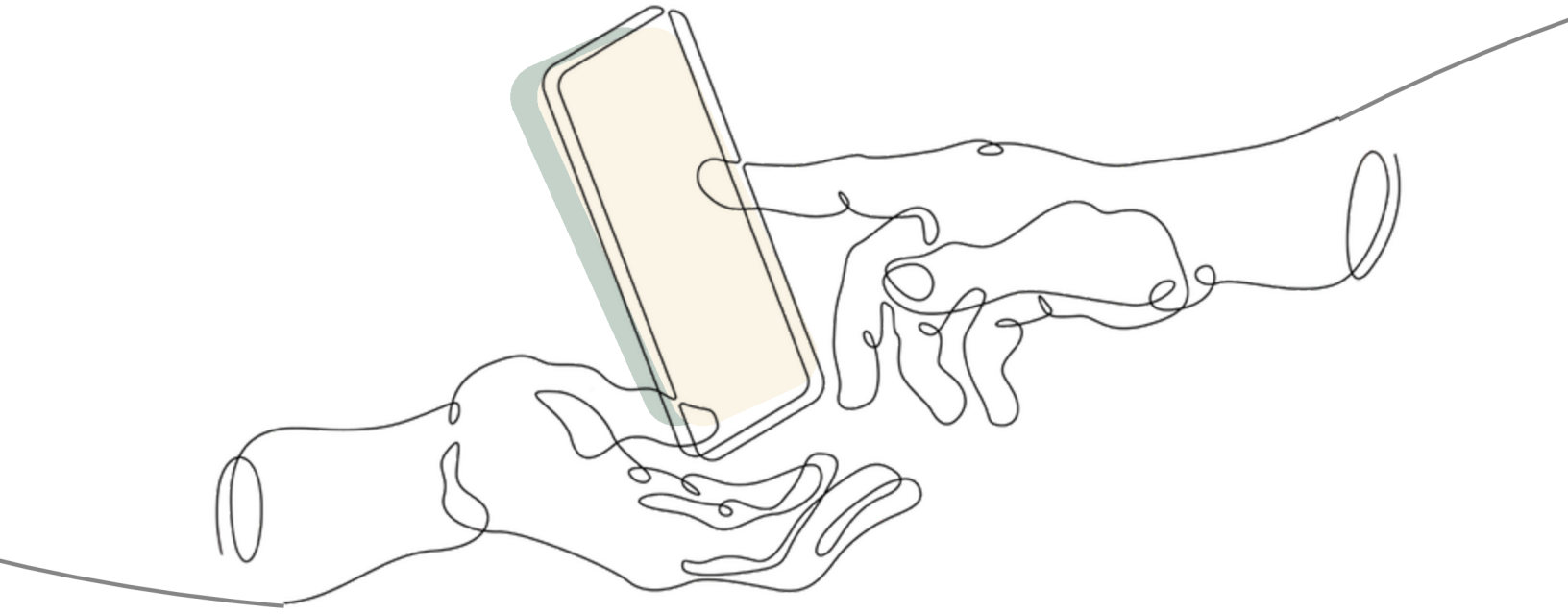
Centre for Immigrant Research | Centre pour la recherche sur les immigrants

SettleSMART: Supporting Messaging and Assistance Resource Technology

Mapping the Use of Emerging Digital Tools by Service Provider Organization (SPOs) in Canada

Environmental Scan Report

March 2026



TIES
THE IMMIGRANT EDUCATION SOCIETY

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VIZWORX

About The Immigrant Education Society (TIES)

The Immigrant Education Society (TIES) is a not-for-profit registered charitable organization that has been serving newcomers and Canadians since 1988. The primary goal of the organization is to provide immigrants and economically disadvantaged individuals with a solid foothold in Canada and afford them the opportunities to feel belonging in their new community. TIES is governed by a Board of Directors made up of devoted community-minded volunteers and operates through funding from both government and private organizations. Since 1992, TIES has been offering the Language Instruction for Newcomers to Canada (LINC) program, with over a thousand clients participating daily. In the early 2000s, TIES expanded its services to include employment and settlement programs and later introduced the Centre for Immigrant Research to further strengthen its research capabilities. More recently, TIES added childcare services, enhancing its ability to support the diverse needs of newcomers.

TIES now operates and fully owns two large facilities in Calgary's Northeast, Forest Lawn and Whitehorn neighbourhoods. In December 2021, TIES expanded its services to a new, larger facility in the Westwinds area of Northeast Calgary. Since its inception, TIES has assisted over 350,000 clients in strengthening their identities as members of Alberta society.

About TIES Centre for Immigrant Research

The Centre aims to use evidence-based knowledge, data, and best practices to inform services and programs and help newcomers settle in Canada. Research projects and programs emerge from and are driven by impacted communities and practitioners. The Centre focuses on three main areas: community-based research, program development, and providing evaluation services.

Community-based Research

Ongoing research allows us to identify and address barriers to integration and share best practices. The Centre employs researchers experienced in quantitative, qualitative, and mixed methods approaches.

Program Development

We aim to determine and respond to community needs by designing both well-established and innovative solutions and testing pilot programs.

Evaluation

We provide fee-for-service program evaluations, systems mapping, community engagement, staff satisfaction evaluation, Equity, Diversity and Inclusion (EDI) evaluation, etc.

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Executive Summary

This report is a part of a three-year project (2025-2028), **SettleSMART: Supporting Message and Assistance Resource Technology**. The goal of SettleSMART is to develop an AI-powered Chatbot and Group Chat platform to help newcomers access timely and reliable settlement information, enhance service delivery, and support innovation and equity in the process of settlement integration of newcomers to Canada.

As part of this work, this report presents an environmental scan of 362 Service Provider Organizations (SPOs) across major Census Metropolitan Areas and key urban centres in Canada, examining the adoption of emerging digital tools, including artificial intelligence (AI), chatbots, and group messaging platforms.

Key Findings

- Findings reveal that AI adoption remains nascent, with only a few SPOs deploying AI-powered tools for employment services.
- Chatbots are more widely used (n = 29), though most rely on rule-based systems or serve as digital receptionists, with limited generative AI capabilities.
- Group messaging platforms were implemented by only 5.5% of SPOs.
- Adoption is concentrated in larger urban centres, leaving smaller cities and northern regions largely underserved.

The study highlights a clear gap between the potential of digital tools and their current use by SPOs, pointing to the need for further research into effectiveness, equity, trust, and co-designed approaches in settlement services. These insights can inform policies and innovation strategies aimed at making digital tools more inclusive and beneficial for newcomers across Canada.

Overview of SettleSMART

SettleSMART is a federally-funded research and intervention initiative by Immigration, Refugees and Citizenship Canada (IRCC) under the Service Delivery Improvement (SDI) stream, aimed at improving how newcomers access timely and accurate settlement information. The project will develop AI-powered digital messaging tool – such as Chatbot and Group Chat -- to strengthen service communication while enhancing the digital capacity of Service Provider Organizations (SPOs).

Newcomers encounter challenges accessing timely and reliable information to support their settlement needs. Yet, settlement SPOs have limited capacity to address those needs. Previous studies revealed that the majority of skilled newcomers prefer to access settlement-related information online.

SettleSMART will develop an **AI-powered chatbot** and **group chat platform** to help newcomers access timely and reliable settlement information, enhance service delivery, and support innovation and equity in the process of settlement.

Throughout this project, we will:

- Understand how newcomers and settlement service provider organizations (SPOs) use digital tools
- Develop an AI-powered ChatBot & Group Chat
- Support interested SPOs in embedding these tools into their operations
- Share insights on digital solutions for settlement sector

Introduction

The use of digital technology in human services has grown rapidly, especially since the COVID-19 pandemic. In the settlement sector, this shift helped organizations move to remote and hybrid service models, making it easier to reach newcomers in rural or remote areas (Kazemi et al., 2024; LaMendola, 2019; Esses et al., 2021).

Digital tools, such as AI-powered platforms, chatbots, and group messaging platforms, have shown potential in improving access, efficiency, and responsiveness (Monteiro et al., 2023; Carboni & Maxwell, 2015; Albanna et al., 2022). They can help SPOs serve more clients, offer multilingual support, and provide timely information. However, many organizations still face barriers, such as lack of funding, training, or infrastructure. Concerns around digital equity, privacy, and trust are also common, especially for newcomers who may have limited access to technology or digital literacy.

To better understand how these tools are being used, an **environmental scan** was conducted on SPOs across Canada. This work helps identify where innovation is happening, where gaps remain, and how digital tools can be better designed to meet the needs of newcomers. These technologies have the potential to empower clients to take charge of their settlement journey and help service providers deliver more effective support (Nejadgholi et al., 2024). In a sector that's often stretched thin, these innovations can make a real difference.

Why does this matter?

1. It helps governments and funders make smart decisions about where to invest in technology.
2. It showcases emergent innovations and adaptive practices.
3. Its advances digital inclusion by highlighting technological gaps and opportunities.

Methodology

Geographical Scope: Using a **purposive sampling framework**, the study focused on Census Metropolitan Areas (CMAs) and other key urban centres where immigrant populations are significant. Using data from the 2021 Canadian Census, researchers selected cities where immigrants make up 23% or more of the population—Canada's highest recorded proportion (Statistics Canada, 2021). These cities, including Toronto, Vancouver, and Calgary, were considered likely hubs for digital innovation in settlement services.

Although Montreal met the population threshold, it was excluded due to Quebec's distinct immigration system, which operates separately from federal programs. To ensure regional diversity, the study also included smaller cities and northern communities with active newcomer services, even if their immigrant populations were lower. This approach provided a more complete picture of digital tool use across Canada.

Settlement Organizations: 362 SPOs were identified using Immigration, Refugees and Citizenship Canada's (IRCC) official directory of federally funded newcomer services. Only organizations physically located within the selected cities were included in the analysis.

Digital Tools: Each SPO's website and social media (such as Facebook, Instagram, LinkedIn, and X) was systematically scanned for instances of digital tools. Keywords, including "AI," "chatbot," and "group chat" were used to find relevant information. To strengthen validity, supplementary searches were conducted within downloadable reports, such as annual reports and strategic plans.

Data Analysis: The analysis was conducted in two stages. First, researchers screened each organization for relevant keywords. Second, they examined the context of each digital tool—its purpose, target users, and how it was deployed. Data were organized by city and then compiled into a single dataset, allowing for comparisons across regions and identification of broader patterns in digital adoption.

Section 1: Overview of Digital Tool Uptake Across SPOs

Out of 362 SPOs reviewed across 18 cities and territorial capitals, 46 organizations (12.7%) demonstrated adoption of at least one type of emerging digital tool, including AI applications, chatbots, or group messaging platforms.

Toronto reported the highest number of digitally engaged SPOs (n=23), followed by Vancouver (n=5), and Ottawa-Gatineau (n=4). In contrast, several locations – including Windsor, Charlottetown, and Iqaluit – recorded no SPOs with digital tool usage. Based on IRCC's database, 139 SPOs offered services in French. In addition, 56 verified francophone SPOs were identified, representing 15.4% of the 362 reviewed.

A detailed breakdown of digital tool usage across all reviewed cities is provided on the next page.

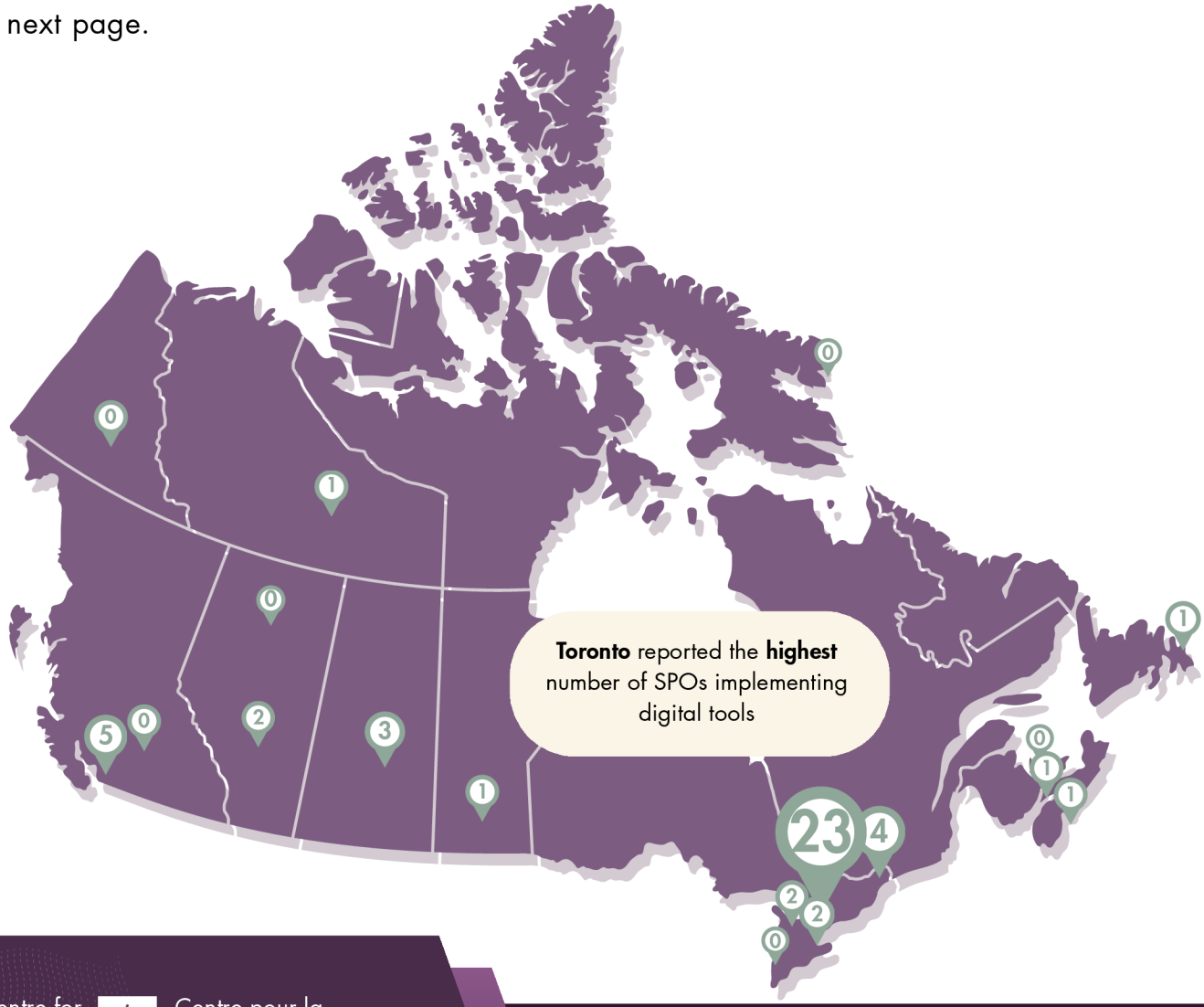


Table 1. Geographic Distribution of SPOs and Adoption of Digital Tools

CMA/Cities	Total Scanned SPOs	SPOs with at least one category	Total AI	Total ChatBot	Total Group Chat
Toronto	104	23	0	17	9
Vancouver	43	5	1	0	5
Calgary	19	2	0	2	1
Abbotsford - Mission	6	0	0	0	0
Edmonton	24	0	0	0	0
Kitchener	11	2	0	2	0
Hamilton	19	2	0	2	0
Winnipeg	27	1	0	1	0
Windsor	9	0	0	0	0
Ottawa - Gatineau	57	4	1	1	2
Halifax	5	1	0	1	0
Moncton	6	1	0	0	1
St. John's	6	1	0	0	1
Saskatoon	14	3	0	2	1
Charlottetown	5	0	0	0	0
Whitehorse	2	0	0	0	0
Yellowknife	4	1	0	1	0
Iqaluit	1	0	0	0	0
Total	**362**	**46**	**2**	**29**	**20**

Across all sites, only 2 SPOs reported the use of AI tools, while 29 SPOs implemented chatbots and 20 utilized group messaging platforms. Adoption remained unevenly distributed across geographic regions. While the majority of SPOs had not adopted any of the digital tools assessed, a few organizations demonstrated multiple tool use.

Section 2: Adoption of AI Tools in Service Delivery

Among the 362 newcomer-serving organizations reviewed, only two were found to be using artificial intelligence (AI) tools in their service delivery. These organizations are located in Vancouver and Ottawa–Gatineau.

Vancouver: Immigrant Services Society of British Columbia (ISSofBC)

ISSofBC has integrated two AI-powered tools into its employment support programs:

SkyHive

This platform uses AI to analyze labour market trends and individual skills. It helps identify gaps, build personalized training plans, and match job seekers with employers based on competencies.

Vitro

An AI-powered virtual interview simulator that provides real-time feedback on verbal and non-verbal communication, helping newcomers prepare for job interviews.

These tools aim to enhance employment readiness and job placement by simulating realistic scenarios and providing real-time, AI-driven feedback. However, both tools require client registration and eligibility screening, and are not publicly accessible.

Ottawa–Gatineau: Société Économique de l'Ontario (SÉO)

SÉO offers access to CareerAtlas, an AI-driven employment platform developed by the Ontario Tourism Education Corporation and powered by FutureFit AI. This tool uses machine learning to:

- Analyze global talent profiles and labour market data
- Provide personalized skill assessments
- Suggest career paths and training opportunities

As with the other AI tool identified, CareerAtlas was not open access—clients were required to register and be assessed for eligibility prior to use.

What Makes These Tools Advanced

The AI tools used by ISSofBC and SÉO rely on data-driven pattern recognition and machine learning, placing them in the category of Statistical AI (Rumelhart, Hinton & Williams, 1986). This distinguishes them from simpler, rule-based systems (Newell & Simon, 1976) and highlights their potential to deliver personalized, scalable support for newcomers seeking employment.

Discussion: Early Experimentation with Advanced Tools

AI adoption in Canada's settlement sector is still in its early stages. Out of 362 newcomer-serving organizations reviewed, only two—ISSofBC in Vancouver and SÉO in Ottawa–Gatineau—were found to be using AI-powered tools to support employment services. These tools use advanced machine learning to help newcomers build skills, prepare for interviews, and find jobs that match their experience.

While these tools show promise, they are not publicly accessible. Clients must register and meet eligibility requirements to use them, which means they are currently used internally rather than as open digital services.

Across the broader labour market, AI is being used to:

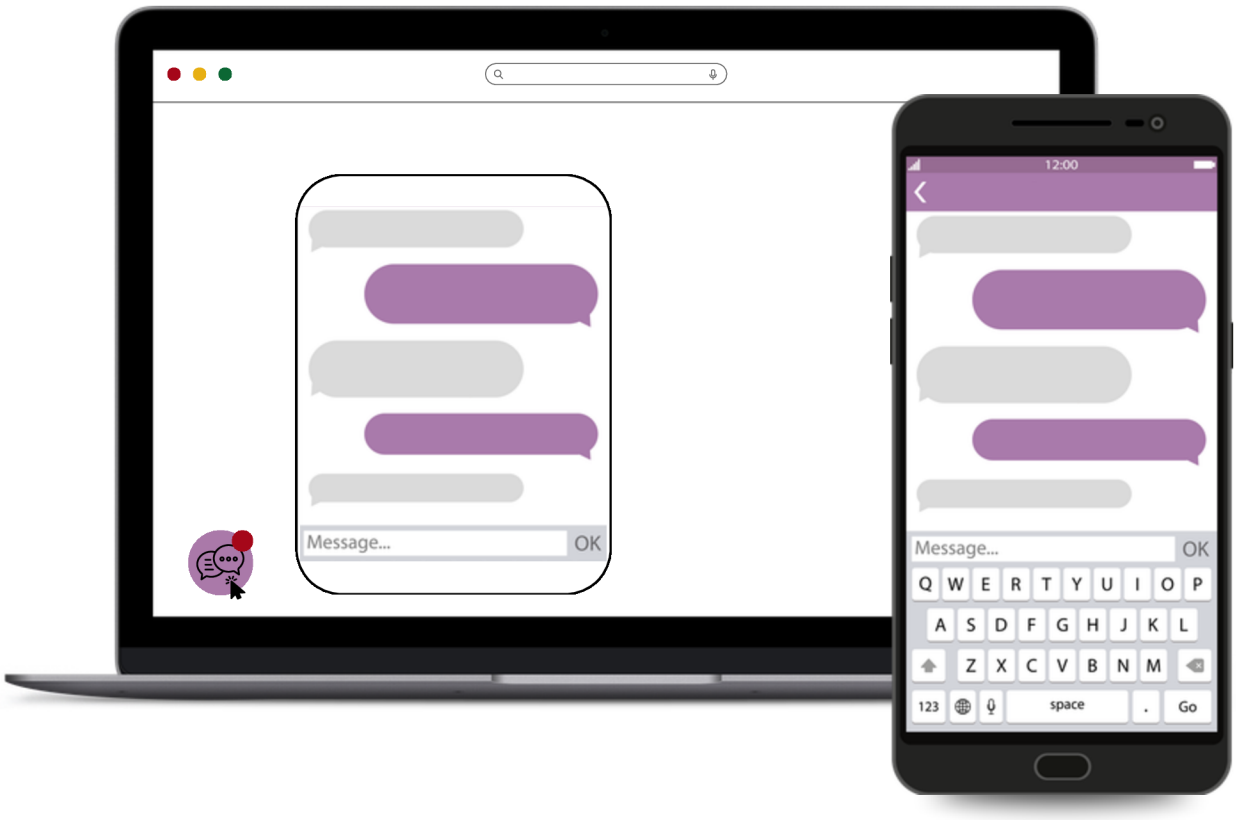
- Match job seekers with suitable roles Delecraz et al., 2022 ; Alonso et al., 2025; Rojas-Galeano et al., 2022; Faluyi, 2025)
- Improve resumes and cover letters for automated screening systems (Tran et al., 2023; Lookadoo & Moore, 2024)
- Simulate interviews and provide feedback on tone, content, and language (Shi & Wang, 2025; Dayal et al., 2025)

Despite this potential, most SPOs in Canada have not yet adopted these technologies. This gap is due to several factors, including limited funding, concerns about equity and ethics, and the need to build trust with clients (Suva & Palova, 2023).

The contrast between what AI can do and how little it's currently used in the settlement sector highlights a major opportunity for innovation. It also raises important questions about how to scale these tools responsibly and ensure they are accessible, inclusive, and aligned with the needs of newcomers.

Section 3: Adoption of Chatbots in Service Delivery

Among the 362 SPOs reviewed, 29 organizations were identified as having implemented chatbot technology. Adoption was highly concentrated in a few urban centres. Toronto accounted for the largest share, with 17 SPOs deploying chatbots, followed by Hamilton (n = 2), Saskatoon (n = 2), Calgary (n = 2), and Kitchener (n = 2). Single instances were observed in Ottawa – Gatineau, Winnipeg, Halifax, Yellowknife. No chatbot adoption was identified in Vancouver, Edmonton, Windsor, Charlottetown, Iqaluit, Moncton, St. John's, Abbotsford–Mission, or Whitehorse.



Types of Chatbots

AI-Based Chatbots

Only a small number of SPOs (five in total) were found to be using chatbots powered by artificial intelligence. These systems are more advanced and capable of understanding natural language, offering multilingual support, and responding to free-text questions. For example:

- Jewish Vocational Service of Metropolitan Toronto and Dixon Hall: chatbots built using platforms like Wonderchat and Voiceflow
- Working Women Community Centre: chatbot demonstrated LLM-based functionality
- Accessible Community Counselling and Employment Services: chatbot, VERA, powered by IBM Watson Assistant and Watson Discovery

Automated Chatbots

Many SPOs use simpler chatbots that rely on pre-set scripts or keyword triggers. These tools simulate conversation but do not use AI or machine learning.

- For example, the chatbot used by COSTI Immigrant Services – Corvetti Education Centre is a basic automated system. It can handle simple questions but lacks the ability to understand natural language or provide personalized responses.

Digital Receptionists

Some tools function more like digital receptionists than true chatbots. These systems typically greet users with a welcome message and collect basic contact information, such as name and email.

- Platforms like Tawk.to, LiveChat.com, and Pure Chat are commonly used for this purpose.
- Organizations such as PTP Adult Learning and Employment Programs and Settlement Assistance and Family Support Services (SAFSS) use these tools to gather client information for follow-up, rather than to provide real-time support or conversation.

Human-Staffed Chat Interfaces

A few organizations use live chat widgets that are operated by staff members. These systems allow real-time communication but are not automated or AI-driven.

- These chat interfaces are usually found on the homepage or contact page of an organization's website and serve as a direct line to staff, rather than a self-service tool.

Functional Capabilities

Chatbots performed a range of functions, which included:

- Responding to frequently asked questions (FAQs)
- Directing users to relevant service pages
- Collecting user contact information for follow-up
- Facilitating appointment bookings (in fewer cases)
- Providing multilingual support (e.g., OpenAI-powered chatbots)

Advanced AI chatbots based on LLM are more efficient in understanding the context of the conversation and provide real time, targeted guidance based on the unique inquiries from the clients.

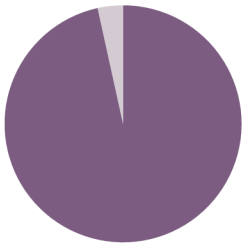
Target User

Most of the chatbots identified in this study were created to support newcomers to Canada, including immigrants and refugees. This aligns with the core mission of the SPOs included in the scan, which focus on helping individuals settle and integrate into Canadian society.

Some chatbots were designed for specific groups within the newcomer population. In other cases, the chatbot's intended audience was not clearly defined. These tools functioned as general access points, available to anyone visiting the organization's website, regardless of background or specific needs.

Platforms and Access Channels

Most chatbots (28 out of 29) were located on the home or landing page of the organization's website, making them immediately visible and accessible to users.



This homepage-centric deployment pattern suggests an emphasis on visibility and ease of discovery. A smaller number of chatbots were placed on contact pages or other subpages. For example, WoodGreen Community Services in Toronto introduced a webchat for seniors, located within the "Services/Seniors" section of its website. The webchat is a component of the Toronto Seniors Helpline program, led by "WoodGreen Community Services" in partnership with other agencies, to enhance user access.

Discussion: Variability in Function and Complexity

The use of chatbots among SPOs in Canada varies widely in terms of functionality and sophistication. While 29 organizations were found to be using chatbot technologies, only a small number had adopted advanced AI-powered systems. Most relied on simpler, automated tools.

This suggests that many SPOs are opting for low-risk, easy-to-manage solutions rather than more complex, interactive systems. However, this also means that many newcomers may not be getting the full benefits that more advanced chatbots can offer—such as multilingual support, personalized guidance, and real-time answers to complex questions (Larsen & Følstad, 2024; Hemesath & Tepe, 2024).

Research also shows that chatbots can reduce barriers for newcomers by offering on-demand, non-judgmental support—especially when navigating sensitive or confusing topics (Chen et al., 2020). When designed well, chatbots can simulate human-like interactions, which helps build trust and encourages people to engage more openly.

This is especially important in the settlement sector, where trust and accurate information are critical (Monteiro, 2024). Many newcomers prefer to access services online (Government of Canada, 2023; Henry et al., 2025; Kazemi et al, 2024; Gonzalez Benson et al, 2025), but they are often cautious about where that information comes from (Monteiro, 2024). Studies have shown that newcomers sometimes receive misleading or conflicting advice from informal sources like social media or community forums (Shuva, 2021a,b,c; Abdi et al., 2019; George, 2012; Kumaran & Chipanshi, 2015).

By embedding chatbots within trusted organizations, SPOs can offer a safe and reliable digital space for newcomers to get the help they need. These tools not only improve efficiency but also act as a protective layer against misinformation, helping newcomers feel more confident as they navigate their settlement journey.

Section 4: Adoption of Group Messaging in Service Delivery

Out of 362 SPOs reviewed, 20 organizations (5.5%) were identified as using group messaging platforms in their service delivery. Adoption was concentrated in a few urban centres, with Toronto reporting the highest number of SPOs using group messaging (n = 9), followed by Vancouver (n = 5) and Ottawa–Gatineau (n = 2). Limited uptake was observed in Saskatoon, Calgary, Hamilton, Moncton, and St. John's, where one SPO was identified in each case. No use of group messaging tools was recorded in Edmonton, Kitchener, Winnipeg, Windsor, Halifax, Charlottetown, Yellowknife, Whitehorse, or Iqaluit.

Type of Group Chat Platform

Of the 20 group messaging platforms...

Functional Capabilities

Group messaging platforms were used to support a variety of service functions:

- Disseminating organizational updates
- Service reminders
- Facilitating peer-to-peer networking among program alumni and community members
- Staff-to-client communication for program follow-up
- Sharing settlement-related resources

Target User

Most group messaging initiatives identified in the study were created to support newcomers broadly, helping immigrants and refugees stay informed and connected. However, some organizations tailored their messaging platforms to serve specific subgroups within the newcomer community. Other initiatives focused on cultural and linguistic communities.

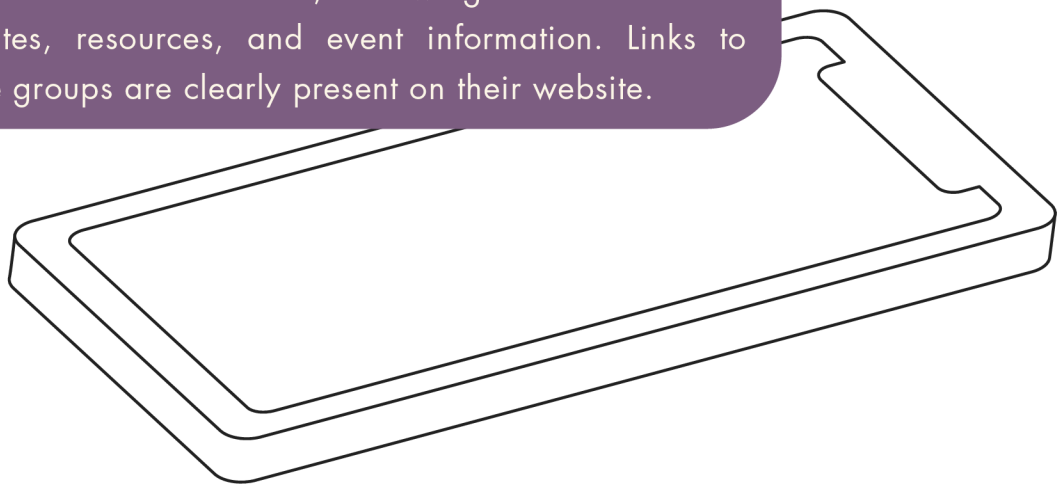
These targeted group chats help newcomers access relevant information, build peer networks, and stay engaged with services that reflect their unique needs and experiences.

Platforms and Access Channels

While many newcomer-serving organizations use group messaging platforms to connect with clients, these tools are often hard to find. Most were identified through websites, blog posts, news updates, or organizational reports. Only a few were discovered through social media or targeted online searches.

This limited visibility means that newcomers may not know these groups exist or how to join them. Few organizations provide direct links to their messaging groups on their websites or during client onboarding, which can make access difficult—especially for those who are new to digital platforms.

A standout example is MOSAIC in Vancouver. MOSAIC uses both WeChat and WhatsApp to connect clients across multiple programs. These platforms serve as communication hubs, allowing staff to share updates, resources, and event information. Links to these groups are clearly present on their website.



Discussion: Community-Building and Peer Engagement

Group messaging platforms—such as WhatsApp, WeChat, and Telegram—have strong potential to support both service delivery and community-building among newcomers. Unlike static websites or one-on-one interactions, these tools create dynamic peer-to-peer spaces where newcomers can share experiences, exchange resources, and build social connections.

This kind of interaction is especially valuable during the early stages of settlement, when newcomers may feel isolated or overwhelmed. Research shows that social networks play a major role in helping immigrants find jobs, housing, and community support (Mastrotheodoros et al., 2021; Simich et al., 2005; Wessendorf & Phillimore, 2019). Group chats allow people in similar situations to connect, offer encouragement, and reduce feelings of isolation.

When hosted or moderated by trusted organizations, these platforms can also help combat misinformation (Shuva, 2021a,b,c; Abdi et al., 2019). They combine the reliability of institutional information with the lived experience of peer communities, creating a hybrid model that blends professional guidance with organic social support.

Despite these benefits, the study found that group messaging is still underused by SPOs. Many initiatives are tied to specific programs or short-term projects, and few are integrated into broader service pathways. This fragmented approach means that opportunities for scalable, collaborative, and client-centered digital engagement are often missed.

Conclusion

In conclusion, the findings from this report contribute valuable insights to the SettleSMART project, particularly focusing on the current usage of digital tools – specifically of AI tools, chatbot technologies, and group messaging platforms across SPOs in Canada. While adoption of these technologies is still in its early stages, the findings show growing interest and experimentation, particularly in larger urban centres like Toronto, Ottawa–Gatineau, and Vancouver.

This study contributes to ongoing debates about the digital transformation of public and social services by highlighting the gaps between what is possible and what is currently practiced in the settlement sector. It also points to the urgent need for further research that critically examines effectiveness, trustworthiness, and equity of digital tools used with newcomers. Importantly, it calls for an approach to innovation that is not simply about adopting technology, but about responsibly designing, scaling, and governing digital systems in ways that align with the human-centered mission of settlement work.

Overall, this scan highlights both innovation and gaps. While some SPOs are leading the way with creative and client-centered tools, others lack capacity or visibility in their digital offerings. These insights will guide the next steps in the SettleSMART project, helping to inform where and how technology can be more effectively used to support newcomer communities across Canada.

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