



Going live with Chatbot Serena at Catholic Schools NSW



How chatbots are revolutionising customer service for CSNSW.

“Bots are the new apps” said Satya Nadella, the CEO of Microsoft in a recent keynote speech. People-to-people conversations, people-to-digital assistants, people-to-bots and even digital assistants-to-bots. That’s the world you’re going to get to see in the years to come.”

Catholic Schools NSW (CSNSW) who are the peak body of Catholic Education in New South Wales, approached Clade to come up with a more efficient way to resolve IT support related inquiries raised by the Catholic Schools community, a user base of approximately 11,000 Teachers, Administrators and Staff. They decided to develop a chatbot – SERENA – to tackle the challenge at hand.

Today, we sit through an interview with the Belinda Christie, Office Services Manager of CSNSW and Alex Dean, former Head of Data and Intelligence Practice at Clade, to discuss the benefits of the new Chatbot, and what it puts on the table for its customers.

Belinda, why does CSNSW need a chatbot?

The CSNSW’s support team were fielding between twenty to fifty questions every single day for people who had forgotten their passwords or username, forgotten how to log in, or just general problems accessing specific applications. We’re talking a user base of over 11,000 of teachers, administrators and staff at schools, most of whom need assistance immediately. About half would only access their account once or twice a year, so it’s understandable they don’t remember their credentials, but it’s a pretty big list of people needing help.

In an attempt to ease the burden on support, we sat down and deliberated on what solution would be best for this company’s needs and realised this was really a common problem with a common solution. We needed to find a way to tell people their username formats and password resets, so they can instantly access their accounts, without breaching our security protocols.

To speed up this process for the end-users and to reduce the burden on support, we came up with the idea of a chatbot. The Chatbot personifies that interaction, providing real-time help to end-users in figuring out the solution to their problem. As soon a person tries to log in a couple of times and fails, the Chatbot prompts them with “Can I help you?”. The main goals were to reduce the amount of support calls and improve the end-user’s interaction without systems, which we did quite dramatically.

Belinda, where does the name Serena come from?

IT support requires endless patience and the ability to remain calm under all circumstances. Our customers are mainly staff and could be located at one of nearly 600 schools across NSW. Many are time poor and trying to access our applications between class or on breaks. I was fortunate enough to sail regularly with a beautiful Italian called Serena, who was also a sailing instructor. She was very calm, had endless patience, and always a number of ways to explain the same thing. That’s what you need as a support person at CSNSW. And so, the name Serena for our Bot was born!

Alex, with the amount of pressure that it has reduced on support, it truly does sound like an amazing tool. But how exactly does the chatbot work? How complicated is the process?

Well, the most important aspect of the bot was ‘ease of use’. We started with a very small iteration which really only looked at the commonly found problems and the common solutions to them, all around what’s the format of the usernames and the simple steps you can take if you need to reset your password. But there would also be some curveballs in there around people having pending accounts, people requesting access to a certain organisation and the process they have to follow through that.

So, we built up a knowledge base, drawn from email support tickets and common questions asked over the phone and eventually we went live with a simple FAQ style chatbot. It was a fast and efficient process; it only took a couple of days to go live.

The key now was to monitor it and look at the logs, see what people are really asking and are they getting to a solution or getting stuck somewhere. We can then refine the FAQ with all these new questions coming in and keep up a constant improvement on how the bot acts in these common scenarios. That has been running successfully now for quite a few months.

Alex, with all of this information, it must have taken a very concise program to configure it all. What platforms/processes were used to create it?

There are quite a few platforms you can choose from when you want to create your own chatbot. There’s bot options on the big platform players space like Amazon Web Services and Microsoft Azure but not to forget the more intuitive options like Google’s api.ai or Facebook’s wit.ai. CSNSW already has a strong relationship with Microsoft and have leveraged exceptional pricing for services. Hence, Microsoft Azure was an easy option to choose especially as with this platform, the chatbot can be up and running effectively in minutes.

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Belinda Christie, Office Services Manager, CSNSW

Belinda, looking at the specifics, what would you say are the three biggest benefits to Catholic schools by using the chatbot?

The first benefit would obviously come in the format of reducing support calls and we have definitely achieved that as emails have dropped to 2-5 a day. The second benefit would be that the end-users now feel they get more responsive support, because the chatbot is readily available at any time of the day and on weekends; they no longer have to wait for an email or phone call. The third benefit I would say is that it gives the support team more visibility on the kinds of problems the users are experiencing. With this level of visibility, we can keep on improving the service we offer. The Chatbot has certainly made a huge difference for all our users.

Belinda, through all of this, do you feel you got value for money? Will the product eventually, in a sense, “pay for itself and over”?

Good question, return on investment is a key element in any software project. This one was an easy win, as within virtually two days we were up and running with the first version of the chatbot, successfully reducing the support queries for log in related problems by 50%. Within weeks, we were already saving money on support.

Version two included the enhancement of the chatbot to now take people through the forgotten password process and actually resetting their password. This was always planned, but as it required quite a lot of custom logic, custom processes and flows we needed the quick win first. It took slightly longer than before, but now that the logic is all set up, we are able to use the chatbot to solve more problems. This could be problems about gaining access to applications, problems around adding themselves to new organisations, and business processes where they might have trouble. Version two is a long plan use; initial investment was higher, but the useability and usefulness of the chatbot has dramatically increased.

Alex, final question, what are your future predictions with the evolution of the chatbot?

I would say today's knowledge on the artificial intelligence component is still quite limited. It still requires a lot of human interaction to configure the knowledge base and train the bot as you would say. We keep on retraining the bot with new information, new cases and new frequently asked questions. But what's going to happen soon is that there will most likely be another revolution where the bot really starts to train itself. This is where the concept of machine learning plays, where we don't have to keep on feeding knowledge into it, but it starts looking at all the questions that have been asked and finds the FAQ pattern itself. It also finds the answers that have been most effective by looking into all the corporate data bases, all the policies and procedures and the different information available; we just effectively let it loose on all the different information we have and let it learn itself which it is best at. That'll be the future. Give it say, twelve to twenty-four months and we'll start seeing some great changes happening.

Through the introduction of this new Chatbot and as Clade Solutions pushes towards a more advanced future in the solutions it provides, we look forward to more “simple solutions to complex problems”.

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