

Innovation, Science and

Innovation, Sciences et Economic Development Canada Développement économique Canada



Digital Transformation Service Sector (DTSS)

ISED's Virtual Assistant Technology



Agenda

- ISED's Virtual Assistant Background & Purpose
- Where We're at Now
- Benefits of Using Virtual Assistant Technology
- Customer Experience Success Factors in Virtual Assistant Use
- Appendix
 - Web Chatbot and Mobile Chatbot Metrics

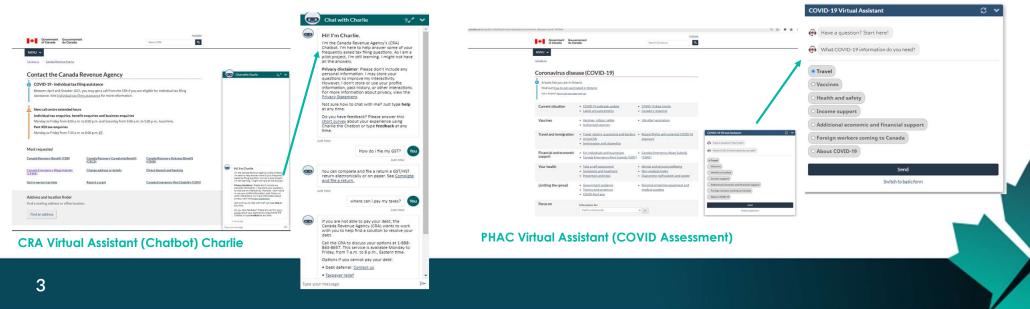
ISED's Virtual Assistant Background & Purpose

Background

 ISED began implementation of Virtual Assistant Technology in 2019 with a product called Chatbot. The current ISED chatbot is named 'Business Assistant'. Virtual Assistant is a communications channel Canadians can currently leverage when landing on ISED's webpages and Mobile app

Purpose

- It's first implementation was launched in 2019 as an initiative to advance our digital innovation in channels that interact with Canadians
- Configuration of Virtual Assistant is dependent on each client needs a virtual assistant can be a guided experience like the health Canada Covid Assessment bot, a call centre chatbot to answer FAQ's, a program or service virtual assistant to help you apply or procure information on that specific service in a personalized way



ISED's Business Assistant Background & Purpose

- Built as an enterprise FAQ Chatbot, with FAQ-based capabilities, that provide a question/answer conversational tone with the user
- Tailored to help Canadian Small Medium Enterprises get answers to questions about ISED programs and services that may help them with their business needs while having a conversational experience
- Current implementations target an audience of Small Medium Enterprises (SMEs) finding government support information
- Business Assistant is currently leveraged by Canada Business App (a mobile channel serving a list of programs and services for SME's), and on our web channels for Strategic Communications Marketing Sector, Corporations Canada and Canadian Intellectual Property office

Examples of ISED's implementation of Virtual Assistant (Business Assistant Chatbot)

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		<u>UI - ISED Chatbot Demo</u>				Hello! I'm Business Assistant, Science Economic Developme	
		Contact Innovation, Science an	d Economic Development Canada			chatbot.	
	Hello! I'm Business Assistant, Innovation,	From: Innovation, Science and Economic Development	it Canada	COVID-19: Support to businesses	1	Please visit our COVID-19 Cal Canada Business App for a list	of supports
0	Science and Economic Development Canada's (ISED's) new chatbot, I'm	What topic do you need help with today?		New		to help your business. You can Government of Canada's COV	ID-19
	programmed to answer your questions about federal incorporations and other	Intellectual property and copyright				Economic Response Plan web programs available for individu	page to find ials.
	ISED services.	Contact information			9	12:34 PM	
	For more information about our chats, please see the <u>Privacy notice</u> (20). I'm still in	Intellectual property and copyright		Newest programs		How can I help you? Ask me	
	training and learning new things every day.	► Telephone	С.	Newest programs Start my business & services Start my business		about government supports a available to small to medium	ized
	How can I help you? Here are the questions	Online form	×	New New		enterprise services or select f most popular questions:	om the
	 People ask me most often: How do I revive my business? 	▼ Chat	-			Coronavirus (COVID-19) r	esources
	How do I get a corporation key?	Ask our Business Assistant questions anytime, from a			Tunn a	for Canadian busines	ses
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Where We're at Now

- Canadian Intellectual Property Office (CIPO), Corporations Canada (CC) and Strategic Communication and Marketing Sector(SCMS) are <u>using the web and mobile Chatbot</u> to help reduce calls to call centres <u>and</u> offer enhanced service when providing information to Canadians who visit their websites or applications
- In addition to CIPO, CC and SCMS, Chatbot <u>also includes</u> content for the following sectors
 - Innovation Canada
 - Digital Skills 4 Youth
 - Canadian Small Business Financing Program (CSBFP)
 - Women Entrepreneurship Fund (WEF)
 - Connect to Innovate
 - And more being added routinely...
- We have also implemented a connection to LiveAgent which is activated when the bot cannot answer the question the user is asking. A live agent transfer is initiated. Depending which bot you are using it will direct you to the appropriate help desk (i.e. ISeD main Customer Service (SCMS), CIPO or CorpCan)

	Chatbot Content Management Process	
CIPO Chatbot CoE (BA)	1. Submit content monogenent explosi 3. Engage in content monogenent consultation 4. Validate content monogenent consultation 9. Perform UAT 10. Provide sgn-off 2. Assess & review request type* 5. mpont/Test/Publish GIA Pairs 6. Load/Publish LUIS Utterances/Entities/ CAA 8. Perform CAA 10.	
Chatbot CoE (DEV)	2. Partom Boccand Charlot & LUS work	

Benefits of using Virtual Assistant Technology

- Virtual Assistant Technology can provide numerous benefits to sectors, programs and organizations in a form of providing expanded customer service
- Strategically the use of virtual assistants allows organizations to:

Make better use of their employees

- If the assistant is programmed to help service clients with information that would otherwise come in through email or phone calls
- Allows employees time to focus on higher value tasks that would perhaps otherwise be used responding to clients where virtual assistant can be programmed to do so

Saves time and money

- Offers flexible support alternative to the user in asking and obtaining questions as virtual assistant is active 24/7
- Virtual Assistant also has the benefit and option of applying Artificial Intelligence(AI) to better understand customer needs and the responses that could be provided to enhance customer service
- Metrics and analytics let's sectors, programs and service owners further insight into their customer's/client's requests for information to further enhance customer service needs

Customer Experience success factors in Virtual Assistant use

- Digital adoption of the virtual assistant technology is largely based on the amount of content that is curated to service the customer service experience
 - For example, a Chatbot will have a knowledge base of questions and answers to directly answer your customers' questions, reducing time for customers to find an answer.
 - They redirect your customers/clients to content so they can quickly help themselves, improving the customer experience.
- When implementing the bot to serve a broad subject matter (such as information on government supports for SMEs), it is better to have as much relevant content as possible for the user should they want to ask questions pertaining to that organizations programs and services
- Support and maintenance of content is ongoing to ensure the client's needs are being met

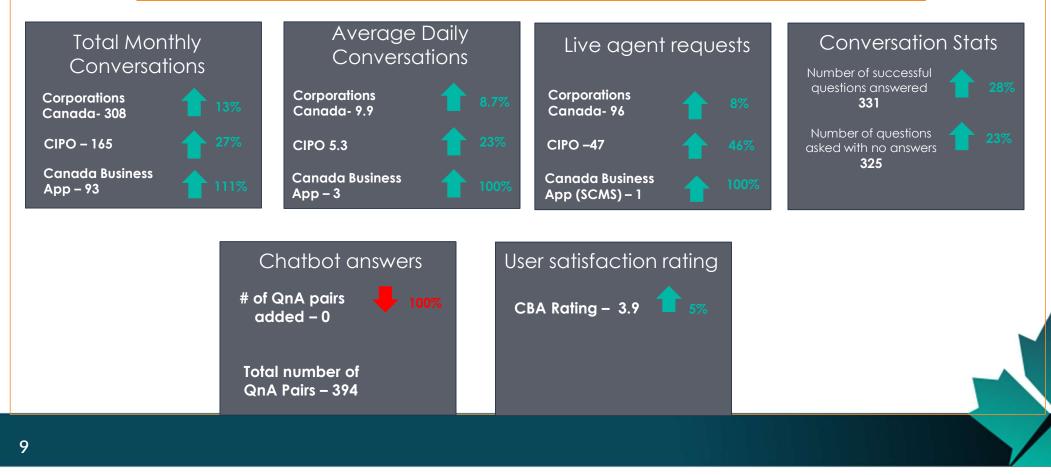
Appendix Web Chatbot and Mobile Chatbot Metrics

Business Assistant Chatbot

Total **566** Conversations

26%

Monthly Usage Statistics Oct 1 – Oct 30, 2021



Business Assistant Bot Metrics (Web and Mobile)

CIPO CorpCan COVID-19 SCMS Innovation

Answered Questions Oct 1 – Oct 31, 2021

325 Unanswered Questions related to business supports

Oct 1 – Oct 30, 2021

* Note: Unanswered questions are analyzed each month by subject matter owner to increase content if required to satisfy future user requests

Business Assistant Chatbot Metrics

	Corporations Canada Cumulative Nov 3, 2020 to date	Corporations Canada Monthly Oct 1 – Oct 31, 2021	CIPO Cumulative Nov 3, 2020 to date	CIPO Monthly Oct 1 – Oct 31, 2021	Canada Business App Cumulative Nov 3, 2020 to date	Canada Business App Monthly Oct 1 – Oct 31, 2021
Total # of Unique Conversations	3,710	308	1,920	165	1,168	93
Feedback • Bad Answer • Bad Website • Good Answer • User Input	47 17 50 97	3 1 3 7	97 43 152 153	6 4 16 13	5 1 29 10	1 0 2 2
Menu Request Restart Conversation Language Email Transcript Print Transcript Privacy Notice Sound Help 	21 14 14 8 2 65 27	2 5 1 1 0 7 4	8 8 6 0 0 22 6	0 2 2 0 0 0 2	112 281 183 0 0 26 0	10 42 20 0 0 7 0
Request Results Good Answer Multi-Answer None-Intent (out-of-scope request outside the Bot's KB) Zero Answer (in-scope request the Bot is not able to answer) 	2,910 103 795 3,859	168 14 121 305	1,321 159 400 1,930	129 12 38 143	620 53 328 606	76 4 41 62