



AI reality check for customer experience

Why CX practitioners and executives see it differently

IBM Institute for Business Value

Executive Report

Customer experience



In this report

Perception gaps between CX practitioners and executives regarding:

How prepared organizations are to adopt AI

The degree of change AI will impose on CX practices

Current AI/CX initiatives and plans for the near future

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Seeing the forest **and** the trees

Companies are moving aggressively to enhance their customer experience (CX) with artificial intelligence (AI). Executives expect AI to bring about extensive change within their organizations, especially in customer engagement, which will have a significant impact on CX practitioners. While most practitioners see AI as an opportunity, fewer say AI will force the wholesale change that executives have predicted. Do CX practitioners have their heads in the sand? Or does their tactical focus afford them a more sober, realistic view of what's possible and how quickly it can be achieved? Companies must strive to bridge this perception gap, or risk disconnects and misdirection that can slow down – or derail – progress.

A matter of perspective

Within organizations looking to improve their CX with AI, it is the CX practitioners – the creative directors, user experience (UX) designers, content strategists, front-end developers and others – who sit at ground zero. These are the specialists who can rapidly adjust CX strategies based on AI-driven insights. They design how AI-powered experiences, such as chatbots, robots and image recognition, will work with customers. And they create the hyper-personalized customer promotions that are automated using AI.

As the coveted “creatives” responsible for reinventing customer touchpoints with AI, how do they think AI will impact customer engagement and brand perception? Do they feel prepared? Will AI require them to change how they do their jobs? And, importantly, can they meet the high expectations that executive CX leaders have for AI-enhanced CX (AI/CX)?

To find out, the IBM Institute for Business Value (IBV) surveyed more than 900 CX practitioners worldwide, across multiple industries. We then compared their answers to responses from a separate survey of more than 1,000 C-level and senior executives from different organizations who are responsible for CX (see the “Study approach and methodology” section at the end of this report).

Nearly all surveyed CX practitioners see AI as an advantage, but far fewer say their industries are ready to apply it:



95%

of CX practitioners report AI is an opportunity, not a threat



79%

predict AI will play an important role in their organizations' futures



Only 59%

say their industry is ready to adopt AI-enhanced CX

Our analysis revealed that serious perception gaps about AI/CX exist between CX practitioners and executives. Each group has valid reasons for seeing things as they do. But those organizations that lack a shared understanding of their CX capabilities can struggle to communicate their CX vision internally and risk adopting starry-eyed strategies that can lead to poor outcomes. This report, part two of a two-part AI/CX series, identifies areas where there is agreement and divergence.¹ And we offer recommendations to help organizations align to an AI-enhanced creative strategy that is both realistic and revolutionary.

Traveling the AI/CX journey

First, let's talk about the commonalities. The vast majority of survey respondents – CX practitioners and executives alike – agree that AI holds enormous potential to improve their CX. Whether AI is employed behind the scenes or integrated into touchpoints so customers can interact with it directly, more than 70 percent of practitioners and executives believe it will play an important role in their organizations' futures. And 74 percent of both groups expect AI will impact customers' perceptions of their brands.

Practitioners and executives also agree on the top three drivers propelling their organizations to adopt AI to enhance their CX:

1. Responding to customer demand for more personalized experiences
2. Maintaining brand reputation for being customer-centric
3. Streamlining processes and gaining efficiencies.

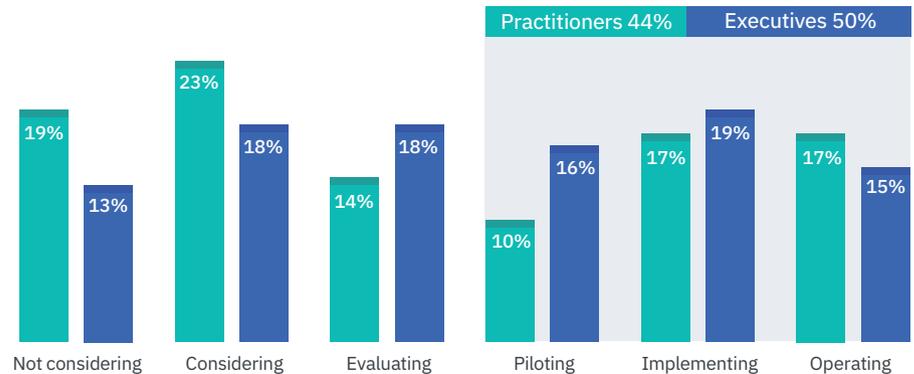
These three motivators represent the duality of AI/CX's appeal. It is seen as a path to satisfy external customer and marketplace pressures, and at the same time, improve internal demands for speed and productivity – a very compelling value proposition.

In fact, practitioners and executives claim a similar rate of AI/CX adoption, with half of executives and nearly half of practitioners reporting their organizations are already piloting, implementing or operating AI/CX (see Figure 1).

While practitioners are anticipating numerous operational benefits from AI/CX, including improved customer insights, they are – not surprisingly – more excited than executives about the potential to improve employee productivity and scale employee expertise

Figure 1

CX practitioners and executives report a similar adoption curve for AI/CX



Practitioner n = 990; Executive n = 1,194.

and skills. In contrast, executives give higher priority to improved decision-making and cost savings than practitioners (see Figure 2).

CX practitioners are well aware the promise of improved productivity extends beyond the design and execution of digital interactions to the experience of human-to-human engagement. As one creative director working for an agency in New York City described it, AI would be a game changer for his client’s customer support representatives. “They currently struggle to provide good customer service,” he said, “but a quality conversation using AI to answer customers’ common questions would free up agents to spend more time resolving complex problems. It would make for a much better customer experience and could reduce the cost of service.”

Figure 2
CX practitioners, especially, are looking forward to improved productivity and scaling expertise with AI/CX
 Ranking of operational benefits that can be realized with AI/CX



Practitioners n=800; Executives n=1,035. *Same ranking number denotes a tie.

It's business as usual, if usual means change

As we found in part one of this series, “The AI-enhanced customer experience: A sea change for CX strategy, design and development,” executives expect AI/CX to notably change the way CX practitioners do their jobs.²

But not all practitioners surveyed share the executives' assessment. Our analysis indicates practitioners are less worried about their ability to adopt AI and the extent of change AI will bring. And a hefty majority of practitioners (83 percent) are confident they understand how AI can drive their organizations' CX goals – far more than the number of executives who claim the same (68 percent).

In fact, 95 percent of practitioners tell us they see AI as an opportunity, not a threat. Their enthusiasm is echoed by a creative director working in Singapore who puts it this way, “When you think about AI – how it learns and the problems it can solve – it's pretty mind-blowing. Just consider the implications for how we live – from medicine and education to entertainment and shopping. We are laying the groundwork for what society is going to become. This is real, and I get to play a part in building that.”

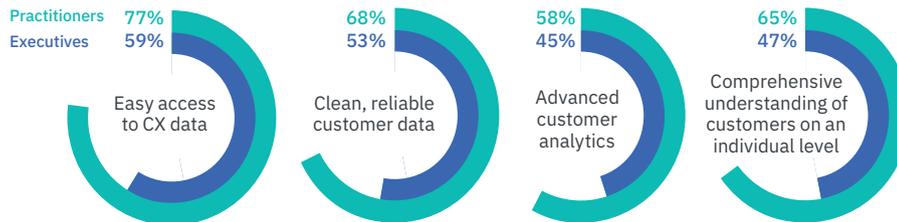
Where does practitioner confidence come from? More practitioners than executives report they currently have the necessary foundational CX capabilities (see Figure 3). In particular, practitioners are more bullish about their CX data and analytics. An AI/CX solution requires access to viable customer data. And CX teams that already use advanced analytics to understand customers at an individual level are apt to have a leg up on companies without this proficiency.

More practitioners than executives are also confident their CX teams have the needed skills to implement AI solutions for CX. Half of the practitioners surveyed say their workforce is ready for AI now, compared to 40 percent of executives. One reason is that fewer practitioners than executives expect AI to significantly change their CX activities. For them, AI is another new technology that needs to be mastered, not unlike many other technologies they have successfully incorporated into their repertoires. As an executive creative director who works in healthcare explained, “Our CX team is very resourceful. That’s just the nature of the job. We are scrappy. We figure it out.”

Figure 3

More CX practitioners report having data and analytics capabilities, as well as understanding individual customers

Respondents with CX capabilities to a “large extent”



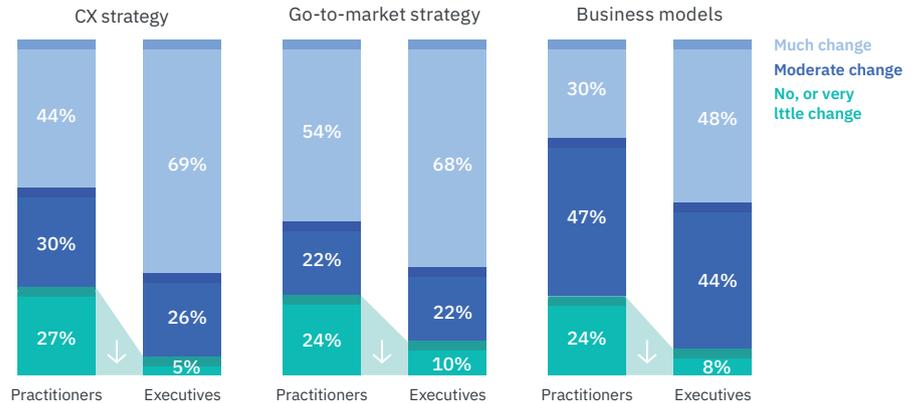
Practitioners n=800; Executives n=1,035.

Roughly a quarter of practitioners do not expect that AI/CX will require them to change their strategies or their business models. But very few executives agree (see Figure 4).

Figure 4

CX practitioners are more skeptical than executives that AI will require them to change their strategies or business models

Extent to which AI/CX will require you to change

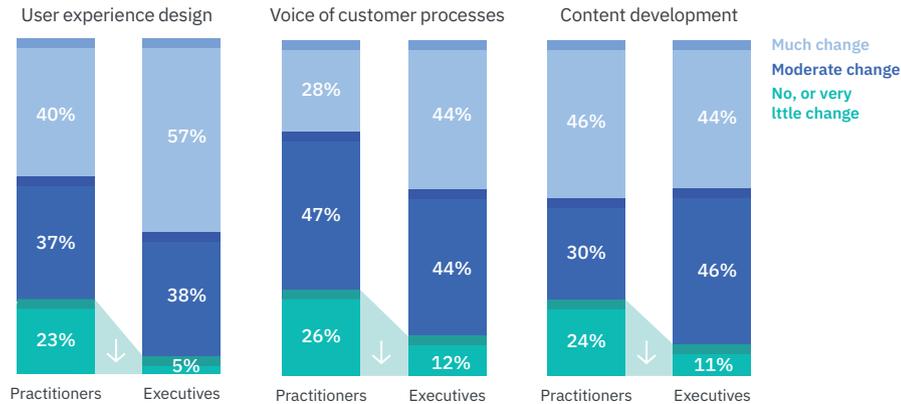


Practitioners n=800; Executives n=1,035.

This notion of AI driving only minimal change is not limited to strategic considerations. Nearly the same number of CX practitioners doubt AI will motivate change in key CX practices, while only a fraction of executives share this view (see Figure 5).

Figure 5
More CX practitioners than executives say they can adopt AI without having to change some central CX practices

Extent to which AI/CX will require you to change

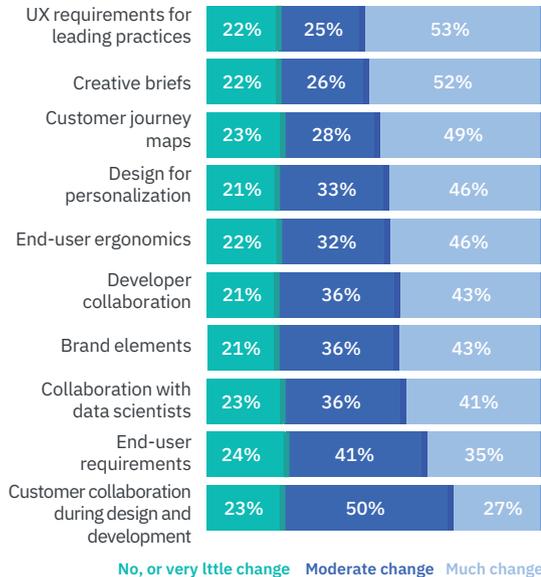


Practitioners n=800; Executives n=1,035.

Figure 6

For most CX-related activities and outputs, less than half of CX practitioners say adopting AI will require them to seriously rethink their approach

Extent to which AI-powered insights will require you to change



Practitioners n=800.

To delve even deeper, we asked CX practitioners to tell us the extent to which AI-powered CX will require their teams to rethink a number of specific CX-related tasks and outputs (see Figure 6). For all but two items in the list, less than half of the practitioners expect much change. And roughly one-quarter of practitioners say that no change in approach will be required.

Why the discrepancy between CX practitioners and executives? Are the executives too far removed from the day-to-day CX work? Perhaps in some organizations that may be the case. Practitioners, responsible for CX delivery, are intimately aware of their CX strengths and shortcomings – maybe more so than executives realize. However, it is also possible that executives' assessments of their organizations' CX abilities are informed by their reading of the marketplace and what it will take to remain competitive as companies adopt AI into their CX.

Same path, different views

Another way to test the alignment of CX practitioners' and executives' perspectives is to look at their current AI/CX initiatives and those they plan to do in the near future. We found that more practitioners than executives report their organizations already embed AI into their CX today in multiple ways.

In our earlier executive-focused report, we classified how companies use AI to enhance CX into three main areas:³

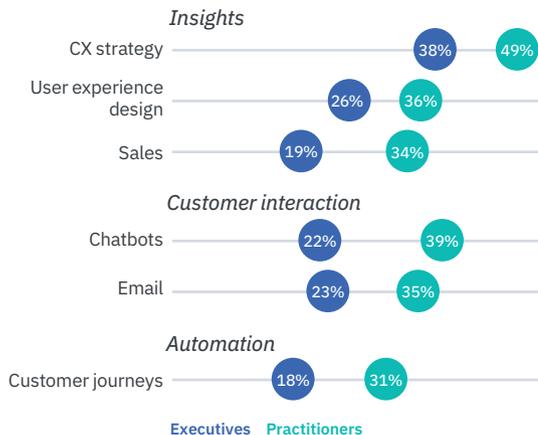
- *Insights.* AI can reveal insights that help employees rapidly make informed decisions that impact CX, from refining their overarching CX strategy to providing real-time responses to customer inquiries.
- *Customer interaction.* Companies can integrate AI into customer-facing experiences or devices that customers can interact with directly, such as chatbots and robots.
- *Automation.* AI can automate behind-the-scenes processes, such as targeted automated marketing promotions and messaging.

For each category, respondents told us what AI/CX initiatives they were currently deploying and what they expected to implement within the next two years.

Figure 7

Significantly more CX practitioners say they are currently deploying AI/CX in a variety of ways

Respondents using AI to enhance their CX today



Practitioners n=447; Executives n=884.

AI/CX initiatives today

We classified respondents currently deploying AI/CX initiatives as those who are in the pilot phase or beyond. In the *Insights* category, close to a third of these CX practitioners and executives report they are already working with AI to inform their customer service, product design or marketing campaigns.

In the *Customer interaction* category, both practitioners and executives cite embedding AI into mobile apps (49 percent of practitioners, 46 percent of executives) and IoT (49 percent of practitioners, 43 percent of executives) as the two most popular current uses of AI/CX. On average, slightly more practitioners (27 percent) than executives (21 percent) say they are already deploying AI-enhanced websites, digital display ads, virtual reality or robots.

And of those whose initiatives fell into the *Automation* category, a somewhat larger percentage of practitioners (29 percent) claims to be using AI to automate customer promotions and messaging versus executives (21 percent). The same holds true for content development (20 percent of practitioners, 13 percent of executives). But there are several areas where far more practitioners report already taking decisive action to embed AI into their CX, across all three categories (see Figure 7).

Why would more practitioners than executives report they are already deploying AI/CX initiatives? It may be that these groups are flying at different altitudes, with differing expectations. CX practitioners may be more focused on entry-level AI/CX pilots or “skunkworks” – small internal teams that develop their own innovative initiatives – or see progress in terms of iterative releases. CX executives, on the other hand, thinking about the bigger picture, may be more comfortable reporting the aggregate of more mature AI/CX initiatives.

AI/CX initiatives within two years

Interestingly, despite practitioners' enthusiasm and readiness for AI, it is executives who tend to be more optimistic that AI/CX initiatives not yet deployed can be launched within two years (see Figure 8). For nearly every initiative we asked about, in all three categories, more executives predict their organizations will be launching initiatives in the near term. But for certain items, the gap between the two groups is substantial.

Notably, initiatives in the customer interaction category – such as IoT, virtual reality and wearables – are newer digital channels for CX. Even without an AI layer, organizations are employing this group of technologies to open additional channels and explore innovative modes of customer engagement. Embedding AI into these advanced technologies can be more complex than traditional customer touchpoints, like mobile or websites, where developers can build AI-powered apps relatively quickly and inexpensively.

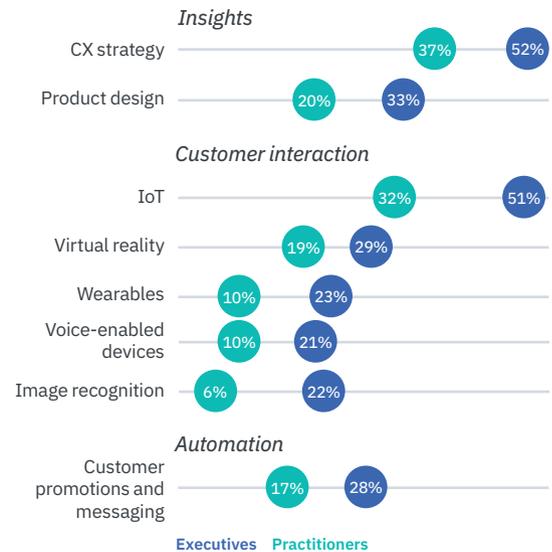
Both practitioners and executives identify complexity of AI integration as their number-one AI/CX challenge. Nevertheless, it is quite possible that practitioners have a more detailed and nuanced view of what can be accomplished in a given timespan and what's required to make that happen.

For example, we asked practitioners which types of experiences they will need to know how to design and develop using AI within the next two years. More than 80 percent say "chatbots." But that percentage drops precipitously for other touchpoints, such as natural language processing at 38 percent or virtual reality at 30 percent. This finding suggests practitioners don't anticipate the AI deluge that executives may be forecasting.

Figure 8

Far more executives predict they will be deploying a number of AI/CX initiatives within the next two years

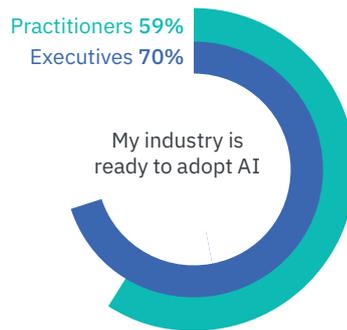
Respondents expecting to use AI to enhance their CX within the next two years



Practitioners n=800; Executives n=1,035.

Figure 9

Far fewer CX practitioners say their industry is ready to adopt AI/CX



Practitioners n=800; Executives n=1,035.

Notwithstanding the data that clearly points to practitioners' excitement for AI, our interviews reveal an undercurrent of cautious reserve based on past experiences with over-hyped technologies. As a marketing director from a marketing research firm lamented, "In my previous job, one of our executives insisted that a new technology was going to change our world, and 18 months later it had gone nowhere."

And a creative director, who is leading an AI/CX initiative for a consumer products client, expressed concern over customers' fears about data privacy, which he thinks could limit AI's effectiveness. He says more corporate transparency and public discourse is needed.

He is also worried about customer satisfaction if the back-end doesn't keep pace with front-end improvements. "You can't do all this cool, high-tech selling and then tell customers they have to wait a week to get the product," he says. "I actually consider the back-end a channel. You're connecting with your customer through that fulfillment experience, too." In fact, fewer practitioners (43 percent) are willing to bet that AI/CX will have a positive impact on customer satisfaction than executives (53 percent).

Tellingly, while more than 40 percent of practitioners report they are well-prepared to integrate AI into their CX and another 30 percent say they are at least moderately so, practitioners are less inclined than executives to say their industry, as a whole, is ready for it (see Figure 9).

Two sides of the same coin

Should these findings be interpreted as a lack of insight by practitioners about their industries' AI trends or a sign that they are less concerned about the broader strategic implications for AI that executives see?

We don't believe so. Executives and practitioners have different rhythms. What's top of mind for executives and the focus they give it is on a different frequency than what practitioners experience. This speaks to the basic challenges inherent in a hierarchical organization. Practitioners will be heads down working to build specific deliverables within defined deadlines, while executives have already moved on to plan the next big thing. This is not unique to CX. This type of divide can easily happen, especially in large, matrixed environments with lots of internal requirements to satisfy.

If there is a disconnect between the two groups, it is likely due to inadequate communication on both sides. What's missing is a shared agenda that reflects a realistic view of what it will take to achieve the executives' vision. Practitioners need to be empowered to help set the AI/CX strategy and execute it, armed with a comprehensive understanding of the organization's capabilities, near-term AI/CX priorities and long-term vision.

Recommendations for a course of action

Be crystal clear about your AI vision

Our findings demonstrate how easy it is for two groups to look at the same environment through different lenses and come to disparate conclusions. Remove any blind spots that prevent your organization from envisioning and implementing a common direction for an effective AI/CX strategy.

- *Invest in AI education and training for everyone.* Because AI systems continuously learn at tremendous speed, AI is unlike other technologies. Our data suggests there may be some confusion about AI's capabilities among executives and practitioners. Executives need more than a cursory grasp of the technology. And practitioners need to be fully informed of AI's strategic implications.
- *Don't let failure of imagination limit your vision for AI.* Granted, we are at the threshold of AI's potential impact, and it is understandable when companies are primarily focused on implementing entry-level AI solutions. But if you don't look beyond these early applications now, new AI tools and solutions could quickly outpace your company's ability to take advantage of them.
- *Be fastidious about clean data.* Your AI/CX solution can only be as good as your data. Feeding AI inaccurate or insufficient data delivers misleading results that undermine your initiatives' integrity and reliability. Elevate clean data to a strategic imperative to help your vision stay on track.

Establish a multidisciplinary council for AI/CX strategy

Companies need to encourage diversity of thought, transparency, and a culture of open and honest feedback, internally and externally. Instead of a top-down approach for setting CX strategy, create a council that enables input from employees who are involved in execution. Include the CX executive owners, business leaders, product owners, creative talent, developers and data scientists to openly debate, decide and deliver on your AI/CX strategy.

- *Break down vertical silos.* We often talk about horizontal collaboration across an organization's functional silos, but in this case, your company also needs to bridge vertical, hierarchical barriers. This is especially important for large, matrixed organizations, with layers of leadership between the CX practitioners and the executives setting the CX strategy.
- *Embrace design thinking for creative problem solving.*⁴ Host regular work sessions with council members to uncover human-centric ways to implement AI solutions.
- *Encourage customers to join your AI journey.* You'll want to be transparent about how AI is enhancing customers' experiences with your brand. Provide opportunities for customers to share their valuable input with the council.

Balance ambition with practical realities

Each group has its specific priorities, but compromise is needed among groups to make sure executives, practitioners and customers all benefit. No executive wants to set a team up for failure by overpromising results. And no team wants to be caught flat-footed, unable to deliver what the business and customers demand.

- *Develop a Minimum Viable Product (MVP) roadmap.*⁵ You need a way to continually produce quick wins while building toward your ultimate AI/CX vision. Having customers weigh in on new AI/CX solutions can help CX leaders and teams prioritize according to customer desirability, business viability and technical feasibility.
- *Create a backlog and constantly groom it based on market trends.* AI technologies are on course to continue to evolve, as are your company's AI/CX capabilities and your customers' expectations. As your AI solutions learn and become more effective, you will quickly find these are not once-and-done experiences, but require continual iteration.
- *Think through AI's broader impact.* Conduct scenario planning to reveal the implications of AI/CX on your business. Consider how it will influence customer loyalty, conversion and the metrics you use to determine success. What about its effect on your CX processes and outputs, as well as your current organizational structures, mix of ecosystem partners and new hire requirements? Look at AI's internal and external impact from many angles, and go deep to consider the art of the possible.

Are you ready to bridge the gaps?

- What formal AI training will help CX executives and practitioners come to a common understanding of what AI requires and the possibilities it holds for your organization?
- What steps do you need to take to establish a multidisciplinary AI/CX council of CX practitioners and executives who can engage customers in creative problem solving?
- If your organization doesn't already follow an agile approach for CX design and development, how can you adopt some of its leading practices, like developing MVPs and creating backlogs?

Study approach and methodology

In cooperation with Oxford Economics, the IBM IBV surveyed 990 CX practitioners, including creative directors, creative services leaders, UX strategists and leaders, digital design strategists and others with similar titles. These individuals either lead or wield significant influence over CX design and development activities for their organizations.

The results covered in this report are based on the comparison of the CX practitioners' responses against the CX executives' responses from the first report in this series, "The AI-enhanced customer experience: A sea change for CX strategy, design and development."⁶ Executive and practitioner participants come from different organizations within seven industries (automotive, banking and financial markets, consumer products, healthcare, media and entertainment, retail and travel) in seven countries in Asia Pacific, Europe, the Middle East, North America and South America. In addition to the surveys, we conducted in-depth interviews with eight CX practitioners from North America and Asia.

For more information

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Related reports

Schwartz, Robert, Kelly Mooney and Carolyn Heller Baird. “The AI-enhanced customer experience: A sea change for CX strategy, design and development.” IBM Institute for Business Value. March 2018. <https://www-935.ibm.com/services/us/gbs/thoughtleadership/custexperience/ai-cx/>

Abercrombie, Cortie, Rafi Ezry, Brian Goehring and Anthony Marshall. “Accelerating enterprise reinvention: How to build a cognitive organization.” IBM Institute for Business Value. June 2017. <https://www-935.ibm.com/services/us/gbs/thoughtleadership/accelentreinvent/>

McFarlane, Laura, Alyssa Waxenberg and Carolyn Heller Baird. “From data deluge to intelligent insights: Adopting cognitive computing to unlock value for marketing and sales.” IBM Institute for Business Value. August 2017. <https://www-935.ibm.com/services/us/gbs/thoughtleadership/cognitivemarketingsales/>

Notes and sources

- 1 Schwartz, Robert, Kelly Mooney and Carolyn Heller Baird. “The AI-enhanced customer experience: A sea change for CX strategy, design and development.” IBM Institute for Business Value. March 2018. <https://www-935.ibm.com/services/us/gbs/thoughtleadership/custexperience/ai-cx/>
- 2 Ibid.
- 3 Ibid
- 4 Design thinking is a powerful approach that enables teams with diverse skillsets to spur innovation and creative problem solving. Though it can be employed to address virtually any challenge, because it is a customer- or user-centric approach, design thinking is often used to define and create brand-differentiating experiences. In particular, IBM’s Enterprise Design Thinking has “re-envisioned design thinking, creating a framework for the speed and scale of the modern enterprise. We are aligning large, dispersed teams and empowering them to continuously deliver better, more human-centered outcomes to the market.” For more information on Enterprise Design Thinking go to: <https://www.ibm.com/design/thinking/>
- 5 According to the Agile Alliance, “a minimum viable product (MVP) is a concept from Lean Startup that stresses the impact of learning in new product development. A key premise behind the idea of MVP is that you produce an actual product (which may be no more than a landing page or a service with an appearance of automation, but which is fully manual behind the scenes) that you can offer to customers and observe their actual behavior with the product or service. Seeing what people actually do with respect to a product is much more reliable than asking people what they would do.” <https://www.agilealliance.org/glossary/mvp/>
- 6 Ibid

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