Market Guide for Conversational AI Solutions

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Initiatives:Enterprise Applications Leadership; Customer Service and Support Technology

The market of conversational AI is evolving rapidly and new solutions are emerging. Applications and software engineering leaders should use this research to navigate the CAI space and evaluate options based on current trends in use cases and vendors' capabilities.

Additional Perspectives

- Invest Implications: Market Guide for Conversational AI Solutions(09 April 2024)

Overview

Key Findings

- Generative AI (GenAI) accelerated the evolution of conversational AI (CAI) platforms and created opportunities for new GenAI-native solutions, making competition fiercer, intensifying market consolidation and forcing vendors to evolve differentiating capabilities and a clearer use-case focus.
- GenAI-native solutions for CAI are largely based on trailblazing approaches. Although they unlock unprecedented capabilities, the range of use cases they can support is more limited compared to established dedicated platforms.
- Demand for CAI capabilities is increasing across numerous use cases, both customer and employee-facing. However, leaders find it challenging to discern solutions that can best meet their requirements in such a rapidly evolving market.

Recommendations

- Mitigate the risks of market consolidation by favoring open solution architectures and vendors that provide distinctive GenAI capabilities and use-case-specific expertise.
- Balance cost and value of GenAI-native approaches by accounting for the specific benefits and risks GenAI technology brings and by evaluating opportunities to leverage GenAI-native solutions in employee-facing use cases first.
- Avoid mismatches in requirements and capabilities by clearly identifying the user experience (UX) focus and the scope of your use case, and then assessing pros and cons of underlying CAI approaches the vendor can provide to enable the use case.

Market Definition

Gartner defines conversational AI (CAI) solutions as enterprise software that provides tools and controls to develop, customize and deploy AI-enabled applications capable of interacting with users in natural language. Conversation modalities include text, voice, image and video, or any combination of these. Conversational applications built leveraging a CAI solution can enable natural language interactions to fulfill a request, such as answering a question or completing a task. CAI solutions support a broad variety of organizationwide AI-driven automation and human-augmentation use cases (employee- and customer-facing) across business units to improve business outcomes such as employee productivity or customer satisfaction.

The market for CAI solutions that became strong in 2018 and consolidated enterprise approaches gained momentum through 2022. That trend culminated in 2023 with a high degree of standardization and enterprise-grade robustness of capabilities offered by dedicated CAI platforms.

The surfacing of large language models (LLMs) had a disruptive impact, and their ability to leverage contextual data (e.g., by prompt engineering via retrieval augmented generation [RAG]), enabled the emergence of new approaches for building GenAI-native applications and the improvement of time-honored CAI approaches, such as intent-based natural language understanding (NLU). In parallel to the evolution of dedicated CAI platforms, which are still very relevant solution types in the CAI space, we are observing the emergence of innovative products, for example, catering to employee assistance (such as in the case of virtual assistants for employees) and enabled by GenAI technology. Moreover, virtually all enterprise applications are being augmented with GenAI-enabled CAI capabilities as extensions of their platform stack.

The result is a market with CAI solutions that are adapting to best leverage the new GenAI-native functions, on top of traditional CAI approaches, hence referred to as hybrid or independently of them. Although several other capabilities, such as analytics or life cycle management, are key for enabling enterprise-grade deployments of conversational applications, the core bot-building approach (GenAI-native versus hybrid) correlates with the supported use cases. In general, newly available GenAI-native solutions are regarded as more suitable to support employee-assistant use cases, but require greater risk management by application leaders for large-scale customer-facing implementations.

Organizations are keenly aware of the potential gains CAI solutions can unlock in terms of productivity, efficiency and customer experience improvement. While the demand for CAI capabilities increases, leaders struggle to identify the solution that best fits both their AI strategies and business requirements in an increasingly crowded and competitive market.

Must-Have Capabilities

The must-have capabilities for this market are productized functionalities to **build, customize and deploy conversational applications** based on GenAI techniques, traditional CAI tooling, or both (hybrid).

Standard Capabilities

The standard capabilities for this market include:

- **Crucial core operations capabilities,** in particular:
  - **Privacy, security and compliance:** The ability to handle privacy, enterprise compliance and security aspects in the solution with ease and control.
  - **Analytics as part of app life cycle management:** The ability to collect, monitor and analyze performance data to get meaningful and actionable insight for reporting, oversight and improvement purposes, which is key for the overall app life cycle management.
- **Back-end integration readiness and customization:** The ability to set up or personalize communication with critical back-end systems, such as services (e.g., cloud services, AI frameworks), data sources (e.g., CRM, customer data platform) or applications (e.g., contact center as a service, martech, and analytics and business intelligence).

- **Basic GenAI-specific capabilities:**
  - **LLM prompt engineering:** The discipline of providing inputs, in the form of text or images, to generative AI models to specify and confine the set of responses the model can produce. LLMs without prompt engineering are just stand-alone tools. They are not usable as such, and they need grounding for improved factual accuracy and relevance, for example, via RAG. Some vendors provide an open architecture that allows customers to bring their own language model or any third party's.
  - **GenAI-specific guardrails:** The capabilities needed to mitigate risks specifically entailed by LLMs and GenAI approaches, in relation to data vectorization, tokenization limits, content anomaly and response verification, but also privacy, regulatory compliance and security in relation to interfacing with third-party LLMs and cybersecurity.

Optional Capabilities

The optional capabilities for this market include:

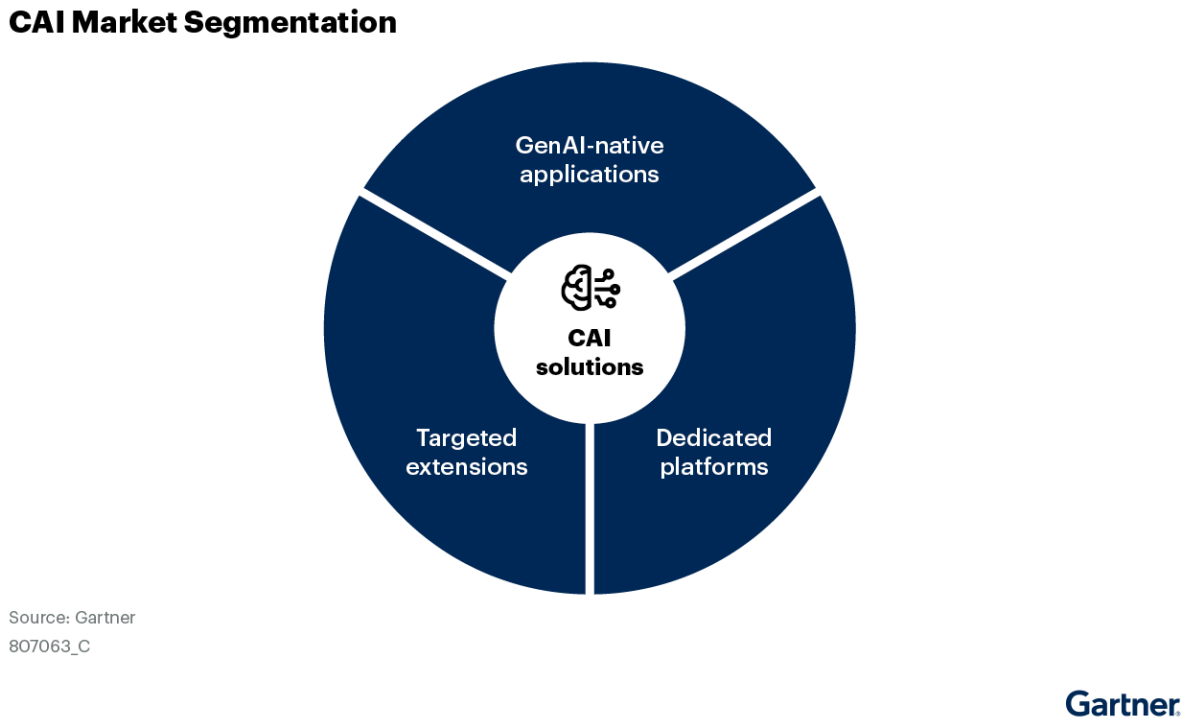
- **Traditional CAI capabilities,** which comprise:
  - **Dialogue management:** The ability to handle complex and sophisticated dialogue experiences that may span different types, like Q&A, query, transactional, negotiation, and review. It includes the enablement of graphical UIs (GUIs) for visual conversational-flow building, including tools to easily manage any relevant fulfillment logic during the dialogues.
  - **Composite intent-based NLU:** The ability to understand the user's natural language, which includes intent matching, based on implementation-specific intent sets, as well as entity recognition, leveraging the multilayer composition of, for example, rule-based and machine learning techniques, including LLMs.
  - **Interaction multimodality:** The ability to understand and implement sophisticated voice or video experiences (listening and speaking) on dedicated devices, interfaces or telephony.
  - **Multichannel connectivity:** The ability to connect to a variety of different digital channels, use specific rich features of different channels and operate multiple channels centrally. Channels may include messaging platforms, website chats, webhooks, telephony, voice speakers and others.

- **Advanced GenAI capabilities:**
  - **GenAI engineering:** GenAI engineering tools enable enterprises to operationalize models faster, balancing both governance and time to market. AI engineering tools can be subdivided into model-centric and data-centric tools. We consider DataOps, LLMOps, LangOps or FMOps, or more broader terms such as ModelOps or MLOps, as a subset of AI engineering.
  - **Vendor-specific LLMs:** The ability vendors may have to provide a self-hosted domain-specific LLM service, such as LLMs being built by the vendors in-house, or a fine-tuned version of open-source or third-party proprietary LLMs.

The delivery modes for such solutions, and the corresponding segments of the CAI market Gartner identifies, are the following (see Figure 1):

- **GenAI-native applications —** Customizable in terms of integration to underlying data sources and repositories, and supplied as SaaS, these applications are GenAI-first stand-alone solutions that come with a dedicated user interface (UI) and that can also be integrated within a broader suite of services and products provided by the same vendor. Consumer-specific apps and large language model (LLM) services provided via API — although offered with additional engineering tools that allow building enterprise apps — are not meeting the inclusion criteria for this segment.
- **Targeted extensions —** Such extensions are predominantly GenAI-native productized capabilities(stand-alone products, add-ons, baseline or premium features) of an underlying platform, and they are intended to enable conversational interactions for the enterprise application's targeted aims. They are then typically focused on a particular vertical, use case or requirement. Dedicated UIs that enable conversational search on top of an insight engine, or GenAI-native assistants embedded in a CRM platform, are examples of targeted extensions in the scope of this segment.
- **Dedicated platforms —** These platforms are SaaS or PaaS-based services upon which applications can be developed. Platforms include dedicated and extensive low-code/no-code capabilities to design and maintain custom virtual assistants for enabling front-office and/or back-office automation. They leverage both GenAI-enabled and traditional CAI capabilities, hence their CAI technology stack is hybrid. Vendors of dedicated platforms are sometimes able to support broad language automation requirements of organizations beyond CAI, for example providing native voice automation competencies.

Figure 1. CAI Market Segmentation



Market Description

We characterize CAI solutions based on the following criteria:

- **UX focus** — This criterion pertains to whether the solution is predominantly focused on augmenting employee experience (EX) or on improving customer experience (CX).

- **Use-case scope** — This criterion refers to the breadth of CAI use cases the solution can potentially enable. Possible scopes are:
  - **Tasks** — Task-specific elements within a process (e.g., finding answers to specific FAQs) or selective workflows (e.g., routing conversations)
  - **Processes** — Complete workflows and end-to-end processes (e.g., appointment booking, recruitment automation, contextual assistance for online shopping, debt collection automation)
  - **Jobs** — Function-specific automation and human augmentation (e.g., customer service chatbots, HR assistant)
  - **Business units (BUs)** — BU-wide automation and human augmentation (e.g., contact center automation, ITSM automation)
  - **The enterprise** — Cross-function automation and human augmentation (e.g., enterprisewide GenAI-enabled conversational search)
- **Enabling technology** — This criterion corresponds to the underlying technologies that power the CAI solution and enable the very same conversational application.
  - Some solutions are exclusively or mostly grounded on GenAI technology (i.e., LLM prompt engineering), so they are defined as “GenAI-native.”
  - Solutions whose background precedes GenAI technology as we know it today leverage traditional CAI tools and GenAI techniques, hence they are “hybrid.”
  - Solutions that leverage uniquely traditional CAI tools, without any traces of LLM augmentation, are disappearing and should be evaluated with caution.

Table 1 covers the characterization of the CAI market segments per these criteria.

Table 1: Characterization of the CAI Market Segments

(Enlarged table in Appendix)

Criterion	GenAI-native applications	Targeted extensions	Dedicated platforms
UX focus	**EX**: GenAI-native applications are mostly leveraged for employee-facing use cases, such as IT support, HR and onboarding assistance, but also content generation via natural language (NL) prompts. Customer-service-agent-assist products, which may be found in this segment, are an exception, as they are employee-facing solutions aimed to improve the overall CX.	**EX or CX**: Targeted extensions offer capabilities compatible with an EX or a CX focus depending on the nature of the underlying platform. For example, an extension of a contact center platform is primarily focused on CX enhancement, while EX augmentation is clearly the goal of extensions found on top of CRM platforms.	**EX and/or CX**: While some dedicated platforms are specialized in either EX or CX improvement, general purpose (GP) platforms are well-versed in both use-case areas.
Use-case scope	**Jobs**: GenAI-native applications may offer coverage for several assistance types across a spectrum of employee-facing use cases (from customer service agent assistance to conversational access to BI data or code generation). Although this is true for solutions designed to be function-agnostic, others are also found to be laser-focused on niche use cases, such as developer support.	**From jobs to BUs**: The scope of use cases potentially supported by extensions is defined by the focus of the product they are augmenting or they are built on top of. Such scope is then typically sized to enable conversational search, if the underlying platform is an insight engine, or IT support automation in the case of an underlying ITSM platform, and so on.	**From BUs to enterprise**: Dedicated platforms provide the broadest use-case coverage in the CAI domain, to the extent of sometimes being GP CAI products. BU and enterprisewide scope is achieved by vendors offering additional competencies and products, which are not discussed in this report. For example, CAI platforms focused on contact center automation are expected to offer advanced, native voice-automation competencies and live-chat modules.
Enabling technology	**GenAI-native first**: These solutions are exclusively leveraging GenAI-native approaches to enable conversational interactions, and none of the traditional CAI tools and techniques.	**Mainly GenAI-native**: New entries qualify as GenAI-native, although some targeted extensions, which CRM or ITSM platform vendors have been offering for years before the hype around GenAI, are still largely based on traditional CAI techniques or are being updated to become hybrid.	**Hybrid**: Dedicated platforms provide support for hybrid approaches.

Source: Gartner (March 2024)

The same criteria we use to characterize these solution segments can also be leveraged by leaders to select the solution types more likely to meet specific use cases' requirements (see Note 1).

Market Direction

The CAI market has never been so crowded and diverse, and interest in chatbot-enabled automation has never been higher. The conversational AI market is projected to reach $36 billion in revenue by 2032, up from $8.2 billion in 2023 (see Emerging Tech: Revenue Opportunity Projection of Conversational AI). During the last year, investments in conversational AI have increased due to GenAI enabling new capabilities and demand for CAI solutions (see Emerging Tech: GenAI Is Driving Investment for Conversational AI). However, while CAI solutions are in high demand today, vendors and buyers should plan for fierce consolidation and specialization, not just within the CAI solution market but also in the tightly clustered AI and natural language technology (NLT) ecosystem.

We foresee the following drivers and restraints shaping CAI:

Increasing Availability of CAI Capabilities Throughout All Enterprise Application Areas

The advent of GenAI and LLMs has significantly expanded the chances for nearly all enterprise applications to incorporate conversational features, transforming the way businesses interact with their systems and customers. Over the next 12 months, we can expect to see further integration of CAI capabilities into enterprise applications, driving a major shift in the market landscape and further eroding the value proposition of dedicated CAI solutions.

Increasing Demand for Automation and AI

The hype and disruption caused by GenAI and LLMs have further fueled the demand for automation and AI technologies. Businesses are increasingly seeking to leverage these advanced CAI solutions to automate complex tasks, enhance customer interactions and gain competitive advantage. This trend is likely to continue, driving further innovation and growth in the CAI market as a whole.

Democratization of Technology Diminishing Market Share

The rapid advancements in AI technology have led to a democratization of CAI solutions, with more companies able to access and implement these technologies. This led to a more fragmented market with smaller market shares for individual providers. However, this could also spur further innovation as companies strive to differentiate their offerings.

Higher Expectations About Capabilities but Limited Understanding of Complexity and Risks of CAI Use Cases

The hype around GenAI and LLMs has raised expectations about CAI applications' capabilities. However, organizations still have a limited understanding of the complexity involved in implementing these technologies and the potential risks they pose, such as ethical considerations and data privacy issues. This could temporarily slow down the adoption of these new solutions, as businesses grapple with these challenges in real-world production deployments.

Market Analysis

Market Segments Analysis

CAI is progressively shifting from characterizing a set of products to qualifying a collection of capabilities. Not all CAI capabilities are delivered equally of course, nor is GenAI technology alone currently able to support the language automation needs of organizations across all possible use cases.

Dedicated platforms, which until early 2023 offered the highest degree of standardization and enterprise-grade robustness of CAI capabilities, are still relevant solutions in the CAI landscape. But leaders should account for the existence of all the other solutions that we are covering in this Market Guide before choosing the vendor that can best support their needs.

GenAI-Native Applications

GenAI-native conversational applications can potentially target consumers or enterprises. Consumer applications are not in the scope of this report, which is focused on enterprise applications. Several providers of LLM technology can also enable enterprise conversational applications via API and dev tools, and these services are excluded from this report too.

For a solution to qualify as an application, it needs to be delivered as a stand-alone product as well, such as a web app. This entails the app has some form of UI and is embedded within a broader ecosystem of services.

Conversational apps should be offered with low-code/no-code functionalities for connecting with relevant data sources and for the streamlined orchestration of different tasks and tools, such as document processing and potentially multiple LLMs. Given that GenAI-native applications are emerging at the time of writing (many are still in beta or preview), we haven't been able to gain deep visibility on some of their exact capabilities case by case and on how they differentiate one from the other.

GenAI apps can enable conversational interactions in relation to employee assist use cases in the areas of data analysis, code generation, software development, customer service, IT support, HR and onboarding.

Targeted Extensions

We have observed a number of GenAI-native CAI solutions surfacing that qualify as targeted extensions across the whole spectrum of enterprise applications. This is consistent with the findings of the 2023 Gartner AI in the Enterprise Survey, which found using GenAI embedded in existing applications is the top method to fulfill GenAI use cases and is substantially higher than the use of GenAI stand-alone tools: Embedded capabilities were preferred as primary enabling approach by 34% of the respondents, versus 19% that favored stand-alone tools. [1] When offered as an embedded GenAI native extension for Q&A and conversational search use cases, CAI is often perceived more like a 'capability' rather than a stand-alone dedicated product.

Notably, this segment includes targeted CAI products that some enterprise application vendors have been offering for years before the hype around GenAI. These solutions mostly leverage traditional CAI technology, such as intent-based NLU and dialogue scripting functionalities. But they have historically been offered by non-CAI vendors in addition to their core platform (e.g., ERP, CRM or ITSM platform) and hence, with a targeted focus on a particular vertical, use case or requirement.

Such solutions typically offer less customization options when compared to dedicated platforms and are less scalable across different use cases inside organizations. They now coexist in many vendors' offerings as legacy products, whose relevance is sometimes eclipsed by the investments made on GenAI-native conversational capabilities. At the time of writing, such targeted products are still sold and relevant, especially when it comes to support user journey automation use cases that require more robustness and control compared to what GenAI-native applications can offer today.

Some illustrative examples of enterprise application areas in which CAI targeted extensions are particularly relevant are:

- **Contact Center** — CAI solutions are found as targeted legacy products not only based on traditional CAI techniques but also as GenAI-native functionalities, especially in agent assist products.

- **CRM** — In CRM platforms, emerging GenAI-native conversational layers are embedded for automating Q&A and content generation, as well as for streamlining some platform-specific tasks, such as the creation of customized close plans for sales.
- **Intelligent document processing** — GenAI-naive functionalities allow employees to interact with content conversationally, for example to extract information and insights and to summarize documents.
- **Insight engines** — GenAI-native capabilities are used to enable conversational search and information retrieval.
- **IT service management (ITSM)** — Targeted extensions enable IT staff augmentation — when it comes to finding information, writing knowledge articles and replying in tickets — and IT support for employees.
- **Productivity software** — GenAI-native products can carry out a multitude of employee assist tasks, the majority of which tend to relate to content generation via NL prompts. These extensions can provide content suggestions and summaries, answer routine emails, summarize discussions from email threads, assist with searches and offer coding help.

In addition to these examples, CAI extensions are also proliferating across knowledge management platforms, BI and augmented analytics platforms, robotic process automation (RPA) platforms, business process automation (BPA) platforms, instant-messaging platforms, and ERP platforms. This report does not cover vendors primarily operating in these areas.

Dedicated Platforms

Several CAI platform vendors have been recalibrating their market positioning strategies. A significant number of vendors continue to categorize their products under the umbrella of CAI solutions. However, some vendors have pivoted toward a GenAI-first approach, to the extent of providing LLMOps-specific capabilities. Simultaneously, another group of vendors has chosen to stress their focus on supporting specific CX or EX use cases.

This strategic diversity in positioning reflects the CAI platform's evolving landscape. Vendors try to stay competitive and differentiate by leveraging their CAI-specific expertise and tools, augmenting and revamping them to stay ahead of the GenAI trends.

All platform vendors are expected to augment their preexisting, traditional capabilities with LLMs, but we expect they will offer GenAI-native modules. At the moment prompt engineering via RAG is not differentiating, it just gives platform vendors parity with solutions in the other segments. Differentiation should be sought in the specific guardrails for GenAI that platforms can provide, especially in terms of response validation and vendor-specific LLMs. The value of these guardrails resides first and foremost in mitigating privacy and data protection risks as enterprises avoid end users sharing data with additional third parties.

In addition to that, CAI platforms are still in the best position to support use cases that entail the automation of complex processes and user journeys, where accuracy and robustness are critical. Rule-based approaches for dialogue scripting, or intent-based NLUs, may be considered obsolete at first sight but prove to offer a solid approach to design and implement sophisticated and solid dialogue experiences. This is particularly relevant in large-scale, customer-facing deployments.

Capabilities

As per the Market Definition, CAI solutions must provide productized functionalities to **build, customize and deploy conversational applications,** based on GenAI techniques, traditional CAI tooling or both (hybrid). How this is achieved depends on standard and optional capabilities.

The standard capabilities for this market we defined in the Market Definition section above are:

- Core operations capabilities, in particular:
  - Privacy, security and compliance
  - Analytics as part of app life cycle management
- Back-end integration readiness and customization
- Basic GenAI-specific capabilities:
  - LLM prompt engineering
  - GenAI-specific guardrails

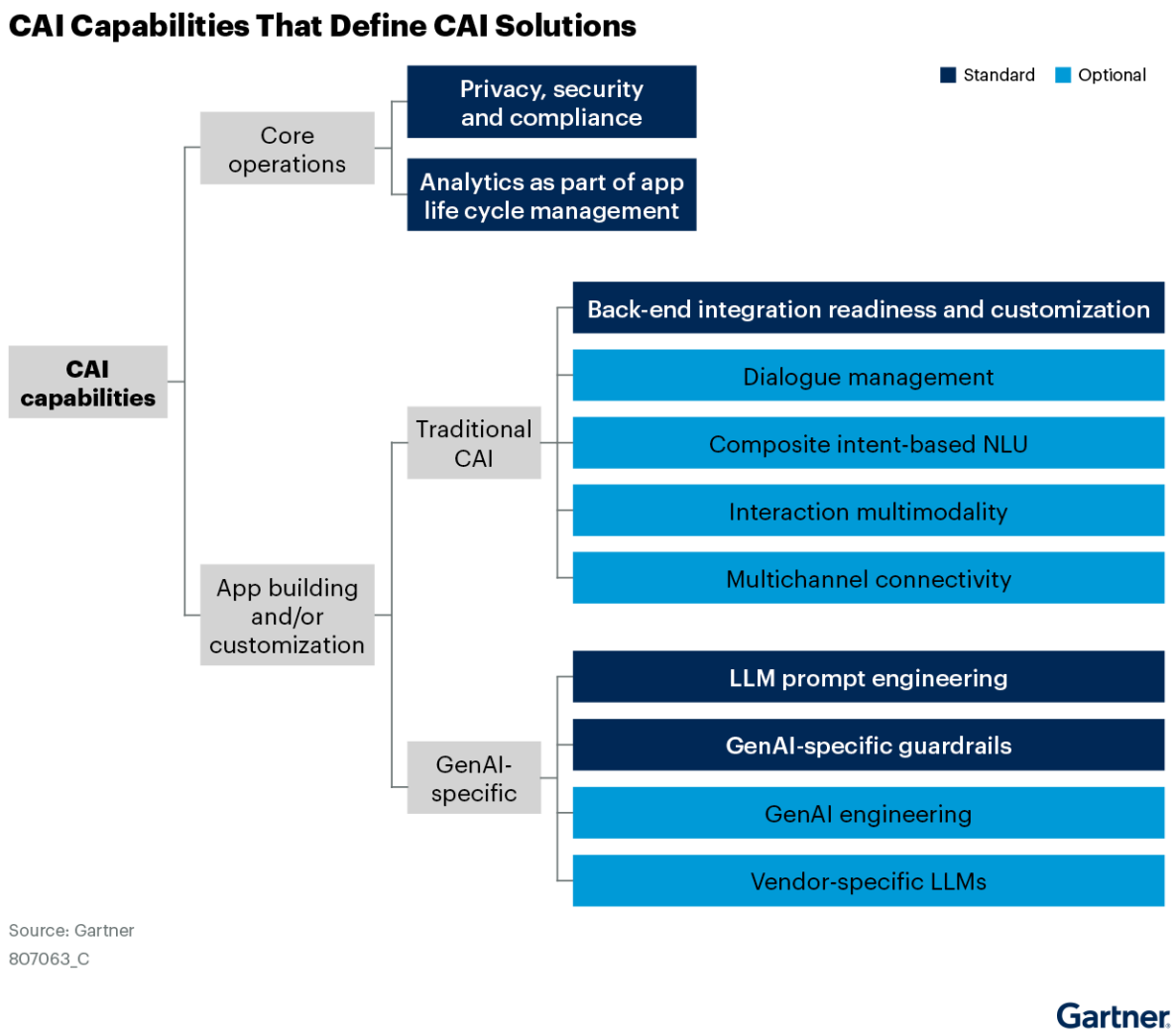
The optional capabilities for this market instead include:

- Traditional CAI capabilities, which comprise:
  - Dialogue management
  - Composite intent-based NLU
  - Interaction multimodality
  - Multichannel connectivity
- Advanced GenAI capabilities:
  - GenAI engineering
  - Vendor-specific LLMs

Notably, traditional CAI capabilities are optional because we cannot assume they are standard across all CAI solutions in the market. Standard is the proxy for the set of capabilities shared across all solution segments (from GenAI-native applications to dedicated platforms). This common denominator set of capabilities does not include the traditional capabilities, which were considered critical until early 2023. Now, you can enable a CAI application without leveraging dialogue management and intent-based NLU, provided your use case allows you to rely on GenAI-native approaches only.

Figure 2 overviews the capabilities that define CAI solutions, highlighting in particular the difference between standard and optional ones.

Figure 2: CAI Capabilities That Define CAI Solutions



On top of these capabilities, vendors may offer additional competencies that can be relevant to support specific requirements of some use cases. As these functionalities, productized modules or services are beyond the scope of how we define CAI solutions, they are not factored into this analysis, although they are listed in the notes (see Note 2).

Representative Vendors

The vendors listed in this Market Guide do not imply an exhaustive list. This section is intended to provide more understanding of the market and its offerings.

The following tables cover a list of representative vendors that offer solutions compatible with the definition we provide of the relevant market segments.

GenAI-native apps are included in Table 2. The three solutions we mention are enterprise products, since consumer apps are out of the scope of this note.

Table 2: GenAI-Native Apps

Vendor name	Headquarters location	Solution name
Anthropic	San Francisco, California, U.S.	Claude Pro [2]
Amazon Web Services (AWS)	Seattle, Washington, U.S.	Amazon Q [3]
OpenAI	San Francisco, California, U.S.	ChatGPT Enterprise

Source: Gartner (March 2024)

Targeted extensions, with particular reference to underlying IdP, ITSM, insight engine, CRM, contact center and productivity software, are included in Table 3.

Table 3: Targeted Extensions

(Enlarged table in Appendix)

Vendor name	Headquarters location	Solution name	Underlying platform
Alkymi	New York, New York, U.S.	Alpha	Intelligent document processing
Cambridge Semantics	Boston, Massachusetts, U.S.	Knowledge Guru [4]	Insight engine
Freshworks	San Mateo, California, U.S.	Freddy AI	CRM, ITSM
Genesys	Menlo Park, California, U.S.	Genesys AI	Contact center
Google	Mountain View, California, U.S.	Gemini for Google Workspace	Productivity software
Instabase	San Francisco, California, U.S.	Instabase AI Hub	Intelligent document processing
Microsoft	Redmond, Washington, U.S.	Copilot for Microsoft 365	Productivity software
Salesforce	San Francisco, California, U.S.	▪ Einstein Copilot ▪ Einstein Bots	CRM
ServiceNow	Santa Clara, California, U.S.	▪ Now Assist ▪ Virtual Agent	ITSM
Squirro	Zürich, Switzerland	SquirroGPT	Insight engine
Verint	Melville, New York, U.S.	Conversational AI	Contact center

Source: Gartner (March 2024)

Table 4 covers dedicated platform solutions, with some additional reference to the predominant — although sometimes not exclusive — UX focus of the offering, or UX-agnostic, meaning the platform is a GP product.

Table 4: Dedicated Platforms

(Enlarged table in Appendix)

Vendor name	HQ	Solution name	UX focus
[24]7.ai	Campbell, California, U.S.	Engagement Cloud	CX
Ada	Toronto, Canada	Ada's AI Agent	CX
Aisera	Palo Alto, California, U.S.	▪ AiseraGPT ▪ AI Copilot ▪ Gen AI Platform	GP
Amelia	New York, New York, U.S.	Amelia Conversational AI Platform	GP
Avaamo	Los Altos, California, U.S.	▪ Avaamo Conversational AI ▪ LLaMB	GP
AWS	Seattle, Washington, U.S.	Amazon Lex	CX
Boost.ai	Sandnes, Norway	Conversational AI Platform	GP
Cognigy	Düsseldorf, Germany	Cognigy.AI	GP
DRUID	Bucharest, Romania	Conversational AI Platform	GP
Espressive	Santa Clara, California, U.S.	Espressive Barista	EX
Google	Mountain View, California, U.S.	Contact Center AI Platform	CX
Gupshup	Fremont, California, U.S.	Conversation Cloud	CX
IBM	Armonk, New York, U.S.	▪ watsonx Assistant ▪ watsonx Orchestrate	GP
iGenius	Milan, Italy	Crystal	EX
Interactions	Franklin, Massachusetts, U.S.	Interactions Intelligent Virtual Assistant	CX
Kore.ai	Orlando, Florida, U.S.	XO Platform	GP
Leena AI	San Francisco, California, U.S.	Leena AI	EX
LivePerson	New York, New York, U.S.	Conversational Cloud	GP
Microsoft	Redmond, Washington, U.S.	Microsoft Copilot Studio	CX
Moveworks	Mountain View, California, U.S.	Enterprise Copilot	EX
Netomi	San Mateo, California, U.S.	Netomi AI	CX
Omilia	Limassol, Cyprus	Omilia Cloud Platform	CX
OneReach.ai	Denver, Colorado, U.S.	GSX Platform	GP
Openstream.ai	Bridgewater, New Jersey, U.S.	EVA	GP
PolyAI	London, U.K.	PolyAI	CX
Rasa	San Francisco, California, U.S.	Rasa Platform	GP
Sprinklr	New York, New York, U.S.	Conversational AI Platform	GP
Uniphore	Palo Alto, California, U.S.	U-Self Serve	CX
Yellow.ai	San Mateo, California, U.S.	Yellow.ai Dynamic Automation Platform	GP

Source: Gartner (March 2024)

Vendor Selection

The providers named in this guide were selected to represent the CAI solutions market. Sources for this list are published Gartner research, inquiries with end users, provider briefings and publicly available information. Inclusion was determined on several criteria, but mostly the relevance of vendors in conversations we had with clients in 2023 and the number of Gartner reports they appeared in during the same time frame. This is not a ranking and should not be interpreted as statements about the strength of a provider's offerings or its depth of expertise.

Market Recommendations

Application and software engineering leaders responsible for selecting CAI solutions should:

- Carefully design their use case in terms of UX focus, scope and risks, which are largely bound to the application's degree of exposure to external stakeholders and the sensitivity of the content the application may handle in terms of inputs and outputs.
- Identify more granular requirements that the CAI application has to meet and prioritize them, starting from language support and then expanding to multimodality (if applicable), privacy and security, and integration to back-end systems and channels.
- Familiarize themselves with risks that are intrinsically bound to GenAI-native products, and assess the GenAI-specific guardrails that vendors can offer to mitigate them.
- Identify requirements that relate to additional competencies, beyond core operations and conversational app building and customization. Examples include voice biometrics, content generation, intelligent document processing or enterprise search.
- Gain visibility on the solution's overall scalability to other potential use cases. If a solution is adopted to be leveraged in customer service, HR assistants may entail similar or different considerations when it comes to identifying requirements and matching them to vendors' capabilities.
- Be open to best-of-breed approaches when onboarding new solutions, and be prepared for significant consolidation of the market, as the range of capabilities offered by vendors is constantly changing, as is the vendor distribution in the AI-technology landscape and viability. Open architectures should be preferred, and assets, such as fine-tuned LLMs or user journey designs, should be readily reusable when switching to different solutions or integrating with them.

Acronym Key and Glossary Terms

CAI	Conversational artificial intelligence
CX	Customer experience
EX	Employee experience
GP	General purpose
LLM	Large language model
NL	Natural language
NLU	Natural language understanding
RPA	Robotic process automation
UI	User interface
UX	User experience

Evidence

[1] **2023 Gartner AI in the Enterprise Survey.** This study was conducted to understand the keys to successful AI implementations and their impact on the broader AI that has been brought by generative AI. The research was conducted online from 19 October through 21 December 2023 among 703 respondents from organizations in the U.S., Germany and the U.K. The main sample consisted of 645 out of the 703. Organizations were required to have developed or intended to deploy at least two AI initiatives within the next three years. Respondents were required to be part of the organization's corporate leadership or report to corporate leadership roles. Fifty-eight out of 703 are the business intelligence (BI) sample. Organizations were required to have developed or intended to deploy at least one AI initiative within the next three years. Respondents were required to be part of the organization's corporate leadership or report to corporate leadership roles or below (senior manager and above) and to be primarily responsible for BI in their organizations. Both the main sample and the BI sample respondents were required to have a high level of involvement with at least one AI initiative, and they were required to have one of the following roles when related to AI in their organizations: determine AI business objectives, measure the value derived from AI initiatives, or manage AI initiatives development and implementation. Quotas among the main sample were established for company size and for industries to ensure a good representation across the sample. No quotas were established for the BI sample. 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.

[2] Not available in all regions at the time of writing.

[3] Preview at the time of writing.

[4] Preview at the time of writing.

Note 1:

Table 5 is intended to offer guidance on how to select the best-fitting solution given the high-level traits of different use cases and the characterization of the market segments described in this report and characterized in terms of:

- Use-case target
- Use-case scope
- Enabling technology

For example, a 'Virtual IT support agent' may be mostly aimed to automate advice and, to some degree, actions, such as incident responses (see the definition provided in Market Guide for Artificial Intelligence Applications in IT Service Management) — hence, it has a sharp EX focus. The initiative can potentially have a business-unit-wide impact as it improves business outcomes for the whole ITSM by deflecting simple requests and issues to reduce human contact volumes and by improving employee engagement and reducing wait times. Given the sophistication of some of the user journeys that need to be automated, such as, local application troubleshooting, hybrid CAI architectures are likely to be needed.

Table 5: Solution Selection by Use-Case Traits

Use-case name	UX focus	Use-case scope	Enabling technology	Solution selection
Virtual IT support agent	EX	BU/Job	Hybrid	GP or EX platform, ITSM platform extension
Contact center automation	CX and EX	BU	Hybrid	GP or CX platform, contact center platform extension
Enterprise conversational search	EX	Job	GenAI-native	EX platform, insight-engine extension
Finance assistant	EX	Job	GenAI-native	Productivity suite extension, GenAI-native applications

Source: Gartner (March 2024)

In addition to the use-case parameters above, organizations should also assess the degree of customization and the amount of effort they can afford to invest in the initiative. GenAI-native apps are typically built with predefined functionalities and a limited set of customization options, which makes them more straightforward to deploy. The integration of data sources is typically streamlined and simplified, often through the use of APIs or prebuilt connectors, which reduces the complexity of the deployment process.

Platforms provide a variety of capabilities with a no-code toolset for business users to build and maintain chatbots and virtual assistants, which include integration with virtually any kind of back-end systems or channels. This requires project teams to undergo an intense design and implementation process, which adds to the deployment effort. In contrast, with GenAI-native apps, these aspects are largely predefined, which significantly reduces the deployment effort.

Note 2: Additional Vendor Competencies for Specific Use Cases

Additional competencies that vendors may offer and that may be required to enable some specific use cases are:

- Natural language query (NLQ), which enables users to ask questions of the data using terms that are either typed into a search box or spoken.
- Text-to-video (TTV) content generation.
- Text-to-image (TTI) content generation.
- Process automation — This may include both task-specific RPA capabilities, and broader BPA and workflow-orchestration capabilities.
- Code generation.
- Document ingestion and processing.
- Knowledge management.
- Text-to-text (TTT) generation —This may include any form of textual content generation in natural language, from emails to marketing copies, to chatbot answers and summaries.
- Support for knowledge graphs (KGs) — These are often foundational capabilities of some insight engine platforms but have been explored as a core data representation approach by some CAI platform vendors too.

- Enterprise search.
- Voice biometrics.
- Fraud detection.
- Automation of outbound communications.
- Dedicated live chat modules.
- Conversation analytics — If advanced, these may leverage sophisticated speech analytics techniques.
- Bot orchestration — This is a classic capability of CAI platforms, although niche in the broader context of CAI solutions and capability of CAI platforms.
- Support for avatars — This often couples with advanced capabilities to handle multimodal (text, voice, video) interactions.

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Emerging Tech Impact Radar: Generative AI

Table 1: Characterization of the CAI Market Segments

Criterion	GenAI-native applications	Targeted extensions	Dedicated platforms
UX focus	**EX:** GenAI-native applications are mostly leveraged for employee-facing use cases, such as IT support, HR and onboarding assistance, but also content generation via natural language (NL) prompts. Customer-service-agent-assist products, which may be found in this segment, are an exception, as they are employee-facing solutions aimed to improve the overall CX.	**EX or CX:** Targeted extensions offer capabilities compatible with an EX or a CX focus depending on the nature of the underlying platform. For example, an extension of a contact center platform is primarily focused on CX enhancement, while EX augmentation is clearly the goal of extensions found on top of CRM platforms.	**EX and/or CX:** While some dedicated platforms are specialized in either EX or CX improvement, general purpose (GP) platforms are well-versed in both use-case areas.
Use-case scope	**Jobs:** GenAI-native applications may offer coverage for several assistance types across a spectrum of employee-facing use cases (from customer service agent assistance to conversational access to BI data or code generation). Although this is true for solutions designed to be function-agnostic, others are also found to be laser-focused on niche use cases, such as developer support.	**From jobs to BUs:** The scope of use cases potentially supported by extensions is defined by the focus of the product they are augmenting or they are built on top of. Such scope is then typically sized to enable conversational search, if the underlying platform is an insight engine, or IT support automation in the case of an underlying ITSM platform, and so on.	**From BUs to enterprise:** Dedicated platforms provide the broadest use-case coverage in the CAI domain, to the extent of sometimes being GP CAI products. BU and enterprisewide scope is achieved by vendors offering additional competencies and products, which are not discussed in this report. For example, CAI platforms focused on contact center automation are expected to offer

			advanced, native voice-automation competencies and live-chat modules.
Enabling technology	**GenAI-native first:** These solutions are exclusively leveraging GenAI-native approaches to enable conversational interactions, and none of the traditional CAI tools and techniques.	**Mainly GenAI-native:** New entries qualify as GenAI-native, although some targeted extensions, which CRM or ITSM platform vendors have been offering for years before the hype around GenAI, are still largely based on traditional CAI techniques or are being updated to become hybrid.	**Hybrid:** Dedicated platforms provide support for hybrid approaches.

Source: Gartner (March 2024)

Table 2: GenAI-Native Apps

Vendor name	Headquarters location	Solution name
Anthropic	San Francisco, California, U.S.	Claude Pro [2]
Amazon Web Services (AWS)	Seattle, Washington, U.S.	Amazon Q [3]
OpenAI	San Francisco, California, U.S.	ChatGPT Enterprise

Source: Gartner (March 2024)

Table 3: Targeted Extensions

Vendor name	Headquarters location	Solution name	Underlying platform
Alkymi	New York, New York, U.S.	Alpha	Intelligent document processing
Cambridge Semantics	Boston, Massachusetts, U.S.	Knowledge Guru [4]	Insight engine
Freshworks	San Mateo, California, U.S.	Freddy AI	CRM, ITSM
Genesys	Menlo Park, California, U.S.	Genesys AI	Contact center
Google	Mountain View, California, U.S.	Gemini for Google Workspace	Productivity software
Instabase	San Francisco, California, U.S.	Instabase AI Hub	Intelligent document processing
Microsoft	Redmond, Washington, U.S.	Copilot for Microsoft 365	Productivity software
Salesforce	San Francisco, California, U.S.	■ Einstein Copilot ■ Einstein Bots	CRM
ServiceNow	Santa Clara, California, U.S.	■ Now Assist ■ Virtual Agent	ITSM
Squirro	Zürich, Switzerland	SquirroGPT	Insight engine
Verint	Melville, New York, U.S.	Conversational AI	Contact center

Source: Gartner (March 2024)

Table 4: Dedicated Platforms

Vendor name	HQ	Solution name	UX focus
[24]7.ai	Campbell, California, U.S.	Engagement Cloud	CX
Ada	Toronto, Canada	Ada's AI Agent	CX
Aisera	Palo Alto, California, U.S.	■ AiseraGPT ■ AI Copilot ■ Gen AI Platform	GP
Amelia	New York, New York, U.S.	Amelia Conversational AI Platform	GP
Avaamo	Los Altos, California, U.S.	■ Avaamo Conversational AI ■ LLaMB	GP
AWS	Seattle, Washington, U.S.	Amazon Lex	CX
Boost.ai	Sandnes, Norway	Conversational AI Platform	GP
Cognigy	Düsseldorf, Germany	Cognigy.AI	GP
DRUID	Bucharest, Romania	Conversational AI Platform	GP
Espressive	Santa Clara, California, U.S.	Espressive Barista	EX

Google	Mountain View, California, U.S.	Contact Center AI Platform	CX
Gupshup	Fremont, California, U.S.	Conversation Cloud	CX
IBM	Armonk, New York, U.S.	■ watsonx Assistant ■ watsonx Orchestrate	GP
iGenius	Milan, Italy	Crystal	EX
Interactions	Franklin, Massachusetts, U.S.	Interactions Intelligent Virtual Assistant	CX
Kore.ai	Orlando, Florida, U.S.	XO Platform	GP
Leena AI	San Francisco, California, U.S.	Leena AI	EX
LivePerson	New York, New York, U.S.	Conversational Cloud	GP
Microsoft	Redmond, Washington, U.S.	Microsoft Copilot Studio	CX
Moveworks	Mountain View, California, U.S.	Enterprise Copilot	EX
Netomi	San Mateo, California, U.S.	Netomi AI	CX
Omilia	Limassol, Cyprus	Omilia Cloud Platform	CX
OneReach.ai	Denver, Colorado, U.S.	GSX Platform	GP
Openstream.ai	Bridgewater, New Jersey, U.S.	EVA	GP
PolyAI	London, U.K.	PolyAI	CX
Rasa	San Francisco, California, U.S.	Rasa Platform	GP

Sprinklr	New York, New York, U.S.	Conversational AI Platform	GP
Uniphore	Palo Alto, California, U.S.	U-Self Serve	CX
Yellow.ai	San Mateo, California, U.S.	Yellow.ai Dynamic Automation Platform	GP

Source: Gartner (March 2024)

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