only/online-only interactions, I believe that Artificial Intelligence will consistently..."

Source: Capgemini Digital Transformation Institute, AI in CX Consumer Survey, May 2018, N=10,000 consumers, 2,488 high-benefit consumers, 2,188 medium-benefit consumers, 5,324 low-benefit consumers.
How should organizations augment their customer experience processes for an AI world?

As we have shown in the previous section, high-benefit consumers (those consumers that reward organizations based on receiving a good AI-enabled experience – see “Who are the high-benefit consumers?”), offer significant potential upside. However, we have also seen how many organizations risk missing this prize, because their aims and approach are not aligned with the needs of consumers in this space. To understand which organizations are getting this right, we have identified a set of organizations that are in sync with these high-benefit consumers. These companies comprise 7% of our sample and, as they are ahead of the following pack, we call them the “Front-Runners.”

Who are the Front-Runner organizations?

We determined the key criteria that set the high-benefit consumers apart. We tested organizations on those criteria to ascertain the companies who are in sync with the pulse of the consumers. We evaluated these organizations on criteria such as:

- Privacy and security of personal data
- Perceived consumer satisfaction with AI-enabled interactions
- Extent of implementation of AI use cases
- Extent of perceived consumer comfort of AI use cases
- Consumer comfort with more human-like qualities in AI
- Features that would make AI more compelling to consumers (personalized recommendations, convenience, trustworthiness, etc.)
These organizations differ from others in many ways, with their approaches offering insights into what constitutes best practice. In this section, we:

- Discuss a set of key practices that organizations should follow to differentiate themselves while building a customer experience strategy for an AI-driven environment.
- Outline a holistic approach to deploying AI in customer experience (see Figure 12).

### Figure 12
Building an effective customer experience strategy for an AI-driven environment

<table>
<thead>
<tr>
<th>Front-runners bring unique approaches for enhancing customer experience via AI</th>
<th>Take a holistic and inclusive approach to deploying AI in CX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ensure that consumer concerns from basis for AI initiatives</td>
<td>1. Employee augmentation</td>
</tr>
<tr>
<td>• Front-Runners prioritize consumer preference and experiences over cost and ROI</td>
<td>2. Customer understanding</td>
</tr>
<tr>
<td>2. Make AI-first a strategic priority</td>
<td>3. Conversational interfaces</td>
</tr>
<tr>
<td>• Over three-quarters (78%) of Front-Runners take an AI-first approach when making organizational decisions and 69% see AI as a business topic rather than a technical topic</td>
<td>4. Predictive personalization</td>
</tr>
<tr>
<td>3. Scale up AI-enabled interactions globally</td>
<td></td>
</tr>
<tr>
<td>• 42% of Front-Runners have globally-scaled AI-enabled interactions for providing information during purchase, as compared to 2% of other organizations</td>
<td></td>
</tr>
<tr>
<td>4. Keep the customer informed</td>
<td></td>
</tr>
<tr>
<td>• Front-Runners are transparent with consumers when deploying ‘AI-enabled interactions across customer touchpoints as compared to other organizations</td>
<td></td>
</tr>
<tr>
<td>5. Align incentives to encourage greater use of AI-enabled interactions</td>
<td>• More than 9 out of 10 Front-Runners agree with consumers’ expectation to be incentivized for use of their personal data</td>
</tr>
</tbody>
</table>

Source: Capgemini Digital Transformation Institute Analysis.

"78% of Front-Runners take an AI-first approach when making organizational decisions"
Ensure that consumer concerns form the basis for AI initiatives

Front-Runners keep their consumers at the center of their AI initiatives, as opposed to the other organizations that are more focused on factors such as cost and RoI (see Figure 13). Front-Runners are more likely than others to focus on areas such as the impact on the customer experience and the applications consumers prefer.

As Claire Charbit, Senior Vice President Information Management Commercial–Marketing–Digital, at Air France-KLM, told us: “We are in a very competitive environment. We need to compete on creating the most compelling value proposition and not only on cost. AI can be of monumental help in enhancing this value proposition by being very specific to what our customers expect.”

![Figure 13](image)

**Figure 13**  
**Front-Runners prioritize consumer preference and experiences over cost and RoI**

<table>
<thead>
<tr>
<th>Share of organizations that prioritize consumer centric parameters</th>
<th>Share of organizations that prioritize cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on customer experience</td>
<td>Cost of implementation</td>
</tr>
<tr>
<td>24%</td>
<td>64%</td>
</tr>
<tr>
<td>Consumer preference of applications</td>
<td>Expected return on investment (RoI)</td>
</tr>
<tr>
<td>18%</td>
<td>24%</td>
</tr>
<tr>
<td>Solving known consumer pain points</td>
<td></td>
</tr>
<tr>
<td>13%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>11%</td>
</tr>
</tbody>
</table>

Front-Runners

Others

Source: Capgemini Digital Transformation Institute, AI in CX Executive Survey, N=528 executives, N=38 Front-Runners, N=490 others.
Make AI-first a strategic priority

An AI-first approach makes AI a core part of a service, and not an afterthought. Or as technology giant Google sees it, it takes the organization’s role beyond informing and into executing and assisting. Google has, in recent years, made a shift from being mobile-first to being AI-first. At a recent event, CEO Sundar Pichai said that AI is more important than fire or electricity and it recently rebranded its research arm from Google Research to Google AI. Traditional organizations are also playing their part. Singapore-based OCBC Bank recently set up a dedicated AI unit with the objective of making the organization AI-first.

Our research found that Front-Runners treat AI as a strategic imperative. Over three-quarters (78%) take an AI-first approach when making organizational decisions (see Figure 14). More Front-Runners also see AI as a business topic that it is, as opposed to a technical topic (see Figure 14). Enrico Maria Bagnasco, Head of Technology Innovation, Telecom Italia says, “We use the approach based on use cases, we actually start from the most relevant need from the customers side, and we build the knowledge into the virtual agent based on this. Again, the most urgent, and the most relevant use case is up to the business line to decide, is not a technical line decision.”

Figure 14  Considering an AI-first strategy is important to nearly three in four Front-Runners

We consider an AI-first strategy while making organizational decisions

<table>
<thead>
<tr>
<th>Share of organizations who consider AI-first strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front-Runners</td>
</tr>
<tr>
<td>78%</td>
</tr>
</tbody>
</table>

We approach AI as a business topic as opposed to a technical topic

<table>
<thead>
<tr>
<th>Share of organizations who consider AI-first strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front-Runners</td>
</tr>
<tr>
<td>38%</td>
</tr>
</tbody>
</table>

Source: Capgemini Digital Transformation Institute, AI in CX Executive Survey, N=528 executives, N=38 Front-Runners, N=490 others.
Scale up AI-enabled interactions globally

While AI-enabled interactions can bring significant upsides, many businesses are still grappling with offering interactions at scale. However, a large proportion of Front-Runners have scaled their AI-enabled interactions across consumer touchpoints. For example, 42% have globally scaled AI-enabled interactions for providing information during purchase (see Figure 15).

To scale initiatives, organizations need to follow a multi-pronged approach to AI implementation. “It is very important that the choices we make today are scalable for tomorrow,” says Air France-KLM’s Claire Charbit. “And, in AI, scale will matter. It is fine to start small, but if we really want to make it a part of our process and really a part of our industrial model, it needs to be scalable. So, we need to ensure we have the proper infrastructure to test and train our model and the right partnerships. If we are ambitious, we need to prepare for future scalability.”

**Figure 15** Front-Runners are focused in scaling AI-enabled interactions globally

<table>
<thead>
<tr>
<th>Activity</th>
<th>Front-Runners</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>While targeting customers</td>
<td>39%</td>
<td>2%</td>
</tr>
<tr>
<td>While making recommendations to customers</td>
<td>29%</td>
<td>2%</td>
</tr>
<tr>
<td>While engaging customers</td>
<td>42%</td>
<td>2%</td>
</tr>
<tr>
<td>While protecting and authenticating customers</td>
<td>37%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: Capgemini Digital Transformation Institute, AI in CX Executive Survey, N=528 executives, N=38 Front-Runners, N=490 others.
Keep the customer informed

Front-Runners understand the nuances that matter to consumers when it comes to AI interactions. For example, the vast majority (92%) understand that consumers want to be aware when they are being targeted with products or services (see Figure 16).

Figure 16  Front-Runners are transparent with consumers when deploying AI-enabled interactions

Share of organizations who keep consumers informed about AI-enabled interactions

- During customer targeting: 92% Front-Runners, 31% Others
- During product/service recommendations from companies: 92% Front-Runners, 32% Others
- While engaging with companies: pre-purchase, during purchase, and post-purchase: 66% Front-Runners, 31% Others
- While being protected and authenticated by companies: 71% Front-Runners, 34% Others

Source: Capgemini Digital Transformation Institute, AI in CX Executive Survey, N=528 executives, N=38 Front-Runners, N=490 others.
Consumers expect organizations to incentivize them for sharing their personal data. Our analysis found that, on an average, more than seven out of ten consumers expect incentives in the form of better deals/offers and priority services. More than nine out of ten (98%) Front-Runners agree with the consumers, compared to less than half of others (see Figure 17). Burberry, which has been a pioneer in using AI for enhanced customer satisfaction, has successfully incentivized customers to share data voluntarily, by having a range of loyalty and reward programs. This data in turn has been used to provide highly personalized recommendations, both online and in-store.¹⁸

**Figure 17**  
**Front-Runners understand consumers’ expectations once they share their data with companies**

“Once consumers have shared their personal data with the company, in exchange, they would expect companies to...”

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Front-Runners</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide better deals/offers</td>
<td>100%</td>
<td>43%</td>
</tr>
<tr>
<td>Provide cash rewards</td>
<td>95%</td>
<td>44%</td>
</tr>
<tr>
<td>Suggest more relevant products and services</td>
<td>97%</td>
<td>46%</td>
</tr>
<tr>
<td>Provide priority services</td>
<td>100%</td>
<td>46%</td>
</tr>
<tr>
<td>Ensure transparency in treatment of data collected</td>
<td>100%</td>
<td>44%</td>
</tr>
</tbody>
</table>

*Source: Capgemini Digital Transformation Institute, AI in CX Executive Survey, N=528 executives, N=38 Front-Runners, N=490 others*
Five angles to deploy AI in customer experience

Based on our extensive experience with clients, we have developed a framework for how organizations should build out their AI in CX initiatives (see Figure 18).

**Employee augmentation:** Michael Natusch, Head of AI at Prudential Plc, believes that AI can complement human workers rather than replace them. "It’s important to point out that we don’t want to replace our human advisors, […] we want to augment them and add to their capabilities.” Apply AI for relieving employees from repetitive tasks (by adding automation to customer-facing business processes) and for supporting employees decisions with predictions or recommendations related to a given customer context or situation, both in real time. This enables employees to focus their unique skills – such as judgement and empathy – on customer interactions. Additionally, determine the hierarchy and balance of employee vs. AI related interactions.

**Customer understanding:** Use AI for continuously enriching a holistic view of the customer with additional actionable insights: their social personality traits, their tone and sentiment towards the brand, their behavior patterns, their propensity to purchase or their lifetime value and thus, to allow for more individual and proactive engagement.

**Conversational interfaces:** Beyond focusing on natural language processing for basic dialogue or Q&A, think about extending user experience towards rich, contextual and individualized conversations: deep connection with enterprise systems, data and knowledge, consumer sentiment and emotion detection, tone and gender adaptation, face or object recognition, and seamless employee participation in conversations when needed.

**Predictive personalization:** Apply AI to personalize conversations with customers and to anticipate their needs or expectations in the form of personalized content and messages, tailored offers, dynamic pricing of products and services, search results sorting or merchandising.

**Source:** Capgemini Applying AI to CX framework.
While organizations are increasingly adopting AI for streamlining of processes, operational efficiencies, and reducing cost, this research has laid out the benefits of deploying AI systems for better customer experiences. The research also clearly put forth consumer preferences when it comes to AI and the extent of human involvement in interactions. Consumers are increasingly aware and satisfied by AI-enabled experiences, but they expect the human presence as critical to enabling these interactions across consumer touchpoints and products and services. There are clear Front-Runners who understand not just what consumer interest in AI-enabled interactions is, but are also aligned on the consumers’ preferences. These organizations, by virtue of how they approach AI-enabled interactions, are setting the example for others across the world. Organizations everywhere are now presented with a huge opportunity to learn from these Front-Runners and tap into evolving consumer expectations and make for more customized and personalized customer interactions, without losing the human empathy and connection in the process. By doing so, organizations ensure that the advent of AI doesn’t mean human intelligence takes a back-seat; it just makes humans all the more critical in building world-class experiences.

Conclusion
Research methodology

Primary surveys
Consumer Survey: We conducted a primary consumer survey of 10,000 consumers across 10 countries in Europe, Asia and Australia.
The quantitative research was complemented with three virtual focus group discussions, with eight to ten consumers per focus group, for France, Germany, and the USA. The survey, as well as the focus group discussions, had a healthy mix of demographics and user and non-user respondents.

**Executive survey: We surveyed executives from 528 companies**

- Executives belong to companies headquartered in: France, Germany, the UK, the USA, India, Spain, Italy, Netherlands, Sweden and Australia
- Retail, consumer products, banking, insurance, utilities, automotive, e-commerce, Fintech firms and utilities

We also conducted interviews with academics and industry leaders, examining the impact of AI on customer experiences, implementation, challenges, and emerging best practices.
References

1. The Verge, “Amazon made a special version of Alexa for hotels with Echo speakers in their rooms,” June 2018.
2. CNET, “Microsoft’s XiaoIce is an AI bot that can also converse like a human,” May 2018.
5. The Verge, “Facebook’s head of AI wants us to stop using the Terminator to talk about AI,” October 2017.
6. For this research, we define interactions enabled by artificial intelligence as those automated and computer generated, self-learning applications that learn users’ preferences over time to enhance their experience. Consumers were given detailed situations and examples throughout the questionnaire to provide clarity and understanding of such interactions.
9. Alexa Brain Group is responsible for building core AI capabilities for Alexa.
10. Tech Crunch, “Alexa will soon gain a memory, converse more naturally, and automatically launch skills,” April 2018.
12. Ibid.
14. On the basis of findings from our research, we define a good/positive AI-enabled experience as an experience which allows for a mix of human and AI interactions, and not just AI-only interactions.
16. CNBC, “Google CEO: A.I. is more important than fire or electricity,” February 2018.
About the Authors

Jerome Buvat
Global Head of Research and Head, Capgemini Digital Transformation Institute
jerome.buvat@capgemini.com
Jerome is the head of Capgemini’s Digital Transformation Institute. He works closely with industry leaders and academics to help organizations understand the nature and impact of digital disruptions.

Mark Taylor
Executive Vice President, Chief Experience Officer
mark-paul.taylor@capgemini.com
Mark is the Chief Experience Officer for Capgemini. He has over 25 years of experience designing, developing and delivering transformative solutions informed by data and enabled by technology. Prior to joining Capgemini in 2014, Mark held senior positions in several global agencies.

Ashwin Yardi
EVP, Group Industrialization Head and COO – India
ashwin.yardi@capgemini.com
Ashwin is global head of Industrialization for Capgemini Group. He is responsible for developing new frameworks, methods, tools and solutions in the area of Intelligent Automation. In this role, he drives improvement of productivity, effectiveness and quality of Capgemini services and also enables clients in improving the efficiency and reliability of their operations and processes. Ashwin has more than 25 years of industry experience in various enterprise applications and new generation technologies and worked internally with several large fortune 500 companies.

Anne-Laure Thieullent
Vice President, Global Head of Artificial Intelligence and also the Global Head of Manufacturing, Automotive, and Life Sciences for Capgemini’s Insights & Data practice. She advises Capgemini customers on how they should put AI technologies to work for their organizations. Her passion is to bring technology, business transformation, and governance together and take customers to where they want to be as AI-driven and innovative companies. She has over 18 years of experience in massive data and analytics systems, from design to production roll-out, and is continuously fostering and building partnerships for the best business outcomes with AI.

Stephane Girard
CTO – Global DCX Practice
stephane.girard@capgemini.com
Stéphane is the CTO of global DCX practice. He is acting across DCX businesses to share and support global vision : designing and connecting CX platforms with clients’ ecosystems and integrating new technology trends. He is also responsible for giving support to iconic deals and deliveries, leading both DCX Technology and Salesforce communities as well as strengthening the relationship with strategic partners on technology matters.

Gagandeep Gadri
Vice President, Head of Customer Experience & Analytics, Capgemini Consulting UK
gagandeep.gadri@capgemini.com
Gagandeep is Vice president and head of Capgemini Consulting’s UK Customer Experience and Analytics practice. He has over 20 years of multichannel consulting experience from around the world. He works with organisations to improve their customer experience through implementing analytics, improved customer service, compelling loyalty and marketing solutions driving higher sales and better service to customers.

Subrahmanyam Kanakadandi
Program Manager, Digital Transformation Institute
subrahmanyam.kvj@capgemini.com
Subrahmanyam is a senior manager at the Digital Transformation Institute. He loves exploring the impact of technology on business and consumer behavior across industries in a world being eaten by software.

Amrita Sengupta
Senior Consultant, Capgemini Digital Transformation Institute
amrita.a.sengupta@capgemini.com
Amrita is a senior consultant at Capgemini’s Digital Transformation Institute. She tracks the patterns of digital disruptions across industries and its impact on businesses.

Yashwardhan Khemka
Senior Consultant, Capgemini Digital Transformation Institute
yashwardhan.khemka@capgemini.com
Yash is a senior consultant at the Digital Transformation Institute. He likes to follow disruption fueled by technology across sectors.
The authors would like to especially thank Shahul Nath, Dorine Melton, Carla Hofsähs and Valentina Pedrazzini for their contributions to this report.

The authors would also like to thank Andreas Falkenberg, Bobby Ngai, Darshan Shankavaram, Florent Guillaume, Joost Smit, Kees Jacobs, Lorna Neville, Michela Cotich, Marc Rietra, Nepomuk Kessler, Olivier Auliard, Rangaramanujam AV, Revathy Rajendran, Ron Tolido, Shannon Warner, Steve Hewett, Thomas Saint-Hilaire, Venkatakrishnan Iyer, for their contribution to this research.

The Digital Transformation Institute

The Digital Transformation Institute is Capgemini’s in-house think-tank on all things digital. The Institute publishes research on the impact of digital technologies on large traditional businesses. The team draws on the worldwide network of Capgemini experts and works closely with academic and technology partners. The Institute has dedicated research centers in the United Kingdom, United States and India.

dti.in@capgemini.com
For more information, please contact:

Global
Mark Taylor
mark-paul.taylor@capgemini.com

Germany
Steffen Elsaesser
steffen.elsaesser@capgemini.com

UK
Gagandeep Gadri
gagandeep.gadri@capgemini.com

Netherlands
Adgild Hop
adgild.hop@capgemini.com

France
Anne-Laure Thieullent
annelaure.thieullent@capgemini.com
Arnaud Bouchard
arnaud.bouchard@capgemini.com

North America
Shannon Warner
shannon.warner@capgemini.com
Mark Landry
mark.landry@capgemini.com

India
Ashwin Yardi
ashwin.yardi@capgemini.com
Darshan Shankavaram
darshan.shankavaram@capgemini.com

UK
Gagandeep Gadri
gagandeep.gadri@capgemini.com

Netherlands
Adgild Hop
adgild.hop@capgemini.com

India
Ashwin Yardi
ashwin.yardi@capgemini.com
Darshan Shankavaram
darshan.shankavaram@capgemini.com
Discover more about our recent research on digital transformation
About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients’ opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of 200,000 team members in over 40 countries. The Group reported 2017 global revenues of EUR 12.8 billion.

Learn more about us at

www.capgemini.com