

Predicts 2024: Machine Customers, GenAI for CX, Composable DXP

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By Analyst(s): Irina Guseva, Don Scheibenreif, Michael Chiu, John Field

IT leaders continue to optimize and invest in their CRM strategy and machine customers, digital experience and customer experience initiatives. This research highlights three predictions on the potential impacts in 2024 and beyond.

Overview

Key Findings

- Machine customers will be directly involved in, or have influence over, trillions of dollars in purchases.
- While the upsides of opportunities for GenAI to enhance customer experience (CX) are numerous, it will also lower or remove impediments that are preventing an improved customer experience.
- Buyer demand is continuously driving digital experience platform (DXP) vendors toward decomposition and modularization of their technologies.

Recommendations

- Drive business by identifying use cases where your products and services can be extended to machine customers.
- Improve CX by identifying your organization's obstacles to an ideal customer experience, then considering whether GenAI could reduce or eliminate them.
- Choose the right DXP vendor by being prepared to evaluate multiple vendors, including pure-play DXP vendors as well as best-of-breed technologies from adjacent markets.

Strategic Planning Assumptions

- Through 2026, 30% of large companies will have a dedicated business unit or sales channels to access fast-growing machine customer markets.
- By 2026, those organizations employing GenAI in their CX will achieve 10% higher CX maturity than those that do not.
- By 2026, at least 70% of organizations will be mandated to acquire composable DXP technology, as opposed to monolithic suites, compared to 50% in 2023.

Analysis

What You Need to Know

In this document, we offer a few predictions that showcase impacts of machine customers, AI and composability on the CRM and CX space. The intent of these predictions is to provide IT leaders a sample of the large-scale potential changes that will impact organizations over the next few years:

Strategic Planning Assumptions

Strategic Planning Assumption: Through 2026, 30% of large companies will have a dedicated business unit or sales channels to access fast-growing machine customer markets.

Analysis by: *Don Scheibenreif, Mark Raskino, Pierfrancesco Manenti, Uma Challa, Irina Guseva, Keith Jones*

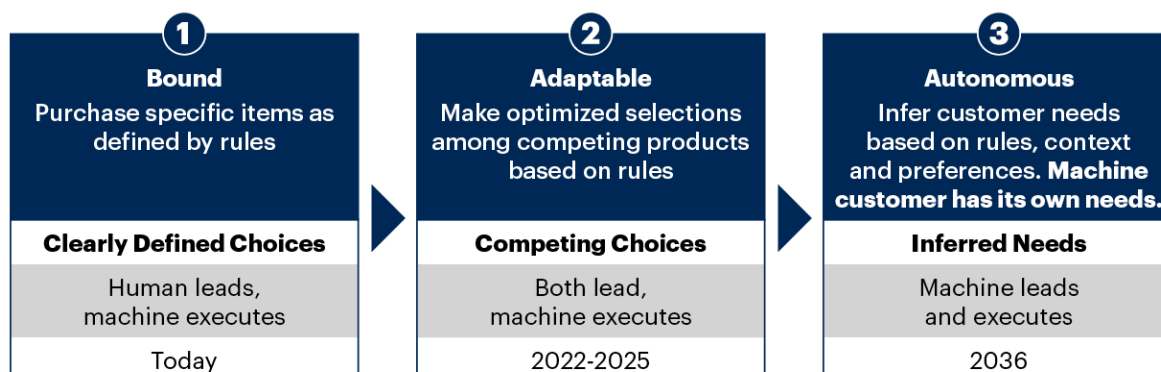
Key Findings:

- A machine customer is a nonhuman economic actor that obtains goods or services in exchange for payment.
- CEOs estimate that 15% to 20% of their revenue will come from machine customers by 2030. ¹
- Gartner modeling predicts that machine customers will be directly involved in, or have influence over, trillions of dollars in purchases by 2030. ² By 2028, 15 billion connected products will exist with the potential to behave as customers, shopping for services and supplies for themselves and their owners. ³
- Over 50% of all organizations sell via a digital commerce platform, the primary channel by which machine customers will transact with an organization. ⁴
- Fifty-three percent of IT services buyers reported that their organizations seek to launch net new digital products and services from the purchase of asset-based services as one of the topmost digital business transformation outcomes. ⁵
- Machine customers will force a reshaping of key functions such as supply chain, sales, marketing, customer service, digital commerce and customer experience.

Figure 1 illustrates how machine customers will likely evolve in the coming years.

Figure 1: Three Phases of Machine Customers

Three Phases of Machine Customers



Source: Gartner
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Gartner

Market Implications:

Machine customers will require their own sales and service channels because they transact at high speeds, and the volume of decision variables they use far exceed human capabilities. This is much like today's "robo-trading" or other forms of high-speed machine-to-machine communication. Machine customers will be programmed to consider dozens, if not hundreds, of decision factors. Because of this, organizations will have to deploy their own "machine sellers," "machine marketers," and "machine customer service" bots to handle the incoming requests. Organizations need to prepare to monitor and measure the emergence of machine customer transactions, so they can build the necessary channels before the volume becomes overwhelming.

Dedicated business units in large, established organizations are a proven method to incubate and grow a new idea that runs counter to the established business model. For example, HP Inc. created a subscription division to develop, test and launch its Instant Ink service. Ten years later, the division is intact, and Instant Ink has over 11 million subscribers. ⁶ Other examples of digital divisions of established organizations include:

- Airbus' Skywise platform
- The EV divisions of OEM automobile manufacturers, such as GM Cruise, Ford Model e, and BMW i
- Singapore's DBS digital banking unit

Machine customers will require different talent, skills and processes that may not exist in a human-customer-focused division.

For supply chain: We expect organizations will set up specific supply chain capabilities with a segmented supply chain to serve the specific needs of machine customers. Machine customers will transact at a faster pace, with lower order quantities than traditional customers, requiring them to be served by supply chains with a different service level.

For marketing: Existing practices of marketing to humans will not work for machines, which will make decisions based on value and facts rather than emotion or feelings. Companies need to provide richer data not only on product, pricing, inventory, delivery and customer reviews, which are normally expected by human customers, but also environmental, social and governance (ESG), reputation, industry certification and rating, competitive positioning, and value proposition. Existing marketing practices for humans are still needed, as these will influence humans to add the brand to their favorites for machine bots to investigate. But this may become less important in the future when machines have gained trust of their human owners, who will fully delegate decisions without any influence.

For digital commerce: Companies will need to make information transparent to make it easier for machines to consume, primarily through its digital commerce platform. This means not only collecting all this data and making it available, but also putting it in forms that can be consumed by machines (e.g., APIs, files, events, data interfaces). For example, we expect that human-consumable digital storefronts will become obsolete for machine customers. They will not need all the extraneous information, graphics and functionality designed for human customers.

For Sales: The seller of the future may look more like a data scientist than a traditional relationship-based seller. Machine customers don't have emotion, and they won't be swayed with traditional human-based selling tactics. Instead, it may be the job of the salesperson to unlock the buying algorithm governing their client's machine-customer-purchasing behavior, or even try to influence the human that is programming it. They may use their own AI-based sales assistant to help with this. Also, an organization may try to deploy its own "machine sellers" to counter their machine customers.

For Customer Service: We expect in the short term that machine customers will be integrated with current service channels (assisted and/or self-service, and/or direct integration with APIs), but as demand increases, organizations will need to think of dedicated ways (channels) of enabling machine customers.

For product designers and engineers: Products will need to be designed specifically for how machine customers buy (formulaic and without emotion). Companies will want to design products that have no substitutes or ones that meet/exceed buyer specifications, but also have differentiation that the machine customer can identify and factor into its analysis.

A dedicated machine customer business unit will need to develop new revenue streams to increase the odds of success across its business ecosystem. It will require a reexamination of where the organization sits in their business ecosystem. It will not be enough to sell to a machine customer; you will need to think about the products and services adjacent to the machine customer and whether you will provide them, or someone else will. For example, the makers of an autonomous lawnmower should think beyond the core work of mowing the lawn and providing replacement parts. They should also be thinking about how to sell fertilizer, sell landscape design services or create a platform where several homeowners can share a single autonomous mower.

The rise of machine customers will be similar to the rise of digital commerce. New skills, mindsets and technologies will be needed to make it work. And like digital commerce, we expect a machine customer business unit will face much of the same resistance. For a dedicated machine customer unit to work, the BU leaders must be comfortable crossing traditional boundaries to challenge the status quo, especially where there is investment in existing channels, like digital commerce. Recommendations:

- **Identify use cases where your products and services can be extended to machine customers.** Initiate collaboration with your chief digital officer, chief data officer, chief strategy officer, sales leaders and chief customer officer to explore machine customers' business potential. Use the questions posed in Gartner's CX CORE model to determine how machine customers can support your overall CX strategy. (See [Presentation Slides: Break Out of the Customer Management Industrial Complex With CX CORE](#) for more information.)
- **Expose your catalog, pricing and inventory through APIs and data interfaces, so that machine customers can search and understand them.** Aim for real-time data to ensure the accuracy of order pricing and stock availability.
- **Upgrade your commerce platform and operations** to handle the larger volume of orders and requests from machine customers. Be able to detect fake machine customers.

- Pilot the ideas you compile during the identification of use cases to understand the technologies, processes and skills required to implement machine customers effectively. Challenge your product designers and engineers to create products for machine customers that have no substitutes.

Related Research:

[Prepare for Machines as Customers or Risk Being Left Behind](#)

[How the Emergence of Machine Customers Will Impact Your Supply Chain](#)

[Podcast: When Machines Become Customers](#)

[Reimagine Innovation With an Adaptive Innovation Ecosystem Framework](#)

Strategic Planning Assumption: By 2026, those organizations employing GenAI in their CX will achieve 10% higher CX maturity than those that do not.

Analysis by: *Michael Chiu, Don Scheibenreif*

Key Findings:

- Thirty-eight percent of leaders see improving customer experience and retention as the primary purpose of initiatives to deploy applications trained on large language models. ⁷
- Forty-two percent of organizations are at Level 1, and 27% at Level 2, within Gartner's five-level CX maturity model. ⁸
- Seventy-four percent of organizations with high levels of CX maturity were able to grow revenue during the first year of the global COVID-19 pandemic, versus only 54% of organizations with the lowest level of CX maturity. ⁹
- Generative AI is being integrated into many applications involved in customer experience, such as CRM sales, contact center software and chatbots, and digital commerce.

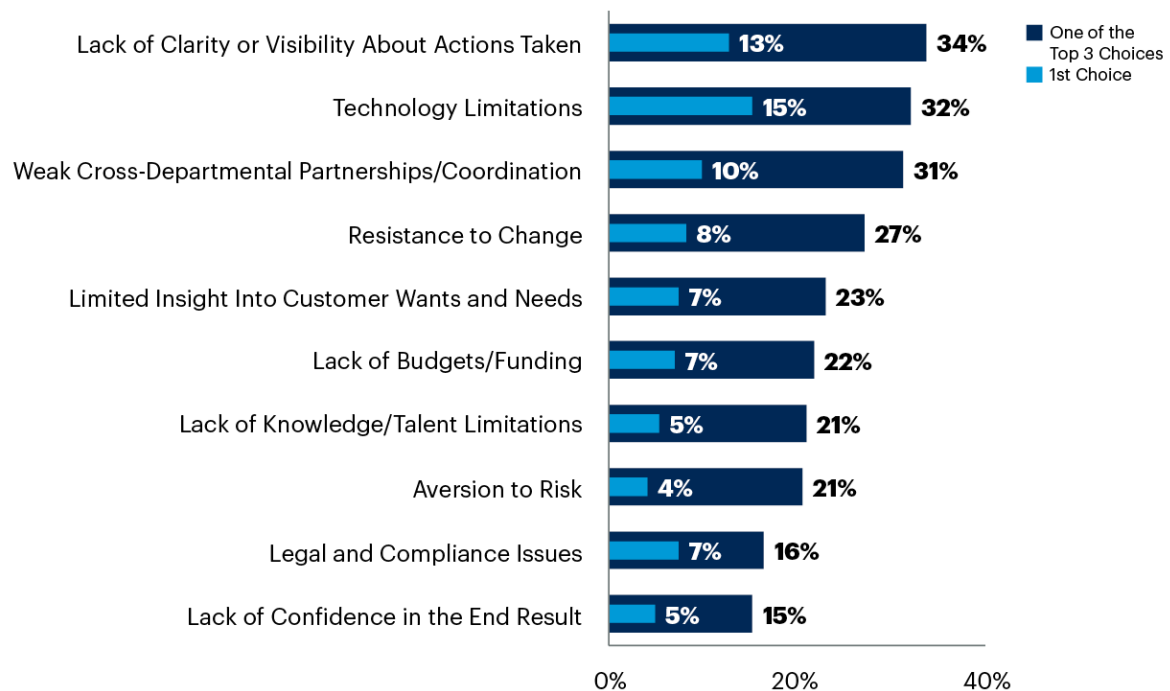
Market Implications:

While the potential for GenAI to enhance customer experience is high, GenAI also will play another role – that of lowering and/or removing impediments to an improved customer experience. The 2021 Gartner CX Priorities for IT and Business Technologists Survey ¹⁰ (see [What's Preventing Organizations From Improving Their Customer Experience?](#)) explored the top impediments to making further improvements to CX (see Figure 2 below).

Figure 2: Top Challenges Preventing an Improved CX

Top Challenges Preventing an Improved CX

Percentage of Respondents



n = 243; All Respondents, excluding "not sure"

Q. What are the top three challenges preventing your organization from delivering an improved customer experience?

Source: 2021 Gartner Customer Experience Priorities for IT and Business Technologists Survey

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GenAI will play a role in addressing these impediments:

Impediment: 34% of those surveyed placed “lack of clarity or visibility about actions taken” in their top three challenges. GenAI’s ability to synthesize vast amounts of customer data rapidly, and to then issue recommendations of suitable CX initiatives to pursue and not to pursue, will greatly help in identifying the next best actions for customers. GenAI can also greatly multiply the number of possible actions to consider, adding to those that a human employee generates on their own, which allows managers to then choose those they deem most promising. Additionally, GenAI’s ability to make sense of a myriad of customer data streams will lead to a better enterprise understanding of customers, enabling faster and more targeted actions to address customers’ problems and needs. Responding to customer inbound requests — emails, for example — would also be a responsibility that GenAI could handle, “closing the (feedback) loop” much faster. GenAI can play a role by recommending actions before the customer is even a customer by crafting more tailored responses to RFPs and offerings that more readily meet the needs of prospects. And GenAI could devise survey questions, develop customer focus group interview guides and converse with customers to help organizations better understand what it is they want — and to then recommend actions to fulfill those customer wants.

Impediment: 32% of those surveyed cited “technology limitations” in their top three challenges. The power of GenAI can break through the technology limitations impediment in a multitude of ways, and provide another technology asset helpful to both customers and to employees providing experiences to customers. For example, with GenAI, virtual assistants (VAs) will be able to converse with customers in humanlike ways, improving CX. GenAI’s abilities to summarize and classify content, when applied to customer conversations and transcripts, can enable improved identification of trends and opportunities. And extending GenAI to customer service reps will enable improved productivity by enabling reps to close out customer interactions with only a few clicks and generating improved call notes more quickly (see [How Can Generative AI Be Used to Improve Customer Service and Support?](#)).

Impediment: 31% of those surveyed cited “weak cross-departmental partnerships/coordination” in their top three challenges. GenAI can draw information from a variety of departments, and package it together into a single, seamless journey for the customer. An example of this would be onboarding: GenAI could facilitate onboarding for new customers, extracting information from several different departments and synthesizing it for the customer. Throughout the onboarding journey or after its completion, GenAI could introduce relevant new products and services to customers, depending on their needs that arise along the way.

Recommendations:

- **Consider using GenAI first with internal employees before applying it to your external CX.** This will allow for more experimentation and familiarization with the technology, and would mitigate the risk of revenue loss, should the technology not perform as intended (see [Gartner Addresses Frequently Asked Questions on ChatGPT](#)). Potential use cases for experimenting with GenAI internally among employees could include using it for internal communications and employee service and support, which is tangentially similar to external customer marketing and customer service and support.
- **Employ a “bet farm” approach with GenAI.** Disaggregate the decision of whether or not to incorporate GenAI in your CX into several smaller “bets” — a concept otherwise known as a “bet farm” — as opposed to going all-in. Each small bet can be further tested with a tiny pilot test.
- **Communicate transparently with those CX employees who may need to change how they perform their jobs because of GenAI.** GenAI can represent a potentially considerable change to CX operations, and to mitigate employee anxiety and resistance about such a change, open communication is imperative.
- **Identify one to three customer journeys in which GenAI may improve the CX within that journey, or improve the employee experience of administering that journey.** Identify at which customer step(s) in the journey GenAI may be beneficial, and run small tests to validate your assumptions. And ensure your organization takes a structured approach to human and technology orchestration — intelligent coordination — particularly for GenAI (see [What Is CX CORE Intelligent Coordination and Why Does It Matter to My Organization?](#)).
- **Identify the risks of using GenAI in CX, and for each risk, develop countermeasures.** Risks of GenAI include incorrect answers, biases, privacy (for publicly-shared models), and copyright violations (see [How Generative AI Can Help Meet Customer Experience Expectations](#)).
- **Assess your vendors’ plans on GenAI.** Challenge your technology vendors to outline their roadmap for using generative AI and related automation technologies to ensure their capabilities are aligned with your CX goals.

Related Research:

[Assess the Value and Cost of Generative AI With New Investment Criteria](#)

[How Generative AI Can Help Meet Customer Experience Expectations](#)

[How Can Generative AI Be Used to Improve Customer Service and Support?](#)

[How to Access Generative AI in Customer Service and Support](#)

[Your Boss Expects a Plan for Generative AI: Here's How to Respond](#)

[Quick Answer: Why Should Service Leaders Care About ChatGPT?](#)

Strategic Planning Assumption: By 2026, at least 70% of organizations will be mandated to acquire composable DXP technology as opposed to monolithic suites, compared to 50% in 2023.

Analysis by: *Irina Guseva and John Field*

Key Findings:

- Organizations selecting a new DXP are increasingly leaning toward cloud-native and composable products, as opposed to monolithic suites.
- The main drivers for a composable DXP acquisition are faster time to market, improved productivity and a move to consumption-based pricing.
- Monolithic DXP suites are making slow progress toward composability, but a purely headless approach lacks the user-friendly business tooling of a monolithic, close-coupled suite.

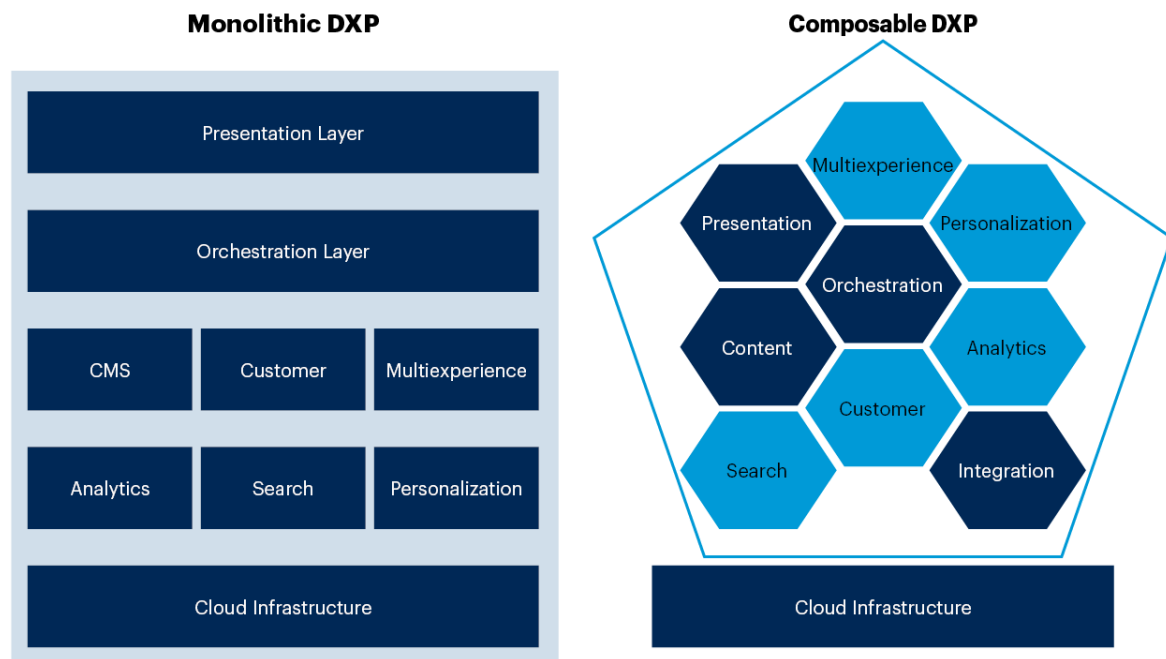
Market Implications:

The demand for a modular approach is driving this change. Composable DXP applications should be built out of smaller, modular capabilities and/or packaged business capabilities (PBCs), as opposed to today's mostly monolithic, all-in-one DXPs. (See Figure 3.) A key indicator of the readiness of a vendor for this new world is how open they are to integration with third-party solutions that may be better than the native capability. (Search, personalization and analytics, for example, are already common integrations.)

The future requires that DXP applications be broken down or decomposed into a set (or sets) of PBCs. Composable application architecture is built as a modular collection of software components that are packaged to represent and encapsulate well-defined business capabilities (also known as PBCs). These PBCs are defined as discrete, task-oriented and independently deployable capabilities.

Figure 3. Monolithic Versus Composable Digital Experience Platforms

Monolithic Versus Composable Digital Experience Platforms



Source: Gartner
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Gartner

The PBCs in DXPs, for example, can be purpose-built and task-oriented, but can also be rebuilt when elements of the purpose or context change. The key is to modernize your technology stack, decompose the DXP monolith, and redesign with task-oriented business processes at the center of your strategy. DXPs also need to be able to stand alongside adjacent and related PBCs, and encourage standardization of user experience (UX) across PBCs in an agile and incremental fashion, with the digital experience also being composable from UX components.

The key change here is in the way the DXP technology is being selected and acquired. Most organizations are already moving away from monolithic solutions and all-in offerings toward a more modular and composable architecture that can come from one or multiple vendors.

Recommendations:

- **Modernize your DXP technology stack** by aligning your architectural and organizational strategy to the principles of composable business.
- **Be prepared to evaluate multiple vendors**, including pure-play DXP vendors, as well as best-of-breed technologies from adjacent markets, such as personalization engine and analytics.
- **Increase your operational agility** by replacing your DXP monolith with a composable architecture and planning a roadmap with an incremental and modular approach.
- **Future-proof your digital experience stack** by implementing granular, task-oriented PBCs, which are key for faster time to market and higher adoption of a DXP. Champion the leadership mindset of modularity and change as the essential core competence for a next-gen growing business.

Related Research:

[Innovation Insight for Digital Experience Composition](#)

[Magic Quadrant for Digital Experience Platforms](#)

[Critical Capabilities for Digital Experience Platforms](#)

A Look Back

In response to your requests, we are taking a look back at some key predictions from previous years. We have intentionally selected predictions from opposite ends of the scale — one where we were wholly or largely on target, as well as one we missed.

This report is too new to have on-target or missed predictions.

Evidence

¹ **2022 Gartner CEO and Senior Business Executive Survey:** This survey was conducted to examine CEO and senior business executive views on current business issues, as well as some areas of technology agenda impact. The survey was conducted from July 2021 through December 2021, with questions about the period from 2021 through 2023. One-quarter of the survey sample was collected in July and August 2021, and three-quarters was collected in October through December 2021. In total, 410 actively employed CEOs, and other senior executive business leaders qualified and participated. The research was collected via 382 online surveys and 28 telephone interviews. The sample mix by role was CEOs (n = 253); CFOs (n = 88); COOs or other C-level executives (n = 19); and chairs, presidents or board directors (n = 50). The sample mix by location was North America (n = 176), Europe (n = 97), Asia/Pacific (n = 86), Latin America (n = 40), the Middle East (n = 4) and South Africa (n = 7). The sample mix by size was \$50 million to less than \$250 million (n = 58), \$250 million to less than \$1 billion (n = 81), \$1 billion to less than \$10 billion (n = 212) and \$10 billion or more (n = 59). Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

² See [The Programmable Economy Is Driving a New Growth Reality and Business Opportunities](#).

³ See [Forecast: Internet of Things, Endpoints and Communications, Worldwide, 2021-2032, 2Q23 Update](#).

⁴ **2021 Gartner Digital Commerce State of the Union Survey:** This survey was conducted online from 31 May through 14 June 2021 to learn the state of digital commerce across multiple verticals and business models, identify correlations between various research components, and understand how organizations are deploying innovations and new touchpoints. In total, 103 IT and business leaders participated, of which 40 were members of Gartner's Research Circle, a Gartner-managed panel — and 63 were from an external sample. Participants from North America (n = 40), EMEA (n = 43), Asia/Pacific (n = 10) and Latin America (n = 10) responded to the survey. Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

⁵ **2022 Gartner Digital Business Buying Behavior Survey:** This survey seeks to understand the behavior of IT services buyers to support their digital business — what they are buying, who is buying, and what the use cases are for technology and delivery model preferences. The survey was conducted online from November through December 2022, among 799 respondents from organizations with annual revenue of at least \$50 million or equivalent from North America (33%), Western Europe (25%), Asia/Pacific (24%), and Southern Europe (18%). Industries surveyed include banking and securities, manufacturing, natural resources, communications, media and services, government, retail, wholesale trade, insurance, utilities, transportation, healthcare providers, and education. Qualified respondents are director-level or higher decision makers or decision influencers in the selection of consulting or outsourcing services for their organization. They are also involved in the selection, evaluation or day-to-day management of at least one of the following consulting or outsourcing services within the past two years: business consulting, technology consulting, application implementation, application managed services, infrastructure implementation, infrastructure managed services, infrastructure as a service, hardware support, and business process services. Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

⁶ [Why HP Is Thinking Beyond Ink for Subscriptions](#), HP Inc.

⁷ [Beyond the Hype: Impact of ChatGPT and Generative AI](#) webinar polls, March through April 2023; n = 2,554.

⁸ Gartner Score Model for Customer Experience, September 2020 through June 2023.

⁹ **2021 Gartner Executive Leader Customer Experience Baseline Survey:** These survey results provide a baseline understanding of executive leaders' awareness of, attitudes toward and priorities for customer experience. The survey sought to understand the gap between what executives believe about customer experience vs. how they act. The survey was conducted online from November through December 2021 among 483 respondents from the U.S., Western Europe and Asia/Pacific. The companies were screened to be midsize, large or global enterprises. The respondents were required to have active participation in setting the strategy or execution of strategy for the enterprisewide customer experience strategy. Disclaimer: The results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

¹⁰ 2021 Gartner Customer Experience Priorities for IT and Business Technologists

Survey: This study was conducted to determine which customer experience (CX) capabilities organizations are investing in and explore how these decisions are affected by the CX maturity of the underlying organization. The research was conducted online from 13 November through 10 December 2021 among 244 respondents in North America, Western Europe and Asia/Pacific. Companies were screened for having a minimum of \$50 million in worldwide annual revenue for the last fiscal year and a minimum of 250 employees worldwide. The sample represented organizations in the U.S. (n = 43), Canada (n = 15), the U.K. (n = 63), India (n = 45), Singapore (n = 39) and Australia/New Zealand (n = 39). To qualify, respondents had to be leading the setting of strategic objectives and priorities for at least one CX-related project activity, or on a team responsible for meeting the strategic objectives and priorities, or an influencer in decisions related to CX. They also had to be knowledgeable about business priorities and/or business benefits for at least one CX project in the past year, along with spending more than 25% of their typical work day on CX improvement projects. Quotas were applied for countries, industries, role, involvement in CX and annual revenue. Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

Recommended by the Authors

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