

## **Settlement Sector & Technology Task Group Preliminary Report - Appendix 1 - Survey Analysis**

Report of Findings on Frontline Workers	<b>3</b>
Frontline Worker Encountering Digital Technologies	3
Reasons for choosing digital technologies	3
Intake or needs assessment on technology, digital literacy, and communication preferences	9
Frontline Worker Digital Literacy	10
Digital literacy professional development training	10
Ethical considerations on cybersecurity	11
Digital wellness when working remotely	12
Frontline Worker Learning and Reflection in the Digital Spaces	13
General experience of providing remote/digital services to clients	13
Challenges of delivering remote/digital services	17
Successes and strategies when adopting a hybrid service model	20
Learning and reflection on digital transformation	23
Frontline Worker Future Expectations	24
Skills and resources for future practices	24
Needed roles and jobs for future hybrid services	25
Needed support in future settlement work	25
<b>Report of Findings on Management</b>	<b>26</b>
Management Encountering Digital Technologies	26
Reasons for selecting digital technologies	26
Management Organizational Practices in Digital Transformation	31
Interrelations between digital transformation and COVID-19	31
Organizational strategies for hybrid service delivery	34
Evaluation and measurement on digital transformation	36
Management Learning and Reflection on Digital Transformation	37
Management successes in adopting a hybrid service delivery model	37
Management Challenges of digital transformation	40
Management reflexive learning on hybrid service delivery	41

Management Future Expectations	44
Hybrid service delivery model in the future	44
Needed training and support to future digital transformation	45
Crucial roles and jobs for future settlement work	46
<b>Discussion and Implications</b>	<b>46</b>
Best Practices to Respond to Digital Inequality	47
Revisiting the Notion of Cybersecurity	47
An Unbalanced Distribution on Digital Transformation	47
<b>Demographic Characteristics of the Sample</b>	<b>48</b>
Frontline worker profile	48
Current role(s) of frontline worker in the immigrant service organizations	48
Types of immigrant service organizations	50
Length of working in the immigrant service organization	52
Primary location of immigrant service organizations	53
Location of immigrant service organizations based on city size	55
Staff size of immigrant service organization	56
Number of clients served by immigrant service organizations	58
Funding sources by program	59
IRCC funded settlement services	61
Management profile	63
Current role(s) of management settlement workers in immigrant service organizations	63
Types of immigrant service organizations	65
Length of working in the immigrant service organization	67
Primary location of immigrant service organizations	68
Location of immigrant service organizations by city size	70
Staff size of immigrant service organization	71
Number of clients serve by immigrant service organization	73
Funding sources by program	74
IRCC funded settlement services	76

## Report of Findings on Frontline Workers

### Frontline Worker Encountering Digital Technologies

This section provides the findings pertaining to frontline workers (both the English and French surveys)' digital interaction and participation when delivering hybrid services. The data in this section comes from both multiple choices and open-ended survey questions. The quantitative data from multiple choice questions is explored and explained by descriptive open-ended responses.

### Reasons for choosing digital technologies

One of our research goals is to understand the settlement sector's engagement with digital technologies. In this context, we asked questions regarding what online tools, channels, apps that frontline practitioners mostly adopted when delivering blended services with their clients (See Figure 1).

Q3 What online tools, channels, apps, etc., do you mostly use at work with your clients (check all that apply)?

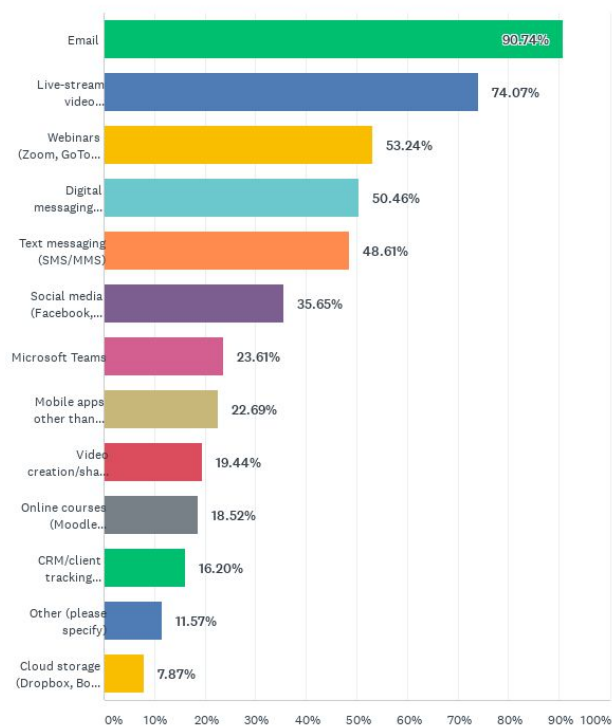


Figure 1: Mostly Used Digital Devices of Frontline Workers with Clients (English)

For French frontline workers, their usage of digital technologies presented differences from the above figure (See Figure 2).

Q3 What online tools, channels, apps, etc., do you mostly use at work with your clients (check all that apply)?

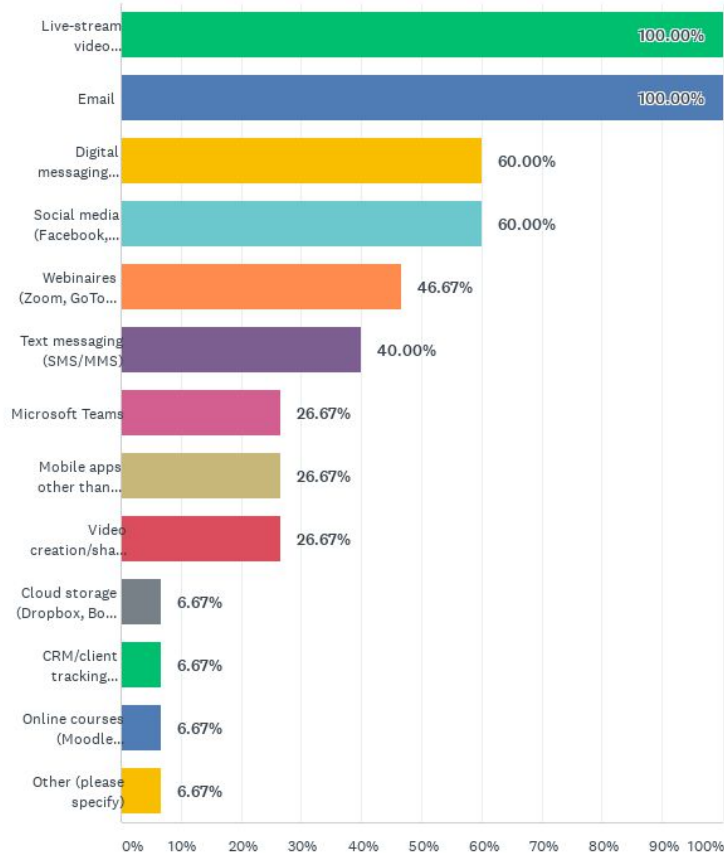


Figure 2: Mostly Used Digital Devices of Frontline Workers with Clients (French)

In light of the above figures, both the French and English surveys found that email, live stream video conferencing and webinars (Zoom, GoTo Webinar, Microsoft Teams), and digital messaging (WhatsApp, Slack, Facebook Messenger, WeChat, Viber, Telegram) were the top three mostly used digital tools between frontline workers and their clients. It is interesting to note a significantly higher use of social media among French respondents. This composite usage of traditional digital tools (emails and text messages) and innovative digital online platforms reflects the changing nature of blended service delivery. Client accessibility of those digital devices and online platforms was indicated as a major reason for choosing specific technologies and channels. To be more specific, client accessibility can be defined as “easy to use,” “user-friendly,” “flexible,” and “convenient.” Frontline workers followed clients’ digital habits and tailored services to these habits and preferences. One frontline worker explained why they used WhatsApp as the daily service tool:

Most clients use WhatsApp. I use the tools that they already use most - it’s the easiest way to communicate. They are unfamiliar with a number of other tech platforms + it is best to stick to what people know.

To many frontline workers, selecting the best digital technology to serve their client does not merely mean to choose the available digital devices or online platforms for clients. More importantly, these frontline workers need to be sharp observers to identify clients' needs based on their cultural backgrounds. For example, one frontline worker implied the importance of knowing the clients' cultural practices to better capture their digital technology choices. This participant said,

The tools used depends on the groups of newcomers served by the newcomer settlement advisor. For example, the majority of newcomers who arrived from Syria prefer to communicate using WhatsApp. Therefore, our Newcomer Settlement Advisor serving Allophone newcomers uses WhatsApp to provide services and programs. Anglophone and francophone newcomers tend to use Facebook, Instagram, Twitter or LinkedIn. Therefore, newcomer settlement advisors serving in English and French promote their programs using the above tools. In short, some social media/comms tools are used more in some cultural groups than in others. Identifying this is helpful.

Besides adopting digital technologies based on client accessibility, many participants underlined that using these online tools to provide certain services was in a position of prominence. These online services comprise virtual need assessment, English learning, intake and referral, and career consulting. In addition, the selection of digital technologies working with clients can be determined by informal organizational research, including client feedback survey, online discussion among staff and management team, as well as focus groups). Many participants also mentioned that using digital online tools for digital marketing purposes led to increased client participation in online sessions and activities. Among all these purposes, one interesting fact we realized was how frontline workers used digital technologies to educate clients for their digital literacy skills:

...I know many meetings (doctors, specialists, insurance, teachers, etc.) are done online and one of my roles is to coach and guide them in increasing their skills and comfort with tech. Tech is key to all facets of life now, and so an increase in digital literacy will also increase a client's self-efficacy, confidence, happiness, etc.

While working with clients can be deemed the most vital interaction for frontline workers when digitally delivering services, digital workplace engagement can be another essential factor that aligns well with our research objective. The following figures (Figure 3 and Figure 4) demonstrate the mostly used online tools, channels, or apps of frontline workers while collaborating with their colleagues.

Q5 What online tools, channels, apps, etc., do you mostly use at work with your colleagues (check all that apply)?

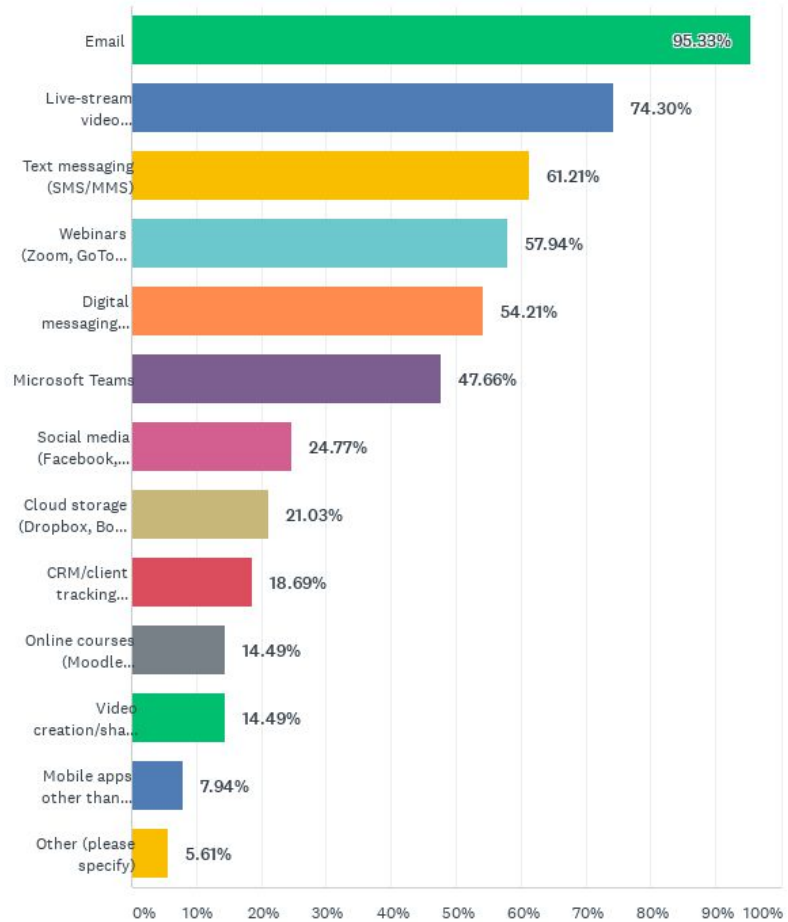


Figure 3: Mostly Used Digital Devices of Frontline Workers with Colleagues (English)

Q5 What online tools, channels, apps, etc., do you mostly use at work with your colleagues (check all that apply)?

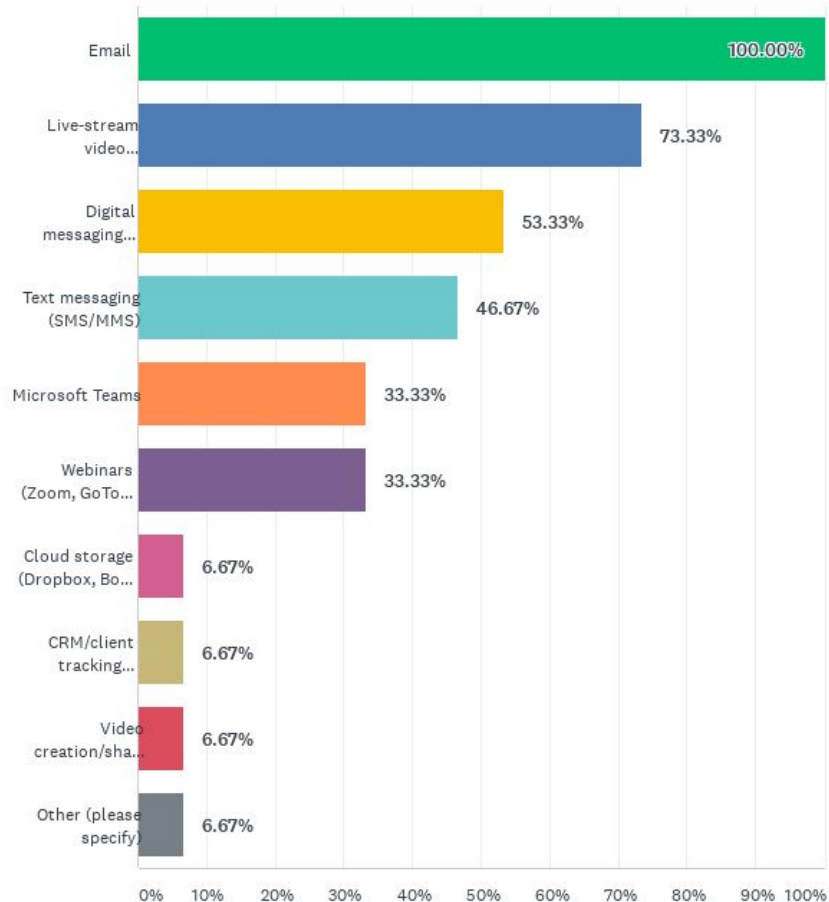


Figure 4: Mostly Used Digital Devices of Frontline Workers with Colleagues (French)

Similar to mostly used tools between frontline workers and clients, the most frequently adopted digital technologies between frontline workers and their colleagues were email, live-stream video conferencing tools (Zoom, Skype, Google Hangouts, Microsoft Teams), webinar (Zoom, GoTo Webinar, Microsoft Teams), and digital messaging (WhatsApp, Slack, Facebook Messenger, WeChat, Viber, Telegram). To unpack the reasons for these selections, one of the majorly identified impetus was digital workplace integration and engagement. One frontline worker well addressed multifaceted functions of different digital technologies that supported virtual workplace collaboration,

I use messaging services (Skype) to communicate quickly with my colleagues, roughly equivalent to stopping by my colleagues desk to ask a question if we were sharing an office. I use email much as I would if we were still working in an office together, for 'official' more formal communication within the team and for almost all communication outside of the team. I use Zoom (video streaming

conferencing) instead of regular or ad hoc formal meetings. I use cloud storage much as we normally would in our team.

In addition to online workplace engagement, most responses underscored the importance of how digital technologies facilitated their external communication between various stakeholders for program updating, community outreach, and workshop collaboration. Frontline participants also mentioned a significant communication that social media can be brought to locate potential clients across different locations and enhance their learning experiences through online sessions and activities.

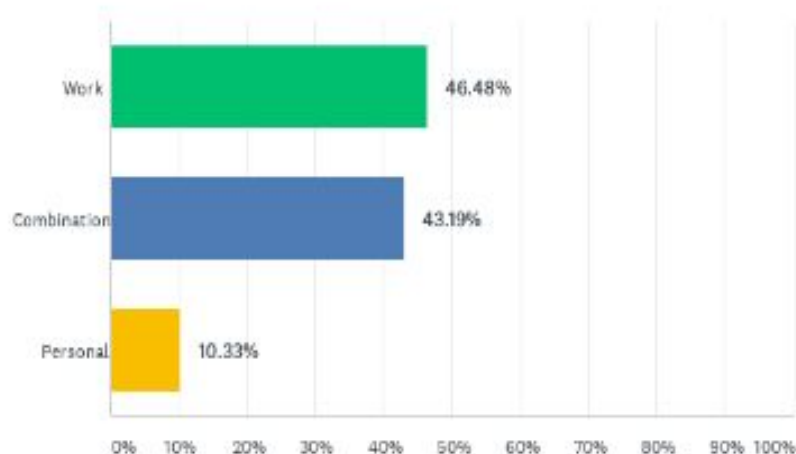
While most respondents briefly provided their motivations for designating certain digital technologies, our data found some frontline workers still struggled with not well adapting the digital online delivery model due to the lack of digital literacy. One respondent stated,

...I would like to communicate through video calls, but my co-workers are not used to the new technologies. So, we used texts in Microsoft Teams only. We are partly working at home and at the office again. However, we don't need to use Microsoft Teams and we use email, phone calls or we coordinate in-person at the office....

The above response exemplified the unbalanced distribution in terms of digital technology interaction that can potentially affect frontline workers' hybrid service delivery. We will delve into this analysis in our discussion section to add the nuance of our research findings.

As we understood reasons for choosing digital technologies between clients and frontline workers themselves, we intended to explore if they used devices brought home from work or personal devices (see Figure 5 and Figure 6).

**Q7 Are you using devices you brought home from work or personal devices (i.e. phones, laptops, tablets) to work to serve newcomers and communicate with co-workers?**



*Figure 5: Devices are Personal or Organizational (English)*

Q7 Are you using devices you brought home from work or personal devices (i.e. phones, laptops, tablets) to work to serve newcomers and communicate with co-workers?

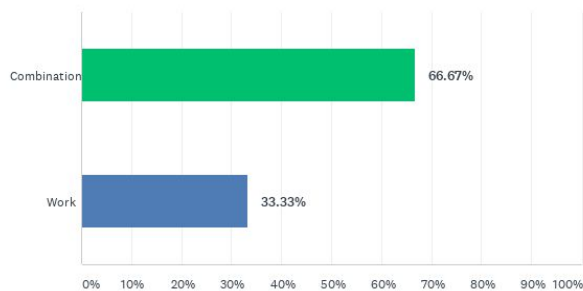


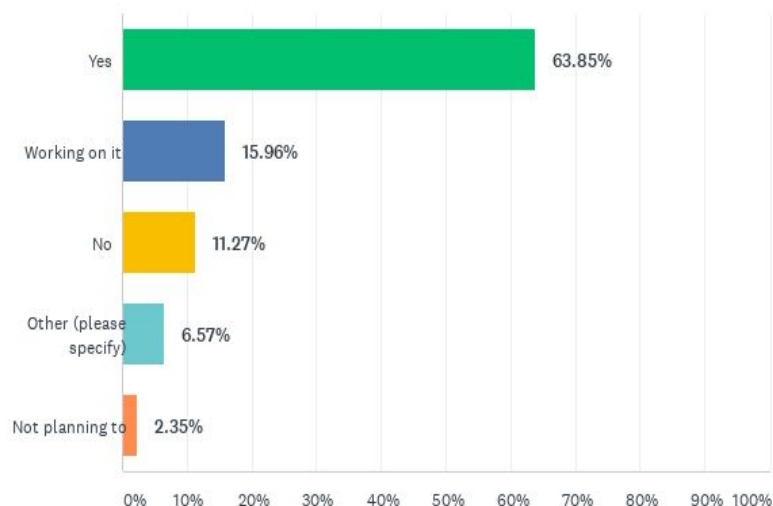
Figure 6: Devices are Personal or Organizational (French)

It is necessary to point out that French frontline workers used a combination of both devices from work and home, while the English surveys combination rate was much lower. Participants from the English surveys also indicated they used personal devices for work purposes, while respondents from the French surveys had no one selected this choice.

**Intake or needs assessment on technology, digital literacy, and communication preferences**

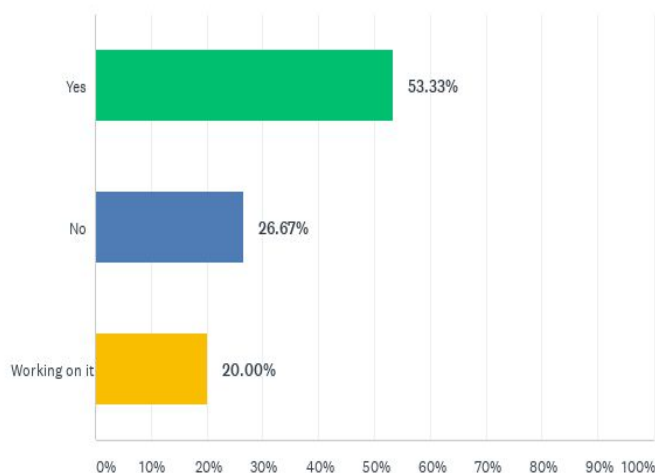
In order to explore degrees of frontline workers adopting digital technologies to capture client needs, we were also interested in exploring if frontline workers have started intake or needs assessment on technology, digital literacy, and communication preference (See Figure 7 and Figure 8).

Q8 Have you begun including questions about technology, digital literacy, communication preferences (eg. text vs email, etc.) in intake or needs assessment?



*Figure 7: Intake or Needs Assessment on Technology, Digital Literacy, and Communication Preferences (English)*

Q8 Have you begun including questions about technology, digital literacy, communication preferences (eg. text vs email, etc.) in intake or needs assessment?



*Figure 8: Intake or Needs Assessment on Technology, Digital Literacy, and Communication Preferences (French)*

The above figures demonstrate differences between the French and English responses. Our first impression was an answer from English frontline workers were significantly diversified as over 60% indicated they had done related needs assessment or intake. For those who indicated as other, one participant said,

Not yet, because it is a team approach, and it wouldn't be wise to offer services to the clients in the workshop I facilitate if the other facilitators did not feel comfortable with that particular communication option preference.

Another factor for not conducting any assessment for digital technologies on clients is attributed to client low digital literacy, and the assessment is not part of the protocol in the program.

### **Frontline Worker Digital Literacy**

This section encompasses three pillars: digital literacy professional development training offered for frontline workers, ethical considerations in blended service delivery, and digital wellness when working remotely.

#### ***Digital literacy professional development training***

Frontline workers' training and support were predominantly focused on educating them to use digital devices and platforms. Among 198 responses (English 183 and French 15), 67 informants responded that they had attended training sessions on how to use Zoom, Microsoft Teams, and other social media platforms such as Facebook and Instagram. These settlement practitioners had been progressively increasing their knowledge of using digital technologies to better serve their clients. In this way, it creates reciprocal learning spaces that frontline workers could further provide digital literacy training to enhance clients' digital skills.

While frontline workers took responsibilities to guide clients' digital practices, our data exposes that IT specialists and frontline workers themselves can provide digital literacy training if programs do not provide related training opportunities. This self-guided learning empowers settlement practitioners to develop and strengthen their virtual learning environment and digital workplace relationship.

We did not get official training on how to use WhatsApp or Facebook for work. Myself and a co-worker created a presentation to create some guidelines around privacy, app features, and best practices. We presented to multiple internal departments, plus presented nationally via Tutela and regionally via the Alberta TESL conference.

Here is another example that highlights how frontline workers construct their learning autonomy to explore internal and external learning opportunities in virtual learning spaces, heightening their digital skills development and growth:

First, I have a BA in Adult Education that included learning, and learning to teach, in blended environments, so I have been a resource to some of my co-workers. Second, my co-workers have been a resource to me; we all have different specialties and share our tech knowledge/best practices. Third, I've attended CERIC webinars and other services (GoToMeeting tutorials, YouTube resources, etc.) to increase my skills. Fourth, we're planning targeted PD to increase our skills as a team in line with our IRCC & BCSIP contracts/deliverables and in support of our clients.

### ***Ethical considerations on cybersecurity***

Besides professional development training on digital technologies and skills, the notion of digital ethics and cybersecurity can be essential while delivering services with a blended model. Our responses illustrated that frontline workers had taken comprehensive ways of protecting client confidentiality, including not asking for personal information via email but over the phone, setting passwords for important documents and devices, deleting emails or pictures with personal information once the service was completed, using reliable work digital devices to secure all documents are properly stored, and dressing properly when meeting clients online. The following answer is a typical example to accentuate how frontline workers have adopted a series of ethical practices to safeguard information for their clients.

I follow a set of ethics that applies to education & career counselling. I follow the same ethics digitally as I would in person. I have extensive training in human rights and therefore, these are forefront in my mind. In terms of very practical aspects such as SIN, DOB etc. --this is not information that I protect individually--it is the IT security team's responsibility to protect information on our platform. Of course, I have a duty to inform them if I suspect anything suspicious, which I take very seriously.

Another example that delineates frontline workers' practices on cybersecurity:

I use Google suite for emailing my clients. I believe that Google has good security. The government forms are secured. I never asked people to provide me SIN number by email or text messages. If I need their SIN number, I will call them.

For many participants, they did not only follow multi-layered online privacy advice but also educated their clients regarding how to better protect their virtual confidentiality.

Preparing for a workshop to inform newcomers about phishing scams. I personally keep advising and warning clients to protect their information all the time and start that with a practical training such as: I make a phone call. I introduce myself and my organization then I ask them about their name. If they answer directly, I stop here and draw their attention about the risk of doing so (e.g. not to start sharing your info., take the power and use your right to also ask questions and the caller has to provide you with it, if it is an email address, I explain to them that it shouldn't come from Gmail/ Hotmail, etc., it needs to show the name of the organization the person is working for).

### ***Digital wellness when working remotely***

From the above example, we understand that frontline workers have worked in multiple positions. As digital service delivery triggers opportunities for these practitioners to reflect and reinforce their daily praxis, we speculate if these multi-dimensional work tasks have generated any impacts on these workers' digital wellness when working remotely. All 197 responses (English 182 and French 15) pinpointed different mental health issues after months of working from home. These digital consequences can be categorized by four major factors: a lack of work life balance because of heavy workloads, difficulties of transitioning home space to a workplace, isolation, and digital fatigue.

Despite the fact that frontline workers had confronted complex forms of increasing workloads that engendered digital fatigue, they were told to self-navigate to deal with their stress. One respondent expressed,

An increased number of Zoom meetings created digital fatigue and stress. To deal with this we started having more in person meetings with masks and social distancing. Now we are unable to do this as we are back in lockdown. Another side to this is balancing work life and personal life while working remotely. Some staff worked overtime meeting with clients, partners and staff. Now we are expected to know when to take a break when we need one. We are encouraged to use our own discretion in terms of our own mental health.

Another example highlighted similar issues:

Digital fatigue is so real!! My eyes are so dried out after 7 hours of video calls. I am working on significantly increasing my water intake. I have also started printing the homework materials and closing my laptop when I am on video calls. I find having both the laptop screen and the phone screen on me all day just drains my energy.

A third perspective was that frontline workers experienced different degrees of isolation without connecting their colleagues in the office space.

I miss them! One of the reasons I got this job was I felt the need to meet new people in a controlled work environment. Part of the joy of the job is gone because they are not around.

While many participants pointed out that heavy workloads triggered stress, informants also elaborated on how workplace anxiety could come from low digital literate clients.

The challenges of working remotely are not being able assist clients faster, many of my clients are not familiar with technology, apps, and they are not able to give me the information required to assist them. For example, some don't know how to send an email, some don't know how to join my workshops online,

I try to guide them as much as possible but it depends on them and how much they know. Sometimes I am not able to help them join my online workshops because some have zero knowledge of using computer, devices, or have limited English.

As faced with different degrees of anxiety, stress, and digital fatigues, respondents shared how they managed to alleviate related situations. Many frontline workers reported that they had set a work routine and took regularly scheduled breaks. They also tried to set a routine with clients by sending them an appointment or homework reminder in the morning. Secondly, making proper use of digital technologies was referred by participants to solve anxiety when working from home. For example, when delivering group sessions, webinars could be more efficient than one on one meetings. Thirdly, switching digital devices can support participants to refresh their minds and practices when serving clients. They adopted the best digital communication tools to connect with clients for different purposes. For instance, after hours of virtual meetings, they tried to contact clients by WhatsApp on their cell phones. In this way, they could escape from sitting in front of the screen but walk around at home when using cell phones.

As many frontline workers encountered digital mental health experiences when working remotely, our research finds that the transition to hybrid service delivery has fostered crucial learning and reflection on their daily virtual workplace practices. It is therefore the purpose of the next section to deconstruct the learning moments that have brought to frontline workers' workplace activities.

### **Frontline Worker Learning and Reflection in the Digital Spaces**

This section addresses the learning and reflection of frontline workers when working in a remote/digital service delivery model. Overall, the learning and reflection derived from digital transformation involve 1) challenges of utilizing a remote/digital service model; 2) strategies and successes in delivering online services for clients; and 3) learning and reflection in delivering digital services.

#### ***General experience of providing remote/digital services to clients***

As we were interested in understanding the scale of frontline workers regarding their experiences of adopting digital services delivery and working remotely, we asked what their experiences were shifting to digital services delivery and remote work (see Figure 9 and Figure 10). Among 195 responses (English 182 and French 13), 46.15% of participants indicated the experience was better than expected and they enjoyed working remotely and delivering services online. Meanwhile, it needs to be noted that over one-third of respondents from the English surveys and one-fifth of informants from the French surveys stated their adaptation was stressful but trying to make progress.

Q15 What has your experience been like shifting to digital service delivery/remote work?

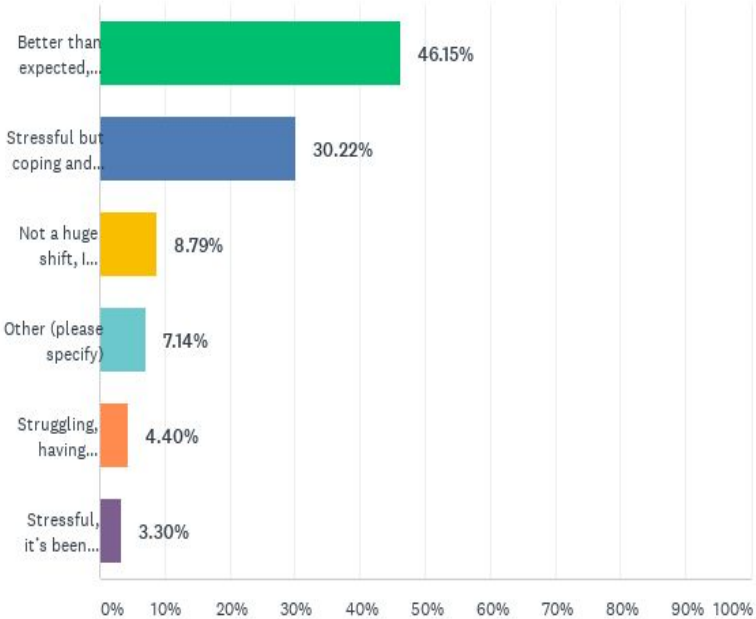
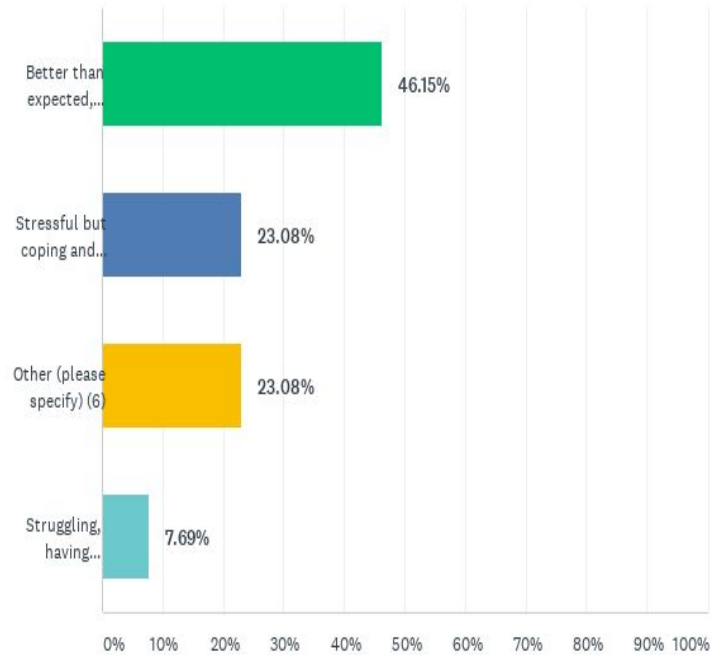


Figure 9: Experiences of Shifting to Digital Services Delivery/ Remote Work (English)

## Q15 What has your experience been like shifting to digital service delivery/remote work?



*Figure 10: Experiences of Shifting to Digital Services Delivery/ Remote Work (French)*

With the purpose of examining frontline workers' transition to digital service delivery, it is equally critical to explore clients' feedback and creation on being served via digital tools (see Figure 11 and Figure 12). Our data reveals that almost 40% of both surveys (English 182 and French 13) selected better than expected. However, it needs to be pointed out that 15.38% of participants stated that their clients had difficulties participating in remote services. In the French surveys, respondents highlighted that clients had different digital literacy levels, so that they had to draw on the best digital tool to serve them.

Q16 How have your clients reacted to being served via remote tools?

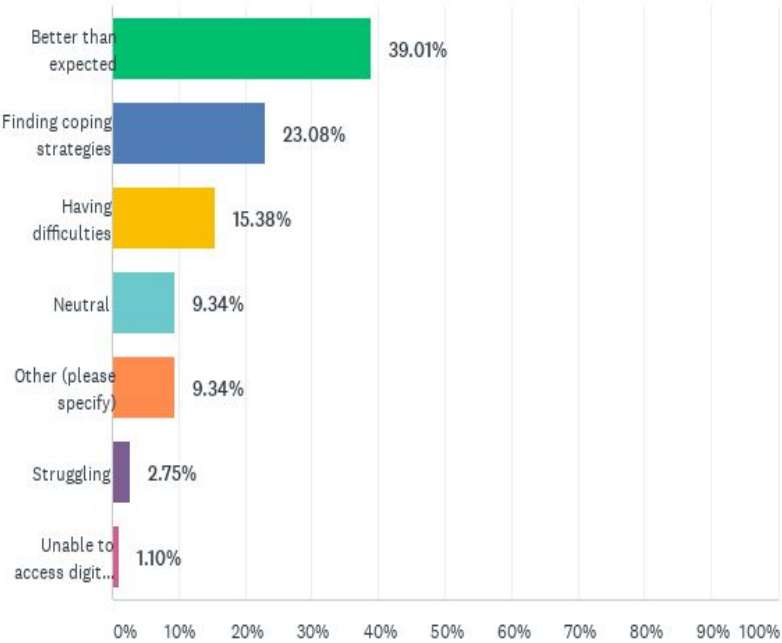


Figure 11: Clients Reactions on to be Served via Digital Tools (English)

## Q16 How have your clients reacted to being served via remote tools?

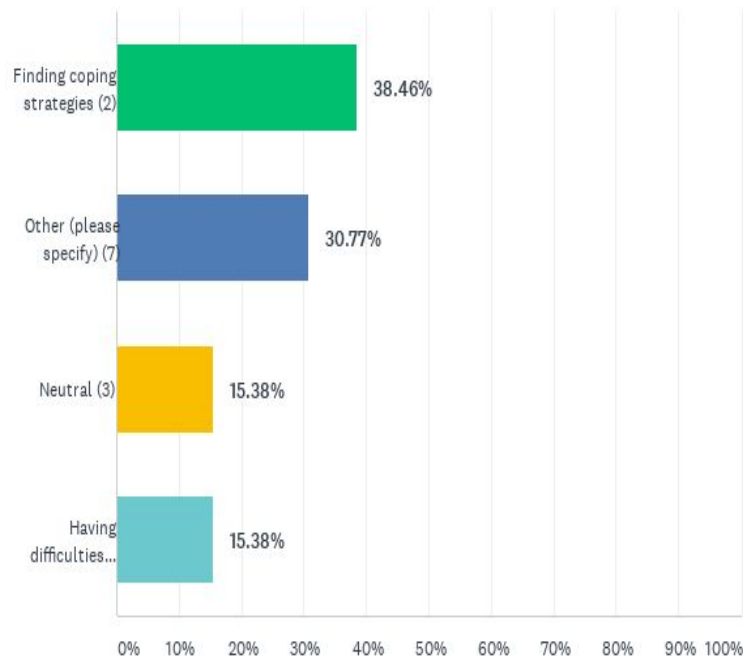


Figure 12: Clients Reactions on to be Served via Digital Tools (French)

### **Challenges of delivering remote/digital services**

Let us delve into the stories of participants to further understand the reasons behind the quantifying percentages. As one of the primary goals of this research is to examine settlement workers' experiences of remote/digital service delivery, it is important to explore their challenges. In order to examine the multifaceted difficulties and barriers, we aim to disassemble the notion of challenges between different social relations: between the colleagues themselves, their clients, and governmental institutions. Besides, frontline workers also reported digital divide experiences on their own.

In terms of challenges when working with colleagues, respondents demonstrated that working with frontline workers whose digital literacy skills were low could be difficult for online service delivery. To solve this barrier, frontline workers provided digital literacy training for those low literate practitioners to minimize the gap in digital collaboration.

I work closely with a colleague who has low digital literacy skills, and I find myself providing regular training and guidance on the use of digital technology, even more so now than before the pandemic.

Many of the confronted challenges derived from the virtual working nature that cannot be transferable. One of these untransferable features was the immediate support from their colleagues. Respondents indicated that working remotely created barriers to meet colleagues face to face and seek immediate support from them. The absence of immediate support includes having a brainstorming moment, stepping away when help is needed, or missing the

opportunities to share clients' cases and discuss problem-solving in physical spaces. Though digital spaces have tightened some frontline workers workplace relationships, it has not always provided timely support for discussion and experience sharing. As a result, these participants internalize workplace barriers and challenges, which further trigger anxiety and stress.

Secondly, frontline workers indicated that working with clients comes from some of the nature of working remotely. These barriers contain clients cannot access digital devices, clients' low digital skills, disconnection with clients through online service delivery. One informant denoted different degrees of barriers clients encountered regarding accessing digital tools. Instead, the service program endorsed means to tackle this obstacle.

Learners who are not able to access online/digital service are invited to attend the hybrid classes and stay in the class after the f2f session to complete activities assigned to be done at home/remotely as they have no computers or tablets at home. Clients are also referred to charity organizations and stores that offer or sell computers for very reduced prices that clients can afford.

Due to the difficulties of digital divide, it was more complicated for settlement workers to complete settlement tasks/goals.

Some clients only have a phone, some do not have a computer and/or internet, some have very low digital literacy. Services take longer and more sessions to complete settlement tasks/goals.

In addition, survey respondents indicate that low digital literacy combined with language barriers produced additional challenges for online service delivery.

Language and literacy tech barriers (teaching clients how to Zoom in order to provide services involving screen sharing for document support or connection/language development programs such as Conversation Club.

Apart from digital inequality, respondents experienced the untransferable character of virtual service providing compared to supporting clients in a physical office space. One participant stated the difficulties of not observing the student's learning process when teaching a large group online.

In a literacy class, face to face instruction is very important. The students are unable to take cues from their classmates and cannot partake in the practice dialogues that are a part of every class (except with me as their teacher). Teaching reading...beginning sounds, ending sounds, vowel sound and 3 letter words is very difficult to do over the phone or over a screen. I tried doing it during my last remote teaching experience and found that my students were getting very tired and frustrated quickly so I left it.

Participants identified difficulties of losing clients who were not willing to participate in online sessions and services. In order to invite these clients to online activities, frontline workers adopted different approaches to maintain client engagement.

People were not engaging and not attending the online programs when they are experiencing anxiety and other feelings related to mental health; during this situation we usually do personal check up by calling over the phone or texting to initiate the communication and asked client on how we could best help her/him.

Frontline workers indicated they had trouble replicating some settlement services digitally. For example, house viewing and lease signing and assisting with moving out of temporary accommodation were limited due to the pandemic outbreak. Additionally, mental health counselling had been greatly impacted by the COVID-19 social distancing policies. Online counselling restricted their mental readiness by observing clients' body gestures and complex facial expressions. For these frontline workers, they found it extremely difficult to provide remote service and retain their interactions with clients in need. It was also challenging for these frontline counselors to deal with traumatized clients physically away from each other.

On top of the above challenges, our data uncovers that frontline workers' difficulties can originate from government institutional procedures.

I had no problems with the technology. However, my problem was the use of the ICARE. I have the system in the office with a good computer. So, when I need to use ICARE I had to go to the office. I could do it at home because I have a laptop from my work, but I was concerned about the privacy on the laptop in a different internet networking. However, I ended doing the ICARE in the laptop because I did not want to go to the office by my own if nobody was there. Many of my colleagues used their own laptops because there were better than the laptops from the office.

Another response elucidates the prolonged waiting line from the government that complicated their service delivery process.

I started working directly remotely during the summer and coped with it. Long waiting lines for CRA and IRCC are an issue and sometimes they don't accept translation without use of representative form. or refuse to be on a three-way phone calls, that makes it challenging to quickly serve clients.

One participant elaborated on how funder restrictions on accessing system documents and client low digital skills produced layers of challenges for frontline workers to proceed with their daily work tasks.

The biggest impact I have seen is access to forms and guidance in navigating systems. Many of the forms required for IRCC purposes will not open on phones or tablets and have frequent error messages in downloading. With our offices closed along with libraries, the ability to print and scan documents or access a desktop computer reduced significantly. I had clients who had to purchase new equipment in order to complete their applications from home. Particularly for older clients who don't have digital literacy skills, they had to wait for months until restrictions eased to receive service. Other clients have waited months to receive notifications from IRCC on their applications and from our end we could only tell them to keep waiting to hear back. This has put the majority of these clients into 'implied status' with no real decision being made on their immigration status.

A fourth challenge reported by frontline participants was digital inequality among frontline workers themselves. One participant pointed out the difficulty of accessing technology at home since only one computer was shared within a household. Agency then provided a laptop for this participant to solve this issue. Moreover, another informant indicated the precarious nature of working remotely was to self-invest in digital tools.

I spent \$500 of my own money updating my PC so that it could handle having many windows open at the same time: database, MS Teams, GoToMeeting,

websites for sharing with clients, etc. Still, sometimes my computer has a sudden shut down to update. I don't have access to an in-house IT team, so I'm terrified this will happen when I'm presenting a live webinar/virtual workshop to a group of people.

Another difficulty reported by participants was regarding solving the tech-related problem when working remotely. One informant said,

Problem with good internet because I didn't have a fast speed at home. No help to resolve internet issue, you have to be involve in all problem resolution.

### ***Successes and strategies when adopting a hybrid service model***

As frontline workers confronted multi-dimensional challenges when working remotely, they explored strategies and achieved successes. Our data demonstrates that frontline workers have produced successes and made strategies to engage newcomers and communities when using a hybrid service model to serve their clients. This report is not separating successes and strategies in findings since these two experiences are interconnected and intertwined.

Figure 13 and Figure 14 virtualize the degrees of engagement that have been made with newcomers and communities. Surprisingly, answers from the English surveys and the French surveys were contrasting. 67.65% of 170 total responses indicated that they had created new ways to interact with newcomers and communities and the French surveys had 20% of 10 total responses selected definitely yes. The major choice made by the French surveys was probably yes (80%), while 25.88% was selected by participants in the English surveys. As we asked what were the approaches to engage newcomers and communities as a follow-up question for these multiple choices, we could not grasp the reasons for frontline workers in the French surveys regarding not being able to engage newcomers and communities. However, responses from the English surveys enriched our understanding since these diversified answers can create spaces for us to reflect on best practices to serve newcomers and communities in future settlement work.

Q22 As a result of the pandemic, has your organization found new ways of engaging newcomers and the communities you serve?

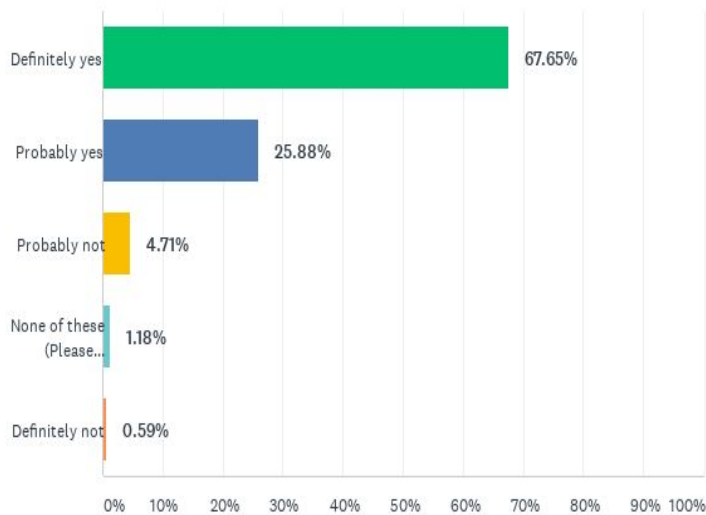


Figure 13: New Ways of Engaging Newcomers and Communities (English)

Q22 As a result of the pandemic, has your organization found new ways of engaging newcomers and the communities you serve?

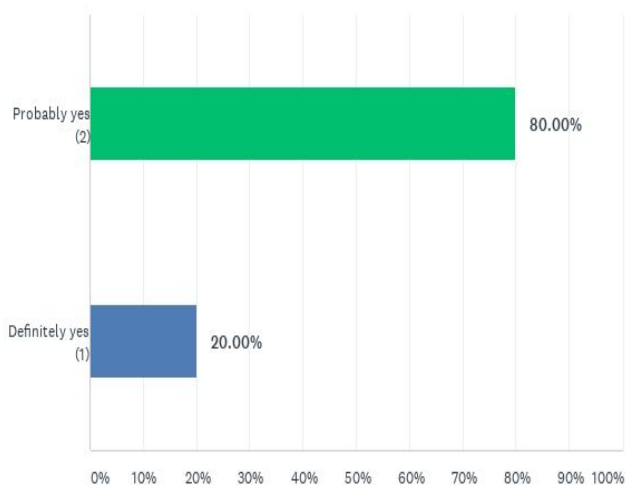


Figure 14: New Ways of Engaging Newcomers and Communities (French)

Community outreach was an efficient way to navigate their interactions with newcomers and communities. One informant noted,

Our department became proactive. Instead of waiting for clients to see us, we call clients to let them know that in spite of the current health situation, we are still able to provide the services.

Additionally, participants shared with us that they created social media platforms for digital marketing as well as a website to provide COVID-19 related service updates for client convenience. These online outreach activities had embraced clients from rural areas and increased their participation in online sessions. One respondent said,

Delivering more group sessions to clients that we work with and engaging them in different sites' activities. Such our clients from Leamington, they don't to travel to our Windsor office to attend a group session or a service in person, now they can engage more with activities that our Leamington office does not provide.

Besides marketing approaches to elevate outreach to different communities, respondents mentioned their comprehensive ways of customizing their remote service to cater to clients' needs. One frontline worker stated,

Online community kitchen - where local immigrant showcases their cultural dish online by showing how to cook, using Zoom and live stream. Anyone including newcomers and community members are welcome to join, learn and discuss afterwards.

As noted by another participant,

We initiated lots of online programs for different groups such as: student tutorial, homework club, family activities (cooking, parent-child play, parenting classes), workshop/sessions on different settlement topics, music, arts and crafts. One-on-one support counselling; mental health group activities. Employing people with different skills and expertise to work with our team to effectively deliver our services to our clients.

Apart from diversified online sessions and activities to develop embracing spaces for online interactions and engagement, some frontline workers adopted an online and offline blended service model to transfer career related events through digital platforms. This service approach has successfully supported immigrants to integrate to the Canadian labour market during the pandemic times. One participant said,

We have had to use more of online webinar tools such as zoom, GoTo meetings etc., to help our clients with events and conferences to help them with networking and other employer and job seekers engagement activities. Also, the clients are really pleased to hear from us by phone, email and video. They feel that they have the support they need at such a difficult time. The technology tools have definitely been a lifeline for many job seeking clients. We are definitely having clients also successfully complete online courses/trainings and also starting to find work!

Another example shows how blended services have been adopted for language instructors to serve their students:

I drop off the homework packages and pick them up when they are finished (once monthly) and occasionally they take screen shots of their work and send it to me (Forming the alphabet, number, copying words etc.)

As a result of localizing and customizing online services and employing a blended service approach, frontline workers have established a trustful relationship with their clients through various online and offline hybrid models.

New client provide information first through email about agency and program, we share website link to win trust and confidence of the client and after that try to contact client through video call for intake and provide other information related to newcomer.

As another participant mentioned,

Based on the feedback from clients, they are very happy with our online services. They are sending us lots of positive emails and other feedback messages.... We have also started to help our program clients with finding mentor connections to help them built on their networks, industry knowledge/trends etc. We also support clients with their training plans and clients are informing us that since all the courses are mainly online, the seats are quite full and sometimes they need to be on waitlist that also delays their action plan & job search.

In addition, digital service delivery successes have been obtained not only from working with clients but from frontline workers themselves. The digital service delivery model has carved digital collaborative opportunities that enriched frontline workers' virtual learning experiences.

Participants addressed that learning can be referred to as a series of remote interactions such as online resources sharing, attending online workshops, online group discussion and experiences sharing, and weekly/monthly staff meetings. Respondents underscored the importance of selecting the most effective digital tool to increase their workplace outcomes with their colleagues. One informant noted,

We need these tools for effective communication and delivery of the content that I wanted others to know. Some are visual and easily understandable. quick and easy means of receiving and sending information. These online tool takes away virtual feeling and brings us closer.

Similarly, another respondent stressed that digital tools helped them create a collaborative work environment and enhance their productivity.

These tools help maintain a collaborative environment and allow us to be productive despite not working with one another in person.

As another respondent noted,

Slack - instant messaging – it's like a virtual workspace and office where everyone is easily accessible and short questions are answered quickly.... We are trying to recreate the office space into the virtual context. These tools are helping us do that.

### ***Learning and reflection on digital transformation***

While frontline workers have experienced challenges, successes, and strategies to service client with a blended service delivery model, it is indispensable to examine what they have learned so far throughout this process. The most predominantly mentioned concept by our participants was the notion of digital inequality, which can be overarchingly defined as “some don't have the technology, or don't have wifi, or they don't know how to use it.” Specifically, we identify that this social inequality derives from these four factors: 1) clients had no access to digital devices such

as cell phone, laptop, or tablets; 2) Clients were living in precarious situations which limits their digital devices access; clients had poor internet connections; and 4) clients were with low digital literacy skills to use digital devices or online tools. The following two examples depict how clients were in vulnerable living conditions based on their intersectional identities that trigger difficulties of accessing digital devices and making use of them:

Good Internet connection and access to laptop/devices (most clients have one device only and need to share it with family/children).

A significant gender barrier where the wife of a husband/wife student couple is largely absent due to family /home responsibilities.

One informant addressed the complications of clients' above-mentioned digital inequality situations that engendered obstacles when providing online services for their clients.

When someone needs technical support for applying anything online (EI, immigration document, BC MSP, etc.), and if the client's computer literacy is very limited, along with the language literacy, then it becomes impossible to navigate the support needed online or over the phone. Only in-person support can meet the needs in this case. Also, when clients do not own their laptop, nor updated smart phone when they need to apply something online, then it is required to meet in-person to use my work laptop for them.

The next story delineates that frontline workers were frustrated to serve clients who were experiencing digital disparity.

Not knowing how clients are actually coping has been very stressful. We know that many of them struggle with regular access to internet and technology so we have continued to use telephone services to follow up with them. Early in the first phase of lockdown we conducted a phone outreach service and received replies like "getting by" and "making due" which was not a great indicator of their level of coping. We had instances of domestic abuse with people being laid off and discouraged from leaving their homes. Many of our clients who are international students did not qualify for income support benefits and instead continued working in retail positions now considered "essential" but with higher risks too. There were also challenges in the settlement workers being able to connect with each other and discuss situations as we would have previously.

While many participants elaborated on digital inequality among their clients can be daunting for both frontline workers and clients, several respondents mentioned that they have learned to become a more embraced learner to fit in the digital learning spaces.

I learned that technology will never replace the presence :) but it helps to keep children and parents connected and engaged, so that way they feel care and love and can continuing the learning process and the developmental children aspects. (emotional, cognitive, social and physical) Also I learn that it is always positive to be ready to leave the comfortable zone and be creative for new challenges. I learn that without technology we would be dead, completely disconnected.

The following frontline worker pointed out different layers of learning acquired since working remotely.

Being open minded for exploring different technologies that can serve better my audience, also being respectful to the personal contribution, time, commitment and interaction of participants in my program. Being patient and reflective in responding to learners' needs and questions. Also respectful to personal information that they share with me and keeping confidentiality. Always asking for consensus if the recording of the meeting is needed.

This section describes findings related to frontline workers' challenges, strategies, success, and learning that occurred to their experiences of digital service delivery. As forecasting the next steps, what do these frontline workers need, and what are they expecting to better adopt a hybrid service model? We will answer these questions in the next section.

### **Frontline Worker Future Expectations**

In this section, we intend to learn more about frontline workers' digital transformation experiences within their organizations and invite them to consider what the sector needs to move towards a hybrid settlement service delivery model in the future.

### ***Skills and resources for future practices***

Frontline workers mentioned the technologies, resources, and skills that they would like to have to proceed with a hybrid delivery model. Notably, eleven participants out of 154 responses (English 145 and French 9) illustrated their need to learn more about digital technologies and online tools to create more interactive sessions for clients. Five frontline workers highlighted the need to improve technology resources for frontline workers. One respondent especially explained the need to obtain a company cell phone so that clients could recognize where the calls came from. Since many of them were using Google hangout calls, clients were reluctant to answer the calls because there was no caller ID.

Another informant mentioned the demanding need to upgrade the organizational website and its function for clients' timely needs. This person described,

Have a better website for people to engaging with the organization. Have a regular newsletter sent to clients. Have a live chat option on the website for clients to connect with us.

### ***Needed roles and jobs for future hybrid services***

Frontline workers also shared with us the roles and jobs that were emerging in their organizations. Among 159 answers (English 150 and French 9), 21 respondents mentioned that they needed IT specialists who can immediately assist them in their technology-related concerns. Forty-three participants noted that they needed internal technology trainers to provide digital literacy training for frontline workers. Thirty-five informants addressed that online facilitators were essential to help organize online learning, sessions, workshops, and courses. Twenty-one frontline workers expressed that instructional designers and curriculum developers were vital to create and regulate online course materials for online sessions and workshops. There were six informants indicated the need to have digital marketing specialists for digital outreach and workshop advertising. Simultaneously, one mentioned hiring mental health specialists to provide professional guidance for those staff experiencing digital wellness issues when working remotely.

In terms of the core digital competencies that frontline workers need to maximize digital transformation and hybrid service delivery, the most identified digital competencies were: 1) administration and coordination skills; 2) digital needs assessment and client needs evaluation, time management and self-discipline; 3) data solutions related skills (data cleansing and data

handling in the database systems); 4) specific digital techniques/skills (video editing); 5) public relations and digital marketing; and 6) communication skills.

***Needed support in future settlement work***

In terms of support that these participants needed for future blended service delivery, 151 responses (English 143 and French 9) portrayed that they were hoping to provide reliable devices and designated mails/postal service for clients who need hardcopies documents. One participant also addressed the need to have a manual for all the new communications methods that staff can refer back to when needed for their work. In the same vein, another frontline worker noted that they need centralized digital service delivery guidelines to best use digital technologies and sharing these experiences with others. This person stated,

We need a national centralized body to share the best practices of how to use digital technologies - down to the level of detail of how to use break out rooms in zoom. We need to hear from every service provider organization about their best practices. We need to share as much as possible as soon as possible.

In addition, these participants presented five major training expectations, including online workshops to increase online facilitation, mental health-related workshops, digital marketing skills, digital services outcomes evaluation model, curriculum and instructional designing, and developing training.

**Report of Findings on Management**

**Management Encountering Digital Technologies**

This section provides the findings in relation to management settlement workers' digital participation in the context of digital transformation and hybrid service delivery. The data in this section derives from both multiple choices and open-ended survey questions.

***Reasons for selecting digital technologies***

As one of our research goals is to explore the experiences of settlement workers' interactions with digital technologies when managing their staff, we focused on what were their mostly used the online tools, channels, apps in the notion of workplace digital technology interaction (see Figure 15 and Figure 16).

Q40 What online tools, channels, apps, etc., do you mostly use in your daily work communicating with staff and others (check all that apply)?

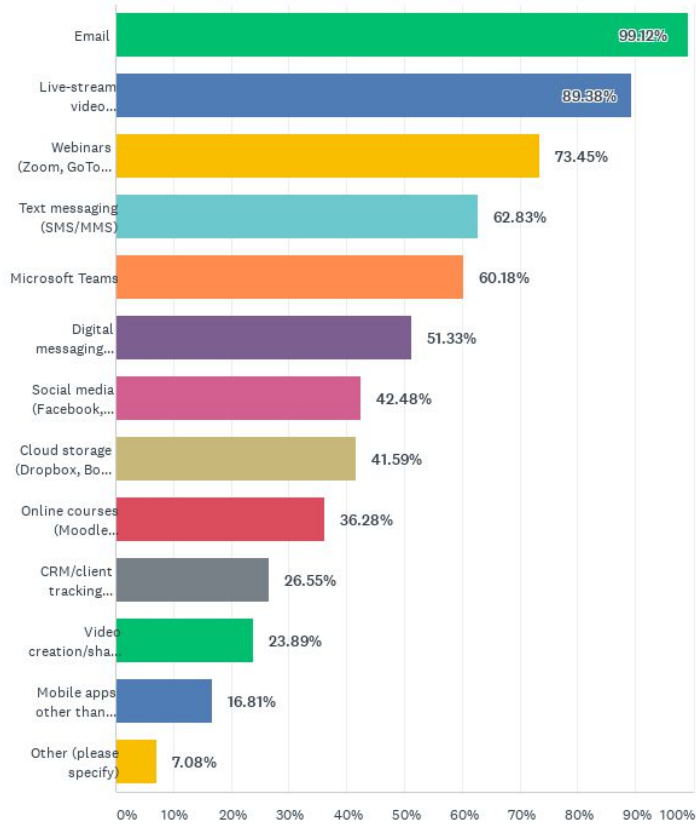


Figure 15: Management Settlement Worker Mostly Used Digital Devices (English)

Q40 What online tools, channels, apps, etc., do you mostly use in your daily work communicating with staff and others (check all that apply)?

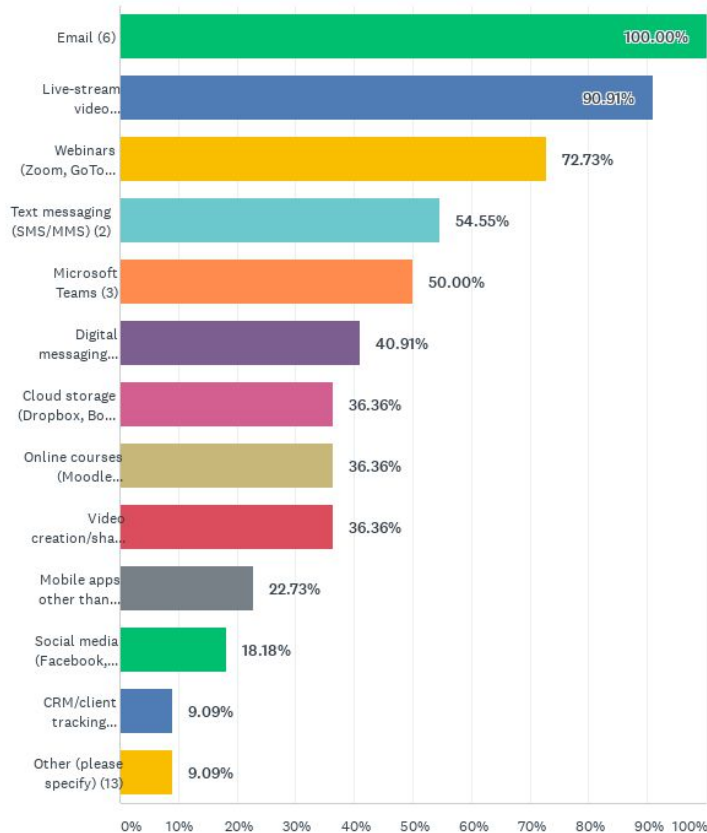


Figure 34: Management Settlement Worker Mostly Used Digital Devices (French)

While the English and French surveys demonstrate that frontline workers' digital technologies usage has different preferences, mostly employed digital tools from the managerial participants appear identical ranking with different percentages. Based on the above figures, we find that over 50% of the total respondents mostly used digital devices are email, live stream video conferencing (Zoom, Skype, Google Hangouts, Microsoft Teams), Webinars (Zoom, GoTo Webinar, Microsoft Teams), Text messaging (SMS/MMS), and Microsoft Teams. Compared to the frontline surveys, management settlement workers in the English surveys have a higher percentage (15.31%) using live stream video conferencing. However, the French survey management participants have a lower rate (9.01%) than frontline respondents in the same survey in terms of using video conferencing.

Regarding the reasons for mostly employing these digital tools, these managerial informants offered various purposes, of which the principal objective was to better support internal communication. In light of our data, digital technologies have become essential navigation for managerial work-related activities. These work-oriented engagements encompass sharing documents and resources, professional development discussion and training, and creating virtual office space. One respondent said,

To maintain a collaborative environment and team life despite working remotely (Zoom, Slack) - To ask questions and receive questions quickly without having to compose an email (Slack, Skype chat function) - To keep an overview of the team's tasks and the progress of the projects (Asana, Monday.com) - We use the telephone very little (more intrusive/disruptive than other means of communication), except if it is essential to speak to each other face to face (e.g. conflict resolution, personal matters). – Also, emails are reserved for more formal communications or more complex subjects.

Another example as noted,

Some tools are easier access, simpler, on hands tools that available to all without any conditions as dealing with International Students or Newcomers they do not need any complexity in using those virtual tools, even on higher levels such as directors and managers many of them appreciate the easier ways of connections. In my position, I am using the virtual for meetings, webinars, training, team meetings, individuals meeting and more. Also, we use many of those tools to provide Interpretation Services too. We use a lot Zoom as it is very simple, never had any problems in connections or design any rooms.

The above two responses elucidate the additional reasons for adopting certain digital technologies at work such as cost, privacy, cybersecurity, accessibility for staff and clients, staff management, and user-friendly features. Meanwhile, the second answer also highlights the significance of selecting accessible and flexible tools for clients to establish a stronger service delivery connection. It is noteworthy that confidentiality was respectively stated as their initial concern when selecting digital tools. Moreover, one managerial individual signaled that this prioritization might not be flexible to their clients since many immigrants were low in digital literacy.

Apart from the motivations mentioned above, our data reveals that management settlement practitioners widely adopted digital technologies innovatively to reach out to local communities for cross-institutional collaboration and locating new clients. One respondent concisely pinpointed each digital tool functioned to the unique purpose of outreach.

Facebook reaches our working families. Instagram reaches youth/young adult.  
Email and zoom - contacts with partnering organizations. Posters put up at local shopping - vulnerable/seniors who don't or can't use technology.  
Radio/Newspaper - seniors and businesses.

Our data identifies that management staff has well-integrated mostly used digital tools to manage their staff. One respondent shared with us a typical workday routine, which facilitated workplace supervision.

All staff sign onto Skype and their email at 8am. All communication and sharing of resources with staff is done via Skype and email. Scheduled lunch periods are in place. Staff must indicate on their Skype when they are away from their computer/desk for longer periods. Staff provide a weekly report on what they have done each week at the end of the week. All contact with clients and organizations is done via cell phone, Skype or Zoom. All meetings are held via Skype or Zoom. Phone is used much less often than online tools.

A similar example from another informant further illustrates how digital technologies can be a vital medium that entails diverse workplace activities.

Staff start their day online with a greeting on our group chat and connect with the other staff regularly throughout the day on this internal chat. Staff either work entirely from home, or some do go into the office for a day or two during the week to meet with clients in person. Many staff appear to work longer hours (starting earlier in the morning or staying later). We are trying to encourage physical/mental health breaks and good practices around work/life balance. We have regular staff meetings of the full staff or departments/teams over zoom.

As we have explored the reasons for managerial participants mostly used specific digital devices, we aimed to understand if these tools were brought home from work or their personal property (see Figure 17 and Figure 18). Our data attests that respondents' digital devices can be both personal and organizational since the choice of "combination" took the largest percentage in two sets of surveys. Among 22 responses in the French survey, no one indicated their devices were personal. However, 4.46% of the English survey (a total of 112 responses) pointed out that their digital tools were their possessions.

Q43 Are you and your staff using devices you brought home from work or personal devices (i.e. phones, laptops, tablets) to work to serve newcomers and communicate with co-workers?

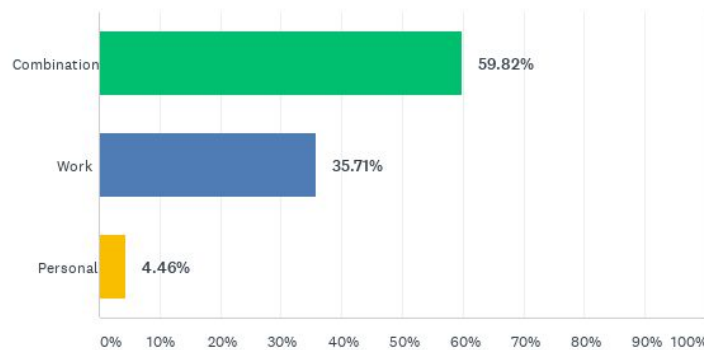


Figure 17: Devices are Personal or Organizational (English)

Q43 Are you and your staff using devices you brought home from work or personal devices (i.e. phones, laptops, tablets) to work to serve newcomers and communicate with co-workers?

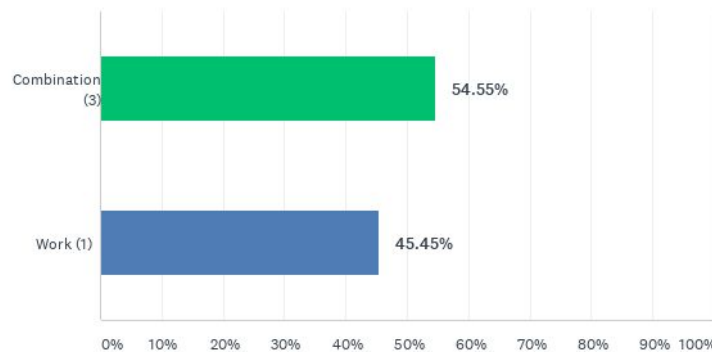


Figure 18: Devices are Personal or Organizational (French)

**Paths of making decision on digital technologies**

In terms of the management decision making process on digital tools for their organizations, respondents emphasized the indispensable factor of conducting institutional-based informal research, including needs assessment with clients, client feedback forms, focus groups with both staff and clients, and online staff discussion. Secondly, they tried to consult related stakeholders such as IT specialists, managers, coordinators, and staff to effectively captured program and service requirements. Additionally, communicating with external immigrant service organizations became prominently substantial to help experiment with online tools and platforms to seek the best resolution to meet the rising obligations to serve clients online.

...by talking with my ED, IT department, Managers, Coordinators, staff and understanding staff, client and programming needs. As well as connecting with other settlement directors and attending virtual conferences to understand what other agencies are doing.

We are communicating with other SPOs, asking staff and clients about their needs and preferences, testing out different platforms and seeking those that provide the highest levels of engagement. Watching what other organizations are doing.

Leadership competencies of these managerial respondents were also essential regarding decision making on digital tools. Four informants underlined that they took the digital transformation initiative before the pandemic at the organizational level. Since they were well-prepared, the pandemic crisis facilitated them to practice digital service delivery to their staff and clients. One respondent described,

Digital transformation is not new to my organization. We are experienced in delivering online service for the last few years. This helped us to advance with online tools and platforms for client services. Keeping this in mind for the last 2 years we made significant effort to build our staff members capacity to use Salesforce/BOT/ERP and so on.

We have established digital integration and adopted technological choices long before the time of COVID-19. Related studies and consultations were carried out to properly prepare the implementation of technological tools.

The above section analyzes reasons and approaches for management settlement workers to determine digital technology choices in their daily work practices. In the next section, we will examine management organizational practices in digital transformation.

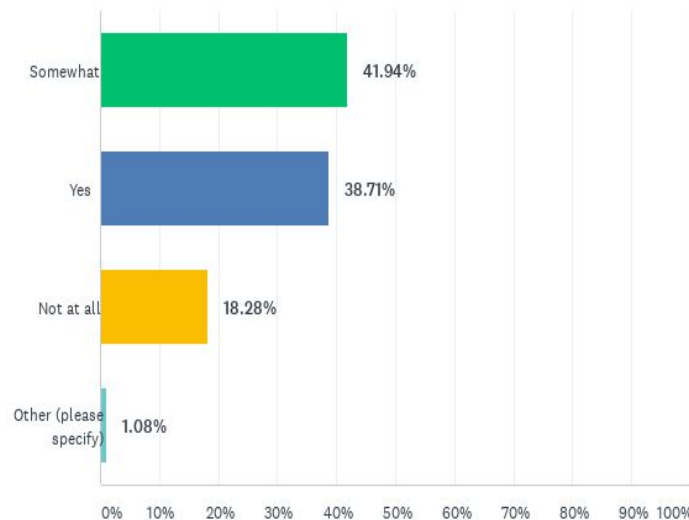
### **Management Organizational Practices in Digital Transformation**

This section intends to understand the leadership role of the managerial level of settlement practitioners in supporting the changing nature of digital transformation and hybrid service delivery in their organizations. Specifically, we focus on understanding the interrelated contexts between COVID-19 and digital transformation, protocols on management settlement workers' organizational execution on digital transformation, and evaluating organizational practices on digital transformation outcomes.

### ***Interrelations between digital transformation and COVID-19***

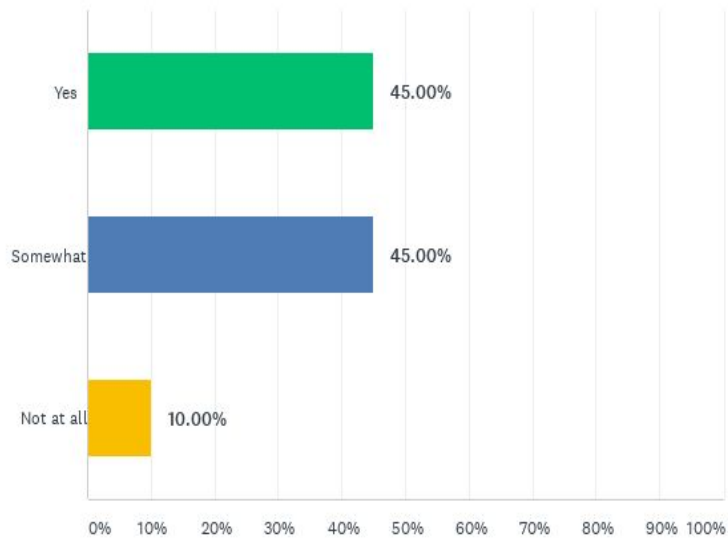
This theme is generated based on our curiosity about whether immigrant service organizations have created a digital transformation model in their organizational practices. To start with, we aimed to investigate if our survey participating organizations had considered a digital transformation of their services before the pandemic (see Figure 19 and Figure 20).

Q48 Has your organization already looked at digital transformation of your services before the pandemic?



*Figure 19: Considering Digital Transformation Services before COVID-19 (English)*

## Q48 Has your organization already looked at digital transformation of your services before the pandemic?



*Figure 20: Considering Digital Transformation Services before COVID-19 (French)*

The above figures render differences in applying digital transformation practices in their daily organizational operation before the pandemic. In the English surveys, 41.94% of management participants selected “somewhat consider,” while the French surveys had a percentage of 45%. Though both survey sample sizes are undoubtedly distinct (English survey 93 and French survey 20), we can grasp an overall perception based on our survey question.

In terms of whether COVID-19 has accelerated organizational digital transformation efforts, choices made by the English surveys and French surveys demonstrated divergent situations (see Figure 21 and Figure 22). In the English surveys, 80.65% of the total respondents stressed COVID-19 as a driving force to expedite digital transformation in their organizations. There were 13.98% of informants who chose “probably yes.” More interestingly, 3.23% of these participants selected “probably not,” and 2.15% picked “definitely not.” For the French survey, data indicates binary circumstances that an equal percentage (50.00%) of respondents chose “definitely yes” or “probably yes.”

Q49 Has COVID-19 accelerated your organization's digital transformation efforts?

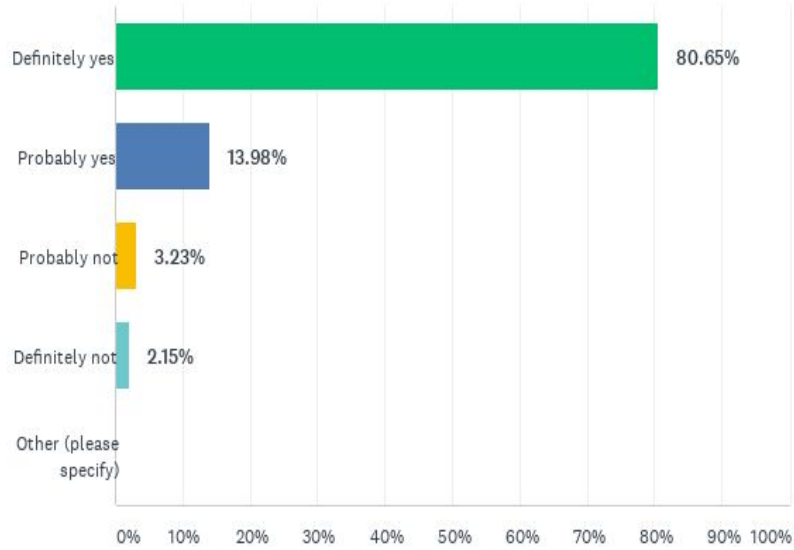


Figure 21: Acceleration of Organizational Digital Transformation Due to COVID-19 (English)

Q49 Has COVID-19 accelerated your organization's digital transformation efforts?

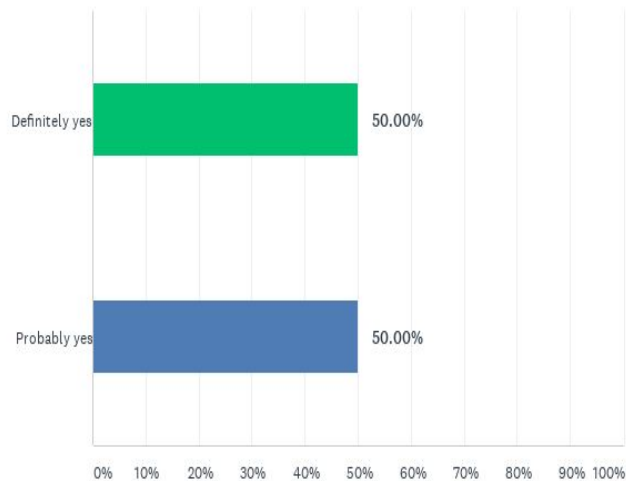


Figure 22: Acceleration of Organizational Digital Transformation Due to COVID-19 (French)

### ***Organizational strategies for hybrid service delivery***

Based on responses in open-ended questions, organizations are taking concrete actions to respond to the complex implementation of digital transformation and hybrid service delivery. Many of them indicated that they adopted a range of strategies to cultivate an embracing virtual learning environment for their staff and clients for mutual development on technology use. These strategies include providing digital literacy training for employees and clients, hiring digital service specialists or related talent, and forming a digital task group to identify and assess techniques to accommodate client needs best. Their understanding of hybrid service delivery was narrowly confined by providing services online and adopting a blended service model for many respondents. Here are two concrete examples:

We have put in place a hybrid digital service delivery approach that is built upon multilingual client on-line and telephone outreach needs and asset assessments. We have begun to focus more attention on ways e.g. curriculum development to teach digital literacy skills through different methodology including through the use of cell phones.

We have two models of digital service. Hybrid classes where learners attend f2f for half the time and work from home the rest of the time. We also have fully on-line classes but the sessions are divided between video conferencing where learners are f2f with the instructors through zoom or Big Blue Button, then continue to complete work assigned by the instructor on their own without instructor's presence.

Many organizations were not clear about a digital transformation model for those exploring the ambiguity in digital transformation and making a progressive application. They indicated "not really," "sort of," or "no" when answering if their agencies had created a hybrid service delivery framework. These agencies were either struggling with integrating digital technologies in their services or in the process of experimenting with online services to fit in the changing nature of hybrid service delivery. One respondent said,

No, we are a small organization with limited funds and resources. Also, we are not very well versed in a lot of technological knowledge.

As another participant stated,

No, the organization hasn't created an agency-wide digital service delivery, as we are a multi service organization and different programs need/use different digital tools and platforms to best serve their clients who are receiving that particular service(s), i.e. a youth program uses different platforms, than say a seniors program or an employment program.

A third example:

Not really, we rather created a collection of service delivery tools from existing technology, purchasing new devices, and looking at tools clients are or can be using.

Though delivering hybrid services can be an essential piece, the concept of digital transformation can be more complicated. It includes the use of digital technologies, knowledge development and mobilization, financial support, as well as internal and external structural change (Kane, Palmer, Phillips, Kiron, & Buckley, 2015; Matt, Hess, & Benlian, 2015). This process invites all stakeholders to consider what needs to be changed, what should be continued, and how to make it happen. Given this context, the following example pinpoints

related resources and actions that need to be considered to foster a digital transformative environment.

We have developed a flexible approach to digital service delivery that brings together a variety of technologies and platforms, so we can have a continuum of client service approaches and service clients based on their access to technology and their digital literacy skills and level. Some of our clients have no access to laptops, tables, computers, smart phones or internet. And many have low digital literacy skills. However, we have not documented/drafted a model or strategy document/policy that can guide how we do this. There are still many other technological improvements we need to implement, like live chat on the website, clients booking appointments with a Settlement Worker online, building more engaging webinars/workshops for clients and to post on our website. This requires additional funding, resources, expertise, and training, which we are hoping to work towards. Having a national approach, through the Technology Task Group, to modernize settlement services, now virtual settlement services, will be very helpful and is really needed.

On top of the above analysis, cybersecurity is deemed as one of the most influential strategies adopted by many agencies. According to our data, many immigrant service organizations have started to provide training on privacy, confidentiality, as well as risk management in the digital spaces when online services. One participant highlighted elements of cybersecurity as a series of detailed practices.

Anything and everything that relates to performing digital services in a safe and confidential manner for clients and workers in order to safely perform all tasks related to settlement, such as documentation-filling, documentation exchange, digital signatures, private info exchange, etc.

Another respondent explained that the organization had provided training and created related policies and procedures to ensure both staff and clients' digital safety. This informant said,

The agency provided training to all staff on cybersecurity, phishing, and other risks to be aware of and ran mock attacks to test staff responses. This was at the beginning of the 2020 year and carried on into the beginning of the pandemic. Our IT and senior leadership also have a number of expected policies and procedures in place to ensure staff are working as safely as possible - e.g. two-factor authentications; requiring all staff to delete browsing history before logging off at the end of the day; requiring staff to delete all temporary/downloaded files at the end of the day; and emptying their recycle bins regularly.

The next response explained how management settlement practitioners took the leadership role to assure cyber safety.

One key piece we discussed at the beginning was a plan around keeping participants personal information safe and secure. For the programs I'm involved in, I ensured to spend time educating myself on how to encrypt files and properly secure documents, excel sheets and confidential information although it was hard to find these resources and maybe having funders themselves come up with tools and trainings that can set an sector-wide standard for privacy/security.

While acquiring safeguard digital routine is fundamental, understanding how to evaluate outcomes of digital transformation can also be vital. Thus, we will explore if immigrant service organizations have started to measure their performances on digital transformation.

### ***Evaluation and measurement on digital transformation***

There are different levels of evaluating processes that respondents engaged in. Among 84 responses from the English surveys, these levels can be categorized into four major phases: 1) twenty-four (28.57%) organizations have initiated digital transformation outcomes measurement through various means; 2) eleven (13.09%) agencies have started planning for evaluation on the effectiveness of hybrid services delivery; 3) twenty-nine (34.52%) informants denoted that they have not yet assessed their digital transformation performances; and 4) fifteen (17.85%) participants mentioned that they were unclear about the concept of evaluating digital transformation outcomes. For the French surveys (total 19 responses), seven (33.33%) of these agencies have started digital transformation outcomes measurement, and seven (33.33%) organizations have not yet begun the evaluation. No responses noted the institutions were planning to conduct digital transformation evaluation or were not sure about the concept.

For those organizations projected digital transformation evaluation, they acknowledged the significance of measuring the outcomes of their blended services through staff discussion, feedback forms, client follow-up outreach, and engaging with a professional consultant. One informant said,

We conducted online surveys for our staff and continue to discuss training needs during team meetings. Focus groups have served to be the most helpful to gather feedback from participants after each program term. What would be most helpful is to learn from other organizations. Also, I wonder if we are asking the right questions -- I would be interested in finding ways to gather more and more accurate feedback.

There were diverse angles that agencies targeted to evaluate their digital transformation outcomes:

We have conducted four needs assessments since late March, all of which included questions probing digital literacy and familiarity, access and service delivery formats moving forward.

To better evaluate organizational digital productivity, one participant pointed out that their institution has hired an analyst for a more systemic analysis.

We hire a data analyst to review client needs and productivity data before and during pandemic. Results are pending.

Another category is that organizations have not yet started digital transformation outcomes measurement. One respondent stated,

Not yet....we are still waist deep in-service delivery pivoting and keeping up with demand for services and how technology can support this....while still fulfilling our contract agreement terms and conditions.

For those organizations that were uncertain about how to measure digital transformation outcomes, they stated that they were “not sure that the measurement has already happened,” “not sure what tool will be needed to do this work,” or “not sure what resources exist” to support their assessment.

As we were interested in understanding resources that can assist organizational digital transformation outcomes measurement, we asked our participants if there were any support they would consider vital to proceed with their measurement process. Three primary resources were highlighted: 1) financial and educational resources; 2) governmental support and guidance; and 3) learning from other organizations. For example, one participant emphasized,

Access /funding to third party evaluators or programs that can support staff in evaluating the transition to online services.

As another informant noted about their needed support was from the government,

We need easy IRRC approval in the program delivery budget line for evaluation consulting work instead of extensive questioning from IRCC. This would be good to do, but we need the resources and expertise to help guide us in this work, and some national guidance would be helpful.

A third respondent illustrated that they were willing to share related learning and information with other immigrant service agencies.

What would be most helpful is to learn from other organizations. Also, I wonder if we are asking the right questions -- I would be interested in finding ways to gather more and more accurate feedback.

This section analyzes the interrelation between COVID-19 and digital transformation, protocols on management settlement workers' organizational execution on digital transformation, and evaluating digital transformation outcomes in the digital sphere. As managerial settlement practitioners, learning and reflecting on daily practices can amplify the potential for organizational development. Thus, the next section aims to explore further their knowledge creation and acquisition in their leadership roles.

### **Management Learning and Reflection on Digital Transformation**

In this section, we aim to examine management settlement workers' successes, challenges, and reflexive learning when operating a digital settlement service delivery model. In the notion of successes, three predominant achievements have been elucidated, including providing extensive support to clients from rural areas and different regions, developing service solutions for clients experiencing digital access disparity, and amplifying digital workplace integration. Furthermore, our data reveals that managerial participants have faced different digital transformation challenges such as digital inequality, digital wellness when working remotely, and barriers from the government. Additionally, managerial individuals' reflexive learning stressed their reflection on the process of transferring to remote work and digital transformation policies and protocols.

#### ***Management successes in adopting a hybrid service delivery model***

We analyzed if the pandemic has generated new approaches to engaging newcomers and communities (see Figures 23 and 24). Both English and French surveys demonstrate that COVID-19 has created spaces for organizations to interact with newcomers and communities. However, almost one-fourth of total participants (90 answers) and more than one-third of total French informants (18 responses) selected the "probably yes" selection, which implies that improvement and development are needed in future practices. For now, let us focus on what successes that participated organizations have obtained by delivering a blended service model.

Q56 As a result of the pandemic, has your organization found new ways of engaging newcomers and communities you serve?

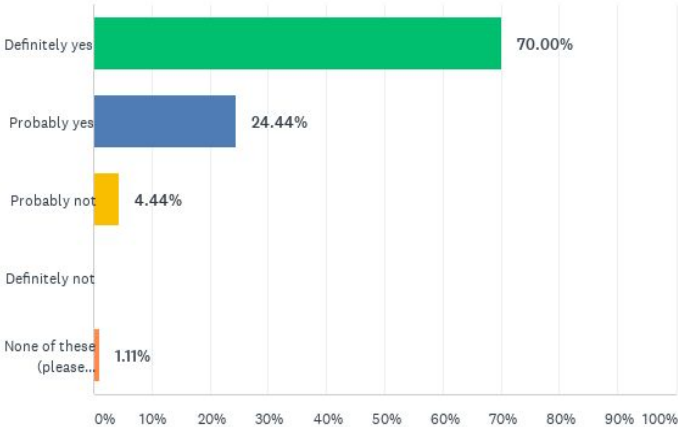


Figure 23: New Ways of Engaging Newcomers and Communities (English)

Q56 As a result of the pandemic, has your organization found new ways of engaging newcomers and communities you serve?

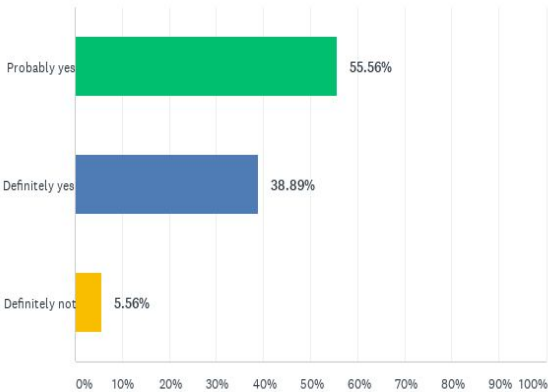


Figure 24: New Ways of Engaging Newcomers and Communities (French)

In light of the above data, there are diverse approaches that organizations have adopted to enrich newcomer and community online engagement. These agencies formed a private social media group for digital marketing and service advertising, and they educated low digital literacy clients to cultivate a more embracing online learning community. Additionally, immigrant service organizations have successfully transferred their organizational newsletter online to intensify outreach performance. Furthermore, informants addressed that they had used different tools to locate vulnerable newcomers such as immigrant women, refugees, or francophones to assist them with their COVID-19 dilemmas.

In addition to efficient engagement with newcomers and communities, another crucial success was management workers' comprehensive approaches to expand their services to clients in rural areas. One respondent stated that clients from rural areas were the most vulnerable social group with low digital literacy. After identifying client situations and difficulties, they provided needed support to increase their online service participation. This respondent stated,

Rural areas had the most vulnerable clients with low language skills and low digital literacy. In addition, they also had a lack of devices and limited access to internet connection. With the assistance of employers, our team had to go to the rural location and set up computer stations and get each client trained and comfortable to access the station. Laptops were also loaned to some of the most vulnerable that had a bit more digital literacy. This process took more than 11 weeks with weekly visits before there was a comfort level to attend a virtual information session.

The following example spotlights that organizations have successfully connected with local businesses and effectively bridged interactions between different industries, regions, and rural areas.

We have worked with local economic development corporations and held networking and hiring events with smaller communities to introduce and encourage newcomers to learn about and consider settling outside of the 4 major metropolitan newcomer receiving centres. Since the pandemic started, we held networking and hiring events with: - Thunder Bay, Ontario - London, Ontario - Winnipeg, Manitoba - Dawson Creek, BC - Fredericton, New Brunswick - Moncton, New Brunswick - Halifax, Nova Scotia - Saskatoon, Saskatchewan.

Hybrid services had not only scope to rural area clients and clients from marginalized regions but also had made progressions to engage clients outside of Canada.

We have not expanded to rural areas per say but the remote service modal has definitely allowed for greater expansion. We have some clients who will receive service while in their home countries. There are many Chinese/Taiwan clients who are currently out of the country and have service needs.

Apart from expanding online service delivery to remote areas, informants indicated that they had created service solutions as strategies that vitally led to digital transformation successes. The following three examples demonstrate how organizations endeavour to provide devices for clients who had difficulties accessing digital tools.

Sought corporate and government support to purchase Chromebooks for a loaner program.

We've actually purchased and delivered over 1150 tablets to all our clients and ensured they are connected to the internet.

...The second was that we secured funding to purchase over 100 devices in one month...

Besides the above three examples, one respondent mentioned that IRCC supported the agency to purchase tablets, Zoom licenses, and cellphones.

### ***Management Challenges of digital transformation***

In light of our data, digital inequality was most reported by our managerial participants. This notion of digital inequality can be understood as low digital literacy skills from clients and the staff themselves. One informant mentioned staff had struggled with accessing digital devices and internet connection.

Enough hardware for staff Some staff really struggle with technology The assumption that staff have sufficient wifi connectivity at home--and if not, how to provide this equitably across the organization Creating sufficient agility in enabling staff to create and post content without it getting bottlenecked with management approval processes.

Besides, another respondent expressed staff were reluctant to integrate digital technologies into their daily services.

The resistance of some staff using the google classroom, Zoom or other platforms. They were afraid of using technology and didn't want to learn - started to criticize the management...

In addition, employees and clients lack digital devices access due to prolonged waiting time.

Simply not enough laptops and cell phones, able to purchase some additional ones right away, but had to wait many months to get approval to purchase additional needed laptops, cell phones and other technological needs (software, services, updates, etc. etc.). This was of course frustrating for staff and for clients.

Apart from the unequal digital divide, managerial settlement practitioners also addressed the importance of IT infrastructure when delivering service remotely.

IT infrastructure. Our IT infrastructure was not ready for the digital transformation that we went through. It was very challenging to move to a complete virtual/ On-line service delivery model in a very short period of time.

In addition to digital inequality challenges, participants reported that digital wellness was another difficulty when working remotely. Respondents explained that their workdays were more extended since they needed to attend meetings across different Canadian regions. This situation engenders difficulties in their work-life balance. As one participant noted,

Many more national and regional meetings are also taking place which can cause problems with time differences - although we are in Central Time so it is rarely outside office hours for us. We meet far more often with our member of staff who works from a different town and more full team meetings in general as there are no informal meetings in the office space.

Furthermore, longer screen time was noted by informants as they have experienced digital fatigue. The following example highlighted that the number of meetings was increasing because of working remotely.

Significantly more team and check-in meetings. I used to hold monthly team meetings and now I meet with my team 3 times per week, plus 3 huddles per week, plus, bi-weekly 1:1 meetings. Pre-Covid, I would meet with staff 1:1 every 4-6 weeks. Typical day includes: -signing in and updating virtual timesheet -checking emails -facilitating webinars -recording webinar attendance in

database -preparing reports -program planning, development, changes  
-checking in with supervisor -team check-in -supporting program events.

Another challenge was caused by the missing piece of human interaction. One respondent said,

We miss informal conversations in the workplace and staff time together for brainstorming new ideas, working through logistical/accounting issues etc. Staff and members are exhausted with being online and often on camera several hours a day + stress and uncertainty of very high COVID numbers in our location. Online works well but when the only option - easy to get burned out and everyone multi-tasking while learning and meeting online which means more work and less focus.

Challenges of digital transformation can also provoke by the government. One participant stated that some government-funded programs were complicated to carry out without a physical presence in the office.

Most government-funded support services (CCLB, NLS, Tutela etc.) bypass administrators and reach directly to instructors, which sets up conditions for conflict in the workplaces as those held responsible for administering programs are left out of the conversations around tools and framework for delivery.

Another crucial factor mentioned by the informants was the prolonged waiting time for processing funding as well as not acknowledging additional funding needs due to blended services delivery.

Cost, cost, cost...government funders making timely decision and having to wait painfully excruciating time for decision to be made...arbitrary decisions on levels and what will be allowed...example cost to upgrade servers unrealistic to meet this virtual pivot and internet costs. Pressures from administrative funding to support these costs and funders not realizing the need to fund extra IT staff to support staff working remotely, security, digital risks and how these costs are covered.

A practical concern raised by another respondent was related to accessing documents when working from home.

Document transfer are not easy if clients basically use phone for communication and not equipped with devices and apps. some IRCC forms are not saveable and staff working from home do not have connection to printers.

Besides aforementioned challenges, participants also underscored inadequate training and educational resources on digital technologies and cyber security. We will emphasize details of this needed support in the section of management future expectations.

### ***Management reflexive learning on hybrid service delivery***

Analyzing managerial workers' successes, strategies, and challenges allow us to better examine the best practices immigrant service organizations have adopted and the capacity for future development in digital transformation. As one of our research objectives was to explore the experiences of settlement practitioners in digital service delivery, we were also interested in perceiving their reflexive learning throughout this process. Management staff have improved their skills and knowledge of digital technology competencies (see Figure 25 and Figure 26).

Q51 Has the shift to remote work/digital transformation resulted in any of the following (check all that apply)?

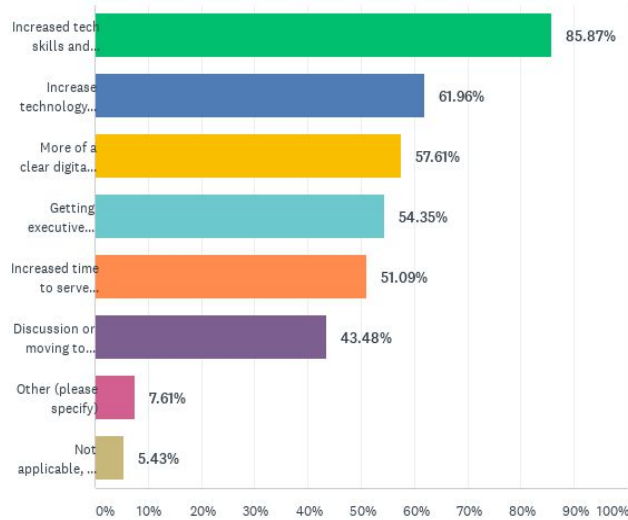


Figure 25: Knowledge and Skills Gained Since Working Remotely (English)

Q51 Has the shift to remote work/digital transformation resulted in any of the following (check all that apply)?

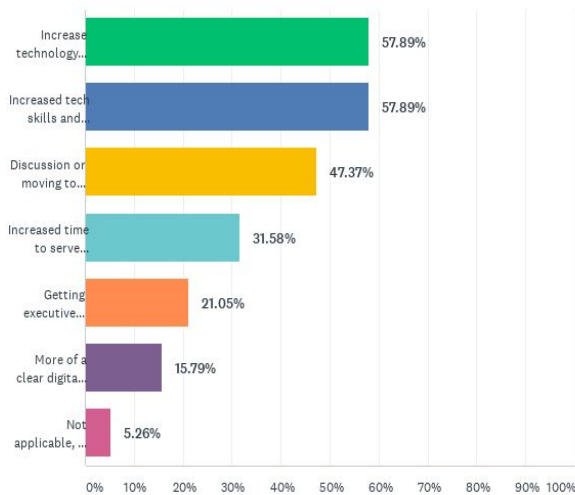


Figure 26: Knowledge and Skills Gained Since Working Remotely (French)

Premised on the above two figures, participants indicated that they had increased digital technology skills. However, the percentage of selecting this choice in the English survey was 27.98% higher than in the French surveys. They all pointed out that digital service delivery had

created opportunities for their organizations to apply for related funding for both surveys. A large percentage in the English survey accentuates that remote work had carved spaces for agencies to vision more centralized digital service strategies for best practices. However, for the French survey, delivering digital services means more potential to discuss or replace legacy digital devices.

We intend to explore if participants' organizations have developed digital policies or protocols or reflection on a strategic discussion on digital technology and skill implementations to enrich our data analysis. One respondent's answer stood out to us as it methodically pinpointed the interconnection between digital transformation practices and principle.

First, making sure staff have the hardware technology (laptops, scanners, cellphones, etc.) that they need to deliver services remotely. Second, making sure organization has IT infrastructure (Server, cloud computing, etc.) to be able to manage and deliver virtual services. Third, making sure policy procedures are in place for virtual and on-line service delivery model. Forth, making sure each service and program has proper platform in places to deliver virtual/ on-line services (e.g. Language training, may need a different platform than youth programming). Fifth, the digital transformation has to have a proper framework to make sure the services are delivered in a manner that the quality of services are not compromised and in fact it should enhance the quality of services.

The following response demonstrates a series of momentous elements that have been considered to produce high-quality remote services, including enriching and complementing online service delivery, cyber security practices, and staff digital literacy training.

We have had to be strategic about how we deliver class lists to instructors of online classes, and protected information cannot be sent via email. We have all brushed up on our policies on securing data. Instructors have taken training in managing classes online and increasing safety and privacy when using platforms like Zoom.

In addition to systematic means to enhance digital transformation capacity, one informant shared specific actions for the ongoing and long-term digital integration.

Multi-pronged approach including the introduction of our new client record management system - NewTrack, client outreach on digital literacy and access to technology, expanded use of newcomer.info 2 way text messaging system, 2 year tech capital replacement schedule - moving all staff from desk top computers to laptops with external monitors and keyboards, docking stations, headsets that can be used both in the office and service delivery from home. Staff training/refreshers on conference platforms. Transition from servers to cloud to manage our on going needs. Review of our Sharepoint site , move towards electronic HR file record keeping, use and policy around electronic signatures.

This section investigates managerial settlement practitioners' successes, strategies, challenges, and reflection in digital transformation. Unquestionably, management reflexive learning on digital transformation is intertwined with the future organizational operations. It is the purpose of our next section to provide vivid inquiry regarding a prospect of the future in hybrid service delivery and digital transformation.

## Management Future Expectations

This section focuses on what immigrant service organizations need to move towards a hybrid settlement service delivery model in the future. To capture the concept of future expectations on managerial participants, we dwell on the likelihood of continuing to adopt a blended service model when the pandemic is over, needed training and support, and the roles and skills considered crucial in the digital transformation framework.

### **Hybrid service delivery model in the future**

To begin with, Figure 27 and Figure 28 quantify the possibility that organizations will expand a digital service model after the pandemic ends. Answers from the English surveys and the French surveys demonstrate a difference. In the English surveys, over one-half of the total participants (90 responses) indicated that they would likely continue utilizing blended service principles when working remotely ends. However, most individuals (61.11%) in French surveys stated that they would somewhat likely continue the blended services model.

Q60 How likely is it that your organization will expand its digital service options as the world reopens?

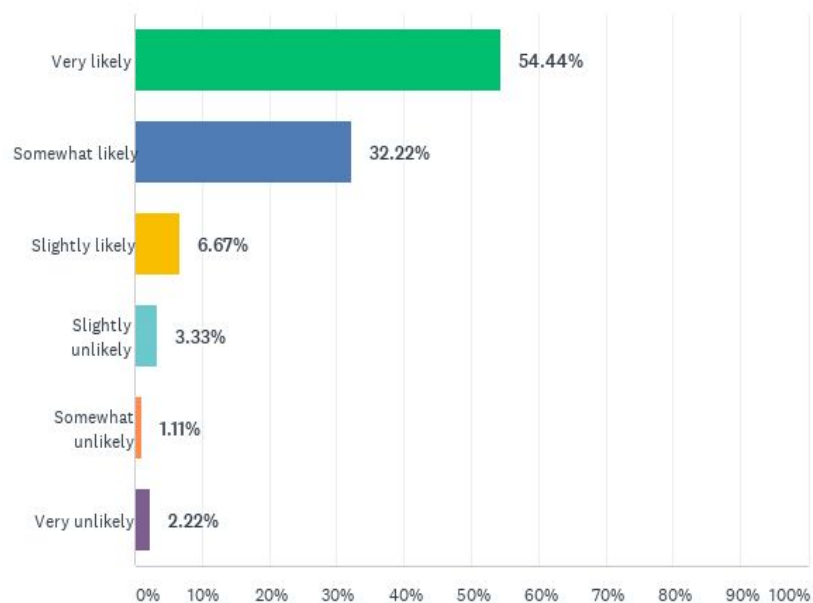


Figure 27: Likelihood to Expand Digital Service Options After Reopening (English)

Q60 How likely is it that your organization will expand its digital service options as the world reopens?

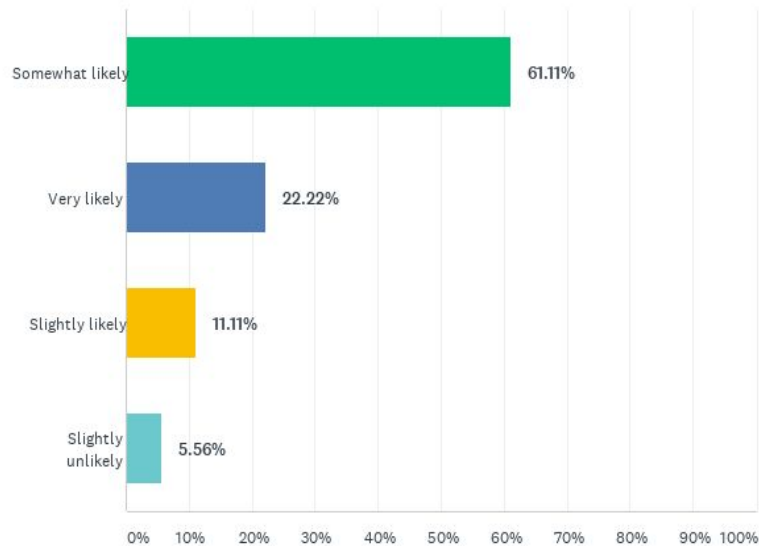


Figure 28: Likelihood to Expand Digital Service Options After Reopening (French)

Organizations that appear positive of integrating a digital service framework depicted that COVID-19 magnified their contemplations regarding modes of service delivery. These respondents also expressed optimism as serving clients online has more interactively connected with communities and saved transportation costs. Moreover, informants pointed out that staff may not be comfortable with entirely in-person programming since a blended service model had concretely accommodated client needs. Those who were uncertain about future digital service delivery indicated their unclear scope in terms of how to restructure and evaluate which programs should be kept online and which ones should be removed from the online environment. Lastly, management participants spotlighted essentiality to gear staff digital technology skills, to be capable of delivering high-quality online services, and to reinforce clients' ability and capacity to learn.

**Needed training and support to future digital transformation**

Management settlement workers identified four areas of training that were in need: 1) how to more comprehensively use digital tools and platforms; 2) how to maintain digital privacy in service delivery and cyber risk management; 3) how to use apply anti-virus to daily work activities to ensure workplace cybersecurity; 4) how to resolve tech-related problems during remote work. Here is a concrete example that echoes training on digital literacy.:

More education on utilizing and maximizing the technology they have to their disposal is always welcomes as our landscape and technology is always changing. This allows staff to pivot accordingly and provide the necessary services based on each clients needs.

Apart from the above training topics, the next response stresses that training should not be limited to staff but also needs to be tailored to clients.

We need resources for training both staff and clients on the use of digital technologies which would include training on digital privacy and managing confidentiality and security issues.

Financial support to provide future organizational digital transformation will be essential. The following two examples highlight specific funding assistance on IT support for delivering hybrid services.

More funding/Special funding--the Admin funding in IRCC contract is not enough to support the IT. Moving forward, the IT should be a separate funding item/area on the Contribution Agreement as Program Delivery, Capital and Admin are, not just having the IT added into Admin. This is the reason why IT has been underfunded for years in the sector.

Our agency requires staff to take on-line security courses once a year. It would be good to have more funding for the IT department as the staff there are overworked, especially during the pandemic.

### ***Crucial roles and jobs for future settlement work***

Similar to the frontline worker surveys, our data exposes urgent needs in diverse roles and jobs for future settlement workers, including online facilitators, instructional designers and curriculum developers, digital consultants, digital case managers, as well as IT specialists. The following response addresses the roles that organizations need to intensify their service delivery and development.

Definitely, online facilitators, instructional designers and curriculum developers so we can develop very strong online curriculum and facilitate it well. We will need these roles to also teach and coach staff. We will need managers who have good skills in managing remote teams and online programs, we'll need evaluators who can help to evaluate online programs. We'll also innovation coaches and staff with experience in innovation, design, foresight etc. to help integrate innovation through the organization. We'll also need staff who can train and teach digital skills to clients.

Unlike most responses, one participant underlined that each member should be more embraced to be positioned in multiple roles to fit in the fluctuated digital service situations more effectively. This comment empowers a revisit on settlement workers' role in future settlement work. However, this suggestion also presents conflict to what has been discussed in both sets of surveys in terms of settlement workers' increasing work tasks. However, this comment provides us spaces to re-negotiate and re-examine the tensions between feasibility, flexibility, and foreseeability of digital transformation in the settlement sector in Canada.

### **Discussion and Implications**

This section allows us to revisit our data and provide nuanced reflection and discussion on quantified statistics and settlement workers' lived experiences intersected with digital transformation activities. To reiterate, our research aims to understand the settlement sector's needs in the transition to digital transformation and a hybrid service delivery model. More specifically, by examining settlement workers' encountering digital technologies, digital literacy experiences, social relationships development within digital spaces, as well as their successes, strategies, challenges, and reflexive learning in blended service delivery, this preliminary report enables us to respond to our research objectives, including infrastructure, privacy issues, and cybersecurity, and digital literacy skills enhancement to settlement workers. As such, we intend to bring in a dialectal lens to enrich our data discussion.

### **Best Practices to Respond to Digital Inequality**

Digital inequality has been progressively addressed in the context of digital transformation in the settlement sector. This significant contribution to social integration attributes to settlement workers' self-directed best online practices. In the early stage, settlement workers gradually acquired digital technology knowledge and integrated digital skills into community outreach. Particularly, they obtained digital marketing competencies to create the online newsletters, establish social media client groups, and promote their services through diverse digital platforms. They constituted virtual learning spaces for clients by providing interactive and dialogical blended services and educating their digital literacy skills and cybersecurity practices. These virtual social relationships were associated across different geographic locations (within and outside of Canada), supporting vulnerable and marginalized social groups such as immigrant mothers, refugees, international students, seniors, youths, and unemployed skilled immigrants to construct an inclusive virtual community.

Though hybrid services effectively alleviate digital divide, this social inequality still exists between both clients as well as settlement workers. According to our data, we find that refugees, senior immigrants, those with low digital literacy skills and language proficiency, and individuals from disadvantaged areas are the most susceptible social units. For settlement workers, they experience purchasing work-purpose digital devices on their own, sharing computers within a household, as well as issues with internet connections for service delivery. In this preliminary report, we hope survey responses provoke our thinking not simply regarding who did not have the access or are low in digital skills but to examine why this can happen and how to better support these multi-dimensional vulnerabilities. We also expect to answer some of the raised questions through our interviews and focus groups data collection, developing a clear vision of digital inequality implications in our final report.

### **Revisiting the Notion of Cybersecurity**

Survey responses illustrate that organizations have been cautious to cybersecurity and have conducted various practices to ensure client privacy is protected and information is safely stored. For frontline workers, their ethical considerations on digital service delivery encompass setting passwords for important documents and digital devices, not sharing personal or private information through digital platforms, giving appropriate advice for clients on sending personal information in digital spaces, and providing cybersecurity workshops for clients. Management also has taken a series of actions to promote cybersecurity. Organizations have provided training on managing cyber risk and workshops on how to best undertake online privacy and confidentiality.

To further illustrate the prominence of cybersecurity and safeguard information, it needs to be noted that cybersecurity is a two-directional practice, in which trust-building has become radically vital. However, responses delineate that organizations have confronted barriers in asking clients to provide personal information in virtual settings, which was not an issue with in-person meetings. Secondly, clients' digital literacy level intimately influences safeguarding information procedure as many of them experienced difficulties opening password-protected documents. It was challenging when guiding clients who were illiterate in their own languages, not to mention those who are intersected with low digital literacy and language proficiency. As such, the complication of cybersecurity has interrelated with language, digital skills, and human-based relationship construction. Therefore, participants address the need to have a national guideline or sector-based model to strengthen digital information safety comprehension.

### **An Unbalanced Distribution on Digital Transformation**

Our data denotes that many organizations have been incrementally adopting a hybrid service delivery model for service delivery. Many agencies have explicit objectives to determine whether

to provide services fully online or hybrid services with online and offline blended client support. To be more specific, organizations have offered online employment development sessions and career fairs, cultural-oriented online events, client intake and needs assessment, one on one consulting and follow-up meetings, and digital training and online service program information. Responses accentuate that clients have shifted from a reluctance to receive online services to feel more comfortable proceeding with virtual services at home. From the organizational perspectives, management participants emphasize their progression on planning, launching, or evaluating digital transformation processes and revising their localized practices through everyday experiential learning.

It needs to admit that this hybrid service delivery model does not work for all services. Frontline workers pointed out that mental counseling services were less effective in the virtual spaces because of the difficulties of mental readiness. Language learning sessions can be challenging through online learning, as instructors cannot provide instant educational guidance if it is a large student group. Besides these two types of services, childcare-related programs, food programs, recreation programs, house viewing and related support, and group trip events were challenging to be transferred online. Despite the fact that digital platforms yield convenience to online learners, to some extent, it can never replace the interpersonal functions fostered in the physical spaces. Furthermore, as it is an early stage for digital transformation, its distribution is still lopsided among different organizations. Some organizations located in large urban cities and medium-sized cities are still encountering barriers in adopting digital technologies. Some agencies were able to provide work-oriented digital devices for staff, while settlement workers had to self-purchase digital tools for service delivery. Moreover, participants expressed that their organizations had established collaborative virtual workplace relationships, and several programs were finding it complex to keep every staff moving in the same direction. This uneven distribution of the digital transformation between organizations, programs, and individuals reflects that we have only touched the surface of digital transformation and the hybrid service model. However, this preliminary report can be a positive starting point for us to glimpse into what digital transformation practices can be practical and effective for future settlement work.

### **Demographic Characteristics of the Sample**

This section provides the demographic characteristics of those who answered the surveys, and they are considered our research sample. The overall sample consists of 367 respondents of which 329 in the English surveys and 37 in the French surveys. There were 216 frontline workers from English-speaking immigrant service organizations/programs who participated in the survey and 113 informants were from the managerial level. In the French surveys, 22 management settlement practitioners participated in this research, while 15 indicated themselves as frontline workers.

#### **Frontline worker profile**

##### ***Current role(s) of frontline worker in the immigrant service organizations***

In terms of the role of frontline workers (English surveys, see Figure 29), 13.04% of them pre-arrival practitioners, 55.90% of them were settlement practitioners, 38.51% of these participants were employment counsellor/consultants, job developers. Housing workers took 16.15% of the total respondent number while health/mental health workers represented 20.50%. We had 19.25% of participants who were childcare providers and 14.91% of informants who were RAP case workers. Youth workers took 27.33% of the total percentage, while volunteer coordinators represent.

Q29 What is/are the current front-line role(s) in your organization?

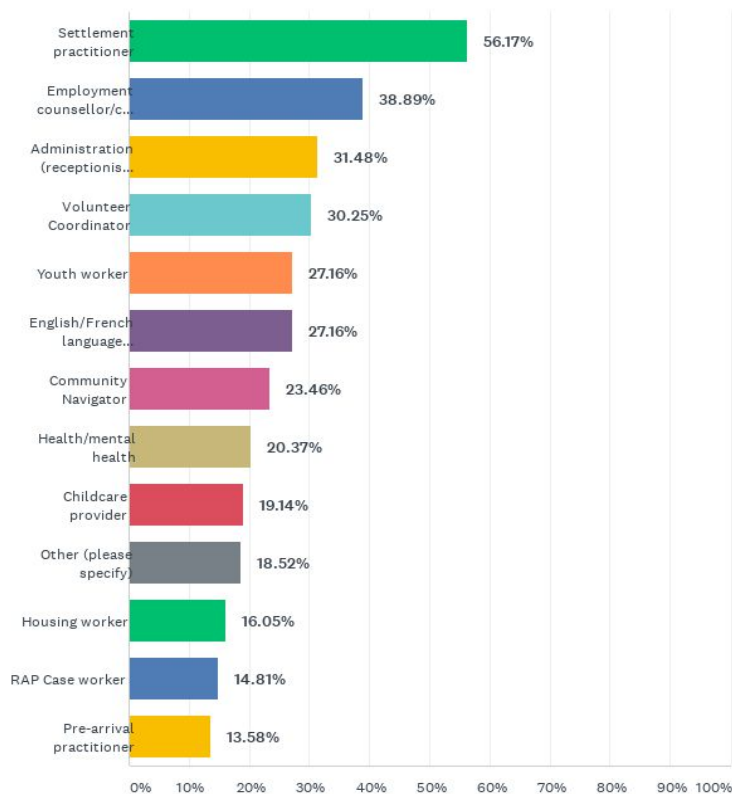


Figure 29: Current Role(s) of Frontline Worker in the Immigrant Service Organizations (English)

Regarding the roles of French frontline workers (see Figure 30), pre-arrival practitioners contained 33.33% of the total survey sample, while 88.89% of the participants identified themselves as settlement practitioners. 22.22% of frontline workers in the survey indicated they worked in employment counsellor/consultant or job developer positions. House workers, administration (receptionists, assistants), English/French language instructors represented the same percentage (33.33%) of total respondents. There were 22.22% of total informants who identified themselves as community navigators. Health/mental health workers, youth workers, and volunteer coordinators took the same percentage of total participants (11.11%). There was no respondent who identified themselves as childcare providers, RAP Case workers. The rest (22.22%) frontline workers worked in entrepreneurship (business start-up), employer engagement, and project management.

Q29 What is/are the current front-line role(s) in your organization?

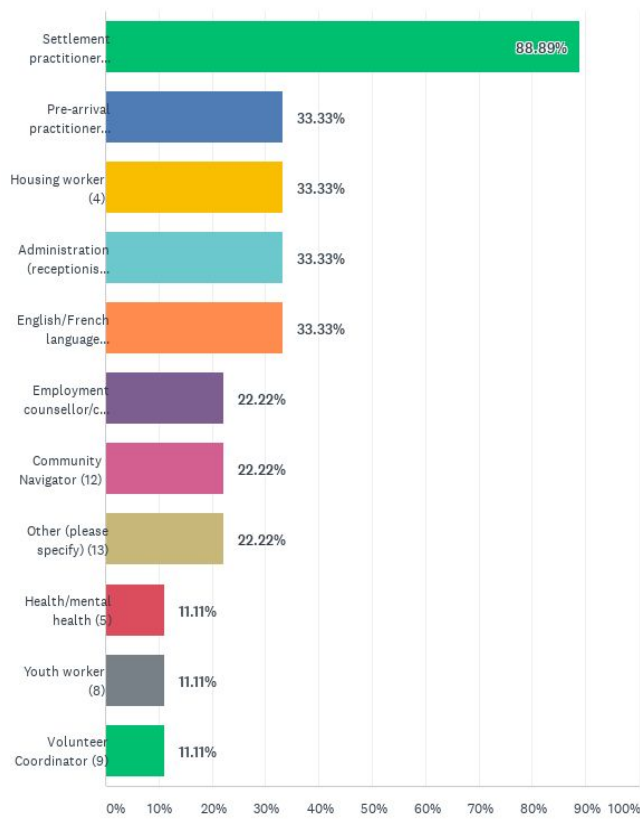


Figure 30: Current Role(s) of Frontline Worker in the Immigrant Service Organizations (French)

**Types of immigrant service organizations**

In terms of the type of immigrant service organization these frontline workers are currently working in (see Figure 31), 86.96% of the total participants worked in community-based organizations, while 12.42% of the total respondents served educational institutions (school, college, or post-secondary). There were 3.11% of total frontline workers working in ethno-cultural organizations (mandated to serve a particular community) and 2.48% of the total informants worked in Francophone immigrant service organizations. In the “other” selection, (8.70%), participants identified that they worked in non-profit organizations, community social services, or the municipal government.

Q30 What type of immigrant service organization are you currently working in?

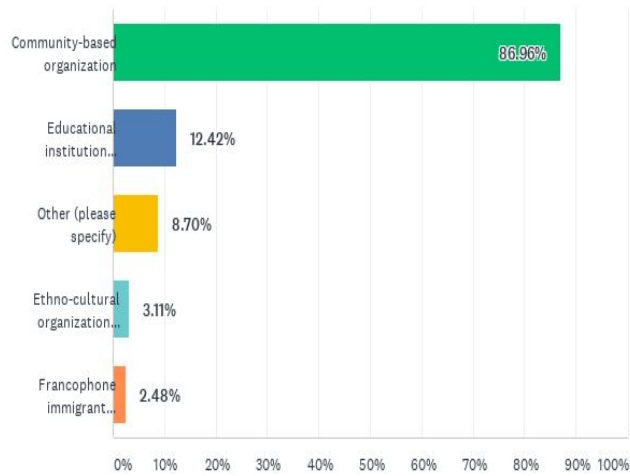


Figure 31: Types of Immigrant Service Organizations (English)

Regarding the French frontline workers, 22.22% were from community-based organizations, while 77.78% from Francophone immigrant service organizations. The sample consists of 12.5% individuals from educational institutions (school, colleagues, or post-secondary) and 3.13% worked in ethno-cultural organizations (mandated to serve a particular community). For those who indicated “other” (11.11%), one participant answered serving in an organization for newcomers’ settlement (services in French and English).

Q30 What type of immigrant service organization are you currently working in?

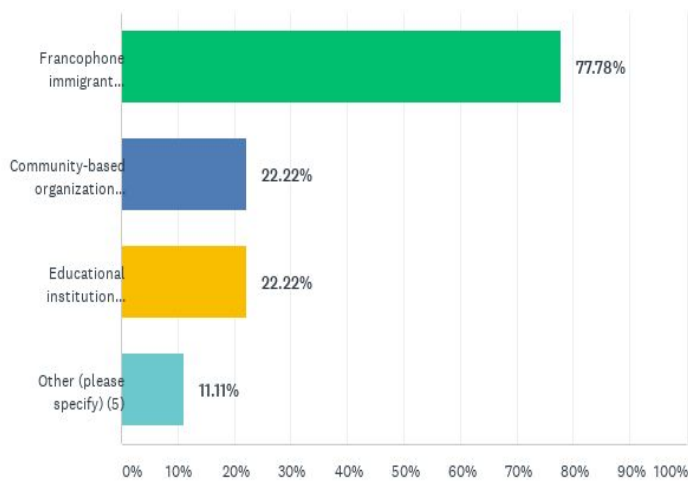
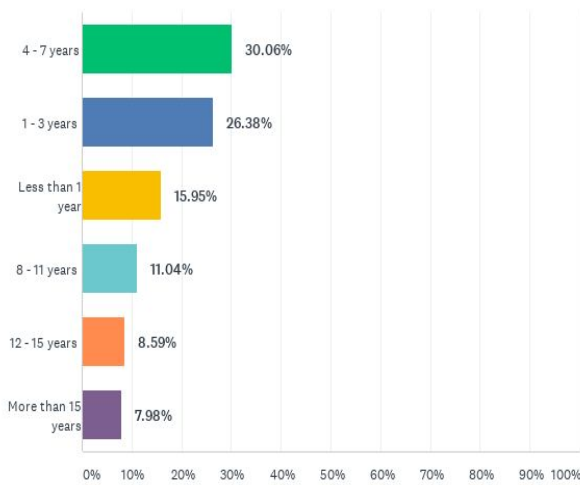


Figure 32: Types of Immigrant Service Organizations (French)

***Length of working in the immigrant service organization***

Figure 33 provides a general understanding of these frontline workers (English) working in the immigrant service organization. As indicated, 16.05% worked less than a year, while most of these sample cases have worked in the organization for one to three years (26.45%) and four to seven years (29.63%). The percentage of those who have worked in the sector for eight to 11 years was 11.11%, while 8.64% indicated they have served on the position for 12 to 15 years. There were 8.02% of frontline individuals signaled more than 15 years was the length of working in the organization.

Q31 How long have you been working in this organization?



***Figure 33: Length of Working in the Immigrant Service Organization (English)***

For the French frontline workers, 11.11% have worked in the organization for less than one year, while 44.44% of individuals have worked in the sector for one to three years. The percentage of these frontline workers who have worked in the organization for four to seven years was 22.22%, while 22.22% have served in the position for 12 to 15 years. No one indicated the length of working in the agency in between eight to 11 years and more than 15 years.

Q31 How long have you been working in this organization?

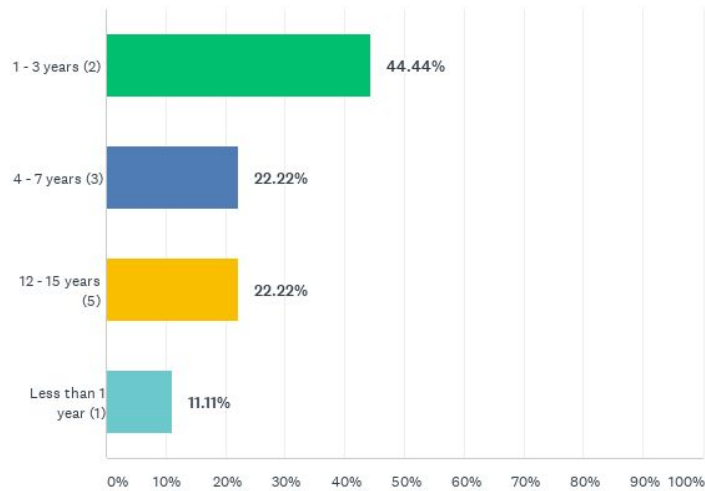


Figure 34: Length of Working in the Immigrant Service Organization (French)

**Primary location of immigrant service organizations**

The sample provinces were mostly primarily located in Ontario (38.89%) and British Columbia (30.25%). The third-largest sample based on the province was from Nova Scotia (17.28%), while the fourth was from Manitoba (6.17%). We had 4.32% frontline workers who worked in Alberta immigrant service organizations and 1.85% from Saskatchewan. There were 0.62% of these frontline workers working in organizations primarily located in New Brunswick and Newfoundland Labrador. No one indicated their organizations were from Quebec, Prince Edward Island, Yukon, Northwest Territories, and Nunavut.

Q32 Which province/territory where your organization is primarily located and provides service?

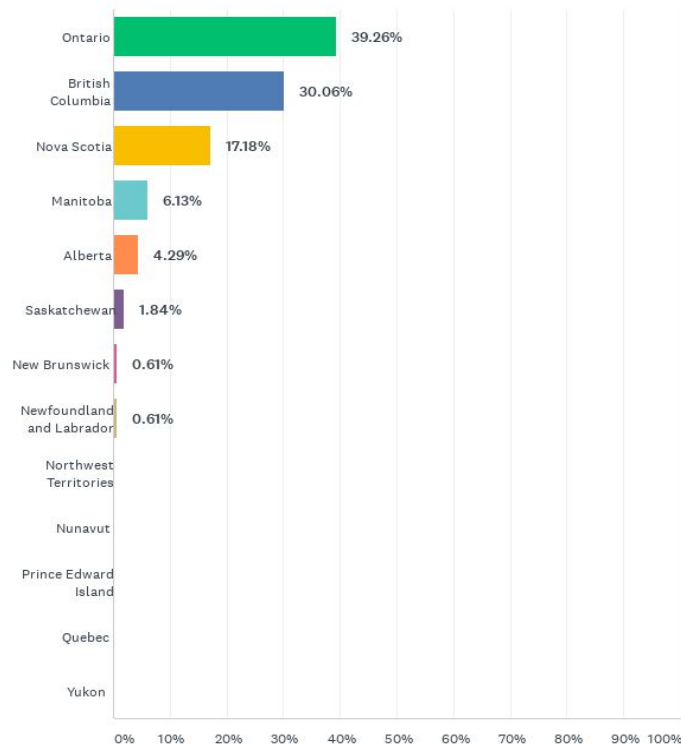


Figure 35: Primary Location of Immigrant Service Organizations (English)

Regarding French frontline workers, most of their organizations were located in New Brunswick (33.33%), while 22.22% of these agencies were in Ontario. There were 11.11% of organizations primarily located in Newfoundland and Labrador, Nova Scotia, Alberta, British Columbia, respectively, while no organizations in the sample were in Manitoba, Northwest Territories, Nunavut, Prince Edward Island, Quebec, Saskatchewan, or Yukon.

Q32 Which province/territory where your organization is primarily located and provides service?

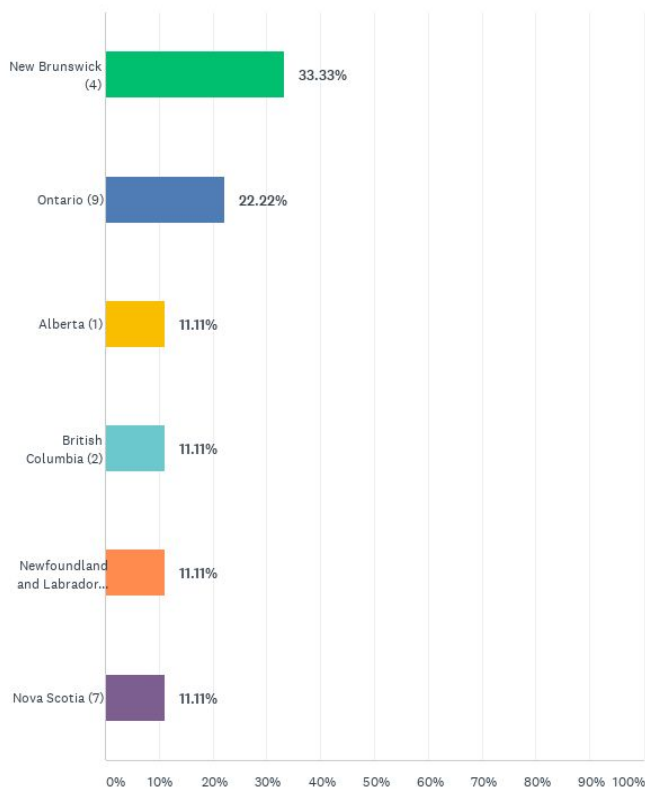


Figure 36: Primary Location of Immigrant Service Organizations (French)

**Location of immigrant service organizations based on city size**

In terms of organization location based on city size (see Figure 37 and Figure 38), participants indicated that their organizations were mostly located in a medium-sized city/urban center with 100,000 to 1 million residents. There were 36.40% of respondents whose organizations were in a large city/urban center with more than 1 million residents. The percentage of smaller cities/urban centers (50,000 to 100,000 people) was 12.42%, while rural areas (less than 50,000 residents) had a percentage of 4.35%.

Q33 Is your organization located in a:

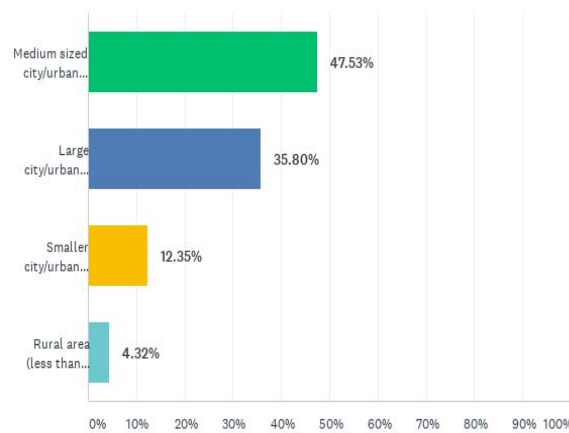


Figure 37: Location of Immigrant Service Organizations Based on City Size (English)

The French surveys' location of immigrant service organizations manifests itself as an interesting phenomenon—we had the same percentage (33.33%) of organizations from both large city/urban centre (more than 1 million people) and medium-sized city/urban centre (100,000 to 1 million people). 22.22% of these participants' organizations were located in smaller cities/urban centers, while rural areas took 11.11% of the total percentage.

Q33 Is your organization located in a:

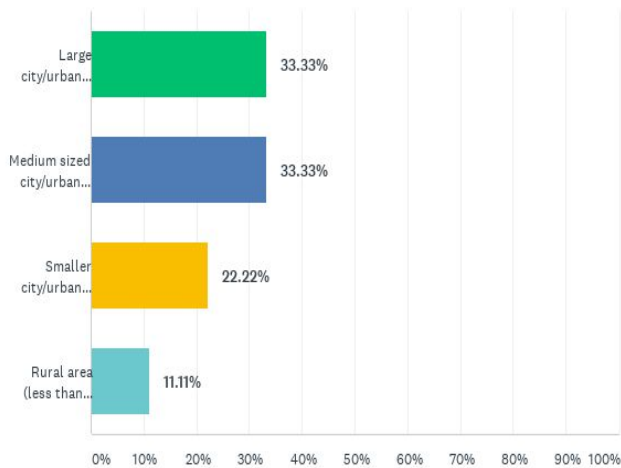


Figure 38: Location of Immigrant Service Organizations Based on City Size (French)

**Staff size of immigrant service organization**

Figure 39 shows the immigrant service organization staff size, including full-time and part-time employees. Our sample reveals that most frontline participants (52.15%) were from an immigrant service organization with over 100 employees, while 20.86% of their agencies had a

staff size of 21 to 50 employees. The percentage of organizations with 51 to 99 employees was 12.27% and 9.20% for an employee size with 11 to 20 staff. There were 4.29% of respondents from an organization staff size of six to ten while 1.23% worked in an agency with one to five employees.

Q34 What is your organization staff size (full time and part-time)?

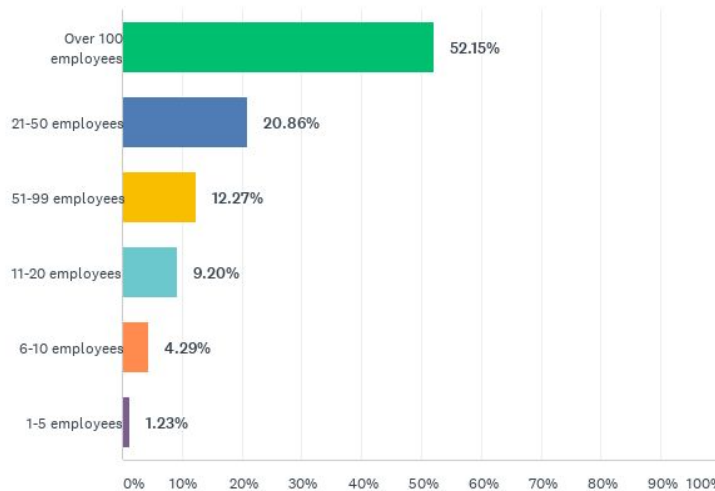


Figure 39: Staff Size of Immigrant Service Organization (English)

Figure 40 provides an overview of the French frontline workers' organization staff size. 33.33% of the total respondents identified their organizations had 21 to 50 employees. Both one to five employees and over 100 employees' staff size were indicated by a percentage of 22.22% by these participants. The percentage of organization staff size was 11.11% for six to ten employees and 11 to 20 staff size. The informants did not select the staff size of 51 to 99 employees.

Q34 What is your organization staff size (full time and part-time)?

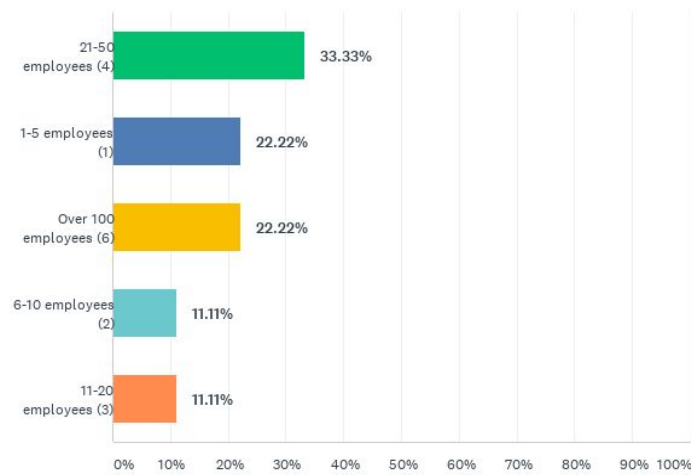


Figure 40: Staff Size of Immigrant Service Organization (French)

**Number of clients served by immigrant service organizations**

In terms of the number of clients that these immigrant service organizations served annually (see Figure 41), 29.87% of the total participants' organizations served over 1001 to 5000 clients, while 29.22% of the total respondents' institutions served 101 to 1000 immigrants. 20.13% of these immigrant service organizations helped 5001 to 10,000 clients every year, and 18.83% of the agencies supported over 10,000 clients yearly.

Q35 How many clients does your organization typically serve each year?

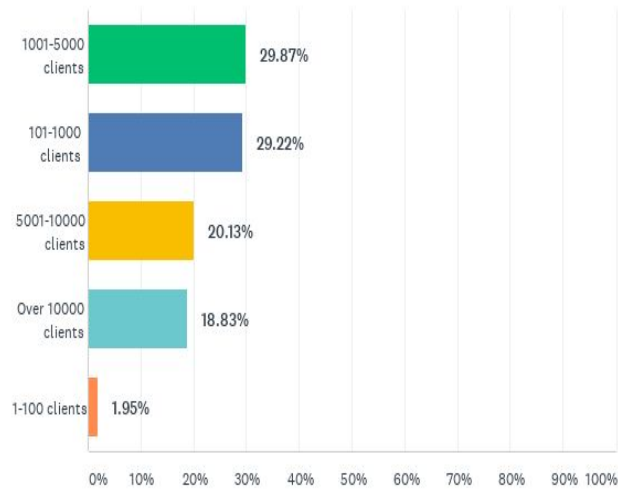


Figure 41: Number of Clients Served by Immigrant Service Organizations (English)

For the French surveys, 75% of these organizations served 101 to 1000 clients every year. The percentages of these respondents' institutions worked with clients number between 5001 to 10,000 and over 10,000 are the same (12.5%).

Q35 How many clients does your organization typically serve each year?

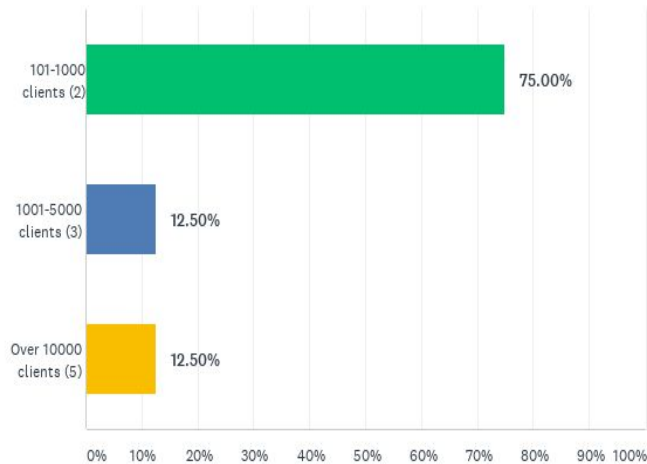
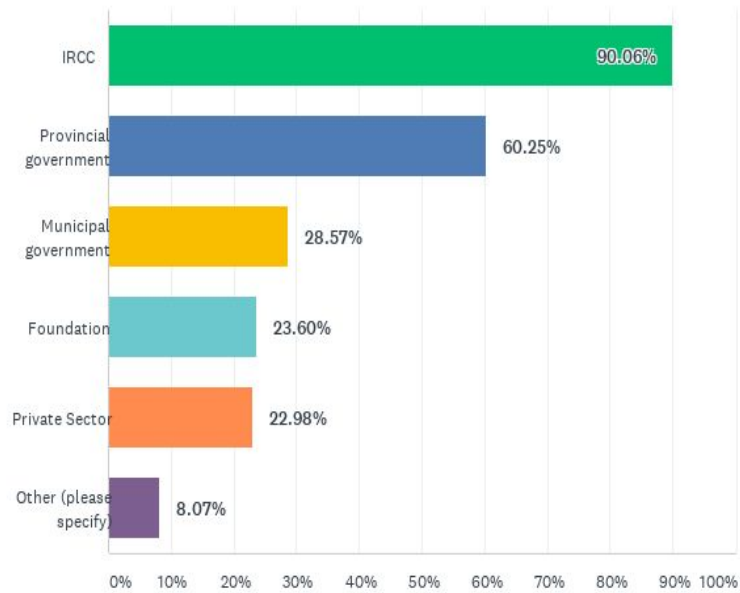


Figure 41: Number of Clients Served by Immigrant Service Organizations (French)

**Funding sources by program**

In terms of funding received by program (see Figure 43), 90.06% of individuals indicated they received funding from IRCC, while the provincial government funded 60.25% of these programs. Municipal government sponsorship took the third-largest percentage (28.57%) of programs from which they received funding. 23.60% of participants mentioned Foundation sponsored their programs, and the private sector funded 22.98% of the programs. In the “other” category, participants identified their programs received funding from gaming industries, the United Way, ESDC, Heritage, or federal governments.

Q36 Which funding does your program receive? Please check all that apply.



*Figure 43: Funding Sources by Program (English)*

The funding sources for the French surveys demonstrated that all of the programs were funded by IRCC (100.00%). 88.89% of these programs were financially supported by the provincial government, while the municipal government funded programs percentage was 33.33%. There was 11.11% of the total programs sponsored by the foundation. No funding sources from the private sector or other sources were indicated.

Q36 Which funding does your program receive? Please check all that apply.

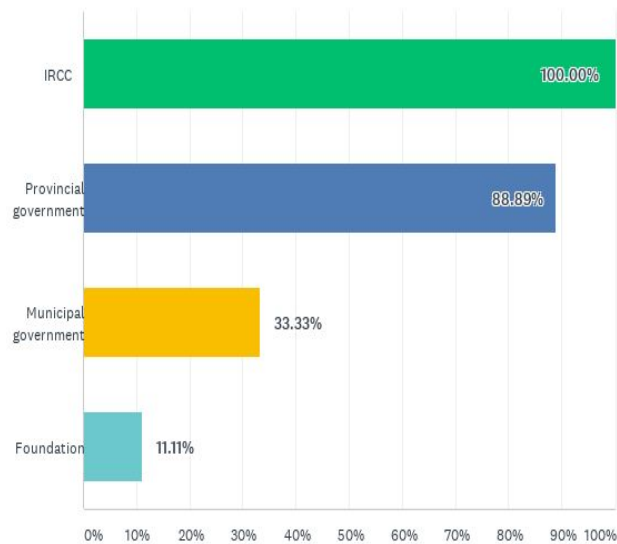


Figure 44: Funding Sources by Program (French)

**IRCC funded settlement services**

Figure 15 provides a landscape of (direct) settlement services funded by IRCC as part of these immigrant service organizations' contribution agreements. Information and orientation took the largest percentage (78.77%) of total funded settlement service delivery, while needs assessment and referrals positioned the second (77.40%). Employment-related services took 62.33% of the total settlement services funding source from IRCC and community connections occupied 61.64%. Case management had a percentage of 49.32% of IRCC funded settlement services, while language training and language assessment represented 48.63% and 38.36%, respectively. Participants implied that Settlement Workers in Schools had a percentage of 35.62% in total IRCC funded settlement services. Pre-arrival had a percentage of 21.92%, and Library Settlement Partnership had 12.33% in a similar context.

Q37 If you are IRCC funded, what (direct) settlement services do you deliver as part of your contribution agreement with IRCC? Please check all that apply.

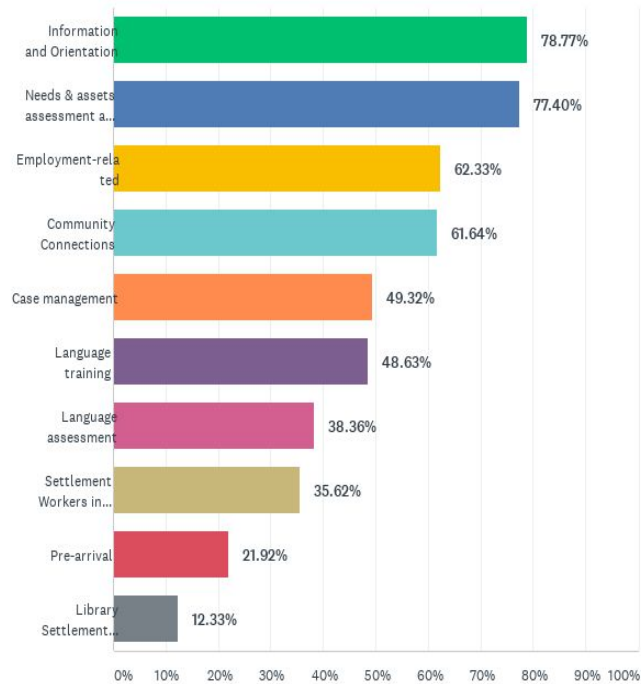


Figure 45: IRCC Funded Settlement Services (English)

All respondents reported that information and orientation settlement services took 100.00% of IRCC funded settlement services for the French surveys sample. Secondly, needs assessment and referrals represented 77.78% of total IRCC funded settlement services. Thirdly, employment-related services, and community connections both occupied 44.44% of IRCC funded settlement services. Settlement Workers in Schools services received 33.33% of total IRCC funded services, while language training and pre-arrival both delivered 22.22%. For language assessment, it had a percentage of 11.11%.

Q37 If you are IRCC funded, what (direct) settlement services do you deliver as part of your contribution agreement with IRCC? Please check all that apply.

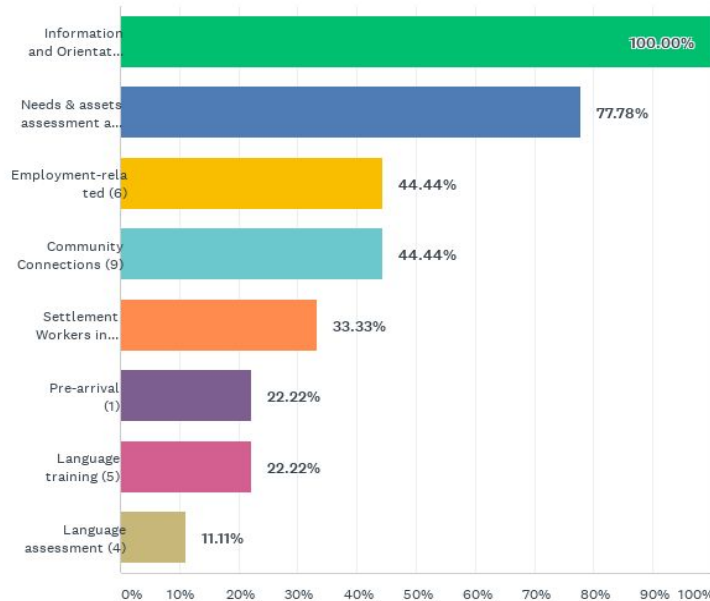


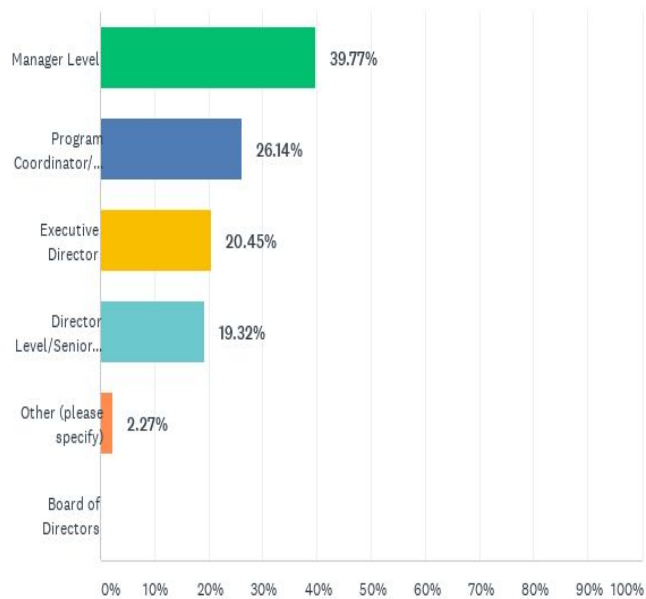
Figure 46: IRCC Funded Settlement Services (French)

### Management profile

#### ***Current role(s) of management settlement workers in immigrant service organizations***

In terms of managers' role (the English surveys, see Figure 47), 39.77% worked at the manager-level, while 26.14% were program coordinators or supervisors. 20.45% of the total participants in manager surveys were executive directors, and 19.32% worked at director level or senior leadership. For the "other" selection, one indicated their position as a project manager, and the other identified themselves as a performance evaluator.

### Q64 What is/are your current role(s) in your organization?



*Figure 47: Current Role(s) of Management Settlement Workers in Immigrant Service Organizations (English)*

For the French surveys (see Figure 48), program coordinators or supervisors took 52.94% of the total sample size, while director level or senior leadership individuals represented 23.53%. Informants who worked at the manager level and worked as executive directors shared an equal percentage (11.76%).

Q64 What is/are your current role(s) in your organization?

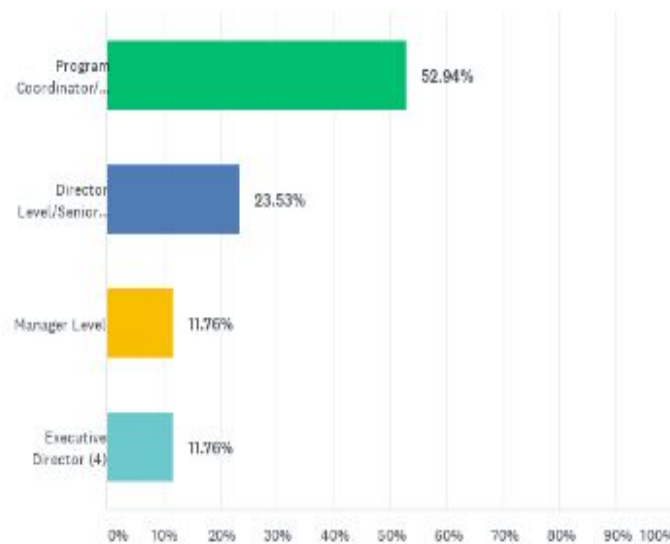


Figure 48: Current Role(s) of Management Settlement Workers in Immigrant Service Organizations (French)

**Types of immigrant service organizations**

In terms of the types of immigrant service organization these managers were currently serving (see Figure 49), 77.27% of the total participants worked in community-based organizations, while 17.05% of the total respondents indicated “other”, including non-profit adult education organization, employment service organization, an umbrella organization, the council of community-based organizations, mental health agency, a national non-profit organization for early literacy and mother empowerment, indirect non-profit service organization, cultural diversity, inclusion training, consulting, and language support organization, and the municipal government. There was an identical amount (5.68%) of the total participants who worked in educational institutions (school or colleges) and ethno-cultural organizations (mandated to serve a particular community). 1.14% of the total informants worked in the private sector. In our manager surveys, no one served immigrants from Francophone immigrant service organizations.

Q65 What type of immigrant service organization are you currently working in?

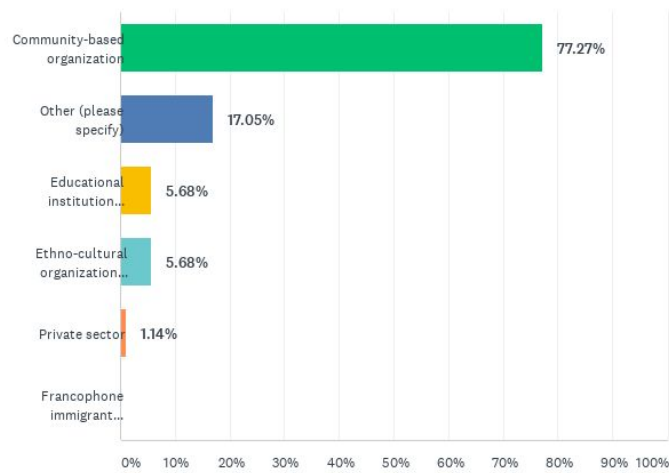


Figure 49: Types of Immigrant Service Organizations (English)

Regarding the French managers (see Figure 50), 64.71% of the total participants were from educational institutions (school or colleague), while individuals who worked in Francophone immigrant service organizations and ethno-cultural organizations (mandated to serve a particular community) shared the same percentage (29.41%). Respondents who served in the private sector took 5.88% of the total sample size. For those who indicated “other” (5.88%), one response showed this person worked in the provincial governmental sector.

Q65 What type of immigrant service organization are you currently working in?

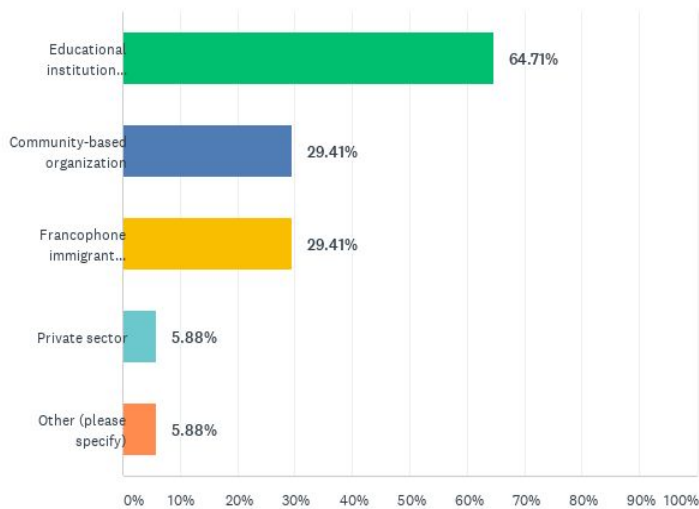
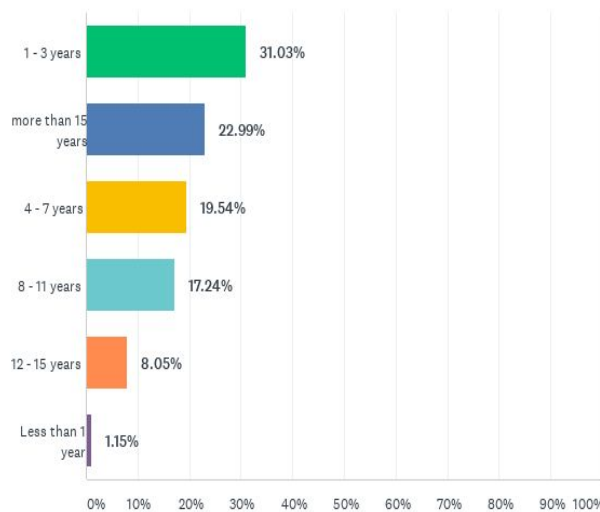


Figure 50: Types of Immigrant Service Organizations (French)

***Length of working in the immigrant service organization***

Figure 51 provides a general landscape of these managerial participants (English) working in immigrant service organizations. As indicated, 31.03% of these respondents worked less than a year in their organizations, while 22.99% worked in the agencies for over 15 years. The percentage of those who have worked in the sector for four to seven years was 19.54%, while 17.24% indicated they have served in the position for eight to 11 years. 8.02% of these managerial informants indicated more than 12 to 15 years was the length they have served in the organizations.

Q66 How long have you been working in this organization?



*Figure 51: Length of Working in the Immigrant Service Organization (English)*

For the French surveys, 35.29% of the total participants have worked in the organizations for one to three years, while 29.41% of these informants have worked in the sector for more than 15 years. The percentage of these managerial workers who have worked in the organization for four to seven years was 23.53%. 5.8% of them have served in the position for less than one year or between eight to 11 years.

Q66 How long have you been working in this organization?

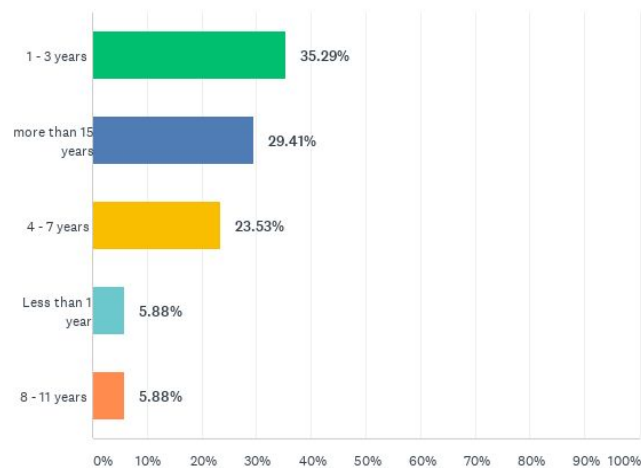


Figure 52: Length of Working in the Immigrant Service Organization (French)

**Primary location of immigrant service organizations**

Participants' organizations were mostly primarily located in Ontario (51.72%) and British Columbia (19.54%). The third-largest sample size based on the provinces was from Alberta (12.64%), while the fourth was from Manitoba (3.45%). We had 3.45% of the total managerial informants who worked in immigrant service organizations from Manitoba, Newfoundland and Labrador, and Nova Scotia. There were 2.30% of these settlement workers worked in organizations primarily located in Yukon. New Brunswick, Northwest Territories, and Saskatchewan shared an even percentage (1.15%) of the sample size. No one indicated their organizations were located in Quebec, Prince Edward Island, or Nunavut.

Q67 Which province/territory where your organization is primarily located and provides service?

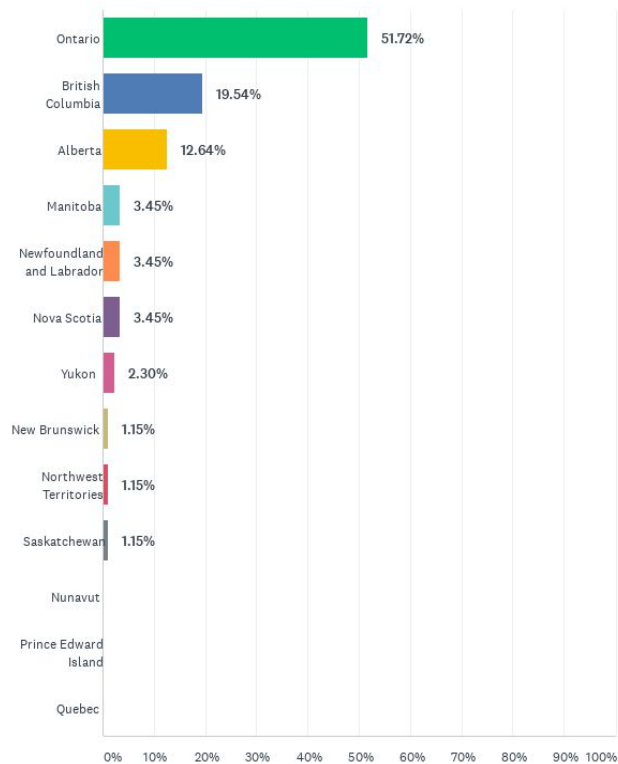


Figure 53: Primary Location of Immigrant Service Organizations (English)

Regarding the French managerial settlement workers (see Figure 54), most of their organizations were located in British Columbia (29.41%), while 17.65% of these agencies were in New Brunswick. There were 17.65% of organizations primarily located in Ontario. Agencies primarily located in Manitoba and Saskatchewan shared an equal percentage (11.76%) of the total survey size. Participants indicated that their organizations located in Northwest Territories and Nova Scotia were comparable (5.88%).

Q67 Which province/territory where your organization is primarily located and provides service?

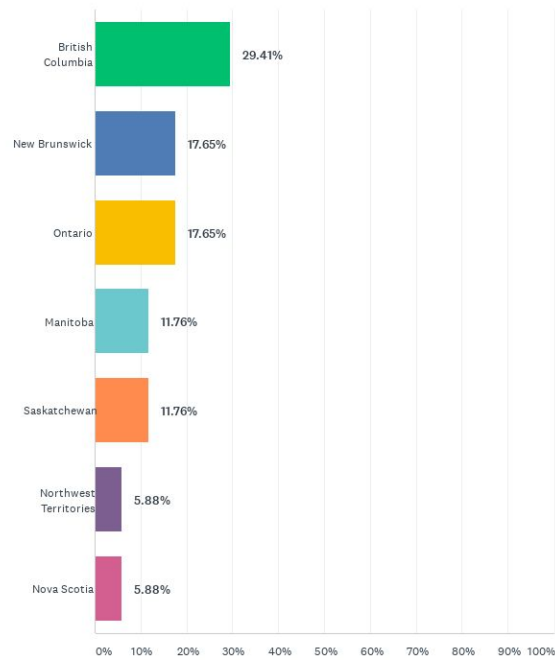


Figure 54: Primary Location of Immigrant Service Organizations (French)

**Location of immigrant service organizations by city size**

In terms of organization location based on city size (see Figure 55), participants indicated that their organizations were mostly (45.45%) located in a large-sized city/urban center with more than 1 million residents. There were 31.82% of respondents whose organizations were in a Medium-sized city/urban centre (100,000 to 1 million people). The percentage of smaller cities/urban centers (50,000 to 100,000 people) was 12.50%, while rural areas (less than 50,000 residents) had a percentage of 10.23% of the total managerial respondents.

Q68 Is your organization located in a:

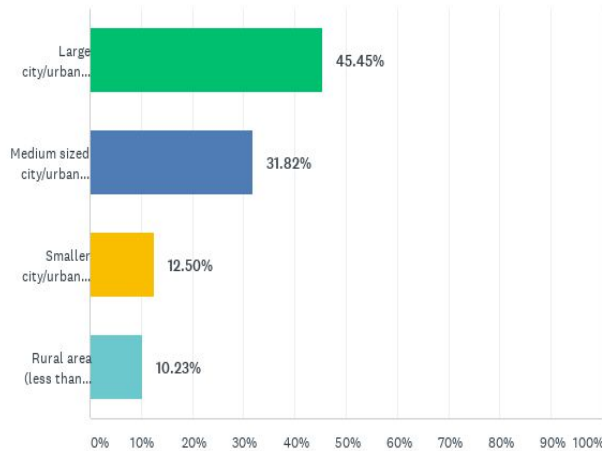


Figure 55: Location of Immigrant Service Organization Based on City Size (English)

For the French surveys (see Figure 56), we had 41.18% of participants' organizations located in the medium-sized city/urban center. In comparison, 35.29% of these respondents' agencies were located in large city/urban centre (more than 1 million people). The percentage of informants' organizations located in the rural area (less than 50,000 people) was 23.53%.

Q68 Is your organization located in a:

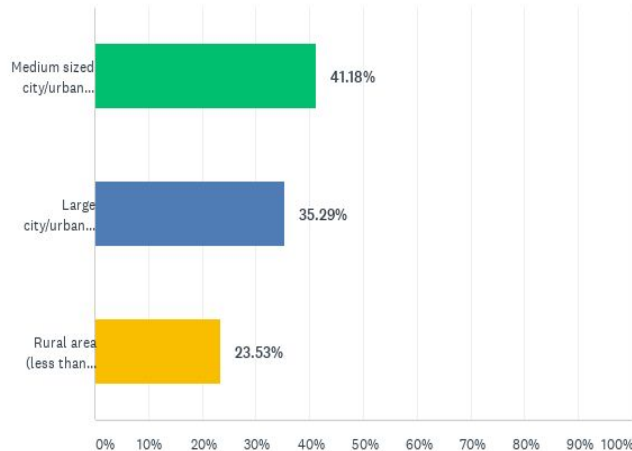


Figure 56: Location of Immigrant Service Organization Based on City Size (French)

**Staff size of immigrant service organization**

In terms of immigrant service organization staff size (full-time and part-time employees) (see Figure 57), our sample reveals that most managerial participants (44.32%) were from an immigrant service organization with over 100 employees. In comparison, 19.32% of their

agencies had a staff size of 21 to 50 employees. The percentage of organizations with 51 to 99 employees was 18.18%, and 7.95% was the percentage of the total participants who worked in organizations with 11 to 20 staff. There were 5.68% of the total respondents from an organization staff size of six to ten, and 4.55% of them served in an agency with one to five employees.

Q69 What is your organization's staff size (full time and part-time)?

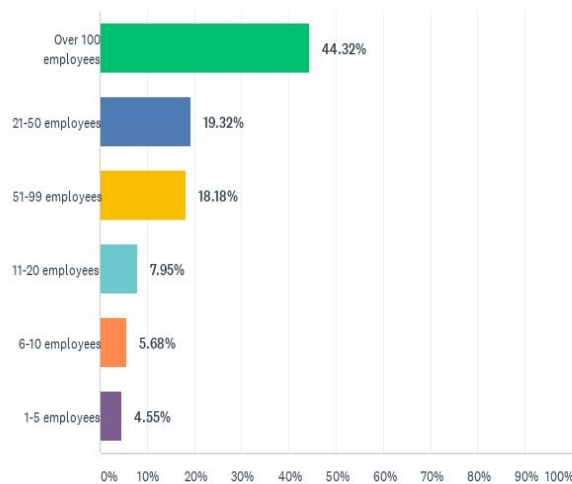


Figure 57: Staff Size of Immigrant Service Organization (English)

Figure 58 provides an overview of the French managerial workers' organization staff size. 35.29% of respondents indicate that their organizations had 11 to 20 employees. The percentage for those whose organizations had 21 to 50 employees and over 100 staff shares an equal amount (23.53%). 11.76% of the total participants identified their agencies had six to 10 employees, while 5.88% mentioned that their institutions had one to five staff.

Q69 What is your organization's staff size (full time and part-time)?

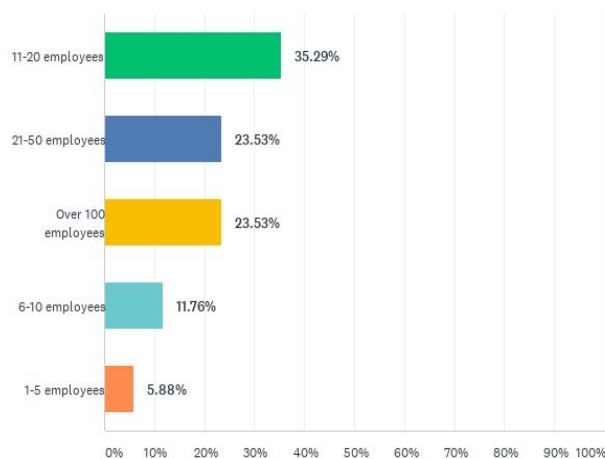


Figure 58: Staff Size of Immigrant Service Organization (French)

**Number of clients served by immigrant service organization**

In terms of the number of clients that these immigrant service organizations served annually (see Figure 59), 29.07% of the total participants' organizations served over 10,000 clients, while 26.74% of the total respondents' institutions served 101 to 1000 immigrants. 25.58% of these immigrant service organizations helped 1001 to 5000 clients every year and 12.79% of the agencies supported 5001 to 10,000 clients yearly.

Q70 How many clients does your organization typically serve each year?

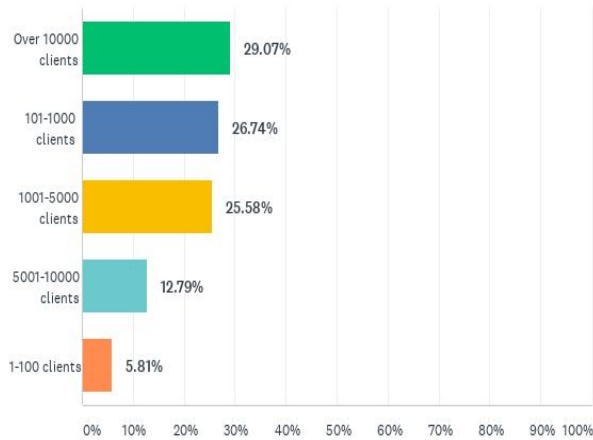
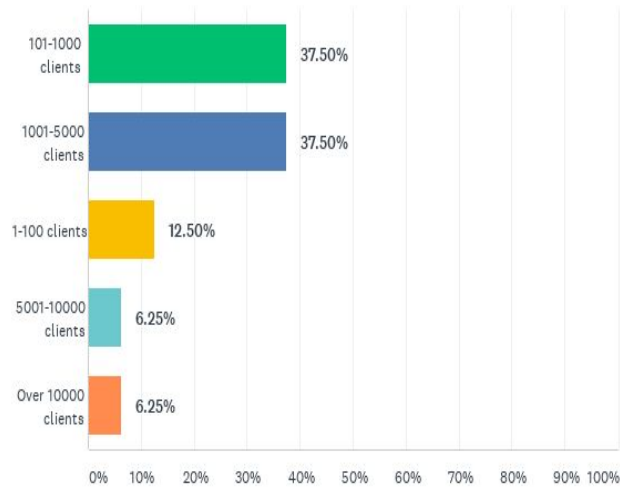


Figure 59: Number of Clients Served by Immigrant Service Organizations (English)

For the French surveys, 37.5% of these organizations served 101 to 1000 clients or 1001 to 5000 clients yearly. There were 12.5% of the total respondents' agencies served 1001 to 5000 clients annually. The percentages of participants' institutions worked with clients number between 5001 to 10,000 and over 10,000 are the same (6.25%).

Q70 How many clients does your organization typically serve each year?



*Figure 60: Number of Clients Served by Immigrant Service Organizations (French)*

**Funding sources by program**

In terms of funding received by program (see Figure 61), 91.01% of individuals indicated they received funding from IRCC, while the provincial government-funded 79.78% of these programs. Municipal government sponsorship took the third-largest percentage (47.19%). 41.57% of the total participants mentioned Foundation sponsored their programs, and the private sector funded 41.57% of the program-based services. In the “other” category (22.47%), participants identified their programs received funding from the United Way, for-profit college, revenue earned through service social enterprises (translation, interpretation, inclusion training), individual donors, or ESDC.

Q71 Which funding does your program receive? Please check all that apply.

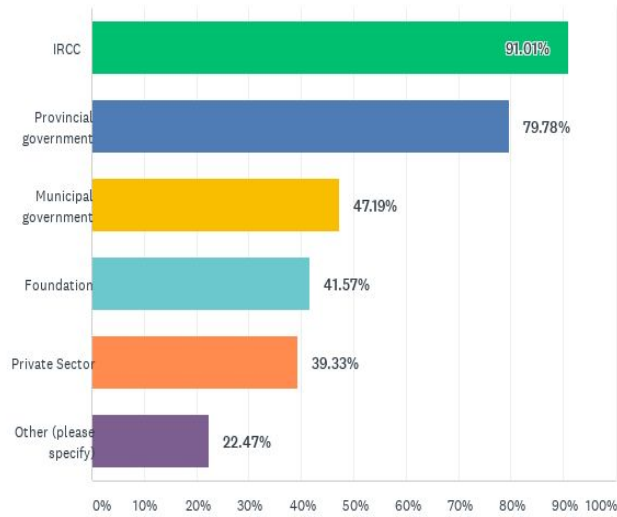


Figure 61: Funding Sources by Program (English)

Funding sources for the French surveys demonstrated that IRCC funded 94.12% of participants' programs, and the provincial government financially supported 41.18% of their programs. Foundation-funded 29.41% of the total programs, while the municipal government and private sector funded programs percentage were identical (11.76%). In the "other" selection (5.88%), individuals indicated earnings from program activities sponsored their programs.

Q71 Which funding does your program receive? Please check all that apply.

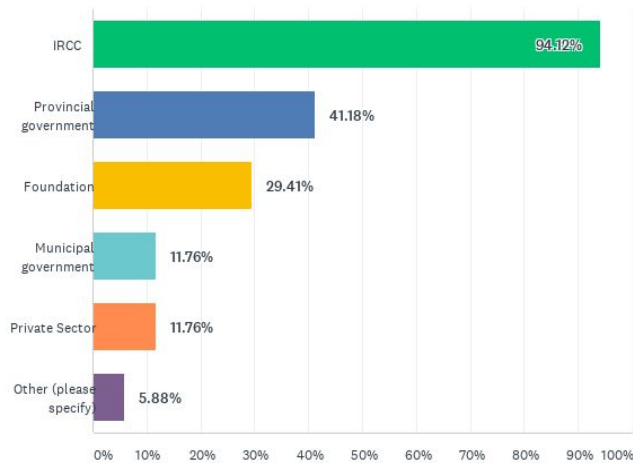
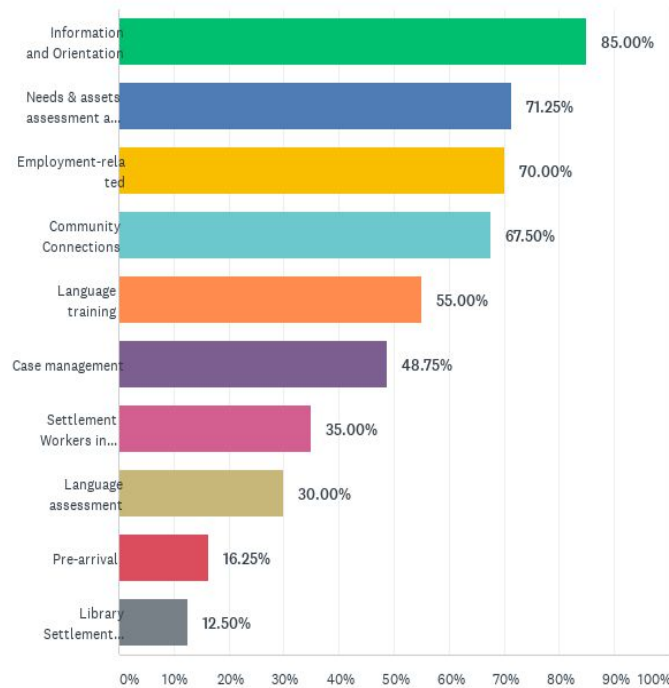


Figure 62: Funding Sources by Program (French)

### **IRCC funded settlement services**

For IRCC funded settlement services (see Figure 63), information and orientation took the largest percentage (85.00%) of the total funded settlement services. In comparison, needs assessment and referrals received the second-largest amount of financial support from the government (71.25%). Employment-related services represented 70.00% of the total settlement services delivery, and community connections occupied 67.50%. Language training had 55.00% of IRCC funded services, while case management had 48.75%. Participants pointed out that Settlement Workers in Schools had a percentage of 35.00% in total IRCC funded settlement programs and language assessment had a percentage of 30.00%. Pre-arrival had a percentage of 21.92% of IRCC funded services, and the Library Settlement Partnership percentage was 12.50%.

Q72 If you are IRCC funded, what (direct) settlement services do you deliver as part of your contribution agreement with IRCC? Please check all that apply.



*Figure 63: IRCC Funded Settlement Services (English)*

For the French survey (see Figure 64), respondents reported that information and orientation settlement services took 68.75% of IRCC funded settlement service delivery. Language training represented 62.50% of the total government-sponsored service, and employment-related services occupied 56.25%. Needs and assessment and referrals provided 43.75% of IRCC funding services, while community connection's percentage was 31.25%. Settlement Worker in Schools had a percentage of 18.75%, and pre-arrival services' percentage was 12.50%. Library Settlement Partnership positioned the last, which had a percentage of 6.25% of the total service delivery.

Q72 If you are IRCC funded, what (direct) settlement services do you deliver as part of your contribution agreement with IRCC? Please check all that apply.

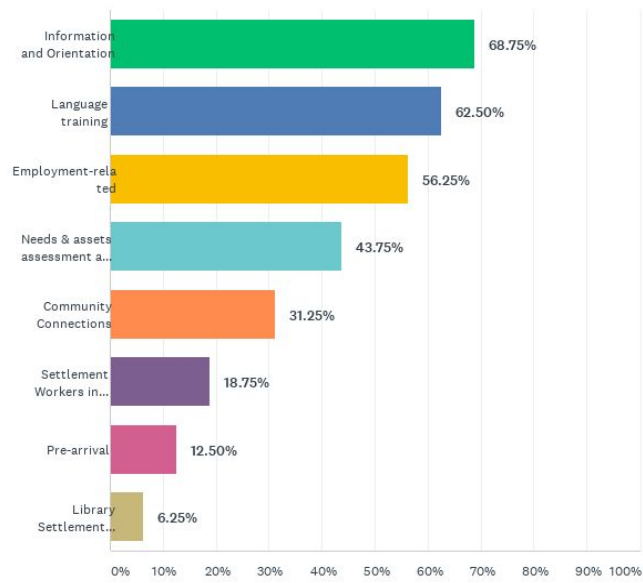


Figure 64: IRCC Funded Settlement Services (French)