

servian_

 Google Cloud



Case Study

Servian helps AustralianSuper find its voice in the cloud



Foreword

The delivery of enterprise-grade cloud services has been a catalyst for digital transformation, with substantial benefits to be had. Yet many organisations miss out on those benefits by focusing too much on using cloud to take cost out of their existing processes, rather than using cloud to add value to them.

As one of Australia's largest specialists in Google Cloud Platform (GCP) solutions, Servian has a long history of success helping businesses achieve real outcomes by embracing a holistic view of their transformation. With a large number of Australia's Google-cloud specialists, we have a broad and deep range of consultancy expertise with formal Google specialisations in Data & Analytics, and Application Development.

Servian's demonstrated competency in GCP shines through in the transformational success of the hundreds of projects they have completed for Australian businesses – particularly in the financial services and insurance (FSI) industry, which has actively embraced data analytics, artificial intelligence (AI) and other cloud capabilities to deliver customer-facing business transformation.

With the expertise Servian provides, Google's enterprise cloud services are ready to transform your business for the future, just as they have already done for the businesses featured in these case studies. Whatever you need to run your business in the cloud, Servian can help.

As Australia's largest industry superannuation fund, AustralianSuper faces the ongoing challenge of providing top-tier service to the 2.2 million workers who contributed \$9.4bn in funds during fiscal 2018.

With more than one million emails coming into AustralianSuper's contact centre annually, an ongoing goal of the company's digital transformation agenda has been to find more efficient ways of handling customer enquiries.

Implementing a human online chat service delivered some early success, but rising volumes and limited functionality introduced scalability issues that led the company to look for a more effective solution.

servian_

AustralianSuper

Google Cloud

At a glance

- AustralianSuper's contact centre handles over one million emails annually and around 14,000 live chats per month
- It proposed triaging many of these chats using an artificial intelligence/machine learning (AI/ML) chatbot
- Servian worked with AustralianSuper to implement Google Dialogflow on Google Cloud Platform
- About 800 questions and answers were fed into the chatbot framework, with more added all the time
- The bot is now handling about 6000 chats per month without human intervention – diverting nearly half of customer chats away from the call centre



Ash, the AI chatbot, is born

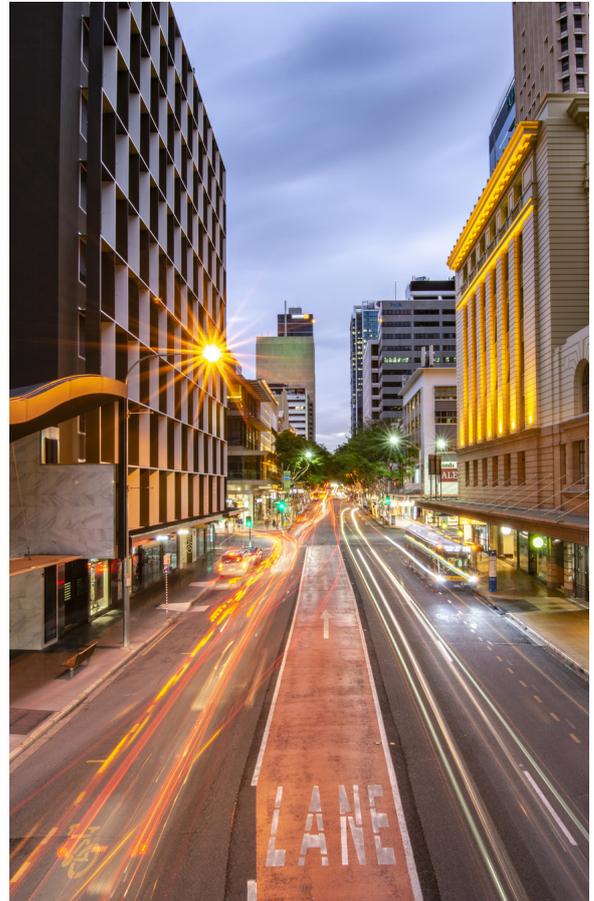
Early in 2018, AustralianSuper's IT team presented the idea of an artificial intelligence/machine learning (AI/ML) chatbot, that could be used to field customers' online enquiries without requiring human intervention, to its executive.

It was a highly speculative move, given the conservative nature of the industry, but recognition of the potential benefits led to approval for development of a 'Concierge Bot' named Ash.

Ash was quickly built on a cloud-based platform from online messaging provider LivePerson, and was trained with pre-developed lists of frequently asked questions (FAQs) and answers.

While the initial implementation confirmed an automated chatbot could provide value, AustralianSuper saw the value of positioning Ash within an expanding ecosystem of AI/ML and related services.

Conversations with data-driven solutions provider, Servian, led to the recommendation of Google Dialogflow, a virtual-assistant platform that offers high accuracy, continuously improving language recognition, and broad integration with related platforms.



“We are trying to channel the expertise that our staff have accumulated over the years, and put that into a knowledge base so we can provide it to anybody that asks us that particular question.”

Building a better bot

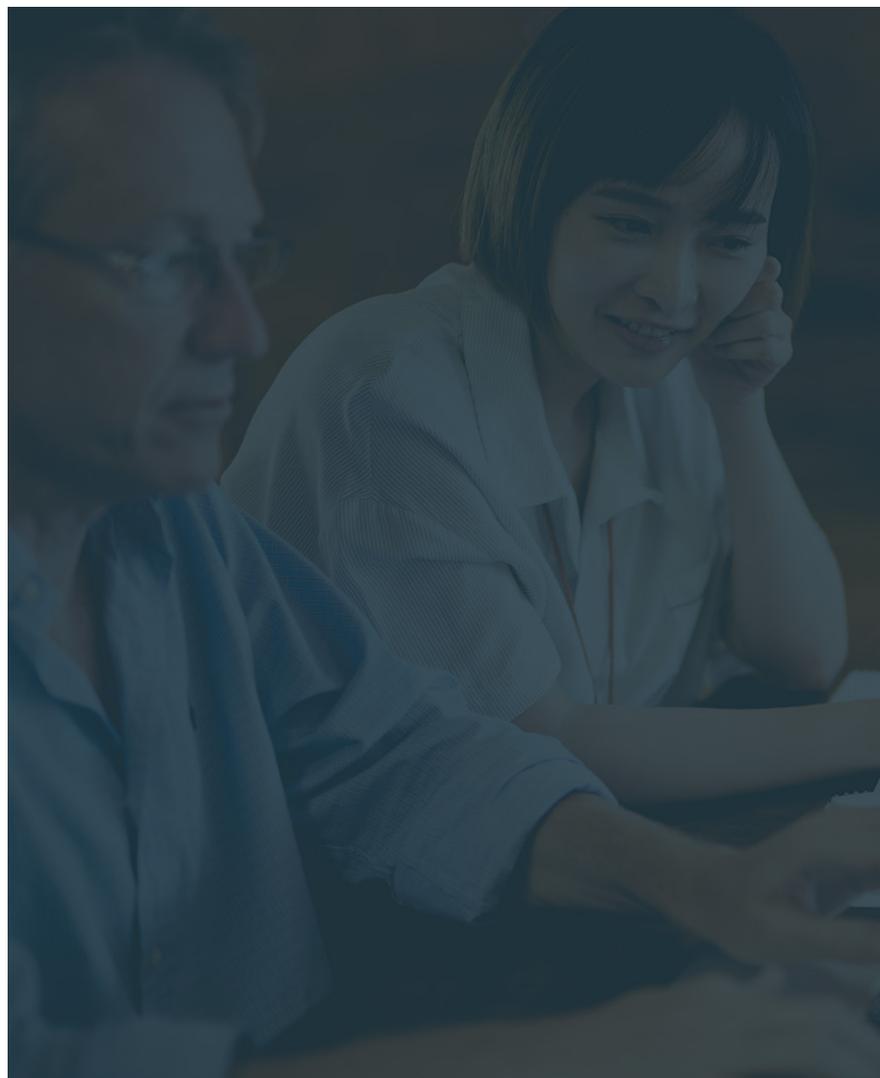
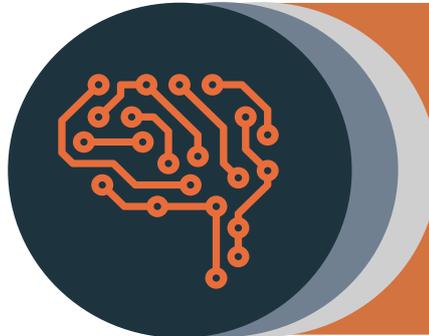
Through a series of conversation experience design workshops, the two organisations were able to build up a bigger knowledge base that was used to train the new version of Ash.

About 250 questions and answers were initially fed into the chatbot framework – which uses the TensorFlow ML model, along with Google Cloud Platform’s (GCP’s) Google Cloud AutoML and Google Contact Center AI solutions, to build and analyse Ash’s ever-expanding knowledge base.

The implementation team initially believed 250 questions would cover every possible enquiry, but within six months that had grown to more than 800 questions based on analysis of real-world conversations with customers.

The bot “keeps going from strength-to-strength”, Francis says, noting the system is handling about 6,000 chats per month without human intervention – nearly half of the 14,000 human and bot chats that AustralianSuper fields every month.

This level of performance – as well as features such as live messaging, asynchronous chatting, and, more recently, integration with Facebook Messenger and a live Business Chat feature – has made the bot a welcome assistant within the company’s contact centre.





Refining the language

Customer satisfaction levels started at about 60 per cent, due both to a smaller initial knowledge base and challenges in processing complex customer instructions.

However, Servian and AustralianSuper have worked steadily to teach Ash with more questions and answers, refining its knowledge base to improve the accuracy and detail of responses.

Training has included using AI to analyse large volumes of text chats and knowledge databases, and, in conjunction with Google Speech-to-Text, to analyse transcriptions of more than 100,000 real-world calls from customers.

With training, customer satisfaction levels have increased to 70 per cent and are on the way towards the benchmark of 90 per cent-plus for human-guided chats. To minimise frustration, chats can be routed to a human for intervention if the chatbot is encountering semantic difficulties.

The choice of GCP has been validated by the high quality of its natural language and voice recognition, which AustralianSuper is leveraging to provide both voice-based and text chatting.

“Accuracy levels with Google Cloud Platform have been more consistent compared with our previous solution,” Francis says.

AustralianSuper has also leveraged GCP’s strong mobile support to integrate Ash into its mobile app, and is exploring ways GCP can provide integration with other devices such as Google Assistant and Google Home. This would extend the reach of its customer support capabilities and further strengthen its brand as a progressive, customer-focused organisation.

Throughout the project, Francis says, Servian has provided solid technical and implementation support.

“Servian has brought its skills and engineering to the table, and its ability to move to Google Cloud Platform was excellent,” he explains. “It has been very supportive and professional.”

“It has done most of the heavy lifting, and we are pleased with the results. We are seeing a lot of commercial benefit from running this, and both the board and senior executives have commented on the difference it is making.”

Next steps



AustralianSuper and Servian continue to **improve the chatbot's accuracy** by feeding it new sources of customer questions and answers



Ongoing training is **increasing customer satisfaction** levels towards those of human chats



Integration into AustralianSuper's mobile app, and with Internet of Things (IoT) devices, will **enable a range of voice-guided interactions**



Additional cloud-based services will continue to **expand the chatbot's capabilities** by providing access to new data sources and service capabilities

servian_

Get in touch today

sydney

Level 46, 264 George Street
Sydney NSW 2000
t +61 2 9376 0700

melbourne

Level 11, 45 William Street
Melbourne VIC 3000
t +61 3 9081 3700

brisbane

Level 3, 200 Mary Street,
Brisbane City QLD 4000
t +61 7 3193 3200

canberra

Suite 2, 6 Napier Close
Deakin, ACT 2600
t +61 457 345 536

adelaide

Level 1, 5 Peel Street
Adelaide SA 5000
t +61 414 458 763

hobart

Level 2, 162 Macquarie St
Hobart, TAS 7000
t +61 402 658 878

bengaluru

Level 2, Plot 23, 8th Main Road
Jayanagar 3rd Block
Bengaluru, India, 560011
t +91 80 4370 4760

auckland

Achilles House, Suite 504
8 Commerce Street
Auckland NZ 1010
t +64 27 320 4548



servian.com

Our mission is to drive competitive advantage for our customers by enabling them to become data driven. By providing advisory, consulting and managed services across our four service areas, Data and Analytics, Digital, Customer Engagement and Cloud and Technology, we ensure your customers get value from their data.