NICE Special Edition

AI for CX

For dummies®

A Wiley Brand

Explore the
capabilities of AI

Discover the advantages
of purpose-built AI

Leverage AI to deliver
exceptional CX

Brought to you
by

NICE®

Floyd Earl Smith

About NICE

With NICE, it's never been easier for organizations of all sizes around the globe to create extraordinary customer experiences while meeting key business metrics. Featuring the world's #1 cloud-native customer experience platform, CXone, and Enlighten, an advanced suite of AI tools for agents and supervisors, business leadership, and customers, NICE is a worldwide leader in digital self-service, CX software and AI tools for the complete business. Over 25,000 organizations in more than 150 countries, including over 85 of the Fortune 100 companies, partner with NICE to transform — and elevate — every customer interaction.

AI for CX

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AI for CX For Dummies®, NICE Special Edition

Publisher's Acknowledgments

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Introduction

For most businesses, and many people, artificial intelligence (AI) is the most exciting topic of technological conversation in the world today. The emergence of breakthrough generative AI technology in the form of Generative Pre-trained Transformer (GPT) and other large language models (LLMs) has captured the imagination of the public, business leaders, and investors around the world.

With all this excitement comes a significant to-do list: Organizations are challenged to understand AI and the many component technologies that make it up, compare their organizational needs to what AI has to offer, and move very quickly to incorporate the latest AI into their offerings.

Interest in AI for customer experience (CX) is particularly high across industries, and it can come with risks. While organizations must incorporate AI into their business strategy, for all departments and purposes, there's understandable hesitation around opening themselves up to embarrassing errors at best and major security risks at worst.

Luckily, your organization doesn't have to face these tasks alone. Leading technology providers offer AI-infused products that you can deploy today, and NICE is in the forefront of using AI for CX.

About This Book

AI for CX For Dummies, NICE Special Edition, explores powerful AI to incorporate into your business's strategy, enabling you to deliver exceptional customer experience (CX) with ease. This book describes the major AI technologies most useful for CX and the positive impact for customers as well as agents, supervisors, management, and other stakeholders. The book concludes by answering common questions about how AI shows up in CX today.

NICE has pioneered the use of AI in delivering first-class CX and is ahead of the curve in developing AI that's fully integrated with a complete CX suite and ready to be used right out of the box. These results are apparent today throughout NICE Enlighten, a

suite of tools that features seamless onboarding and adapts to your organization with highly customized capabilities that evolve and grow as fast as you do.

In this book, you discover the potential for the use of AI in CX and related business disciplines and get to know NICE's AI-backed solutions. This knowledge can empower you to effectively deploy new solutions as they arrive and also to ask providers for even better solutions as they become possible with yet further improvements in AI technology.

Icons Used in This Book

From start to finish, this book uses icons as a visual guide, pointing out important points for you to remember, things to steer clear of, advice, and technical considerations. Here is what the icons mean:

REMEMBER The Remember icon indicates information that's worth retaining across chapters in this book, and that's highly likely to be useful even when you set this book aside.

WARNING Steer clear. The information here helps you avoid making costly mistakes.

TIP Tips give you advice and helpful best practices regarding your journey through the use of AI for CX.

TECHNICAL STUFF The jargon beneath the jargon is explained. Also, if you're a numbers person, sometimes I give you a few industry statistics.

Beyond the Book

This book describes the use of AI in delivering the best possible CX, and it's brought to you by NICE. For resources beyond what this book offers, you can check out more information about NICE, Enlighten, and AI at `nice.com/ai-for-business`.

Chapter **1**

Making CX Better with Cutting-Edge AI

O ne area that clearly benefits from artificial intelligence (AI) technology, and has been putting AI to use for quite some time, is customer experience (CX). Offering superior CX is a key method that companies use to distinguish themselves. When implemented correctly, AI offers this labor-intensive discipline significant advantages from functional improvements to time and cost savings and more.

But to evaluate the potential uses of AI, whether as part of a CX offering or for other business purposes, your organization needs to develop a shared understanding of AI and the major component technologies that fall under the AI umbrella. This chapter describes these technologies in a way that businesspeople and technical experts can use as a shared reference for discussion, investigation, and action.

Unfurling the AI Umbrella

AI has been actively discussed for many years. It became a much livelier topic with the introduction of digital computers in the 1940s as part of the British and American effort to crack enemy

codes in World War II. Only a few people at that time even knew that digital computers existed — and how capable they were at codebreaking. But even within this relatively small group, specu-lation quickly arose as to whether, and for what tasks, a computer may someday be able to match or exceed human capabilities on both broad and narrow tasks.

Alan Turing, known as a developer of the first modern computers and the inventor of the universal Turing machine, proposed what he called *the imitation game,* an approach that's now widely known as the Turing test. The Turing test assesses a machine's ability to think and express intelligence like a human. Basically, to pass the test, AI would need to fool humans into believing that it was also human. A computer that passed the Turing test would be said to demonstrate artificial general intelligence (AGI). No such system exists at this point; however, you may be forgiven for assuming the opposite when you observe AI in action today.

Instances of amazing AI performance include

» Watching a Waymo self-driving (and driverless) car pick up, interact with, and drop off passengers in San Francisco

» Observing that a tool called ChatGPT (short for Chat Generative Pre-trained Transformer) can achieve passing scores on widely used entrance exams, such as the Law School Admission Test (LSAT), according to the Washington Post

» Interacting with a chatbot on a website, getting accurate, conversational answers — and wondering whether a human is assisting the chatbot's side of the conversation (the answer is usually no)

Listing AI's Key Components

REMEMBER

The major components of AI are

» AGI

» Expert systems

» Current AI

» Machine learning (ML)

» Deep learning

» Neural networks

These core technologies and how they relate to one another are shown in Figure 1-1.
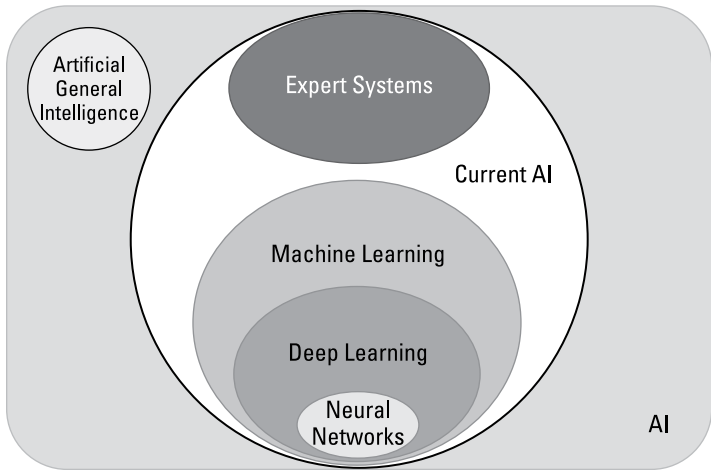
FIGURE 1-1: Core AI technologies and how they relate to one another.

For the purposes of this book, the core points to remember are

» ML is a branch of AI and computer science that enables computers to make predictions, or learn, based on data and algorithms. This underlies generative AI technologies, such as ChatGPT.

» An AI-based system that's focused on a specific domain of human knowledge, such as CX, is known as an *expert system.*

TECHNICAL STUFF

Today's AI systems, even the most advanced ones, ultimately fail the Turing test. As such, despite their impressive capabilities, they're usually described as *weak AI*. AGI, on the other hand, is described as *strong AI,* and there's much speculation as to when AI that passes the Turing test may arrive.

Identifying ML as the Mainstay for CX

Whether you're familiar with AI or are just diving into the topic, you may have heard terms such as *ML*, *deep learning*, and *neural networks.* One facet of AI technology relevant to the sudden explosion in AI's usefulness today is ML, and ML is part of a suite of related technologies:

» **Neural networks:** A neural network is a mathematical system used to find patterns in data. As in the human brain, different possible assumptions gain more or less influence — greater or lesser weight — as the neural network learns from examples. The lowest level of a neural network can feed into a higher level that has its own weightings, and this process can repeat upward for many levels.

» **Deep learning:** A deep learning algorithm uses a neural network with at least three layers, which is what makes it deep when compared to a shallow neural network that has only one or two layers.

Getting Help from Generative AI

The term *generative AI* came into widespread use beginning in late 2022 with the release of ChatGPT 3, a type of generative AI that produces conversational outputs in response to user prompts. ChatGPT is a chatbot whose name breaks down as follows:

» **Chatbot:** Tools that converse with humans, usually through typed messages, to help humans find information or accomplish tasks

» **Generative:** Refers to the workings of large language models (LLMs) and artificial neural networks that generate text, images, or some other form of output

» **Pre-trained:** Meaning that ML has been used to create a deep learning neural network (one with more than three layers) with associated weights that reflect its training

» **Transformer:** A particular form of neural network architecture that processes tokens (text and character) to capture

and process long-range dependencies and context, enabling an LLM to be trained to generate outputs and language rather than canned answers

REMEMBER

ChatGPT is a specific example of generative AI — AI that generates text, images, or other forms of output. Generative AI can use chat for input and response to the user, or it can use other forms of input and feedback, such as when a software developer uses generative AI to generate code or analyze API security. AI technologies, such as Google Bard and ChatGPT, can even understand the spoken word and speak responses.

When assessing all forms of generative AI, keep in mind several terms:

» **LLM:** This type of AI algorithm learns by analyzing vast amounts of data gathered from the Internet and other sources. In NICE's case, this includes massively large customer interactions data sets.

» **Parameters:** Also referred to as *weights,* these numerical values represent variables in the neural network and define the strength of connection between neurons across a model's layers.

» **Tokens:** These define the structure and behavior of an LLM, training the parameters to help the AI understand context. In general, the more parameters an LLM has, the more data it can process. Adding to the parameters used by an LLM means increasing both its power and the time and expense needed to train it, as well as use it once it's trained.

WARNING

» **Emergent behavior:** Unprogrammed, often unplanned, and sometimes entirely unexpected abilities that emerge from a trained LLM. Emergent behavior can be beneficial (as with new insights) or highly problematic (as with untruths or sudden use of emotionally laden language).

WARNING

Without guardrails, generative AI can create issues. Organizations in particular must implement systems that protect their brand and security. Potential concerns about generative AI include

» **Copyright and trademark:** The sources of knowledge that AI draws data from can include copyrighted materials used without permission. AI users must face the prospect of concern about their own use of the output of such systems.

- **»** **Hallucination:** One dramatic and troubling example of emergent AI behavior is hallucination — the generation of false, misleading, or irrelevant information. Hallucination is a tremendous disservice to the user and could potentially be the basis of customer dissatisfaction, complaints, or even legal action by users against a company.

- **»** **Deepfakes:** Generative AI can be used to create manipulated images and videos that even experts have trouble distinguishing from unaltered media. Deepfakes can add a false impression of reality to what's really misinformation. (And they can be used to target any personal or corporate brand, including yours.)

Increased use of emerging AI tools has also cast a warm glow on the potential benefits of AI, which smart organizations are incorporating internally and across products. These tools include the following:

- **»** **Automation:** Some of AI's capabilities have been in use for quite some time and continue to offer huge potential when it comes to process improvements. Automation can produce helpful content and handle routine, repetitive, and mundane tasks, which not only affords human agents more time to handle complex challenges but also creates opportunities for major cost savings.

- **»** **Personalized service:** Generative AI can provide fast, personalized self-service responses to a wide range of queries, making information available in a customer's format of choice while cutting response times and improving accuracy. Increased self-service offerings also allow human agents to speak with those customers who prefer live calls and to focus on the most complex problems.

- **»** **Data analysis:** By analyzing customer interaction data, AI can proactively improve CX by providing up-to-the-minute information to customers and internal stakeholders, identifying opportunities for automation and improvement based on positive customer sentiment, and even preventing potential issues.

Chapter **2**

Identifying the Benefits of AI for CX

T he power and utility of artificial intelligence (AI) are clearly growing, as shown by the widespread interest in generative AI technologies, but how can this technology best be leveraged for use in customer experience (CX)? That question is best answered by briefly reconsidering what CX means in the age of AI, identifying the stakeholder interests that can be met by this new technology, and specifying how AI can be used to build up and protect a company's brand.

Finding the Meaning of CX in the AI Age

Customers have a great, and growing, interest in digital self-service — an interest that companies frequently underestimate. Customers expect personalized, accurate options that meet their needs for up-to-date information and assistance that accommodate preferences like platform, timing, and language. And they want this without the once-standard need to converse directly with another person.

With AI, you can help make that happen. AI offers great promise for usefulness across all types of customer interactions:

» **Searching for information:** Companies are often faced with customers who first turn to search engines to find the answers to their questions, but brands don't have full control over the accuracy of the results or the customer's overall experience out there on the Internet. By using AI, an organization can maintain their search engine optimization (SEO) as well as provide powerful search functionality within the company website, making it rewarding for a user to search within this more manageable environment. Companies can use organic and paid search results to bring customers and prospects from the open Internet onto their websites.

» **Using a chatbot:** Site users are increasingly willing to use chatbots to seek help with making purchases or solving problems. Given the sharp increase in chatbot capability heralded by the arrival of generative AI, companies have the opportunity to offer a new iteration of chatbots, called *intelligent virtual agents* (IVAs), that uses this technology. IVAs provide 100 percent accuracy, shorter wait times, and highly effective interactions. They also offer end-to-end support, resulting in full resolutions through human-like conversations and an understanding of the user's goals and how best to meet them.

» **Interacting with people:** Customer service agents and salespeople continue to be the most capable in meeting the most complex needs that users have, but your employees need to have all the capabilities of search and chatbots at hand. That way, they can use these built-in capabilities to get help or complete tasks for the user. Employees can also use custom tools, unavailable to the customer, to go even further in getting things done to the customer's full satisfaction.

REMEMBER

According to research, roughly 30 percent of transactions were supported by automation in 2023, and about 70 percent will be in 2025 — a huge increase in two short years. Your organization needs to move quickly to stay ahead of, or at least even with, the incorporation of AI into the customer's experience of your brand. Visit `www.nice.com/resources/so-you-want-to-be-a-generative-ai-expert` to find out more.

Providing a Safe, Secure Environment for the Use of AI

As the name suggests, CX is all about the customer. And customers interact with your brand to make purchases and to solve problems, not to waste time or to create new problems for themselves. If you provide a safe and secure environment in which the customer experience can occur, you make the experience much better for everyone involved.

You can begin by protecting personally identifiable information (PII) and other, less specific information about the customer. Information such as the customer's name, address, and phone number must be used carefully.

Even more general information about a customer can be misused, causing dissatisfaction. For instance, displaying a targeted sales promotion in the midst of a chatbot session to solve a customer service problem can be quite off-putting, whereas the same offer at some other time may be both welcome and effective.

AI's less desirable effects can introduce new problems in the customer experience environment. Notably, you need to take steps to avoid the tendency of large language models (LLMs) to hallucinate, offering inaccurate or misleading or even alarming information, which can take the customer experience — and your customer satisfaction scores — in the wrong direction.

WARNING Even more benign emergent behaviors can cause problems. You may want to prevent your chatbot, for instance, from producing suggestions on topics other than the topic the customer is already interacting with you on. A customer could view such suggestions as confusing or distracting.

TIP Reassure the customer as to how the information that they generate in, for instance, a chat session will be used. People are generally aware that information they enter into a chatbot can become part of the chatbot's database, meaning that it moves out of the user's control and may or may not be used for their benefit.

For instance, if you resell information derived from chat sessions to other companies, your customers could start to see retargeted ads online or receive other unwelcome marketing contacts. Draw

up clear policies for the use of such information and find ways to reassure users about fears and concerns they may have.

Promoting Stakeholder Interests with New Technology

What are the interests of a brand in interacting with users who are using generative AI technology on-site? Though the potential length of such a list is long, here are a few highlights:

» **Using the brand's tools:** As with search, a brand is much better able to advance its interests when a customer uses tools provided by the company, such as using a company-provided LLM rather than an external product.

» **Providing a high-quality experience:** After the brand has a customer using the tools it provides, the experience must be as effective as possible to enable customers to solve problems, make purchases, and complete other tasks.

» **Providing a holistic experience:** Customers aren't the only users who can benefit from a company-provided LLM. Agents, supervisors, and management all need to use the LLM directly and for gathering important information about the customer base and the LLM itself for use by the business.

TIP The use of AI impacts all stakeholders, including a company's employees. The impact is likely to be positive for most employees with secure, single platform software that can offer benefits like reducing repetitive tasks and saving time searching for solutions. If and when you deploy AI for CX, let your employees know that you expect the technology to benefit them, and ask them for feedback as to their experience with it.

Improving Employee Experience

AI has the potential to positively impact your employees throughout your organization. Agents are a great example of ways AI can improve their work experience. For instance, AI can help provide contextually optimized information to the agent, exactly at the time

when they need it most. AI can let the agent know the customer's likely sentiment during an interaction; it can put the right script in front of the agent, for use as a resource; it can let the agent know when there's a risk of non–compliance with applicable company standards, regulations, and laws; and it can provide the agent with real–time feedback as to their own performance.

TIP

Along with CX, smart companies also seek to improve employee experience (EX). That is, AI needs to be deployed in a way that improves the employee's experience, by making them more effective in creating a positive experience for customers.

AI can even give the agent feedback into their own state of mind and about issues that might impact their performance, along with alerting the agent as to when it may be appropriate to reach out for assistance to another agent or a supervisor.

Using AI to Build and Protect the Brand

Your use of generative AI as part of the CX can become a powerful positive for your brand. Your organization may be able to realize the following benefits:

» **Higher sales:** You may enable higher sales through the use of more positive and effective on-site and agent-led selling experiences, complementary sales, upselling, and customer retention.

» **Greater customer satisfaction:** Simply reducing the number of clicks a user has to make to complete a task can improve a customer's impression of your brand.

» **Better employer brand:** Providing the benefits of new technology to your employees, as well as to customers, can build your employer brand. This increases employee satisfaction, making it easier to retain and attract the best employees.

» **Association with progressive use of technology:** Letting your customers know that you've incorporated the latest and greatest technology in a way that directly benefits them can create an additional positive association for your brand. People love to know that you're making every possible effort and investment to better serve them.

TIP

» **Reassurance as to safe use of technology:** Most of us have seen notices on websites to the effect that our information won't be resold to others. Such reassurance may carry even greater weight if you offer it in association with your use of the latest, greatest — but also potentially problematic without such safety measures — new technology.

» **More and better management information:** Along with improving the key numbers that drive your business forward, you can make those same numbers more accessible to more people within your business, faster and more conveniently than ever before. You can even include information that was never previously available — for instance, information about the usefulness of the new AI technology you're introducing.

IN THIS CHAPTER

» **Getting trusted AI**

» **Helping customers find their way**

» **Supporting employees in their work**

» **Mapping actions for business**

» **Analyzing the results**

Chapter **3**

Unveiling a NICE Implementation of AI for CX

Organizations have a tremendous challenge as they seek to incorporate artificial intelligence (AI) into the daily fabric of their operations. Trying to do so in a safe, responsible, and yet forward-looking manner — to lean in while not risking serious problems for all concerned — is a daunting prospect.

Smart suppliers can ease a company's burdens by providing products and services that are fully infused with AI capabilities and provide the full range of capabilities that a company would hope for, without the dangers that come when an organization tries to go it alone on the cutting edge of new technology.

REMEMBER

NICE sees generative AI as a once-in-a-generation (no pun intended) opportunity to improve customer experience (CX), along with employee experience (EX), while helping the organization as a whole to operate more effectively. NICE's trusted AI solutions for businesses support contact center agents and supervisors with Enlighten Copilot, provide customer service directly with Enlighten Autopilot, and deliver business intelligence through

Enlighten Actions. Finally, Enlighten XO brings AI models trained on the world's largest historical CX data set to help your business analyze customer satisfaction with, and employee engagement around, CX, and identify ways to make CX even better.

As powerful as each of the components of Enlighten is on its own, the whole is greater than the sum of the parts. In this chapter, I describe each of the components of the Enlighten suite and show how it provides value to businesses.

The Enlighten Suite: Trusted AI for Your Business

NICE has been laying the groundwork for increased use of AI in its business for many years, so the sudden emergence of generative AI in late 2022 wasn't entirely a surprise. The company was well-prepared to take advantage of the opportunity that generative AI offers to provide CX at a previously unattainable level.

NICE Enlighten is a suite of AI solutions that allows a company to cost-effectively deliver incredible CX, in a way that benefits agents, supervisors, and the business as a whole. Enlighten begins by delivering security, privacy, and compliance — that is, by meeting the legal, regulatory, and safety concerns that companies may run afoul of when they seek to offer AI-powered capabilities on their own.

Enlighten takes protecting customers and brands as its first priority. New capabilities must first be made safe to use for all stakeholders, including both the company using Enlighten and its customers, before the technology is deployed.

Enlighten also seeks to augment, not replace, employees. That means targeting AI toward highly repetitive, lower-touch and lower-value interactions, while supporting agents in higher-touch, higher-value, and more novel interactions. Supervisors also benefit from AI-driven tools, specifically in order to offload repetitive management tasks, assign agent training and offer resources, and provide insights needed to improve decision making.

By meeting the needs of customers, agents and supervisors, and leadership, Enlighten doesn't compromise one set of goals to further another. Both CX and EX are maximized in every interaction.

Enlighten Autopilot for CXi

Enlighten Autopilot delivers exceptional customer experience interactions (CXi).

REMEMBER

At the same time, Autopilot is on the cutting edge because it puts generative AI front and center. With Autopilot, AI is interacting directly with the customer, providing them with the best possible rapid response to their needs and concerns.

Autopilot takes advantage of the leading-edge technology developed by NICE to leverage a deep well of knowledge derived from the company's years as a leader in the customer experience business. Autopilot uses the latest emergent AI capabilities to deliver an unmatched customer journey for efficient, accurate interactions with constant attention to safety and security — for the business and the end-user. By drawing on your company's proprietary knowledge base, your customers receive information with strong brand adherence and guardrails to prevent unwanted or incorrect answers, erasing common concerns about AI hallucinations or inappropriate responses.

Autopilot has many benefits, but its goal can be summed up simply: to provide the results that can normally only be achieved by the best human agents, with greater responsiveness and at lower cost. Human agents are then allowed to focus on the most complex and, often, challenging interactions, increasing both their value to the business and their level of engagement with their jobs.

Enlighten Copilot

If an AI capability was focused entirely on customers, agents and their management may be left on the outside looking in — trying to provide excellent customer service without access to the technology that customers were interacting with directly. This section highlights how Enlighten helps agents and supervisors within your organization.

Serving agents

NICE has always been focused equally on the employee and customer experiences, so no one is left out from the benefits that can be provided by AI. Enlighten Copilot creates an AI-enhanced experience for human agents as well as for customers.

Agents are called on to draw from a wide range of resources in dealing with customers. Copilot provides specific, actionable guidance while also placing valuable resources onscreen, in the agent's field of view.

Copilot also delivers valuable information from the AI system itself, assessing customer sentiment in real time. Copilot delivers this information directly to the agent, helping them to maximize the value of every interaction they are involved in — from the standpoint of the customer as well as the business.

Supporting supervisors

Copilot also delivers a superior experience to supervisors, who are often neglected by other customer support systems. Supervisors can access the information environment provided to agents and help them make the most of it. Supervisors also get specific analytics and information tailored to them and their teams, helping them to support agents in real time as well as after the fact.

Copilot further supports supervisors by going the extra mile to provide recommendations to agents when they need support during or after the most challenging interactions, including opportunities for skill building. When an agent needs information or assistance, Copilot allows supervisors to quickly assess the agent's needs and assign training. It then schedules the training to ensure adequate coverage so there are no gaps in support that may increase customer wait times.

Enlighten Actions for Businesses

Providing data to CX stakeholders is only so valuable without closing the loop — providing actionable information about CX and EX, along with the actions taken by supervisors and the results they obtain, to business leadership.

Enlighten Actions closes the loop by aligning CX and EX interactions to business goals as they're occurring. Actions goes beyond providing information; it helps in mapping business objectives to sales and customer support functions, whether delivered directly through an IVA or by human agents, supported by AI and by AI-empowered supervisors.

By providing automation and information in real time, at all levels of customer experience, Enlighten makes it possible for businesses to adapt, improvise, and overcome obstacles in real time. The capability of the business to engage productively with customers improves every day, delivering sustainable competitive advantage to the organization.

Enlighten XO for Analysis

Organizations are exerting tremendous effort to deploy analytics of all kinds — not least AI-infused analytics — to deliver actionable insights to the business. These insights deliver value at every level, from maximizing the value of a sale with a recommendation engine to helping businesses optimize inventory management, store and office site selection, and employee benefits.

But what if a supplier provided analytics as a core part of their offering, using their own experience and their knowledge of customer needs to deliver actionable insights, as it were, on a platter? And in doing so, what if that offering helped the organization to move further ahead of the competition on a daily basis?

That's what Enlighten delivers with Enlighten XO. This AI-powered capability uses models trained on successful customer interactions from the world's largest CX dataset. Enlighten XO analyzes interactions as they occur, maximizing the value of the Enlighten suite in a way that's optimized for each organization that adopts it — not only as part of how they go to market, interacting with customers, but as part of how they manage the entire business.

With Enlighten XO, customers accelerate realization of their business goals by mapping them directly to what their customers are trying to accomplish. And the other components of the Enlighten suite help to operationalize these strategies, making the entire business smart, responsive, and nimble.

Chapter **4**
Ten Questions about AI for CX

Kids are famous for asking a million questions, and adults may often roll their eyes as the questions pile up. But the funny thing is, when you present grown-ups with something really new, they ask a million questions, too. So in this chapter, I present you with ten sharp, incisive questions about the use of artificial intelligence (AI) in customer experience (CX) and the best answers to help guide you.

Who Is the Industry Leader in AI for CX?

NICE is leading in AI for CX because NICE believes deeply in the value that CX can bring to its customers and to the world at large. And in seeking to improve the experience of NICE customers as they strive to bring the best CX to their own customer communities, NICE has found again and again that AI is an indispensable part of a successful CX strategy for a business to provide forward-thinking, superior customer interactions and to enable stakeholders across their organization.

AI is an exciting technology and is critical to the future of CX. AI has been uniquely relevant to the industry over many years. As such, at this time when AI is vital to every business's strategy, NICE has been able to skate to where the puck is going to be, with AI-backed solutions like CXone, a holistic cloud platform trained on the industry's largest data set and ready for immediate deployment in any business sector. NICE Enlighten generative AI offers secure, brand-safe, and knowledge-based capabilities, mitigating many of the risks and resource-draining situations that so often put businesses at a disadvantage. Instead, NICE offerings allow businesses to quickly adopt a solution designed to adapt constantly and scale with the company.

Is Generative AI Too New to Use in AI for CX?

REMEMBER

AI has featured prominently in the CX world for a number of years. Just ask NICE: With more than three decades of unparalleled experience, this isn't new territory. In fact, generative AI isn't really all that new either. For instance, transformers, which are represented by the T in GPT, were unveiled in a seminal research paper from Google Research, titled *Attention Is All You Need,* in 2017. This was the beginning of a furious effort around generative AI at many organizations — an effort that continues to increase today.

What is new is the sudden leap in the amount of attention generative AI receives. Generative AI isn't as new as many people think, and it's well established enough to use in CX — a field in which AI of various kinds has already been used for many years.

What Are the Benefits of CX for AI?

AI delivers benefits at every level of CX, as illustrated by the NICE product line:

» **Customer self-service:** Enlighten Autopilot helps customers efficiently help themselves, increasing customer satisfaction and decreasing costs.

>> **Agent and supervisor empowerment:** Enlighten Copilot utilizes AI-powered tools and features for agents and supervisors, making them more effective and, with the automation of mundane tasks and data analysis, making their work more rewarding. This aids agent productivity, skill development, and skill retention, in addition to providing supervisors with increased tools to support agents, all while building the employer brand.

>> **Business effectiveness:** Enlighten Actions uses AI to tie excellent CX to the overall goals of a business, which directly assists leadership in making highly informed decisions and improving results for all stakeholders.

>> **Analytical understanding:** This suite of AI-backed tools provides powerful data analysis at top speed to help the business dive deep into the most up-to-date information on every aspect of CX, which can contribute to new product development and product improvement, as well as improve CX for products as they exist today.

Check out Chapter 3 for more on these NICE capabilities.

Which AI Technologies Are Most Important for CX?

The most important underlying AI technology for CX is machine learning (ML). With ML, AI technology learns from your unique customer base and their interactions with your equally unique products, services, and people. Neural networks and deep learning are ML technologies that allow ever more human-friendly interactions and results with your customers, with your agents as they work to support their customers, and with your staff as they seek to move the business forward through improvements in CX.

How Is ML Used in AI for CX?

ML allows software to, in effect, customize itself. As the knowledge base continues to mature as you deliver CX by using AI, you benefit across all your business metrics, not least in differentiation from your competitor. AI for CX, driven by ML, can widen the

degree to which no one in the world can serve your customers in your area of business as well as you and your organization can.

Is AI Really Needed in the Modern CX Tech Stack?

AI augments and multiplies the efforts of humans at high speed and with high accuracy at low cost. AI also spots and fills in gaps in coverage, or areas in need of improvement, without the need for human direction. If AI were left out of the tech stack, all the valuable capabilities provided by AI in the tech stack today and in the future would have to be provided directly by humans (or not be provided at all).

All these human efforts would take time and cost money, slowing business and raising costs. Or the lack of these efforts would impose burdens on your customers. AI also helps in providing the most effective data security and accurate knowledge management, providing guardrails with internal and external benefits for your brand. Only with AI can humans — your customers, agents, supervisors, and leadership — be effectively empowered to focus on doing the things that are uniquely human.

How Can We Protect Our Brand When Using AI?

Many AI tools are trained on data sets that may include copyrighted data, data from behind a paywall, and even proprietary data from your or other businesses, raising issues of privacy as well as compensation to the holders of intellectual property (IP). With NICE Enlighten, you can avoid these concerns. NICE Enlighten is built to use your business's knowledge base to safeguard your brand, so anything customers receive is not only in alignment with the latest information from your organization but also avoids any legal concerns by omitting copyrighted and sensitive data.

You protect your brand when using AI by

» Working with responsible providers who avoid the use of others' IP and minimize problems such as the appearance of errors in AI-generated results, and who can also provide information and training to help your people get the best from what AI delivers

» Maintaining the same smart skepticism around AI that people have always exercised with information from one another and that's now being extended to machine-provided answers

The old adage "Trust, but verify" is increasingly appropriate for all the information that comes to you, and this lesson can be incorporated as part of providing excellent CX.

What Does AI Offer Our Customers?

AI offers both direct and indirect benefits to your customers. A direct benefit is how users get answers when they interact with your brand via IVAs that understand context and intent, communicating in a conversational and human-like manner. The indirect benefits come from the overall improvements in CX. For example, in addition to powerful customer tools, the entire Enlighten suite from NICE includes assistance for your organization in meeting its business goals — ultimately benefiting all stakeholders.

How Do CX Stakeholders Benefit from AI?

The entire organization and its stakeholders — including employees, stockholders, partners, suppliers, and the community at large — benefit from excellent CX. That's because it empowers your customers while increasing automation and knowledge-management capabilities, as well as workforce retention, and decreases the time it takes to gather and analyze data to inform business decisions, all factors that help cut your costs. And the best CX can only be delivered effectively by making smart use of AI. With the role of AI in CX constantly expanding, other stakeholders benefit just as your customers do.

How Does the Use of AI Relate to CXi?

AI has both direct and indirect effects on customer experience interactions (CXi). AI helps customers interact with your brand directly, asking questions and getting the right answers in a conversational way. While it's often AI that's interacting with your customer directly and in real time, you ultimately set the parameters that determine what happens in these interactions.

When customers interact with your brand indirectly, for instance through social media comments, AI is able to gather information about these interactions and deliver initial processing of it. AI orchestrates the delivery of raw data and also derives information and knowledge from that same data, centralizing information to increase accuracy and connect the dots across platforms — which means you can avoid things like asking customers for information they've already provided to you — and helping to guide both your customer and your business toward optimal CX at all touchpoints.

NICE

Reimagine your CX with AI

Powerful possibilities, made simple
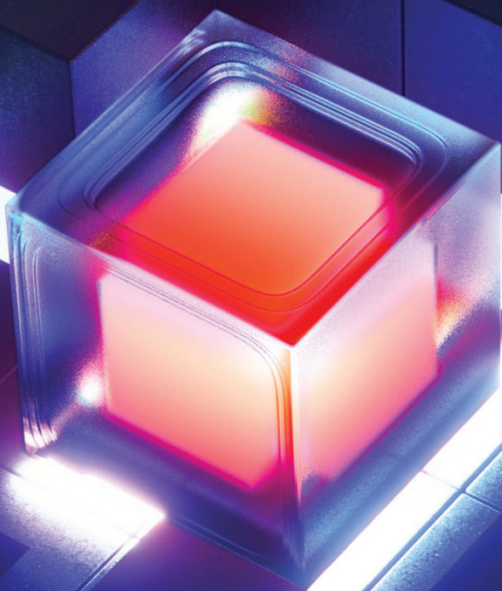
nice.com/ai-for-business

Imagine unparalleled CX with the power of AI

AI makes the future of CX possible today by providing data-driven insights that enhance customer interactions, boost employee productivity and satisfaction, and enable informed decisions, automation, training, and knowledge. AI purpose-built for CX, from NICE, supports leadership, agents, supervisors, and customers through a single platform across various channels, languages, and communication methods while ensuring data security and brand adherence. Welcome to the future of CX, powered by AI.

Inside…

- AI's origins and terms to know
- How AI is redefining CX
- Why generative AI is crucial to CX
- Implementing AI quickly and securely
- AI employee and customer benefits
- Negating brand risk without slowdown
- The AI-powered future of your CX

NICE®

Floyd Earl Smith has worked in marketing at Apple, HSBC, NGINX, Onehouse, and Visa. He received his BA at the University of San Francisco and his MSc at the London School of Economics. He has written many *For Dummies* books, including *Quantum Computing For Dummies.*

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