

Entering the era of agentic AI will shift investment to agentic experiences, but keeping humans at the center of the customer experience transformation will be critical.

Powering next-gen services with AI in regulated industries



Businesses in highly-regulated industries like financial services, insurance, pharmaceuticals, and health care are increasingly turning to AI-powered tools to streamline complex and sensitive tasks. Conversational AI-driven interfaces are helping hospitals to track the location and delivery of a patient's time-sensitive cancer drugs. Generative AI chatbots are helping insurance customers answer questions and solve problems. And agentic AI systems are emerging to support financial services customers in making complex financial planning and budgeting decisions.

"Over the last 15 years of digital transformation, the orientation in many regulated sectors has been to look at digital technologies as a place to provide more cost-effective and meaningful customer experience and divert customers from higher-cost, more complex channels of service," says Peter Neufeld, who leads the EY Studio+ digital and customer experience capability at EY for financial services companies in the UK, Europe, the Middle East, and Africa.

For many, the "last mile" of the end-to-end customer journey can present a challenge. Services at this stage often involve much more complex interactions than the usual app or self-service portal can handle. This could be dealing with a challenging health diagnosis, addressing late mortgage payments, applying for government benefits, or understanding the lifestyle you can afford in retirement. "When we get into these more complex service needs, there's a real bias toward human interaction," says Neufeld. "We want to speak to someone, we want to understand whether we're making a good decision, or we might want alternative views and perspectives."

Methodology



MIT Technology Review Insights surveyed 250 executives and business leaders in regulated industries to explore how AI is being used to improve the customer experience (CX). The survey was conducted in February and March of 2025 and respondents represent a range of global regulated industries, from health care to banking.

Key takeaways

- 1 AI for CX is already ubiquitous across regulated industries – and agentic AI is on the rise. Existing rigor in governance and compliance can help accelerate implementation and support innovation.
- 2 Prioritizing privacy and security, integrating systems and data, and building trust with customers will be essential for the coming era, where AI agents could handle more complex or sensitive tasks without human intervention.
- 3 But humans will still be vital to the AI-powered CX journey. Companies need to fully understand customer needs and design their systems in line with them, continuously testing, updating, and refining.

But these high-cost, high-touch interactions can be less than satisfying for customers when handled through a call center if, for example, technical systems are outdated or data sources are disconnected. Those kinds of problems ultimately lead to the possibility of complaints and lost business. Good customer experience is critical for the bottom line. Customers are **3.8 times more likely to make return purchases** after a successful experience than after an unsuccessful one, according to Qualtrics. Intuitive AI-driven systems – supported by robust data infrastructure that can efficiently access and share information in real time – can boost the customer experience, even in complex or sensitive situations.

Agentic AI is emerging as a critical tool for CX in 2025. Gartner predicts that **agentic AI will autonomously resolve 80% of common customer service issues** without human interaction by 2029. Agentic experiences (AX) can perform complex, multi-step tasks across multiple systems autonomously on a user's behalf. The life-like, in-depth, and adaptive nature of their conversational abilities gives AX the ability to

understand the context of a user's request. This can move interactions beyond simple information retrieval or transaction processing and toward more complex problem-solving and non-judgmental advice, available any time.

That advice can be highly personalized to an individual too, since the model can draw on data about the customer's entire history of conversations and interactions with the company; analyze their behavioral patterns, moods, and intent; and dynamically adjust interactions. Using this information, agentic AI systems have the potential to help customers simplify decision-making, plan how to reach specific goals, or manage critical life decisions – all without human interaction. In the future, AI agents may help us do things like close a deceased family member's bank accounts, coach us through our home-buying options, or examine various lines of debt and seamlessly consolidate them into a better loan, for example.

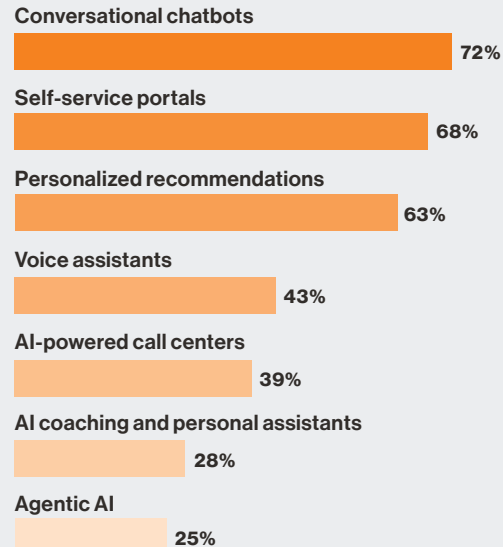
The primacy of AI for CX

Already, AI is ubiquitous across regulated industries. In a survey of executives who work in sectors including health care and banking, conducted by MIT Technology Review Insights, all respondents say they are already providing, or planning to provide, AI-powered products and services to enhance CX. Conversational chatbots (selected by 72% of respondents), self-service portals (68%), and personalized recommendations (63%) were the top three most popular applications. Already, 25% say they have adopted agentic AI (see Figure 1).

With an even greater need for effective governance and compliance, especially in areas like privacy, data protection, and ethics, companies in highly-regulated industries can often be slower to adopt new technologies and consider them to be barriers. But – perhaps counterintuitively – the existing rigor in highly-regulated companies can actually give them an edge when it comes to guiding innovations like AI in CX. “Some tend to think more regulated industries are late to adopt or conservative in their approach,” says Sonny Shergill, global VP commercial digital health at AstraZeneca. “However, experience in managing regulation can be a superpower to go faster.” After all, many companies already have governance, guidelines, and processes laid out. “It's in our DNA to be agile as guidelines change, rules change, reimbursement changes,” says Shergill. “Experience in managing regulation is an opportunity.”

Figure 1: Chatbots, self-service portals, and personalization are key focuses for AI in CX in regulated industries

Large proportions of surveyed executives reported their companies are at work on AI-enabled products and services to help customers.



Source: MIT Technology Review Insights survey, 2025

One in three respondents (33%) in our study agree, saying that regulations accelerate innovation and transformation in CX. A similar amount, 40%, say regulations have a neutral effect, and 28% say they are a barrier (see Figure 2). In fact, two-thirds of executives (65%) believe their industry is ahead of others in adopting AI-powered customer service, with only 10% saying they are behind and 25% saying they are on par (see Figure 3).

Within their own industry, executives are confident about how they're improving CX using AI. Nearly half of respondents (48%) say their company is ahead of competitors, with only 13% saying they are behind (see Figure 4).

“Experience in managing regulation can be a superpower to go faster.”

Sonny Shergill, Global VP Commercial Digital Health, AstraZeneca

The trust challenge and the rise of agentic AI

Despite this rapid and confident advancement, companies in regulated industries still face a plethora of challenges with implementing AI in CX solutions. The security and privacy of customer data in AI-powered products and services is the number one concern for executives in our survey, with 57% saying it is most important. Other concerns include the ease of use (46%) and transparency and explainability about how AI is used (41%) (see Figure 5).

Businesses have work to do to gain the trust of consumers. In a recent EY survey, **only 42% of respondents say they would trust financial services companies to manage AI** in ways that align with their best interests, and only slightly more (47%) say they would trust health care companies. Trust in AI declines further when AI is used in a more human-centric role. In health care, for example, 57% of respondents say they support the use of AI to predict health issues, but only 37% trust AI as a medical practitioner.

“Hospital systems and clinicians are now increasingly open to the idea of using AI to enable their productivity at the site of care and their workflows, but when it comes to patients, they would like the nurse practitioner, physician assistant, and absolutely the doctor, all to be there holding their hand from diagnosis to treatment,” says Alok Sonig, executive vice president and group president, pharmaceuticals, at Baxter.

“We could imagine a future not too far from now where you might still want to maintain that human in the loop, but it’s not going to be the most important thing that the customer wants from you in the experience.”

Peter Neufeld, EY Studio+ EMEA Financial Services Digital Customer Experience Leader, EY

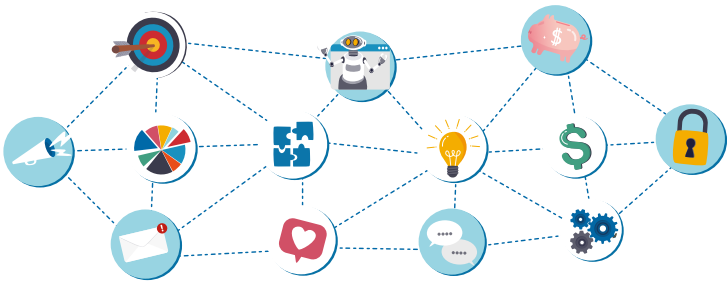


Figure 2: A third of executives say regulations will accelerate innovation and the transformation of CX in regulated industries

Strong accelerator	2%
Moderate accelerator	31%
Neutral	40%
Moderate barrier	22%
Strong barrier	6%

Source: MIT Technology Review Insights survey, 2025

Figure 3: Two thirds of executives in regulated industries believe they are ahead of other industries in using AI to innovate and transform CX

Significantly ahead	17%
Somewhat ahead	48%
On par	25%
Somewhat behind	10%

Source: MIT Technology Review Insights survey, 2025

With agentic AI, respondents in our survey say that the most important factor in building trust with customers is being transparent about how businesses are managing customer data (64%), gaining explicit consent from customers to use AI (56%), and communicating what AI does (51%) (see Figure 6).

Building successful AX

As businesses look to build agentic AI for CX, the following are key factors for success:

Transparency. Research from EY shows that many consumers don't want AX interfaces to mimic humans. They want to be informed that they are dealing with a non-human agent. "As agentic AI begins to evolve, there will be deeper questions about how we want to interact with non-human interfaces that can mimic human behavior," says Neufeld of EY. Questions include, should AI mimic someone's ethnicity, gender, or accent, for example? The future of personalization has the

Figure 4: Nearly half of executives in regulated industries believe they are ahead of competitors in using AI for CX

Significantly ahead	12%
Somewhat ahead	36%
On par	40%
Somewhat behind	13%

Source: MIT Technology Review Insights survey, 2025

Examples of AI for CX in regulated industries

Leading companies in regulated industries are using AI-powered products and services to transform the customer experience:

HR Block uses an AI-powered conversational AI assistant called AI Tax Assist to help taxpayers accurately answer questions about taxes from trustworthy sources and simplify complex filing tasks and documentation.

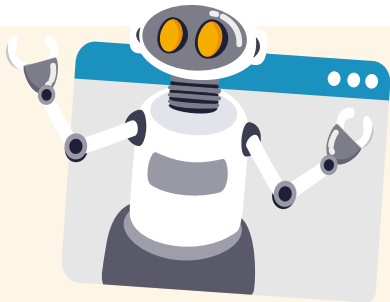
US Bank launched a conversational voice assistant called Asistente Inteligente to help Spanish-speaking customers—many of whom are dependent on younger family members to communicate in English—to navigate its banking app by voice or text and handle everyday banking tasks using their native language. The app helps families overcome generational language differences to have complex financial conversations and close language and opportunity gaps.

AstraZeneca is using AI for a range of different tasks, from mining data for insights to support drug discovery and clinical trials, to automating dossiers, developing and reviewing content, and improving the customer experience.

The company has created AZ Brain, an AI learning platform that helps them understand customer behavior and market performance, and unearth quantified, targeted gaps in care. The platform builds on a range of data sets and then applies machine learning and AI models based on specific business needs.

Additionally, an emerging area of exploration is how to use multimodal patient data to understand the correlation between certain patient characteristics and potential treatment outcomes. The company is creating an ecosystem of partners to develop tools that help support accurate diagnoses, make decisions about the right path to take, and highlight relevant clinical trials available and other information personalized to individual patient needs.

"The end game is always to try and equip the health care provider with the ability to deliver optimal care, earlier and with the best possible outcomes for the patients we all serve," says Shergill of AstraZeneca.



“As agentic AI begins to evolve, there will be deeper questions about how we want to interact with non-human interfaces that can mimic human behavior.”



Peter Neufeld, EY Studio+ EMEA Financial Services Digital Customer Experience Leader, EY

potential of being far more manipulative, Neufeld says, which becomes important to manage in regulated sectors.

“The more anthropomorphic you can create something, the more consumable it is, and the more interaction you’ll get,” says Shergill of AstraZeneca. “But at the same time, you don’t want to ever replace that unique human experience and connection.”

Personalization. Online experiences today are fairly static, with personalization based on customer information or records. But as more sophisticated models are able to go deeper – drawing on larger and more complex stores of data, making predictions, and adapting according to customer behavior, moods, or preferences – organizations are faced with two challenges. First, companies should establish that they have robust infrastructure and effective systems that can capitalize on the vast troves of varied data they are able to capture rather than lock it in silos. And second,

they must carefully consider how to utilize this information with the utmost care and ethical responsibility and invest in both privacy and personalization.

Automation. Currently, many organizations use automation tools like AI chatbots and voice-response trees to handle routine interactions, then bring in a human customer service agent for anything more important, sensitive, or complex. These agents can often draw on AI-driven tools to support them with summaries of past conversations, customer data, and previous interactions with the company. But in the future, some organizations may consider removing human agents completely from the customer journey in the right circumstances.

“We could imagine a future not too far from now where you might still want to maintain that human in the loop, but it’s not going to be the most important thing that the customer wants from you in the experience,” says

Figure 5: Security and privacy, ease of use, and transparency are key concerns when using AI for CX in regulated industries

57%

Security and privacy
Protecting customer data and privacy in AI interactions

46%

Ease of use
Simplicity and intuitiveness of the interface and interaction

41%

Transparency and explainability
How AI operates and is used

38%

Proactive communication
Anticipating customer needs, suggesting solutions

38%

Real-time response
Immediate responses to customer inquiries or actions

37%

Personalization and agency
Tailored to individual customer preferences and behaviors

35%

Accuracy and consistency
Precision in understanding customer needs and delivering relevancy with consistent actions across interactions

8%

Emotional intelligence
Understanding tone, sentiment, and context

Neufeld. “In fact, with some experiences, they might not want a human in the loop.” For example, when someone dies, it can be unpleasant to have to explain over and over to different call center agents why you need to take over a loved one’s accounts. And having the same trusted employee to help you each time is likely to be costly and impractical. Automating some of those interactions could make the process easier. An AI agent could handle a series of actions on a customer’s behalf and let the customer know when the company needs approvals.

Seizing the AI-powered opportunity

AI presents organizations in regulated industries with unprecedented opportunities to improve processes, streamline customer service, and even protect their

businesses and customers from bad actors in the ever-growing battle against fraud. Miki Van Cleave, chief design officer of Chase, identifies how AI-driven tools can assess natural language to discern patterns and learn if a customer is in any kind of risk. “As leaders, we really have an intense amount of responsibility in encouraging folks to explore ways that make their jobs faster, easier, and simpler,” says Van Cleave. “We really need to lean in and be the guardians of our own destiny, explore the art of what’s possible and see where the technology takes us.”

Neufeld is optimistic about the impact AI can have if it’s applied in meaningful ways to improve the customer experience. But to achieve that potential, companies have to move away from thinking about AI as a technology limited to chatbots and AI agents and start

Lessons in creating trustworthy AI-powered experiences

JPMorganChase has been a leader in applying AI and machine learning through its **Machine Learning Center of Excellence**. Miki Van Cleave, chief design officer for Chase, the consumer and community bank at the firm, identifies what she sees as some of the most important strategies for designing AI-powered experiences that build trust.

Embrace human-centered design

“We spend an inordinate amount of time thinking about the language that customers need to hear so that they are crystal clear on what they’re doing. For example with fraud detection, we will spend hours, days, and weeks dissecting every noun, verb, and adjective in an interstitial page to make sure it helps customers know what to do.”

Uncover the customer’s true needs

“People are unpredictable, and they’re good at doing things you didn’t expect. There will still be moments where we really need to watch people doing things and see why they did the thing we didn’t think they would do, and learn from those interactions.”

Foster a sense of safety

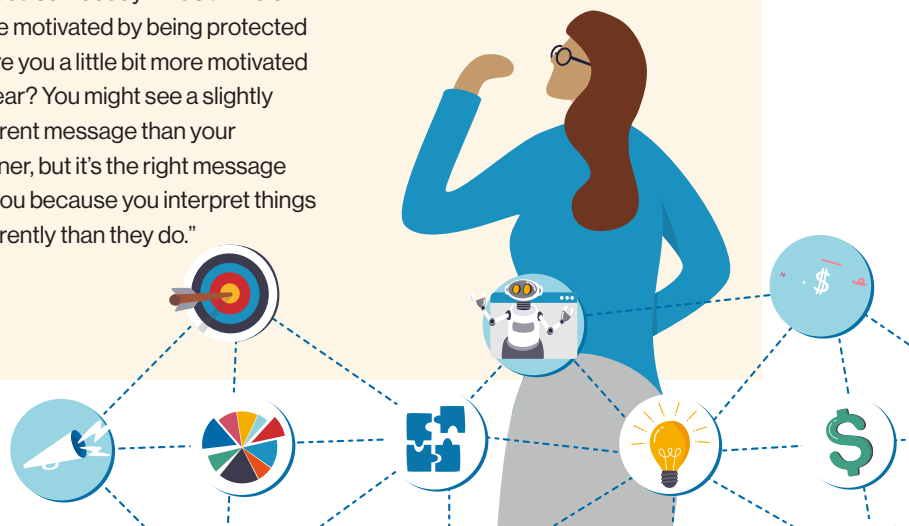
“We are here to build trust and start from a place of understanding the consumer mindset. Stress, shame, and guilt are very real human emotions that can be part of what you experience if you’re not sure you’re doing things right or you’re not sure you have the right information.”

Understand what motivates customers

“Are you somebody who’s a little bit more motivated by being protected or are you a little bit more motivated by fear? You might see a slightly different message than your partner, but it’s the right message for you because you interpret things differently than they do.”

Guide experiments with outcomes

“It’s our job as senior leaders to show a lot of enthusiasm for what could be done, but also to get pretty clear and crisp quickly on what our first, second, and third order of use is going to be, and then really watch for outcomes. The good news is that if the first test doesn’t work, there are 20 other options behind it that you can play around with.”



thinking about it as a multi-pronged experience that motivates and changes behavior and has an impact as customers begin to use it. That means working alongside humans to unlock insights.

“There’s a real opportunity to test the experience with real customers, co-create with them, and bring real people into the design and engineering process,” Neufeld says. “That opens our eyes with empathy to how we can make this technology work even better.” Co-creation is therefore vital when designing the AI-powered customer journey. Companies need to listen to the customer and understand their needs, all while testing, evolving, and learning in a continuous cycle of refinement.

“You have to design your experiments for success at an adequate scale, and be able to dynamically adapt almost on a daily basis, because customers’ behaviors are changing,” says Sonig at Baxter, adding that the biggest enabler of AI-powered innovation in CX is the acceptance and endorsement of the technology among management.

With experiments, leading measures like process efficiency and business model improvement can be more relevant than lagging measures like financial results, he says. “The tendency in large companies is to get lost in the weeds and miss the forest for the trees,” says Sonig. “The more you can strategically synthesize what success looks like and look at the agent experience as a business model transformation, the better.”

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Alok Sonig, Executive Vice President and Group President, Pharmaceuticals, Baxter

Figure 6: For agentic AI, transparent data use, explicit consent, and clear communication are critical in building trust with customers

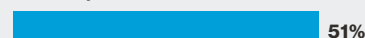
Being transparent about how businesses are managing customer data



Gaining explicit consent and providing opt-out from customers



Communicating and explaining what the AI does, both capabilities and limitations



Providing easy-to-access support channels and clear accountability



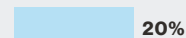
Establishing data security measures



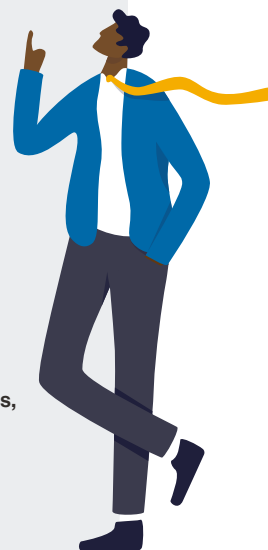
Establishing ethical AI practices internally for AI



Increasing customer autonomy to set preferences, see past actions, give feedback, and override AI decisions when needed



Source: MIT Technology Review Insights survey, 2025



What sets leaders apart

Daniel Mathews, global life sciences leader at EY, sees five ways organizations can continuously improve their AI-powered services and lead the way forward in customer experience innovation.

- 1 Embrace the data challenge, and don't lock it into silos.
- 2 Don't view regulations as a barrier; use them to guide your innovation.
- 3 Invest in both privacy and personalization.
- 4 Have a multi-asset strategy; chatbots and AI service agents aren't enough.
- 5 Don't rely on AI alone; you have to work with humans.

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Sonny Shergill, Global VP Commercial Digital Health, AstraZeneca

Alok Sonig, Executive Vice President and Group President, Pharmaceuticals, Baxter

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