

SUCCESS STORY

Building the future of chatbots with Chat Leap's no-code, AI platform, enabled by Elastic on AWS

Chat Leap, the leading provider of chatbots on the Viber messaging platform, uses Elastic to power global campaigns reaching millions of customers for everything from Black Friday sales to global sporting events.

Region
Israel

Industry
Software & Technology

Solution
Elasticsearch



Reduces infrastructure costs by 40%

- Chat Leap has reduced operating and administrative costs by 40% by migrating from an on-premises environment to Elastic Cloud on AWS.



Reduces DevOps costs by 80%

- With Elastic Cloud's managed environment, Chat Leap is far less reliant on in-house DevOps and code management, reducing the cost of these resources by 80%.



Massive scalability improving chatbots

- With Elastic, Chat Leap clients can engage with millions of customers and manage activity spikes that may generate billions of data events.

Chatbots have become ubiquitous in the past few years, driven by the global popularity of messaging apps and advances in artificial intelligence. As a result, the market is estimated to be worth [\\$1.25 billion](#) by 2025 as online businesses continue to put chatbots at the heart of their communication and promotion strategies.

[Chat Leap](#) is one of the most prominent players in this sector and is a preferred Viber instant messaging platform partner. Founded in 2016, it offers a no-code development platform where businesses such as banks, retailers, and music promoters can build chatbots to connect with customers. Shai Alon, Director, Chat Leap, says, “Brands can create an API token and then use Chat Leap’s No-Code drag and drop interface to create a chatbot. It’s super intuitive—bot admins don’t need any special training or technical expertise.”

Chat Leap also takes care of hosting and provides detailed analytics so that businesses can track chatbot performance. As a result, Viber recommends Chat Leap as ‘the most cutting-edge platform for building chat experiences.’

From no-code to high growth

Chat Leap’s success didn’t happen by accident. Some of the most popular bots it hosts reach hundreds of millions of users, and engage users in dozens of different languages. To reach this kind of audience, companies need technology that won’t fail when millions of fans respond to a global record label announcing the dates for an international tour or a sneaker brand promoting a 24-hour special offer.

Alon says, “Our platform supports some of the biggest brands in the world, so our technology stack must be scalable, flexible, and dependable enough to match their expectations. That’s why we chose [Elastic Observability](#) and [Elasticsearch](#).”

Chat Leap did assess another leading NoSQL database management system, but its feature-set was lacking. In addition its scalability wasn’t up to spikes in demand during global entertainment events. “Thanks to Elastic’s scalability and resilience we can deliver a smooth user experience, irrespective of traffic volume,” says Alon. Elastic was also put to the test during the football world championship at the end of 2022. “There



were lots of campaigns that spiked during halftime, but Elastic had no difficulty standing up to demand.”

Data analytics is equally critical for Chat Leap and its customers who need an at-a-glance view of chatbot performance. These campaigns may generate billions of data points and require sophisticated search and analytics to meet the expectations of modern businesses and their marketing teams.

The Chat Leap team took advantage of Elastic’s robust [‘parent-child’](#) (now ‘join’) infrastructure to map anonymized chatbot users to ongoing events, creating a detailed user-event stream. “With Elastic, we get insights about interaction at both aggregate and granular level. Our in-house analytics tool can record billions of events each month,” says Alon.



Elastic appears in the center in all our architecture sketches—we consider it the ‘Core’ of our engine. It gives our customers everything they need to set up massive campaigns quickly, while offering detailed, actionable analytics that maximize chatbot reach, conversions, and engagement.

Chen Friedman

R&D Team Leader, Chat Leap

Data-driven decisions that propel business growth

To help clients understand their audience and adapt accordingly, Chat Leap built a comprehensive [analytics dashboard](#) using Elastic that can be configured to scrutinize usage patterns. Chen Friedman, R&D Team Leader, Chat Leap, says, “Building this kind of system with a relational database is a no-go. You couldn’t get the same aggregation, especially with the ultra-low latencies we need to support our clients. With Elastic we’ve been able to bake a fully-fledged analytics platform into our product that compares with the leading dashboards on the market.”

An excellent example of how businesses use Chat Leap analytics is a chatbot quiz. “With Chat Leap, you can track overall participation, find out how many people started the quiz, how far they got, and other details in a matter of seconds,” says Friedman. “And if customers want information that is not supported in the regular flow, it’s easy to build custom reports with an Elasticsearch query.”

Chat Leap’s embrace of Elasticsearch doesn’t end with analytics. It also taps into Elastic’s scan (formerly “scan and scroll”) capabilities for advanced broadcasting techniques. This includes an innovative AI broadcast system that calculates the optimal time to send users push notifications. Combined with personalized content, this increases the likelihood of user engagement, ensuring that the right message reaches each user at the right time.

Moving to Elastic Cloud reduces infrastructure costs by 40%

As the use of Elastic widens, Chat Leap has moved from on-premises infrastructure to a managed Elastic Cloud environment. This has slashed operational costs by 40%, while improving scalability and streamlining maintenance.

[Elastic Cloud](#) has also helped reduce DevOps management costs by 80%. “Moving to a managed solution has reduced our dependency on full-time DevOps resources and the amount of code that needs managing. It has also reduced query latency, so that we can continue to analyze data at scale and in real time,” says Friedman.

He also praises the Elastic account team that helped manage the migration and supports Chat Leap on a regular basis. “Whenever we had a question, the Elastic team was there. Even though we are not a massive customer, it always feels like we are getting the enterprise treatment from Elastic in terms of the resources and the speed of turnaround at our disposal,” says Friedman.

Chat Leap is now looking to use more of Elastic’s AI capabilities as it adds new features to its chatbot platform. This includes features that blend the best of [vector search](#) with traditional keyword search. “Elastic is the go-to technology for hybrid search. It has a decade’s worth of features that a young technology such as a dedicated vector database can’t offer. Adding embeddings to Elastic makes more sense than rewriting the whole search, filter and aggregation stack,” says Alon.

Chat Leap team is also looking at additional ways to adopt [generative AI](#) into its business model. “We think that Elastic’s capabilities position it as one of the best solutions for [RAG](#) (retrieval augmented generation), making it a fantastic complementary technology for [large language models](#) (LLMs) and generative AI. There is a lot of potential here,” says Alon.

In the meantime, Chat Leap’s customers are getting ready for the next big events in the chatbot campaign calendar. Friedman says, “We had a very busy holiday season this year as more and more businesses recognize the versatility and value of chatbot solutions. Thanks to Elastic, we can help our customers prepare for these and other global conversations with complete confidence.”



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