

Build vs. Buy: Considerations for Your Conversation Intelligence Programme

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#### Introduction

While most organisations have weathered the worst of the pandemic-related shutdowns, economic challenges and staffing shortages still linger. On top of that, customer expectations remain at all-time highs, and many contact centre and customer experience (CX) leaders understand the direct connection between contact centre operations and customer satisfaction.

That leaves many teams in the position of having to reconsider their own efficiency. According to **CallMiner's 2023 CX Landscape Report**, 45% of senior CX and contact centre leaders strongly agree they want their organisation to do more with fewer resources in the current economy. Nearly half (49%) of survey respondents believe artificial intelligence (AI) will help them achieve greater efficiency to optimise CX strategies when under financial strain.

Further, the rapid rise of artificial intelligence, such as generative AI, has captured the public interest around the technology's possibilities and promise. Generative AI models have the ability to create content and images, simulate scenarios, and even generate insights or extract valuable information based on the data on which they're trained.

McKinsey estimates that AI adoption has more than doubled in the past five years. While it's still early, you can expect generative AI will only accelerate that adoption level even further. However, generative AI solutions can seem deceptively simple to implement for enterprise use cases, such as analysing customer interactions in the contact centre, or applying customer insights crossfunctionally to other areas of the business. Peeling back the layers, established AI platforms such as conversation intelligence have deep experience and are pushing the boundaries in these industries. They offer more simplicity of implementation and faster time to value than building your own solutions with generative AI.

In order to make the best decision for your organisation, it's critical to understand the difference between homegrown and licensed AI solutions for the contact centre and other enterprise use cases, such as sales, finance and marketing, that impact customer experience (CX). As many teams have found, uncovering insight from vast amounts of unstructured data isn't easy. The same **CX Landscape Report** cited above found that 68% of organisations don't think their CX data is harnessed to their organisation's best advantage. With the right AI solution, teams can more effectively leverage this data to drive both CX and business improvements at scale.





#### **Understanding homegrown solutions**

For many organisations, it may seem tempting to build a homegrown conversation intelligence solution using widely available generative AI and large language models (LLMs) to analyse unstructured customer conversations and extract valuable insights.

While building your own solution may seem simpler with LLMs and generative AI, the operational parts of building and maintaining a homegrown conversation intelligence solution are far more complex – from the software and data engineering to data science training and tuning. For one, building your own solution requires significant time to build, which may delay your ability to access crucial insights. You may need to hire additional in-house experts – think developers, data scientists, data engineers and other domain experts – to make the project successful. Even still, many teams run into maintenance and scalability issues, as well as performance concerns that require the need for continuous governance.

Perhaps the most important consideration is how users at your company will interact with the software. Everyone from analysts, to supervisors, to frontline contact centre agents will need to leverage this solution to understand how to apply customer insights to their own specific use cases. These use cases – including coaching, self-coaching, and agent feedback loops – are critical to any comprehensive conversation intelligence solution. For example, a contact centre supervisor might leverage data on customer sentiment and emotion to determine whether an agent requires additional empathy coaching, or they might use insights to determine how to improve agent onboarding.

Creating these specific outputs from a generative AI model or LLM requires custom workflows and user interfaces, including workflows that enable you to access the value of LLMs generally. It's not effective, at scale, to ask a public, consumer-level model to generate insights from hundreds of thousands or even millions of omnichannel customer conversations. Developing these workflows is difficult, and as needs emerge, your software engineering team must stay on top of building more workflows to accommodate these demands.



Another critical consideration is product maintenance. The software engineering team must be able to invest resources into maintaining the software itself and the technical infrastructure at scale. In addition, time and resources must be devoted to selecting the most appropriate AI model for the right use cases. For example, generative AI models aren't effective at transcript redactions (e.g. a customer's personally identifiable information), and you should be using Named Entity Recognition (NER) instead.

Finally, organisations building their own AI solutions must consider how to do so responsibly. There are still significant risks that go along with using publicly available LLMs. According to the **2023 CX Landscape Report**, the vast majority of organisations are adopting AI technology, but many also acknowledge risks, including exposing their company to security and/or compliance risks (45%). Only 6% said they have no fears when it comes to adopting AI for customer service and CX use cases.

Beyond these risks include models' <u>capacity to hallucinate</u>, or make up facts. In addition, generative AI models have been proven to generate biased outputs, by merit of the fact that they're trained on open internet data. The data science team responsible for the homegrown AI solution must be invested in consistently evaluating all of the available models out there (along with their continuous updates), and choosing the best model for the best use case.



# Building your own conversation intelligence solution? Key factors to consider

Scope and use cases: The amount of development required for an in-house solution will largely depend on what you intend to do with generative Al. If you aim to create a comprehensive, scalable conversation intelligence system that involves continuous mining workflows, complex data processing, real-time analysis, and integration with other systems, the development effort will be significant.

**Data privacy and security:** Implementing robust data privacy and security measures is essential, especially if you're handling sensitive customer data to ensure compliance with relevant regulations (e.g., GDPR, HIPAA, FISMA). This involves implementing encryption, access controls, password restrictions, undergoing annual audits, and more – which you don't get with public LLMs.

**Response quality:** Another hurdle of leveraging LLMs for conversation intelligence is response quality. Ensuring the quality and relevance of responses can be challenging, as the model may occasionally hallucinate, producing inaccurate, biased, or nonsensical outputs.

Integrations: Integrating your communication systems (e.g., CRM, ticketing, CCaaS platforms, social, survey tools, etc.) with your data storage solution is critical to ensure a continuous flow of interaction data. Integrating LLMs into your existing infrastructure or applications can be a complex task. You'll need developers to work on integrating the model's APIs, set up data pipelines, and ensure that it interacts properly with your systems.

Actionable workflows: Designing effective workflows to extract actionable insights at scale from LLM-generated responses is crucial. While it might be easy to submit a block of text and ask generative AI to pull out findings in one-off scenarios, it's much different (and can be incredibly expensive) to ask it to find insights at scale. Actionable workflows need to be carefully thought through and built out. Additionally, licensed conversation intelligence solutions go beyond mere conversation analysis; they bring a full suite of workflows into play, assisting in coaching, elevating agent performance, streamlining quality control, among other valuable features.

Refinement: Enterprise conversation intelligence solutions often come with years of refinement and optimisation. They use a variety of specialised AI techniques (not just LLMs) to comprehensively analyse customer conversations, and that's because LLMs aren't the best fit for every business use case. Homegrown systems may lack the maturity and fine-tuning found in licensed alternatives, resulting in inefficiencies, as well as less accurate insights and responses.

Ongoing management: All these activities aren't one-and-done processes. You'll need to commit dedicated resources to continually evolve your infrastructure, apply new or updated security measures and governance, regularly monitor response quality, expand ecosystem connections, and more. Scalability issues may also arise as data volumes grow, leading to processing bottlenecks. It's not just enough to build an in-house conversation intelligence solution, you also have to be prepared to maintain and improve it.





We are big advocates for AI, we think that it's going to have a huge impact on the economy, we think it's going to have big impacts on society at large, we think it's great for productivity. But the hype around generative AI in 2023 has just been so immense, that we think it's overhyped, and there's lots of obstacles that need to get through to bring it to market.

Just the cost of deploying and sustaining generative AI is immense. And it's all very well for these massive companies to be doing it. But for many organisations, many developers, it's just going to become too expensive."

#### **Ben Wood**

Chief analyst, CCS Insight **Source** 



### Exploring licensed conversation intelligence solutions

Licensed conversation intelligence solutions – often software as a service (SaaS) based – are those that are purchased from a technology provider. Some providers, such as CallMiner, have had decades of experience building these solutions. In addition to handling the back-end complexities of technology infrastructure and maintenance, conversation intelligence providers often have the industry partnerships and employee resources to leverage the latest generative AI models, LLMs, and other types of purpose-built AI models to analyse customer feedback, composing the optimal solutions for specific use cases.

#### This includes:

- Contact centre improvements, including contact centre efficiency, the frontline agent experience, compliance and risk outcomes, quality assurance (QA), fraud detection and sales effectiveness.
- Experience management improvements, including CX and customer journey analysis, product intelligence, and brand experience management. These insights benefit teams across sales, marketing, product and more.
- Vertical use cases take into account the nuances of specific industries, particularly those that are highly regulated, such as healthcare, retail, financial services, technology, collections, BPO, and beyond.

Some of these technologies have proven their efficacy with some of the largest brands and most complex customer use cases and datasets in the world, so it's worth investigating whether there's a common case study or solution that aligns with your company's pain points.



## Key benefits of a licensed conversation intelligence solution

There are many advantages to adopting a licensed conversation intelligence solution. Speed-to-implementation and faster time-to-value are on the top of the list. For organisations, adopting a conversation intelligence platform is the fastest path to generating results that matter to the business — whether you're trying to improve certain contact centre KPIs, remove friction from the customer journey, incorporate customer feedback loops into your product development, or otherwise.

These types of results can give companies an edge over the competition — and often in the case of competitive advantage, there's no time to waste.

Let's take a look at some of the other key considerations in depth.

#### Lower development and maintenance costs

One major consideration is the development time and resources required to build your own conversation intelligence solution. Does your organisation have the data science, data engineering, and development expertise needed to create and maintain a homegrown solution, even if you use a foundational generative AI model?

Selecting the right licensed solution takes that burden off of your team, reducing technical complexity and ensuring continuous innovation. You'll be using a solution that's already built, so there's no need to evaluate models, build, QA, deploy, and continuously improve your own software. That means lower development costs and faster time-to-value.

#### Thoughtfully designed workflows

Licensed conversation intelligence solutions often come with built-in workflows that make it easy for specific types of end users to interact and find value with the software. As referenced in the Forrester Wave: Conversation Intelligence for Customer Service, Q3 2023, "The true standouts are those that have gone beyond the basics, crafting enterprise-ready workflows that intelligently incorporate generative AI and ML. As buyers consider their options, they should prioritise vendors that not only incorporate AI and ML but also prioritise their role in augmenting human workflows, empowering frontline agents and operations staff."



Here are a few examples of workflows included with CallMiner:

**Coaching:** Intuitive and comprehensive coaching workflows uplevel your entire agent base, making it easy for supervisors and managers to provide data-driven feedback that accentuates positive behaviours, and continuously improves upon customer service benchmarks.

**Agent guidance:** Real-time monitoring and in-the-moment alerts provide agents with guidance on the best course of action, making it possible to meet compliance demands and deliver exceptional CX every time.

**Self-coaching:** Empower agents to self-improve using various Al-driven scores delivered after a customer conversation. Practical feedback on areas selected by management that tells them they're succeeding, and which areas need improvement.

**Closed-loop feedback:** Address organisation-wide awareness gaps to drive better business outcomes across the board.

**Easier and faster analytics**: Time-tested categories are built on years of fine-tuning to deliver faster, in-depth, and actionable analytics.

**Summarization and after-call work:** Al-powered summarisation and post-contact analytics removes human effort from the equation, making it easy to understand the outcomes of customer conversations at scale.

Your conversation intelligence solution should leverage multiple types of AI to make it easy for your team to transcribe audio, redact information, summarise and classify customer interactions, provide reporting, and close the loop on important next steps, so you can uncover and take action on customer insights as if you were able to manually sit in on every interaction.

#### Enterprise-grade scalability and security

Another advantage of selecting a licensed conversation intelligence solution is enterprise-readiness. First, consider whether your homegrown solution can scale to meet your data processing needs over time. Will cloud processing costs end up exceeding what you can handle over time? Do you have the 'plumbing' to handle more data as you grow? As your business scales, so do the demands on the solution. Homegrown systems may struggle to keep up, leading to performance bottlenecks. With a licensed solution, plumbing and processing automatically scale with your business, so you don't have to be concerned about how costs, architecture or performance change as you scale.

In addition, enterprise-grade security is critical when considering a homegrown solution. Putting sensitive customer data into a public LLM is the exact opposite of doing right by your customers, as it's difficult to trace what happens to that data. Is it being commingled with other data? Is the company who developed the model using your data for Al training purposes?

To contrast, with a licensed conversation intelligence solution, data never leaves the company's system (unless a customer exports their own data). Data is not commingled among customers. On top of that, your conversation intelligence solution provider should apply security measures on your data, including redaction (PCI, PII, PHI), and data handling (Soc2, ISO2700, PCI DSS, GDPR, HITRUST, FISMA). Security controls such as encryption, access controls, password restrictions, annual audits, and more are all crucial — especially for highly regulated industries such as healthcare or financial services.





# Why responsible Al is important

Computer algorithms lack the ability to reason for themselves. They've been known to produce inaccurate, biased, and even discriminatory results. So, while Al can push the boundaries of what is humanly possible and drive our world forward, we need to do so ethically and responsibly.

For CallMiner, this includes:

- 1. Security measures: Training data is critically important to the value of LLMs and algorithms, but not at the expense of customer data. CallMiner maintains strong guardrails to ensure that no customer or other sensitive data is exposed to open models. These strong security practices are in line with how we've always treated the customer data that exists in the CallMiner platform.
- 2. Human-in-the-loop priority: Al should not exist completely unchecked or in a black box. CallMiner's human-in-the-loop approach ensures that Al technologies, including their outputs, are overseen by the right teams. This reduces the chances and impact of Al mistakes, and focuses on using Al to drive business value outcomes.
- 3. Robust governance: Al is going to get things wrong; we call these hallucinations. In closed, internal scenarios, hallucinations are manageable, but for customerfacing applications, hallucinations can be the difference between customer loyalty and churn. CallMiner is focused on heavy and continuous testing to ensure that models are working as intended by identifying and eliminating hallucinations.

# Rethinking whether building your own Al solution is right for your organisation

While it may seem simple to take a DIY approach to a conversation intelligence solution based on publicly available LLMs, in reality, the effort and risks may well exceed what most organisations are willing to take on. While these models have made it easier for companies to dip their toes into conversation intelligence, generative AI is still in its early stages – and prone to issues around accuracy, security, scalability and viable insight. Keeping up with the latest AI developments may not be a core competency for your company, whereas it's the lifeblood of a licensed conversation intelligence solution's business.

In addition to the technical considerations of building and maintaining your solution, it's important to weigh all of the costs — including the opportunity costs of diverting development resources away from core business activities. Over time, organisations who choose DIY experience a higher total cost of ownership than a licensed solution, even if initial starting costs seem lower.

For many teams, it's important to get up and running fast. Adopting a trusted, licensed solution results not just in faster time-to-value, but in the long term value that Al-based enterprise solutions are designed to offer.

Ultimately, while it's critical to consider your organisation's specific requirements, growth goals, and resource constraints, for the vast majority of businesses today, building your own solution simply won't be a reasonable option. Licensing an enterprise-ready conversation intelligence solution is what will give you a clear industry advantage.

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#### **About CallMiner**

CallMiner is the global leader in conversation intelligence to drive business performance improvement. Powered by artificial intelligence and machine learning, CallMiner delivers the industry's most comprehensive platform to analyse omnichannel customer interactions at scale, allowing organisations to interpret sentiment and identify patterns to reveal deep understanding from every conversation.

By connecting the dots between insights and action, CallMiner enables companies to identify areas of opportunity to drive business improvement, growth and transformational change more effectively than ever before. CallMiner is trusted by the world's leading organisations across retail, financial services, healthcare and insurance, travel and hospitality, and more.



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