NIB GROUP · CUSTOMER STORY

Improving member experience with customizable conversational AI



INSURANCE · AUSTRALIA AND NEW ZEALAND · 1,800 EMPLOYEES

900%
Increase in member interactions

95%
Conversation understanding rate

200%
More members served year-on-year

Key takeaways

150,000 members

over 150,000 members, a 200% increase from 2019

Four languages

product information in four languages, for international students and workers

More self-service

In the three years nibby has been online, member interactions have increased by over 900%, with a conversation understanding rate of 95%. Over 50% of conversations are resolved by pointing the member to content or a self-service resource.

nib Group (nib) provides health and medical insurance to over 1.4 million Australian and New Zealand residents, and the company is also Australia's third largest travel insurer.

In 2017, nib became the first private insurer in Australia and New Zealand to improve member experience by leveraging AI with the introduction of nibby. nibby is a digital assistant embedded in the nib online member portal and mobile app, and available after hours via voice. nibby relieves pressure on human agents by providing a first line of support, including call routing and providing answers to common questions.

One of nibby's primary duties is ensuring members are routed to the appropriate team. This automated routing results in decreased handle times while eliminating the frustration of being transferred from call center to call center. nibby identifies members as international visitors, students, Australian residents, or healthcare providers during the first interaction, and nibby also sorts inquiries to sales or support.

The challenge

Since launch, nib has continued to review and redesign nibby, with the goals of improved member experience, increased efficiency, and higher productivity. With a long-term vision of an assistant that went beyond FAQs, nib worked to make nibby more contextual and sophisticated.

The first iteration of nibby was built on an enterprise cloud-based NLU. Over time, the nib team identified opportunities to advance nibby, but doing so would require greater customization capabilities and ownership over their machine learning models.

While the cloud-based NLU offered a set of capabilities out of the box, a feature request was the only path to getting more out of the platform. In addition, the team saw a chance to make the update process more predictable and reliable. Having greater visibility into updates that flowed into the NLU framework would allow the team to avoid unexpected interactions with their own code updates.

The solution

With a team of data scientists and engineers ready to bring nibby to its full potential, nib began to benchmark alternative conversational AI frameworks. Rasa stood out for its extensibility and flexibility, as well as for features like the ability to customize channel-specific responses. Rasa's enterprise open source framework provided the freedom to build custom features on nib's timeline, rather than relying on a vendor's roadmap, and developers and data scientists had complete visibility into updates and functionality flowing into the product.

nib also embraced the Rasa approach to stories and dialogue management, which offered two benefits. First, Rasa reduced complexity. According to Dom Sammut, Engineering Manager - Conversational Experiences at nib, "Before, we had massive diagrams, like big trees," which mapped out hypothetical member journeys. After migrating to Rasa, the team shifted their approach, moving to small conversation blocks that could be interconnected. This more nimble approach allowed the team to design flexible conversation flows that responded to the member, rather than enforcing a narrow, prescribed path for users to follow.

Second, Rasa offered a development flow that allowed developers and conversation designers to work together harmoniously. Conversation designers were able to write stories and create dialogues independently, without requiring developer resources. For functionality that did require custom Python functions, conversation designers could simply reference the action name in the dialogue, a process the team found to be much more cumbersome with the original cloud-based NLU. "With Rasa, it was super straightforward," Dom said. "I can give our conversation designer a list of the custom action names and they can drop them into the story."

Ultimately, the decision to replatform came down to long-term vision and building the best possible assistant. "We wanted to have a bot that could have the best conversation and most natural and helpful conversations with members, and that was Rasa at the end of the day."

In the process of migrating to Rasa, nib seized the opportunity to refresh the underlying design of nibby, removing legacy code and rethinking the way conversations were handled from scratch. Working alongside the Rasa Customer Success Engineering team, nib completed the migration within three months. Post-migration, the Rasa team has continued to work closely with nib, partnering to identify and solve issues, and taking a hands-on approach to version upgrades and feature development.

> "If you're out to build serious conversational applications—not just dabble—Rasa is the platform you do it with. If you want to have serious conversations and actually uplift and change the way your organization operates, open source allows unlimited possibilities. The upfront investment in the right platform will yield benefits in shorter time-to-market and lower overall total cost of ownership."



Dom Sammut

Engineering Manager - Conversational Experiences, nib Group

The results

nibby's success has allowed agents to focus on impactful conversations, grown the team and business around conversational AI, and expanded nib's AI assistant program to more channels. As more and more companies seek to create the same customer experience across multiple channels at scale, serving many channels with a single Rasa assistant has allowed nib to leverage their existing assistant to serve more members.

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Since laying a new technical foundation with Rasa and incorporating consistent listening and learning from members, nibby has reached new milestones in 2020:

Served over 150,000 members, a 200% increase from 2019
Introduced product information in four languages, for international students and workers
Delivered COVID-19 information to members

What comes next

nib continues to improve nibby, with a target of increasing deflection rate and member satisfaction in years ahead.

About Rasa

Rasa simplifies building complex conversational AI by extending LLMs with reliable business logic. Our platform enables enterprises to build sophisticated AI assistants that handle millions of interactions securely—giving you complete control to scale automation. Trusted by Fortune 500 companies, Rasa ensures data privacy, security, and scalability for enterprises. Rasa is privately held, with funding from Accel, Andreessen Horowitz, and Basis Set Ventures.

rasa.com
info@rasa.com