

IMMIGRATION, REFUGEES AND CITIZENSHIP CANADA

SOCIAL CARE AND CHATBOT

Last updated: January 2020

• HISTORY OF IRCC SOCIAL CARE

DEC. 2014

Social Media team was created and IRCC social media presence was expanded.

JUN. 2015

Began answering client questions on social media, using existing tools (Hootsuite) and resources (0.5 FTE).

2015-16

Issued 2,357 responses to clients.

2016-17

Issued 4,877 responses to clients.

A high number of general questions (e.g. eligibility) led us to the idea that some responses could be automated.

2017-18

Issued 14,862 responses to clients.

Launch of Quaid in P7 (see "Timeline of Pilot").

•TIMELINE OF PILOT

SPRING 2017

Pitched, and received internal funding for, a chatbot/social care pilot

Duration: 2+1 years
Cost: \$640,000/yr
Included: chatbot, helpdesk, FTEs

NOV. 2017

Procured a helpdesk tool to better manage client enquiries, effectively beginning data collection for training of a chatbot (and measurement of social care activities)

OCT. 2018

Launched Quaid (after procuring solution in August 2018) on Facebook Messenger

NOV. 2019

After successful Facebook implementation, began piloting Quaid on the IRCC website, and initiating process to move into regular operations beginning in 2020-21

Context: IRCC Social Media

(not including IEC channels)



FACEBOOK

- Over 1.56M followers
- 80% outside of Canada
- 150-200 questions per day
- Questions are usually about general eligibility



TWITTER

- Over 227k followers
- 50% outside of Canada
- 100-150 questions per day
- Questions are more complex than on Facebook - no chatbot



INSTAGRAM

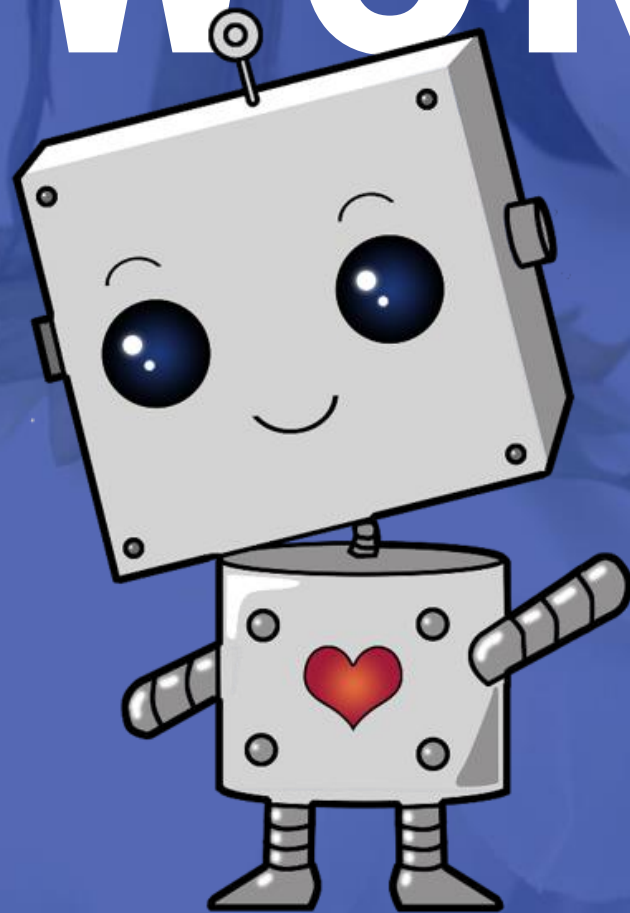
- Over 31,300 followers
- We do not answer questions
- Used to promote human interest elements of IRCC's work, rather than client service



LINKEDIN

- Over 78,300 followers
- IRCC's corporate presence to promote job opportunities, corporate initiatives
- HR answers relevant questions

• HOW • QUAD • WORKS



- Exists in Facebook Messenger (and one page of the IRCC website)
- Asks clients if they have a general or specific question - then answers the general ones
- Uses natural language processing (NLP) to understand the client intent, and assess its confidence in providing one of the answers on which it is trained
- Seeks clarification if needed; if it still can't answer using its training data, it will offer web content and ask the client if it helps
- If web suggestions don't answer the client's question, it escalates to an agent for a response

- QUAID
- ON THE
- WEB +
- LIVE
- CHAT

Piloting on one page of the IRCC website (as of November 7, 2019).

Results to date include:

- Average of 100 conversations daily
- 16% of clients visiting the page talk to Quaid
- 92% of those interacting with Quaid are new users and 76% are located inside Canada
- Provides 74% of clients with the answer they need, without escalating to an agent.

As the audience differs from our Facebook following, the questions are different. We're building a "web brain" for Quaid using this new data.

•HOW THE •HELPDESK •WORKS

1. QUESTIONS

Clients ask us questions through Twitter and Facebook Messenger. These questions are automatically turned into tickets in Freshdesk - agents can see everything in one place. Questions are assigned to agents based on channel.



3. ANALYSIS

We pull a lot of data from the helpdesk for analysis, including:

- response time (average, by line of business, by question, etc.)
- volume of enquiries handled (by agents, by Quaid, per channel, etc.)
- top questions asked (by channel, by line of business, by time period, etc.)

This data can help us make improvements to our communications, such as web and social media content, or even client correspondence.

2. RESPONSES

Agents use Freshdesk to issue responses (including escalations from Quaid) and forward enquiries to subject matter experts for consultation. When they use a canned response, enquiries are automatically tagged by CRC.

RESULTS TO DATE

84.6%

client satisfaction rate

28%

escalation rate

92,000 +

responses sent this fiscal year

CANNED RESPONSE CODES (CRCs)

051103

05: Line of business (study permit)

11: Sub-topic (letter of introduction)

03: Response...

"There is no formal limit on how far in advance you can arrive in Canada, though if you're planning to arrive significantly in advance you should bring evidence that supports your case to be admitted into Canada ahead of time."

Automated application of 1,000+ CRCs allows us to quickly identify and quantify the questions we receive at a granular level, and assess long-term trends.

This also allows us to track things like:

- questions asked based on platform
- number of interactions held with a client to resolve their issue, and possible relationships between particular questions and a client's journey

•BUSINESS IMPROVEMENTS PROCESS AND EXAMPLE

1

OBSERVATION

40% of biometrics-related questions on social media were from clients who had not received a BIL after 24 hours (as advertised on our website)

2

HYPOTHESIS

Client uncertainty is caused by lack of clear instruction on our website telling clients that they need to upload a biometrics receipt in order to receive a BIL

3

TEST

Place clear instructions on the website telling clients that they need to upload their receipt to proceed with biometrics

4

MONITOR + ITERATE

Assess if there is a decrease in questions from clients on this issue

- KEY PERFORMANCE INDICATORS**
- HOW DO WE MEASURE SUCCESS?**

VOLUME

How many people are we serving?

Over 92,000 sessions served this fiscal year.

SATISFACTION

Are they satisfied with our service?

84% of clients are satisfied with our service.

LOAD

Is our Chatbot helping human agents or creating more work?

The Chatbot only needs help with 1/3 of the clients it serves.

FUNCTION

How accurate are our responses? Are people getting the best answer possible?

96% of intents Quaid sends answer the client's question.

- CLIENT
- EXPERIENCE

AND PRIVACY



MEETING QUAID

Quaid introduces itself as a chatbot that is designed to answer general questions. It also provides clients with a link to online Terms and Conditions about interacting with Quaid. Quaid lets clients know when it is handing over the conversation to an agent.

SATISFACTION

Quaid asks clients if he was able to answer their question. We use this data (along with escalation and other data) to identify areas for improvement.

PRIVACY

Quaid asks clients not to include personal information (contact information, client identifier, etc.) in their questions. If they provide this info, it is masked before any data is stored in our systems. No client information is matched to IRCC records.

QUESTIONS? COMMENTS?



•ANNEX: •DEFINITIONS

•SOME OF THE WEIRDER TERMS THAT WE USE

•ABANDON RATE:

- The percentage of clients who start a chat with us, but then leave without resolution.

•CANNED RESPONSE CODES (CRCs):

- The 6 digit codes we attach to all of our client interactions that we use to determine what clients are asking us about.

•CUSTOM SEARCH ENGINE (CSE):

- A search engine we built so that only our IRCC links are searched - we plug this into Quaid to give it a hand in answering questions.

•ESCALATION RATE:

- The percentage of sessions Quaid sends to an agent, rather than answering by itself.

•INTENT:

- A response we teach Quaid to provide to clients when they ask a certain question.

•KNOWLEDGE BASE:

- The giant database of all pre-approved answers we send to our clients.