

# Improving Accessibility to the City of Reykjavík's Digital Welfare Supplemental Materials



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**WPI**



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# Appendix A: Survey for Barriers in English, Icelandic, Arabic, and Polish

This Survey is completely anonymous, meant to help improve the current digital services the City of Reykjavík has to provide to its citizens, written by college students at Worcester Polytechnic Institute, working with The City of Reykjavík Service Design Department.

Select all that apply (Circle best fit answers)

1. What is your age?  
<19 | 20-24 | 24-29 | 30-39 | 40-49 | 50-59 | 60-66 | 67+
2. What languages are you fluent in?  
Icelandic | English | Spanish | Polish | Arabic  
Other \_\_\_\_\_
3. Were you aware that you are able to apply for Financial Assistance online as well?  
Yes | No
4. If you answered “Yes” to the previous question, what is preventing you from using this online service?  
Lack of knowledge of the online services | Not good with computers / smartphone  
No internet/ Computer / smartphone | Prefer in-person methods  
Language Barrier  
Other \_\_\_\_\_
5. Would any of these be beneficial to you to start using this service online?  
A tutorial on how to use this service | 1 on 1 digital help  
Increased visibility of this service | General computer help  
Assisting getting electronic ID | Assistance using electronic ID  
Other \_\_\_\_\_
6. How likely is it you would use this service online in the future?  
Very Likely | Likely | No affect | Unlikely | Very Unlikely | Not Applicable

Þessi könnun er framkvæmd af nemum við Worcester Polytechnic Institute háskólann í Boston í samvinnu við Reykjavíkurborg. Farið er með svör sem trúnaðarmál og ekki er hægt að rekja einstök svör til þátttakenda. Markmið könnunarinnar er að bæta rafræna þjónustu borgarinnar.

**Dragðu bring utan um þá möguleika sem eiga við þig**

1. Á hvaða aldursbili ert þú?

<19 | 20-24 | 24-29 | 30-39 | 40-49 | 50-59 | 60-66 | 67+

2. Hvaða tungumál hentar þér best þegar þú sækir um fjárhagsaðstoð?

Íslenska | Enska | Spænska | Pólska | Arabíska  
Other \_\_\_\_\_

3. Veist þú að þú getur sótt um fjárhagsaðstoð rafrænt?

Já | Nei

4. Ef þú svaraðir “Já” við fyrri spurningu, hvað kemur í veg fyrir að þú sækir um rafrænt? (þú mátt velja marga möguleika)

Kann ekki að sækja um rafrænt | Er ekki fær í að nota tölvur/snjallsíma

Á ekki síma / tölvu / internet | Kýs að mæta á staðinn og hitta fólk

Tungumálaörðugleikar

Annað \_\_\_\_\_

5. Gæti eitthvað af eftirfarandi atriðum hjálpað þér við að sækja um rafrænt?

Kennsluefni um rafræna umsókn | Aðstoð frá starfsmanni

Aukinn sýnileiki rafrænnar umsóknar | Almenn tölvu/snjallsímaaðstoð

Aðstoð við að sækja um rafræn skilríki | Aðstoð við að nota rafræn skilríki Annað \_\_\_\_\_

6. Hversu líklegt telur þú að þú munir nýta rafræna umsókn í framtíðinni?

Mjög líklegt | Líklegt | Hvorki líklegt né ólíklegt | Ólíklegt | MJög ólíklegt

| Veit ekki / Vil ekki svara

هذا الاستطلاع يهدف إلى المساعدة في تحسين الخدمات الرقمية الحالية التي تقدمها مدينة ريكيا فيك لمواطنيها. الاستطلاع كتب من طرف طلاب في معهد

ويستر المتعددة التخصصات في نطاق العمل مع مديرية تصميم الخدمات لمدينة ريكيا فيك. ليس من الضروري كتب اسمكم والمعلومات ستبقى سرية.

اختر كل ما ينطبق

1. ما هو عمرك؟

<19 | 20-24 | 24-29 | 30-39 | 40-49 | 50-59 | 60-66 | 67+

2. ما هي اللغات التي تتكلمها بخلاقة؟

الأيسلندية \ الإنجليزية \ الإسبانية \ البولندية \ العربية

أخر:

3. هل كنت على علم بأنك قادر على التقدم بطلب للحصول على المساعدة المالية عبر الإنترنت؟

نعم | لا

4. إذا أجبت بـ "نعم" على السؤال السابق، فما الذي يمنعك من استخدام هذه الخدمة الرقمية على الأنترنت؟

قلة المعرفة بالخدمات عبر الإنترنت | لا يوجد إنترنت / كمبيوتر / هاتف | لا تعرف استخدام أجهزة الكمبيوتر | تفضل الأساليب الشخصية

أخر:

5. هل ستكون أي من هذه الطرق مفيدة لك لبدء استخدام هذه الخدمة عبر الإنترنت؟

برنامج تعليمي حول كيفية استخدام هذه الخدمة | زيادة اشارة هذه الخدمة | مساعدة رقمية شخصية | مساعدة عامة في تشغيل الكمبيوتر

المساعدة في الحصول على الهوية الإلكترونية | المساعدة في استخدام الهوية الإلكترونية

أخر:

6. ما مدى احتمالية استخدامك لهذه الخدمة عبر الإنترنت في المستقبل؟

من المحتمل جدا | من المحتمل | لا تأثير | من غير المحتمل | من المستبعد جدا | لا اجابة

*Esta encuesta es completamente anónima, busca mejorar los servicios digitales actuales que la ciudad de Reykjavik puede ofrecer a sus ciudadanos, escrita por estudiantes universitarios del Worcester Polytechnic Institute, trabajando con el Departamento de Diseño de la Ciudad de Reykjavik.*

Marque todas las que apliquen con un círculo

1. ¿Cuántos años tiene?

<19 | 20-24 | 24-29 | 30-39 | 40-49 | 50-59 | 60-66 | 67+

2. ¿Cuáles lenguas domina?

islandés | inglés | castellano | polaco | árabe

Otras \_\_\_\_\_

3. ¿Sabía que podría pedir ayuda financiera en línea también?

Sí | No

4. Si contestara “sí” a la pregunta anterior, ¿qué le previene de usar ese servicio en línea?

Una falta de conocimiento de los servicios en línea | No manejo bien las computadoras

No tengo Internet o computadora | Prefiero métodos presenciales

5. ¿Cuáles de las opciones a continuación le ayudarían a comenzar a usar este servicio en línea?

Un tutorial sobre cómo usar el servicio | Ayuda digital a solas

Más visibilidad del servicio | Ayuda general con las computadoras

Ayuda para conseguir una ID electrónica | Ayuda para usar una ID electrónica

Otro \_\_\_\_\_

6. ¿Es probable que use este servicio en línea en el futuro?

Muy probable | Probable | No tengo opinión | improbable | Muy poco probable

Poniższa ankieta została przygotowana przez studentów bostońskiego uniwersytetu Worcester Polytechnic Institute we współpracy z Miastem Reykjavík. Podczas przetwarzania odpowiedzi zachowana jest poufność i nie ma możliwości powiązania odpowiedzi z osobą, która jej udziela. Celem tej ankiety jest ulepszenie usług elektronicznych Miasta Reykjavík. **Otocz kółkiem odpowiedzi, które do Ciebie pasują**

1. Jaki jest Twój wiek?

<19 | 20-24 | 24-29 | 30-39 | 40-49 | 50-59 | 60-66 | 67+

2. W jakim języku jest Tobie najwygodniej ubiegać się o wsparcie finansowe?

islandzki | angielski | hiszpański | polski | arabski

Inne \_\_\_\_\_

3. Czy wiesz, że o wsparcie finansowe możesz się ubiegać elektronicznie?

Tak | Nie

4. Jeśli w poprzednim pytaniu odpowiedziałeś/aś „tak”, to co powstrzymuje Cię przed złożeniem elektronicznego wniosku o pomoc finansową? (Możesz zaznaczyć kilka odpowiedzi)

Nie umiem złożyć wniosku elektronicznie | Nie umiem obsługiwać komputera/smartfona

Nie mam telefonu/komputera/ internetu | Wolę przyjść osobiście i spotkać się z ludźmi Problem językowy

Inne \_\_\_\_\_

5. Czy któryś z poniższych czynników mógłby Tobie pomóc w ubieganiu się o pomoc finansową drogą elektroniczną?

Materiały instruktażowe o formularzu elektronicznym | Pomoc pracownika

Większe wyeksponowanie formularza elektronicznego | Ogólna pomoc w obsłudze komputera/smartfona

Pomoc w ubieganiu się o e-dowód | Pomoc w użyciu e-dowodu

Inne \_\_\_\_\_

6. Na ile jest to prawdopodobne, że w przyszłości skorzystasz z formularza elektronicznego?

Bardzo prawdopodobne | Prawdopodobne | Ani prawdopodobne, ani nieprawdopodobne

Nieprawdopodobne | Bardzo nieprawdopodobne | Nie wiem / Nie chcę udzielić odpowiedzi

# Appendix B: Service Center Interview Topics

## Topics Covered

1. Understanding of the physical application and general paperwork required
  - i. Walk in process
  - ii. Necessary government ID
  - iii. What does the service provide
2. Demographics and patterns found in people coming in to apply in-person
  - i. What barriers are stopping users from using the electronic system
  - ii. Why do people prefer going in person
  - iii. Patterns among people with different demographics
3. Understanding service center worker's opinions on current system
  - i. Is the system beneficial
  - ii. Changes seen since implementation of the electrical system
4. Recommendations for the current digital system
  - i. Guides, Tutorials, Online help
  - ii. UI improvement, Digital process improvement



# Appendix C: Digital Service Design Topics

## Topics Covered

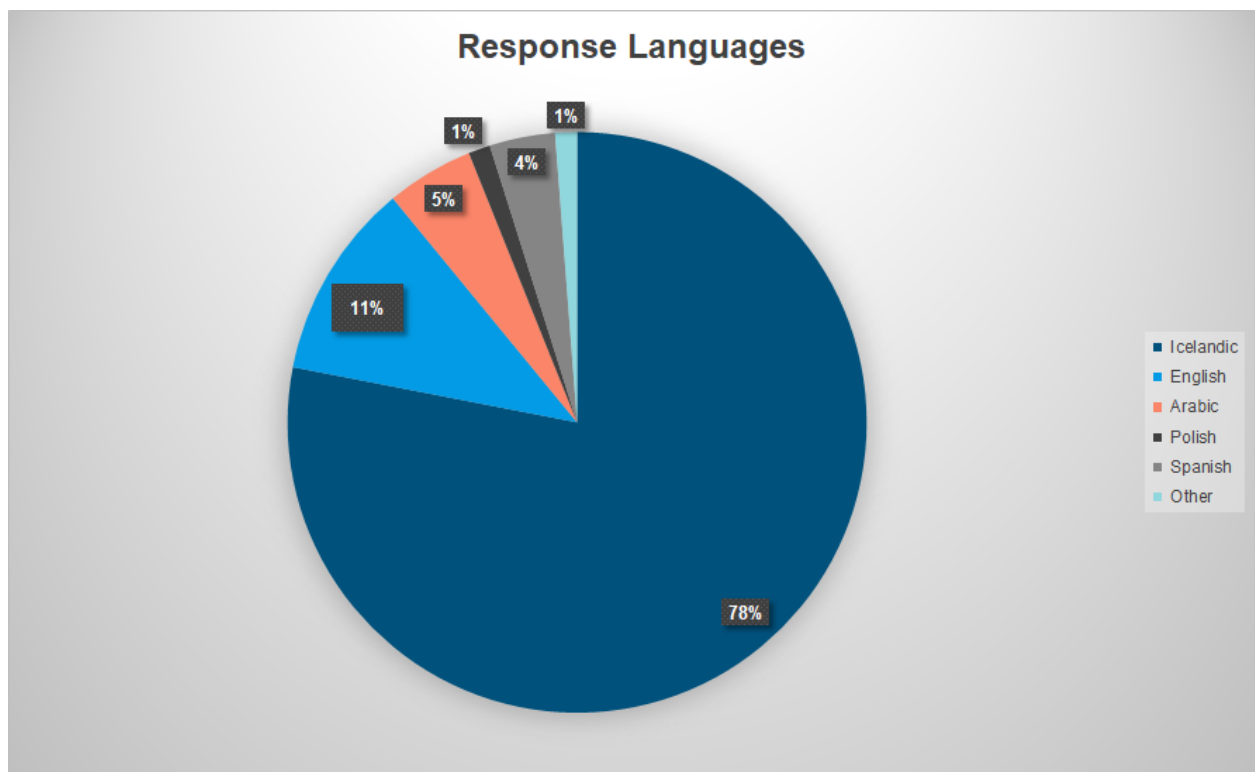
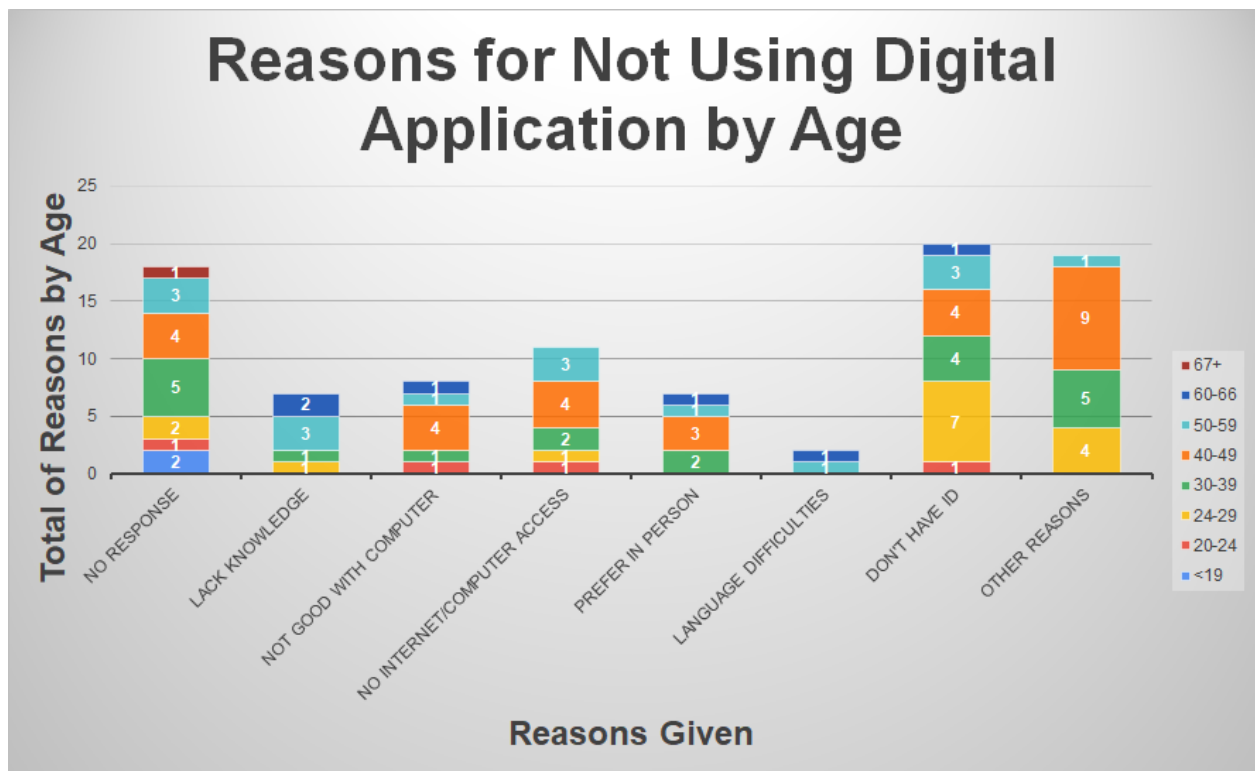
1. Considerations taken into account for who is using the services
  - i. Text to speech conversion
  - ii. Self-explanatory instructions
  - iii. Text size considerations
2. Proper management with user's private information
  - i. Two factor authentications using electronic ID
  - ii. Who can access information
3. Necessities of using universal language on the front end
  - i. Updating website to have simpler language for online translation to not be jank
4. Pre-existing systems and services they may be using as a guide
  - i. financial assistance system
  - ii. Background research into user centered design

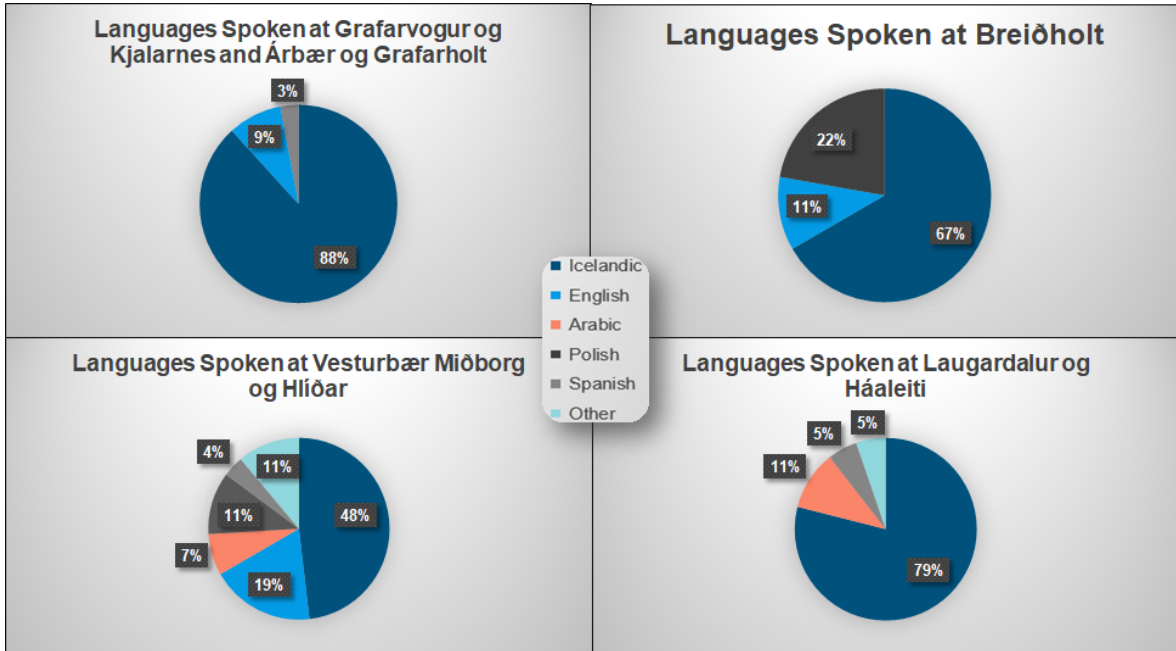
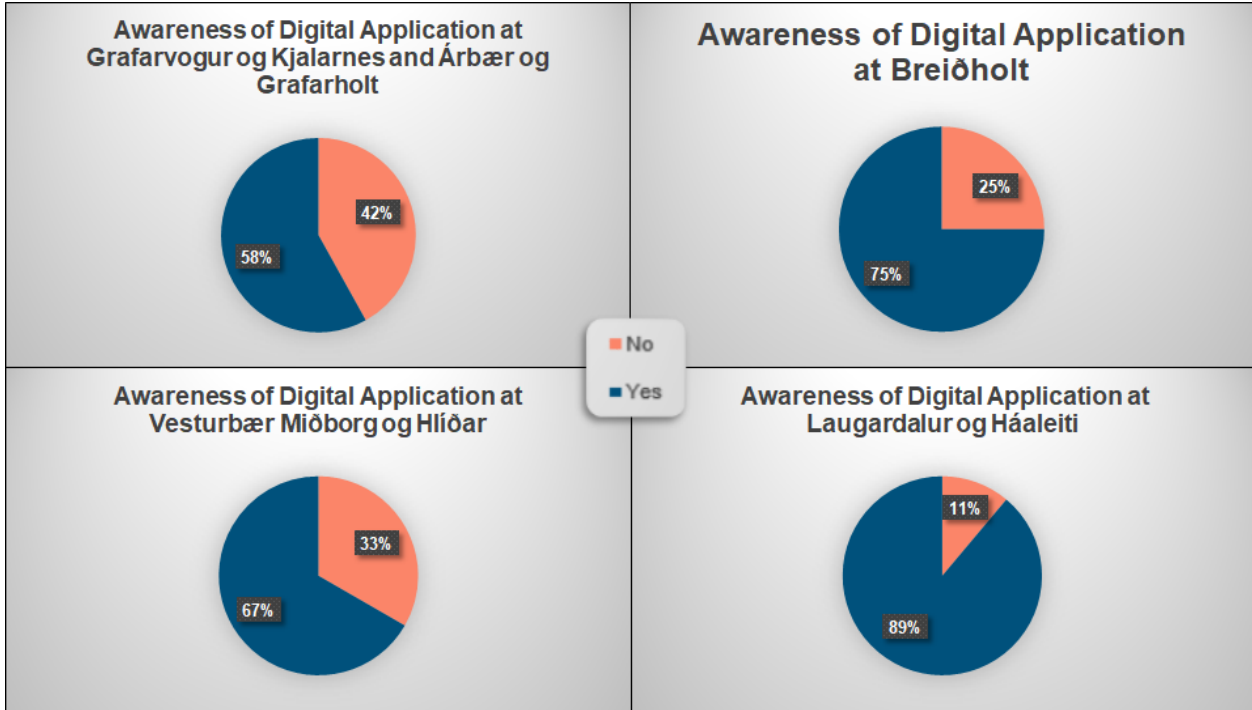
# **Appendix D: Consent Scripts**

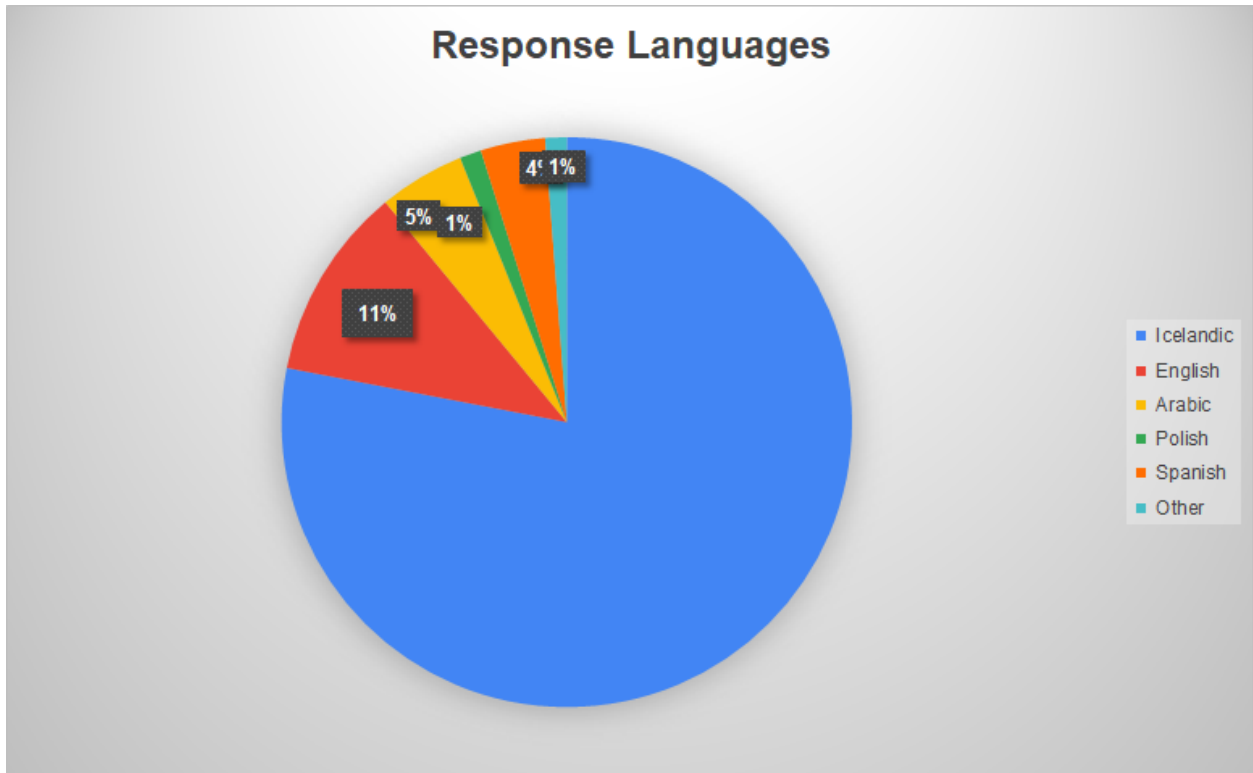
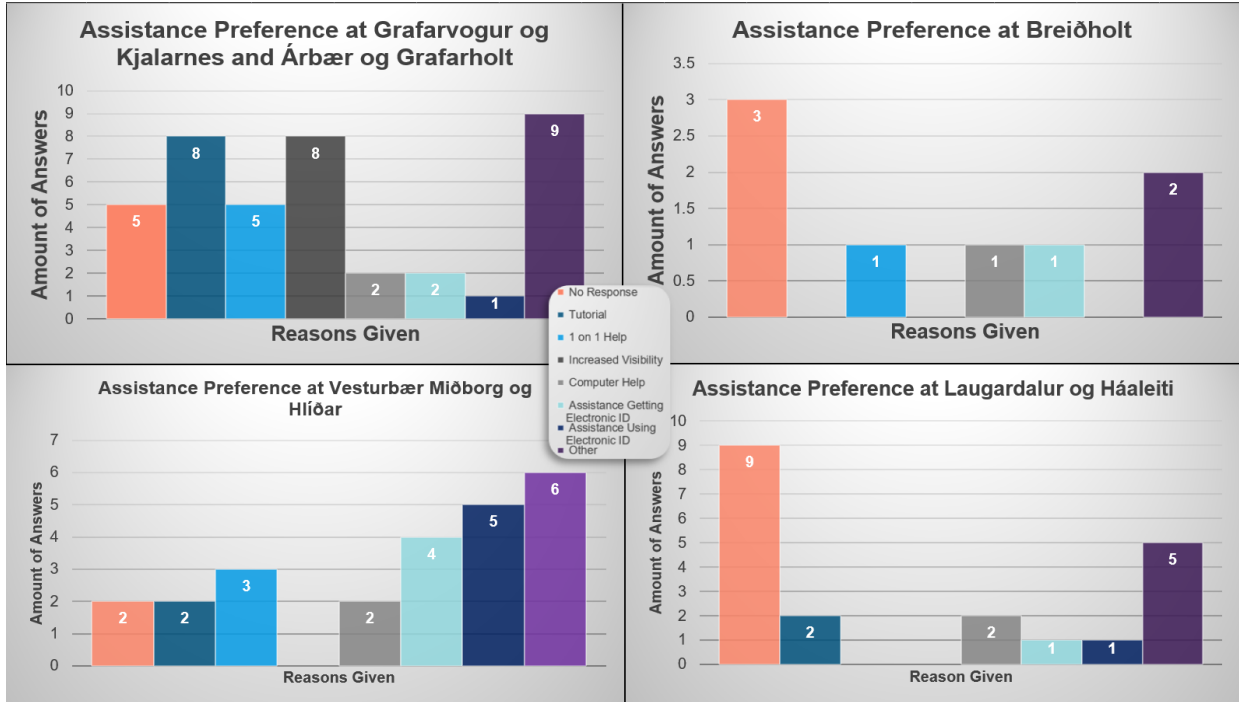
## **Survey consent**

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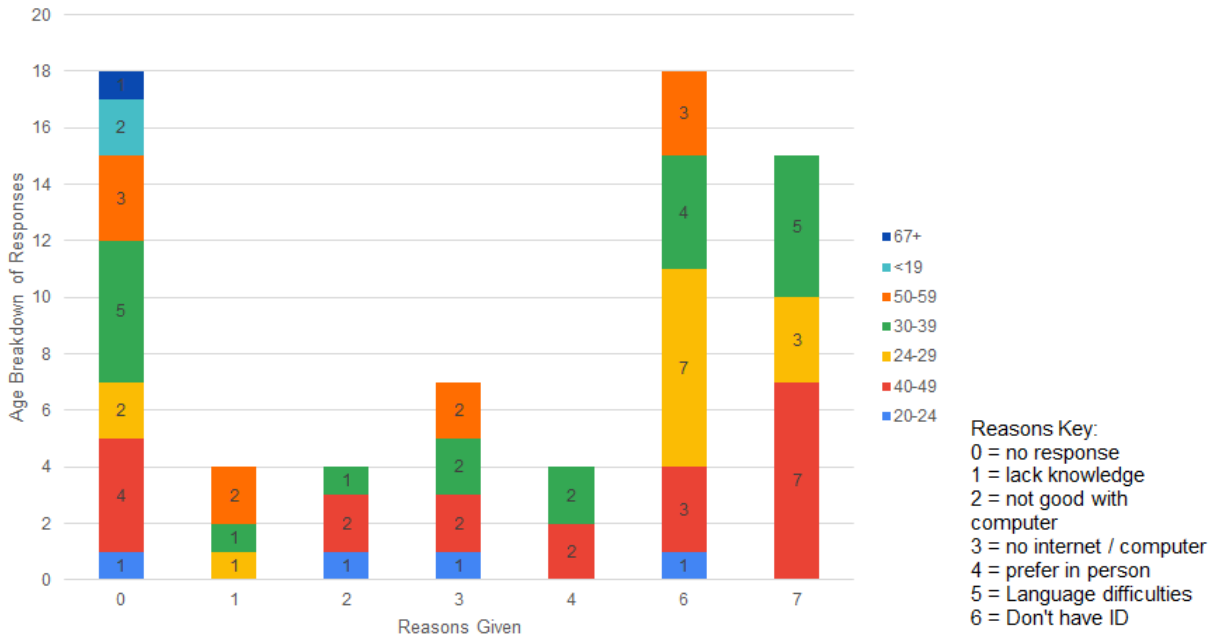
## Appendix E: Survey Data



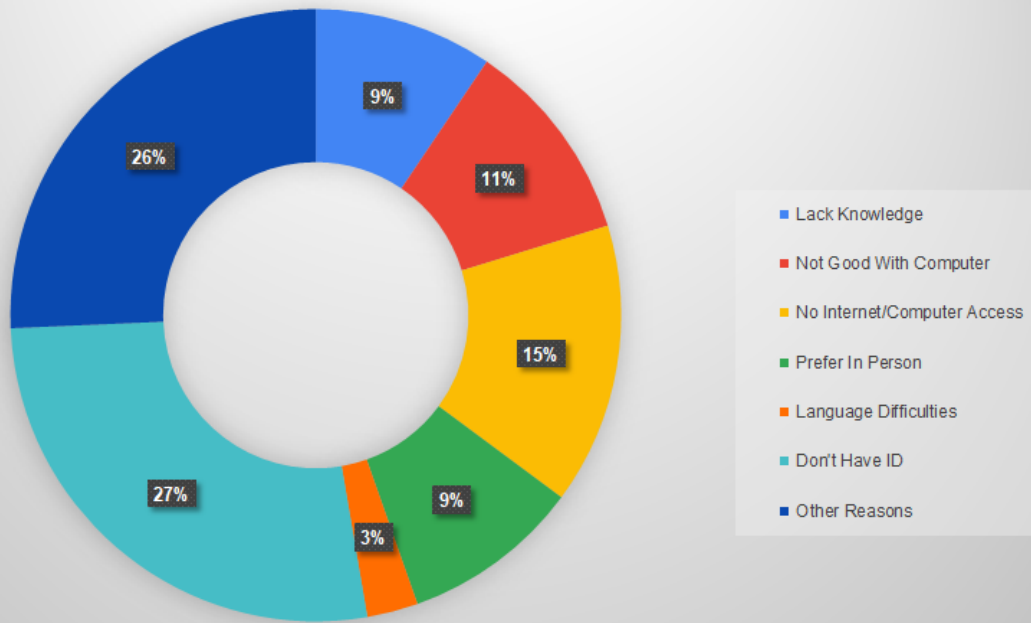


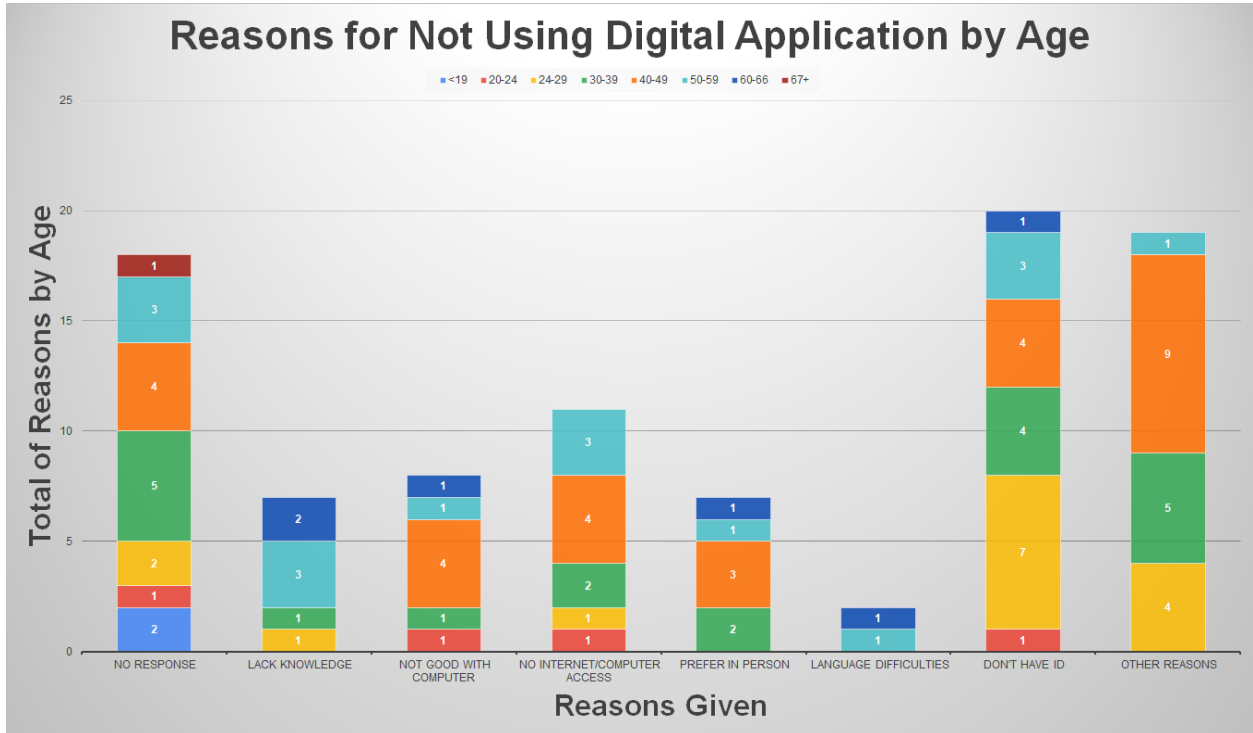


Reasons for Not Using Digital Application by Age



Percentage of Each Reason That People Responded With





Link to all of our raw data

[https://docs.google.com/spreadsheets/d/1TU3iW8pkXha6M7\\_IrR1Or2xfN329ahdEYrTD8GG\\_EME/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1TU3iW8pkXha6M7_IrR1Or2xfN329ahdEYrTD8GG_EME/edit?usp=sharing)

Raw Data:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Survey Number	Age	Category	Languages	Did they know	Reasons	Assistance use	Why they use it in the future	Reasons Other	Assistance Other							
1	2	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6									
2	1	2	EN, Romanian	0	2	6	2									
3	2	3	IS, EN, SP	0	0	1,2,5,6	6									
4	3	3	IS	1	6	7	6									
5	4	3	None	1	6	5	2		No							
6	5	4	Tigrina	0	0	1	1									
7	6	5	IS	1	2	2	4									
8	7	6	PL	0	0	6	6									
9	8	7	PL	0	0	1,2,4,5	2									
10	9	6	PL	0	0	2	2									
11	9	6	Lashan and some EN	0	0	1,2,4,5	2									
12	10	5	EN, PL	1	3	5	5		No passport							
13	11	0	EN, PL	1	6	0	1									
14	12	0	IS	1	6	7	1									
15	13	5	IS	1	6	7	1		Doesn't know where website is							
16	14	6	IS, EN	1	0	6	6									
17	15	5	IS	1	4	7	1		Don't need help, just opposed to the way technology is being marketed							
18	16	6	AR	1	3	4	6									
19	17	2	IS, EN	1	6	7	1		lost phone							
20	18	4	IS	1	6	6	6									
21	19	5	IS	1	6	5	1		Electronic ID doesn't work							
22	20	3	IS	1	7	7	1		There was a stumbling block							
23	21	3	IS	1	6	7	1									
24	22	5	PL	0	0	5	2									
25	23	4	IS	1	3	7	2									
26	24	3	IS	1	6	2	5		Issue with phone							
27	25	2	IS, EN	1	3	7	1									
28	26	7	IS	1	4	9	3									
29	27	4	IS	1	1,6	4	3									
30	28	3	IS	1	6	0	3									
31	29	4	PL	0	0	0	5									
32	30	3	PL	0	0	0	4									
33	31	5	IS	1	2	7	5		none							
34	32	6	IS	1	6	0	5									
35	33	6	AR	1	6	0	3									
36	34	5	IS	1	6	0	2									
37	35	6	IS	1	6	1	3									
38	36	5	IS	1	7	0	2		SIM card issues							
39	37	3	IS	1	1	0	2									
40	38	6	IS	1	3	4	1									
41	39	3	IS	1	6	0	4		Issues with phone							
42	40	2	IS	1	3,7	7	1		Issues with phone							
43	41	3	IS	1	7	7	4		Issues with phone							
44	42	3	IS	1	3,7	0	1		Id doesn't work							
45	43	5	IS	1	3,7	7	4		temporarily no internet access							
46	44	4	DMT	0	7	0	6		Did not receive ID							
47	45	4	IS	1	6	5,6	2									
48	46	4	IS	1	3	7	1									
49	47	5	AR, SP	0	2,3	1,4	2		Moving							
50	48	4	IS	1	7	4	6									
51	49	4	IS	1	4	3	2		No internet due to financial reasons							
52	50	5	IS	1	7	0	1									
53	51	6	IS	1	3,7	1	3		Phone issues							

Age	Category	Languages	Did they know	Reasons	Assistance	Future
18 = 1	20-24 = 2	None = none	1 = yes	0 = no response	0 = no response	0 = no response
25 = 3	25-29 = 3	IS = Icelandic	0 = no	1 = lack knowledge	1 = tutorial	1 = very likely
30 = 4	30-39 = 4	EN = English		2 = not good with computer	2 = 1 on 1 help	2 = likely
40 = 5	40-49 = 5	SP = Spanish		3 = no internet / computer	3 = increased visibility	3 = no effect
50 = 6	50-59 = 6	PL = Polish		4 = prefer in person	4 = general computer	4 = unlikely
60 = 7	60-69 = 7	AR = Arabic		5 = Language difficulties	5 = assisting getting eID	5 = very unlikely
67 = 8		Written = Other		6 = Don't have ID	6 = assistance using eID	6 = not applicable
				7 = other > written out	7 = other = written out	



A	B	C	D	E	F	G	H	I	J
54	52	5	IS	1	4	2	2		
55	53	4	IS	1	4	1	1		
56	54	4	IS	1	2	2	2		
57	55	1	IS	0	0	3	3		
58	56	5	IS	0	0	3	3		
59	57	3	IS, EN	0	0	1,2,3,4,5,6	3		
60	58	6	IS	0	1	1	2		
61	59	4	IS	0	0	1	2		
62	60	5	IS	0	0	0	3		
63	61	6	IS	1	0	0	0		
64	62	8	IS	0	0	0	2		
65	63	5	IS	1	7	3	1		Couldnt figure it out when he tried it
66	64	4	IS	1	1	3	2		
67	65	4	IS	1	0	1,2,3,4,5	1		
68	66	1	SIP	0	0	1	1		
69	67	3	IS	0	0	7	3		He didnt know but now he knows
70	68	4	IS	0	0	7	2		No computer
71	69	4	IS	0	7	7	3		No need
72	70	5	IS	1	7	1	1		No access to electronics
73	71	6	IS, EN	0	1	7	6		My children
74	72	5	IS	1	7	7	1		No ID
75	73	5	IS	1	7	7	1		Nothing
76	74	3	IS	1	7	7	1		Feels better to have everything written
77	75	4	IS	1	7	7	5		Don't need it
78	76	5	IS, EN	1	2,4,6,7	2	6		No Electronic ID, phone issues
79	77	5	IS	1	7	7	1		Doesnt need financial aid
80	78	2	IS	0	0	3	2		Doesnt like the electronic form
81				54					To increase electronic assistance do not hesitate to email
82									
83									
84					Assistance to use				
85	IS	61	78.21%		0	1	8		25.00%
86	EN	10	12.82%		1	2	6		18.75%
87	SIP	2	2.56%		2	3	6		18.75%
88	AR	4	5.13%		4	4	4		12.50%
89	PL	5	6.41%		5	5	4		12.50%
90	Other	5	6.41%		6	4	4		12.50%
91									

## Appendix F: Interview Notes

### Service center meeting W Liney 9/27/21

- @ Laugavegur 77 , 101 Reykjavík
- They have an idea of why people aren't coming
- Station in downtown Reykjavík
  - More ppl come in than the other stations
  - Lots of homeless and foreigners
    - No id
    - Need smartphones
- 2 homeless shelters nearby
- Sim card is connected to id
- More homeless people near this service center
- Highest percent of homeless people of any of the centers
- \*Lots of Venezuelans refugees
- Lots of Arabic, Somali
- Largest group single male 30-39
- There's a large mix of rich and cheap housing in the area
- Center covers downtown area and 2 districts
- Large amount of frontline workers
  - Social workers
  - Psychologists
  - Etc
- Many people apply last week and day of the month
  - Tend to forget
  - Some people w/ substance abuse may forget to apply until their last chance
- Lots of repeat visitors
- They promoted their web services
- Provide computer access and internet at the centers
- Promote visitors to get their ids
- Some people want to come in person because they want social interactions

### Service center meeting w/ Lara :

- Already know some answers
- No legal docs, passport, id, license
- Takes time, photo id, etc to do'
- ~20% are drug users or refugees
  - Lost or dont have phone
- Survey might be too complex
- High immigrant population in the area
- 23k people in total. Mostly immigrants
- Upper area of the zone has highest poverty

- No homeless shelters
- Mostly polish
- Skra.is
- Hagstofa.is
- Much more immigrants
- Changed dramatically in last 3 years
- Public computers
- Push to get id
- Promote services
- Get temp id then get full id
- Not many workers at the service center
- Center wants to provide as many goods and services within the bounds of their restrictions
- Lots of people repeat for many months and years
- Not large homeless population

### **Service center meeting w/ Ella:**

- No digital ids for immigrants
- Substance abusers
- People who want it later
- People come here for other reasons so might as well do the application here
- Asked to do it online at the center
- Video tutorial might help
- Electronic services for children would make the process easier
- Immigrants get translators
- Has a team that drives out to make people sign papers
- 67+ don't apply here
- Elderly can handle computers but some come for help
- No contact with other service center

### **Service center meeting w/ Margaret:**

- Substance abusers come here
- Sometimes they get a call for help
- Always ask them to do it online
- Age might be a factor
- People with digital ID also like coming in person for some reason
- Supposed to be for a short period
- Not many immigrants here

### **Meeting with designers (Búi and Andri)**

department of service and innovation

consist of 10 ish people, service designers, product designers, and whatever that last one is that is about looking at users who use the stuff

diverse background, project management and design oriented, and also traditionally trained background,  
use image advait took to look at their setup

- working in teams, but also not really a team since its more transitioning from "teams" that meet for like an hour or two a week into actual teams that meet together to work together

Re-evaluating how they are supposed to do digital design

- trust is the first stage to find who should be where and the setup of the teams and the skills - get the vibe down and redefining scenarios to amplify the voices

- understanding a person's ability and parameter to maximize the efficiency and put their heart into the project

- understand timeframe and do they have the right goals

- they define their goals to not fully be goals but at least define what they want to do to find the root cause or root problem

- look into what the big concept means, go from there

~EX: digital signatures, original goal is to explore the potential of connecting digital signatures to an API service linked to something -> converting Reykjavik's system into a more digitally signature system -> understanding other systems that provide the same service -> tackling it in a broader scope

- define projects around the current project to try and not duplicate work or repeat what they are doing

- finding the right people who have very specific informations and points to expedite the process to not backtrack

-linking the couple of departments and with other digital leaders to see the bigger pictures to link projects and use similar systems - check org chart

- what needs what, moving from pen and paper into digital, then look at everything and look at an overview of what need everything and what defines everything

- what else is out there, what has been done before

-identify the users, who are we targeting here? -> question users selected but more or less go with what they're given, employees of Reykjavik city, or simply citizens depending on who created the project, owned the project, or are providing leadership in the project.

- focus results, what are biggest pinpoints - interviews, surveys, shadowing, what tools are necessary and fit the timeframe whilst doing so

- focus work - same goals try to clump together and paint points that are similar, label stuff, start individually then as a group to see validity as to what everything is

- ideating - what kind of solutions and how are they implemented - is it a digital thing or is it a workflow thing - is it a digital solution (not bound to physical)

- data mappings - bang for a buck, how is it driven, is it worth it to invest more, is it socially or financially motivated

- pick the solutions that could be realistic

- leaves service designers and then goes to project managers -> backend

- if small project, easy, nice, quick, pretty

- if big - service mapping blueprints, journey mapping, looking more into what goes into the service and make the output very visual, decrease the word count and show the story instead on the journeymap and see the stage

- great way to tell the stakeholders on what is happening and what is important with just a couple of slides and stuff

Have a way to identify things to be worked on - things discovered, what's on goal, what's valuable enough to take forward and be used for future projects and the sort - low hanging fruit that would definitely bring some value - \*\*\*Our recommendations should be stuff that should be reusable and worth it to the city\*\*

had two weeks to map out the financial aid program of a very small team with a product manager and a specialist from the welfare department with oversight - one person that knows everything, also difficult since you can go into minor details VERY quickly, a double edged sword but also works wicked well since being able to understand big picture and the size of an and is great

The org chart

purple - welfare - previously pretty siloed, no way finding out between teams working on the same processes

green - parks and rec

blue - sports and leisure

turquoise - tourism and stuff

light blue - education

inner departments support other departments, placed digital leader in each of the depths to align the city more, spread across 400 different locations across city

Styrmir is welfare digital leader, Asta is sports and leisure

- with these silos they are breaking the boundaries between welfare and education

project manager identifies which group is working with what to understand dangers, what they're working for, what systems to use and combine to not increase the necessary work

departments can never be the same since they are working with separate things, but are always bringing in new ways of thinking from other depts - the whole manager trade might actually be a great idea to piggyback off this idea

Have a recommendation that will automatically refer to people to other financial aids before they apply online maybe, or also in person have a system that identifies these people

Finding the right solutions go back in the market and work or evaluate them as disabled and find a way to send them to their disability aid solution -> they are probably collecting information on the amount of months each person has applied, might as well use that to recommend them to a separate service

Osk - tilde on O, their recommendation is to provide digital identities through the city instead of through the banks? Language barrier seems to be difficult to break through and is a very relevant challenge, might be growing since immigration is increasing

not getting people do this themselves online but instead just pushing them there, once you do a digital walkthrough with a person there, person may do it themselves in the future

city of R might provide phones - 10 years+ to use digital ID

Always need iD - ID is big problem - might be quite a bit easier but is also a potential of Reykjavik employee identifying person through driver's license or passport - if can identify, can provide access to system - Have the ability for worker at service center to "buzz" the person using the service in, that would be great???

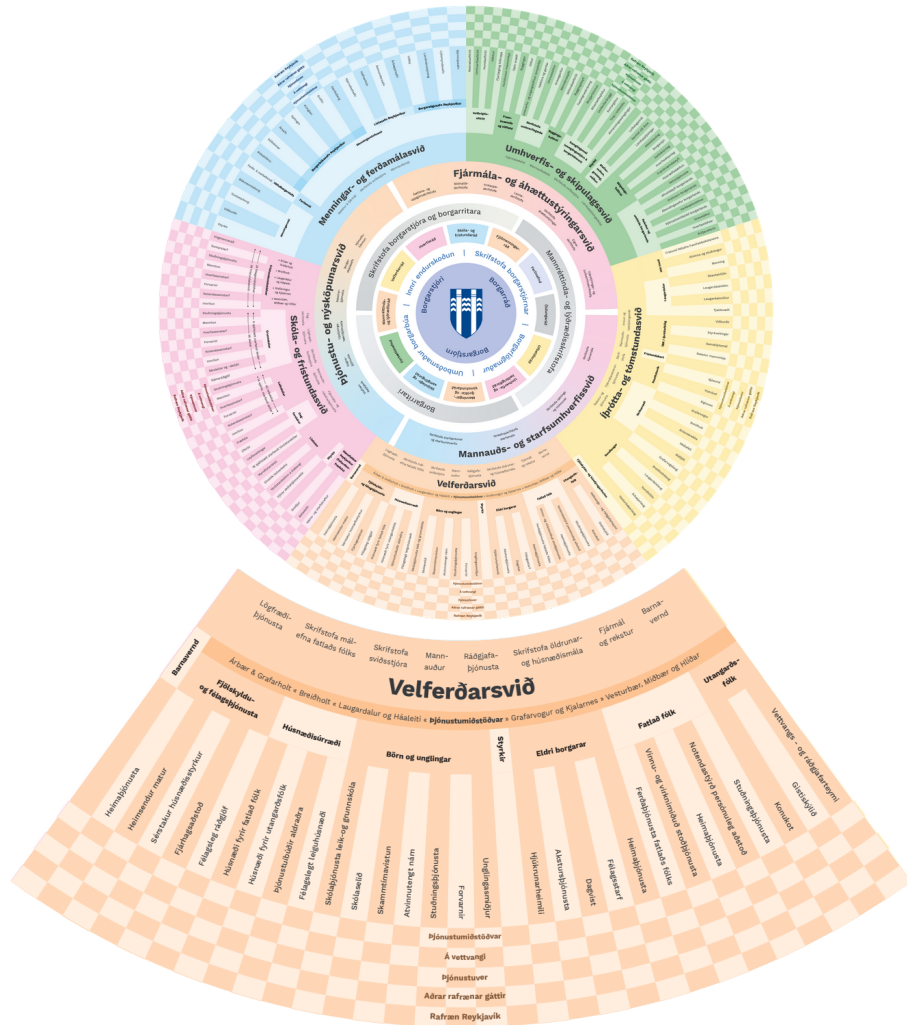
recommend teams that can do this work themselves

Forget how expensive it is to do it not digitally - you are really investing into the digital service

Counseling systems can be used for more things - contact, evaluate, identify, and then help - grouping services together instead of trying to buy another solution

Very good for people working on tech solutions is not better, just making it different. comes with different types of benefits

- what are you losing or gaining from the move?



Organizational chart above

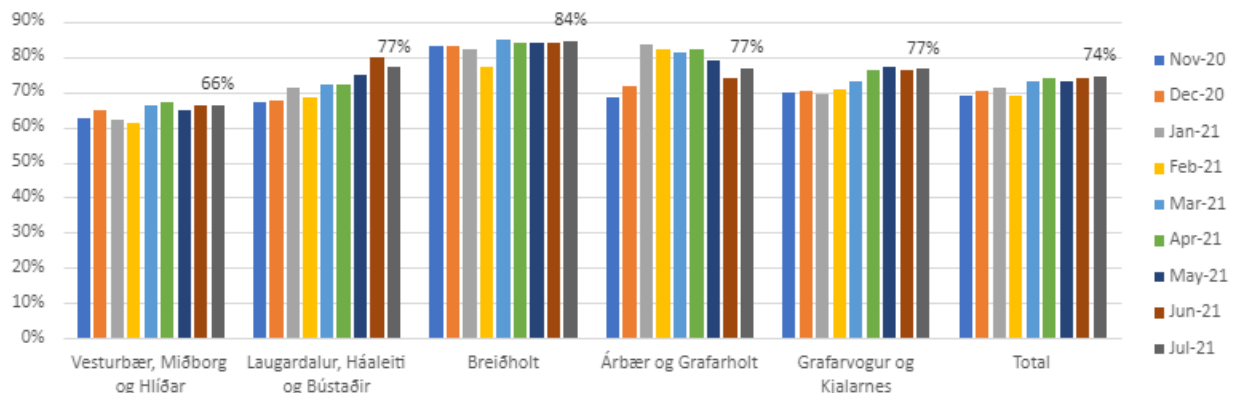
## Appendix G: Background Demographic Data

**Table 1**  
*Provided financial support for subsistence. Percentage of users divided according to whether an electronic application was submitted or not, divided by location.*

Service Center	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	#####	Jul-21
Vesturbær, Miðborg og Hlíðar	63%	65%	62%	61%	66%	67%	65%	66%	66%
Laugardalur, Háaleiti og Bústaðir	67%	67%	71%	69%	72%	72%	75%	80%	77%
Breiðholt	83%	83%	82%	77%	85%	84%	84%	84%	84%
Árbær og Grafarholt	69%	72%	84%	82%	81%	82%	79%	74%	77%
Grafarvogur og Kjalarnes	70%	70%	69%	70%	73%	76%	77%	76%	77%
<b>Total</b>	<b>69%</b>	<b>70%</b>	<b>71%</b>	<b>69%</b>	<b>73%</b>	<b>74%</b>	<b>73%</b>	<b>74%</b>	<b>74%</b>

	Service Centers	#####	Dec-20	#####	#####	Mar-21	#####	#####	#####	Jul-21
<b>Electronically</b>	Vesturbær, Miðborg og Hlíðar	313	310	303	301	327	326	305	321	307
	Laugardalur, Háaleiti og Bústaðir	214	206	214	219	226	217	222	239	219
	Breiðholt	213	218	208	192	215	209	201	208	204
	Árbær og Grafarholt	105	102	112	110	112	102	93	100	105
	Grafarvogur og Kjalarnes	96	94	83	86	89	86	83	86	88
	<b>Total</b>	<b>941</b>	<b>930</b>	<b>920</b>	<b>908</b>	<b>969</b>	<b>940</b>	<b>904</b>	<b>954</b>	<b>923</b>
<b>In Person</b>	Vesturbær, Miðborg og Hlíðar	187	170	184	193	172	161	166	165	156
	Laugardalur, Háaleiti og Bústaðir	105	100	87	100	90	83	73	59	66
	Breiðholt	44	45	45	57	38	39	37	39	38
	Árbær og Grafarholt	48	40	22	24	27	23	25	36	32
	Grafarvogur og Kjalarnes	42	40	37	36	26	27	25	28	27
	<b>Total</b>	<b>426</b>	<b>395</b>	<b>375</b>	<b>410</b>	<b>353</b>	<b>333</b>	<b>326</b>	<b>327</b>	<b>319</b>
<b>Total</b>	Vesturbær, Miðborg og Hlíðar	500	480	487	494	499	487	471	486	463
	Laugardalur, Háaleiti og Bústaðir	319	306	301	319	316	300	295	298	285
	Breiðholt	257	263	253	249	253	248	238	247	242
	Árbær og Grafarholt	153	142	134	134	139	125	118	136	137
	Grafarvogur og Kjalarnes	138	134	120	122	115	113	108	114	115
	<b>Total</b>	<b>1,367</b>	<b>1,325</b>	<b>1,295</b>	<b>1,318</b>	<b>1,322</b>	<b>1,273</b>	<b>1,230</b>	<b>1,281</b>	<b>1,242</b>

Figure 1: Proportion of users of financial aid who applied online according to their Service Center





Age Range (in years)	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	#####	Jul-21
19 and younger	67%	71%	79%	53%	69%	61%	68%	72%	70%
20-24	67%	71%	70%	65%	68%	73%	73%	74%	71%
25-29	69%	71%	73%	70%	79%	78%	77%	79%	78%
30-39	74%	75%	74%	72%	78%	76%	76%	75%	76%
40-49	68%	68%	69%	70%	72%	75%	72%	74%	75%
50-59	70%	70%	73%	69%	68%	71%	75%	78%	76%
60-66	56%	50%	48%	54%	49%	45%	49%	44%	48%
67 and older	32%	24%	50%	50%	73%	67%	67%	89%	80%
<b>Total</b>	<b>69%</b>	<b>70%</b>	<b>71%</b>	<b>69%</b>	<b>73%</b>	<b>74%</b>	<b>73%</b>	<b>74%</b>	<b>74%</b>

	Age Range (in years)	#####	Dec-20	#####	#####	Mar-21	#####	#####	#####	Jul-21
<b>Electronically</b>	19 and younger	32	34	11	8	9	11	13	28	28
	20-24	126	125	112	104	111	116	113	134	120
	25-29	182	182	183	172	194	190	178	189	182
	30-39	309	303	307	308	330	306	293	292	288
	40-49	167	172	179	187	196	196	180	184	181
	50-59	85	85	98	94	94	90	95	97	92
	60-66	28	25	23	29	27	25	26	22	24
	67 and older	12	4	7	6	8	6	6	8	8
<b>Total</b>	<b>941</b>	<b>930</b>	<b>920</b>	<b>908</b>	<b>969</b>	<b>940</b>	<b>904</b>	<b>954</b>	<b>923</b>	
<b>In Person</b>	19 and younger	16	14	3	7	4	7	6	11	12
	20-24	61	52	47	56	52	44	41	46	48
	25-29	80	74	68	74	51	53	52	49	51
	30-39	107	99	109	118	95	95	94	98	90
	40-49	78	81	79	81	76	65	71	66	61
	50-59	37	37	37	43	44	36	32	28	29
	60-66	22	25	25	25	28	30	27	28	26
	67 and older	25	13	7	6	3	3	3	1	2
<b>Total</b>	<b>426</b>	<b>395</b>	<b>375</b>	<b>410</b>	<b>353</b>	<b>333</b>	<b>326</b>	<b>327</b>	<b>319</b>	
<b>Total</b>	19 and younger	48	48	14	15	13	18	19	39	40
	20-24	187	177	159	160	163	160	154	180	168
	25-29	262	256	251	246	245	243	230	238	233
	30-39	416	402	416	426	425	401	387	390	378
	40-49	245	253	258	268	272	261	251	250	242
	50-59	122	122	135	137	138	126	127	125	121
	60-66	50	50	48	54	55	55	53	50	50
	67 and older	37	17	14	12	11	9	9	9	10
<b>Total</b>	<b>1,367</b>	<b>1,325</b>	<b>1,295</b>	<b>1,318</b>	<b>1,322</b>	<b>1,273</b>	<b>1,230</b>	<b>1,281</b>	<b>1,242</b>	

Figure 2: Proportion of users who applied for financial aid electronically divided by age

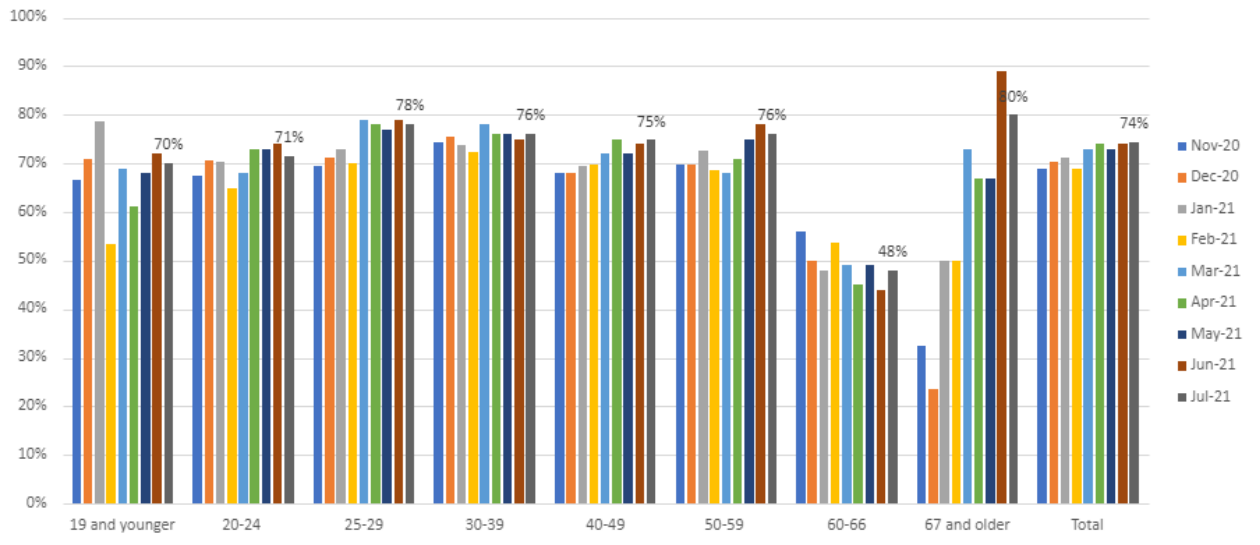
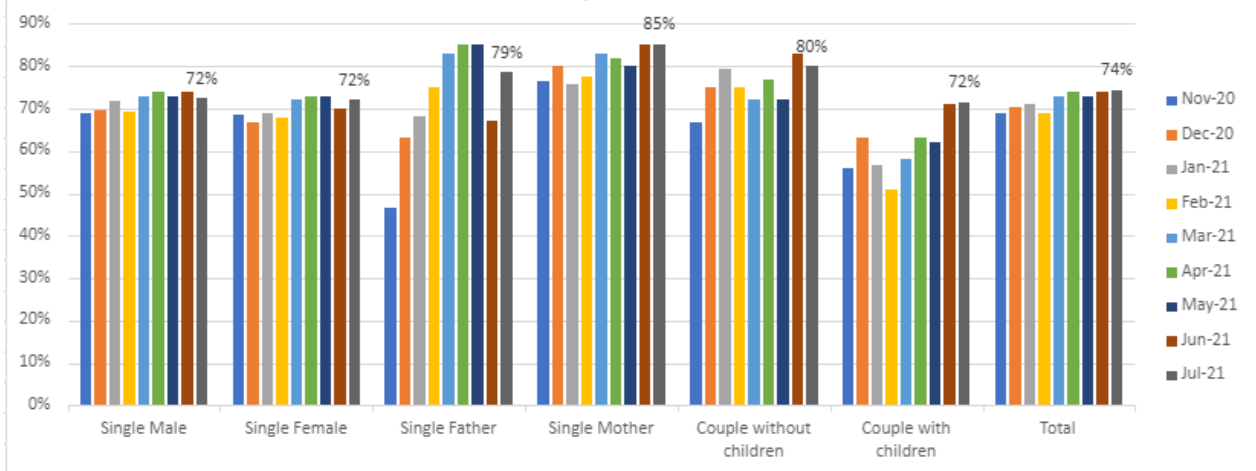


Table 3

Family Type	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	#####	Jul-21
Single Male	69%	70%	72%	69%	73%	74%	73%	74%	72%
Single Female	68%	67%	69%	68%	72%	73%	73%	70%	72%
Single Father	47%	63%	68%	75%	83%	85%	85%	67%	79%
Single Mother	77%	80%	76%	78%	83%	82%	80%	85%	85%
Couple without children	67%	75%	79%	75%	72%	77%	72%	83%	80%
Couple with children	56%	63%	57%	51%	58%	63%	62%	71%	72%
<b>Total</b>	<b>69%</b>	<b>70%</b>	<b>71%</b>	<b>69%</b>	<b>73%</b>	<b>74%</b>	<b>73%</b>	<b>74%</b>	<b>74%</b>

	Family Type	#####	Dec-20	#####	#####	Mar-21	#####	#####	#####	Jul-21
<b>Electronically</b>	Single Male	527	514	520	510	548	536	524	527	499
	Single Female	182	172	167	167	177	167	158	172	178
	Single Father	7	12	15	15	19	11	11	8	11
	Single Mother	153	152	141	139	145	141	132	158	155
	Couple without children	24	27	27	24	23	23	21	19	12
	Couple with children	48	53	50	53	57	62	58	70	68
	<b>Total</b>	<b>941</b>	<b>930</b>	<b>920</b>	<b>908</b>	<b>969</b>	<b>940</b>	<b>904</b>	<b>954</b>	<b>923</b>
<b>In Person</b>	Single Male	237	224	203	227	201	193	191	190	190
	Single Female	84	86	75	79	68	63	58	72	69
	Single Father	8	7	7	5	4	2	2	4	3
	Single Mother	47	38	45	40	30	31	32	29	27
	Couple without children	12	9	7	8	9	7	8	4	3
	Couple with children	38	31	38	51	41	37	35	28	27
	<b>Total</b>	<b>426</b>	<b>395</b>	<b>375</b>	<b>410</b>	<b>353</b>	<b>333</b>	<b>326</b>	<b>327</b>	<b>319</b>
<b>Total</b>	Single Male	764	738	723	737	749	729	715	717	689
	Single Female	266	258	242	246	245	230	216	244	247
	Single Father	15	19	22	20	23	13	13	12	14
	Single Mother	200	190	186	179	175	172	164	187	182
	Couple without children	36	36	34	32	32	30	29	23	15
	Couple with children	86	84	88	104	98	99	93	98	95
	<b>Total</b>	<b>1,367</b>	<b>1,325</b>	<b>1,295</b>	<b>1,318</b>	<b>1,322</b>	<b>1,273</b>	<b>1,230</b>	<b>1,281</b>	<b>1,242</b>

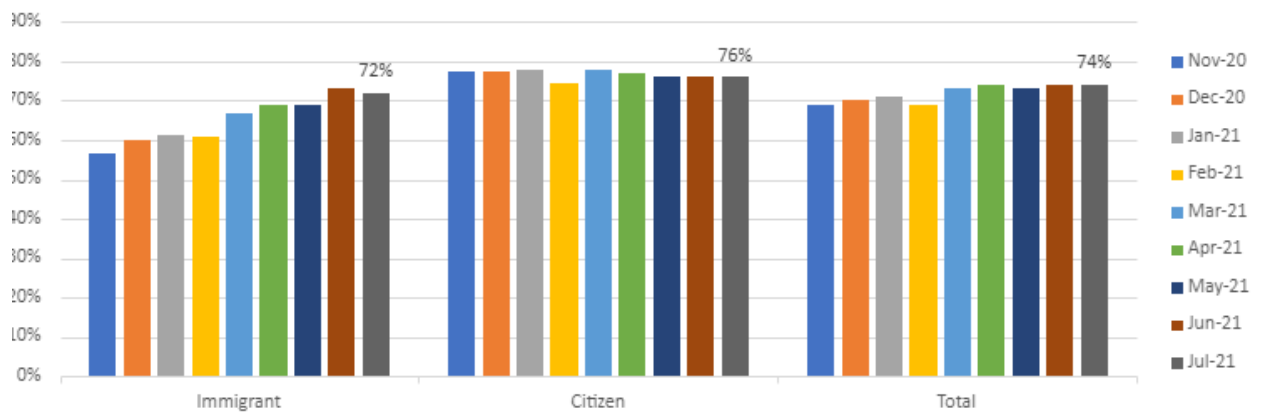
Figure 3: Proportion of users of financial assistance for subsistence who applied for electronic division by family structure



Citizenship Status	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	#####	Jul-21
Immigrant	56%	60%	61%	61%	67%	69%	69%	73%	72%
Citizen	77%	77%	78%	75%	78%	77%	76%	76%	76%
<b>Total</b>	<b>69%</b>	<b>70%</b>	<b>71%</b>	<b>69%</b>	<b>73%</b>	<b>74%</b>	<b>73%</b>	<b>74%</b>	<b>74%</b>

	Citizenship Status	#####	Dec-20	#####	#####	Mar-21	#####	#####	#####	Jul-21
<b>Electronically</b>	Immigrant	312	328	325	333	354	342	336	358	331
	Citizen	629	602	595	575	615	598	568	596	592
	<b>Total</b>	<b>941</b>	<b>930</b>	<b>920</b>	<b>908</b>	<b>969</b>	<b>940</b>	<b>904</b>	<b>954</b>	<b>923</b>
<b>In Person</b>	Immigrant	241	219	206	215	178	156	150	136	128
	Citizen	<b>185</b>	<b>176</b>	<b>169</b>	<b>195</b>	<b>175</b>	<b>177</b>	<b>176</b>	<b>191</b>	<b>191</b>
	<b>Total</b>	<b>426</b>	<b>395</b>	<b>375</b>	<b>410</b>	<b>353</b>	<b>333</b>	<b>326</b>	<b>327</b>	<b>319</b>
<b>Total</b>	Immigrant	553	547	531	548	532	498	486	494	459
	Citizen	814	778	764	770	790	775	744	787	783
	<b>Total</b>	<b>1,367</b>	<b>1,325</b>	<b>1,295</b>	<b>1,318</b>	<b>1,322</b>	<b>1,273</b>	<b>1,230</b>	<b>1,281</b>	<b>1,242</b>

Figure 4: Proportion of users of financial assistance for subsistence who applied for electronically, divided by citizenship



**Table 5**

*Proportion of users who applied for financial aid electronically divided by employment status*

Employment Status	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	#####	Jul-21
Unemployed without access to benefits	69%	69%	70%	69%	74%	77%	76%	76%	77%
Unemployed with access to benefits	71%	76%	70%	77%	73%	81%	82%	84%	80%
Unemployed with the rights to benefits	83%	89%	85%	76%	92%	74%	72%	73%	79%
Unemployed Student in between		100%						98%	76%
On Retirement Pension	31%	24%	50%	29%	67%	67%	60%	83%	71%
On Maternity Leave	68%	88%	81%	65%	79%	73%	75%	86%	79%
Full Time Employment	100%	100%	67%	100%		100%	100%	80%	100%
Part Time Employment	76%	86%	79%	89%	79%	92%	85%	84%	79%
On Rehabilitation Pension	50%		100%	50%	100%	80%	75%		
Student	8%	13%	40%	14%	20%	29%		33%	33%
Unable to Work	71%	72%	71%	69%	71%	70%	71%	71%	71%
On Disability	69%	72%	68%	72%	77%	76%	82%	77%	74%
<b>Total</b>	<b>69%</b>	<b>70%</b>	<b>71%</b>	<b>69%</b>	<b>73%</b>	<b>74%</b>	<b>73%</b>	<b>74%</b>	<b>77%</b>

	Employment Status	#####	Dec-20	#####	#####	Mar-21	#####	#####	#####	Jul-21
<b>Electronically</b>	Unemployed without access to benefits	435	437	439	438	482	469	445	438	419
	Unemployed with access to benefits	20	22	21	23	19	21	18	21	20
	Unemployed with the rights to benefits	35	32	33	29	36	29	25	24	27
	Unemployed Student in between		1				6		48	31
	On Retirement Pension	11	4	7	2	4		3	5	5
	On Maternity Leave	19	21	17	11	11	11	12	12	15
	Full Time Employment	4	2	2	4		2	2	4	1
	Part Time Employment	13	12	11	17	15	12	11	16	15
	On Rehabilitation Pension	1		1	1	2	4	3		0
	Student	1	2	2	1	1	2	0	5	2
	Unable to Work	378	376	366	356	375	365	362	358	365
	On Disability	24	21	21	26	24	19	23	23	23
	<b>Total</b>	<b>941</b>	<b>930</b>	<b>920</b>	<b>908</b>	<b>969</b>	<b>940</b>	<b>904</b>	<b>954</b>	<b>923</b>
<b>In Person</b>	Unemployed without access to benefits	194	196	184	201	167	144	144	141	123
	Unemployed with access to benefits	8	7	9	7	7	5	4	4	5
	Unemployed with the rights to benefits	7	4	6	9	3	10	10	9	7
	Unemployed Student in between		0						1	10
	On Retirement Pension	24	13	7	5	2	3	2	1	2
	On Maternity Leave	9	3	4	6	3	4	4	2	4
	Full Time Employment	0	0	1	0		0	0	1	0
	Part Time Employment	4	2	3	2	4	1	2	3	4
	On Rehabilitation Pension	1		0	1	0	1	1		1
	Student	12	13	3	6	4	5	4	10	4
	Unable to Work	156	149	148	163	156	154	150	148	151
	On Disability	11	8	10	10	7	6	5	7	8
	<b>Total</b>	<b>426</b>	<b>395</b>	<b>375</b>	<b>410</b>	<b>353</b>	<b>333</b>	<b>326</b>	<b>327</b>	<b>319</b>
<b>Total</b>	Unemployed without access to benefits	629	633	623	639	649	613	589	579	542
	Unemployed with access to benefits	28	29	30	30	26	26	22	25	25
	Unemployed with the rights to benefits	42	36	39	38	39	39	35	33	34
	Unemployed Student in between		1						49	41
	On Retirement Pension	35	17	14	7	6	9	5	6	7
	On Maternity Leave	28	24	21	17	14	15	16	14	19
	Full Time Employment	4	2	3	4		2	2	5	1
	Part Time Employment	17	14	14	19	19	13	13	19	19
	On Rehabilitation Pension	2		1	2	2	5	4		1
	Student	13	15	5	7	5	7	4	15	6
	Unable to Work	534	525	514	519	531	519	512	506	516
	On Disability	35	29	31	36	31	25	28	30	31
	<b>Total</b>	<b>1,367</b>	<b>1,325</b>	<b>1,295</b>	<b>1,318</b>	<b>1,322</b>	<b>1,273</b>	<b>1,230</b>	<b>1,281</b>	<b>1,242</b>

Figure 5: Proportion of users who applied for financial aid electronically divided by employment status

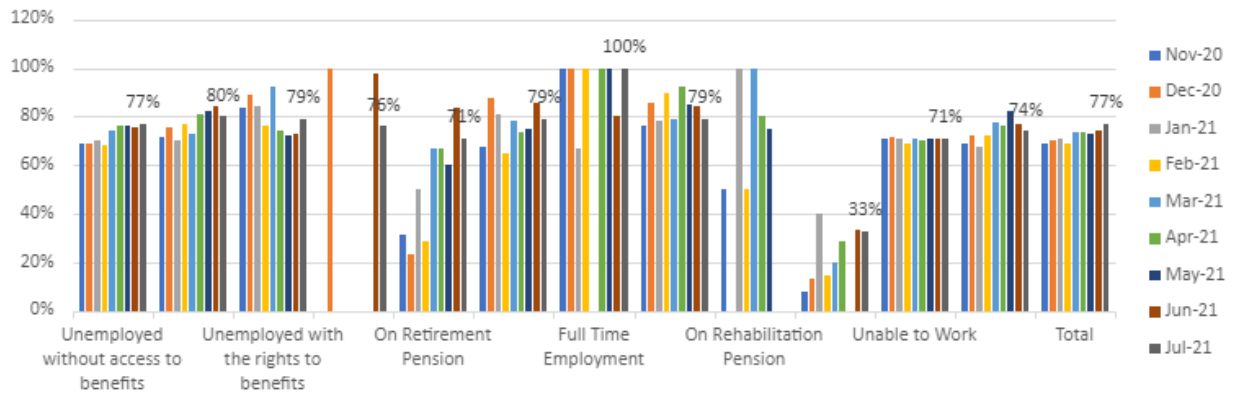


Table 6

Proportion of users of financial assistance who applied electronically according to education

Education	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	#####	Jul-21
Primary School Level or Less	64%	67%	68%	65%	68%	66%	66%	68%	67%
Secondary School Level	71%	64%	72%	73%	74%	77%	80%	80%	78%
University Level	69%	72%	72%	73%	71%	73%	67%	70%	75%
Missing Information	70%	72%	72%	69%	75%	76%	76%	76%	77%
<b>Total</b>	<b>69%</b>	<b>70%</b>	<b>71%</b>	<b>69%</b>	<b>73%</b>	<b>74%</b>	<b>73%</b>	<b>74%</b>	<b>74%</b>

	Education	#####	Dec-20	#####	#####	Mar-21	#####	#####	#####	Jul-21
<b>Electronically</b>	Primary School Level or Less	203	211	188	182	191	184	180	206	194
	Secondary School Level	79	76	76	75	78	80	78	78	73
	University Level	45	47	51	48	49	47	43	42	47
	Missing Information	614	596	605	603	651	629	603	628	609
	<b>Total</b>	<b>941</b>	<b>930</b>	<b>920</b>	<b>908</b>	<b>969</b>	<b>940</b>	<b>904</b>	<b>954</b>	<b>923</b>
<b>In Person</b>	Primary School Level or Less	113	102	90	99	91	93	91	95	97
	Secondary School Level	32	43	29	28	28	24	20	19	21
	University Level	20	18	20	18	20	17	21	18	16
	Missing Information	261	232	236	265	214	199	194	195	185
	<b>Total</b>	<b>426</b>	<b>395</b>	<b>375</b>	<b>410</b>	<b>353</b>	<b>333</b>	<b>326</b>	<b>327</b>	<b>319</b>
<b>Total</b>	Primary School Level or Less	<b>316</b>	<b>313</b>	<b>278</b>	<b>281</b>	<b>282</b>	<b>277</b>	<b>271</b>	<b>301</b>	<b>291</b>
	Secondary School Level	<b>111</b>	<b>119</b>	<b>105</b>	<b>103</b>	<b>106</b>	<b>104</b>	<b>98</b>	<b>97</b>	<b>94</b>
	University Level	<b>65</b>	<b>65</b>	<b>71</b>	<b>66</b>	<b>69</b>	<b>64</b>	<b>64</b>	<b>60</b>	<b>63</b>
	Missing Information	<b>875</b>	<b>828</b>	<b>841</b>	<b>868</b>	<b>865</b>	<b>828</b>	<b>797</b>	<b>823</b>	<b>794</b>
	<b>Total</b>	<b>1,367</b>	<b>1,325</b>	<b>1,295</b>	<b>1,318</b>	<b>1,322</b>	<b>1,273</b>	<b>1,230</b>	<b>1,281</b>	<b>1,242</b>

Figure 6: Proportion of users of financial assistance who applied electronically according to education.

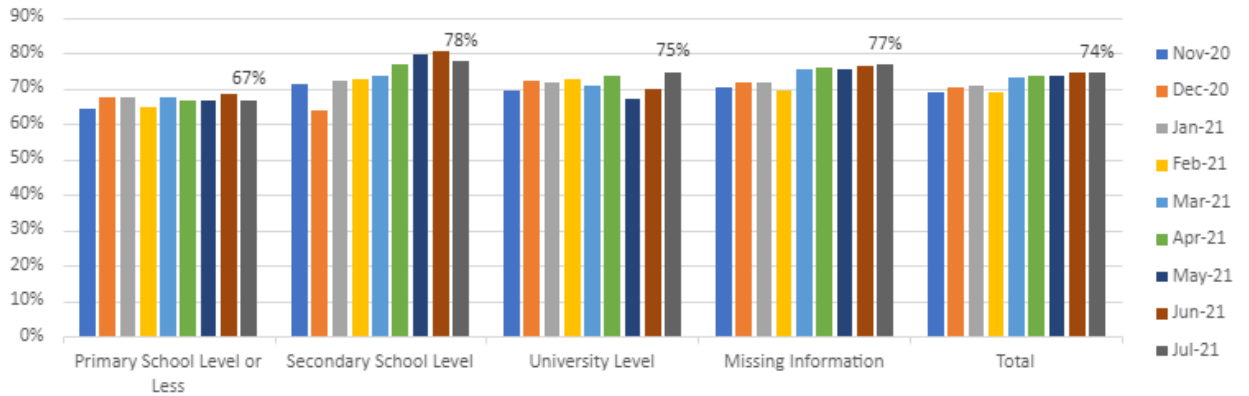


Table 7

Proportion of users of financial assistance who applied electronically according to the number of months that assistance was provided

Number of Months	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	#####	Jul-21
1 month	62%	51%	63%	54%	68%	67%	69%	67%	61%
2 months	59%	66%	58%	59%	56%	66%	63%	71%	69%
3 months	56%	66%	69%	68%	67%	57%	75%	73%	74%
4 months	74%	57%	71%	65%	72%	75%	70%	80%	74%
5 months	56%	73%	72%	74%	67%	76%	76%	71%	77%
6 months	77%	63%	71%	70%	84%	73%	79%	84%	79%
7 months	78%	80%	62%	69%	74%	76%	76%	79%	76%
8 months	79%	86%	80%	64%	83%	78%	80%	80%	83%
9 months	67%	76%	75%	78%	74%	81%	67%	79%	76%
10 months	74%	80%	79%	76%	82%	75%	78%	77%	79%
11 months	80%	74%	71%	76%	79%	83%	70%	69%	64%
12 months	68%	70%	72%	70%	73%	74%	74%	74%	76%
<b>Total</b>	<b>69%</b>	<b>70%</b>	<b>71%</b>	<b>69%</b>	<b>73%</b>	<b>74%</b>	<b>73%</b>	<b>74%</b>	<b>74%</b>

	Number of Months	#####	Dec-20	#####	#####	Mar-21	#####	#####	#####	Jul-21
<b>Electronically</b>	1 month	66	42	49	55	56	46	45	76	48
	2 months	69	54	40	40	45	44	37	47	68
	3 months	30	69	54	43	39	41	48	51	51
	4 months	58	31	68	44	51	46	51	49	37
	5 months	42	52	38	67	44	51	41	46	44
	6 months	69	45	44	31	73	46	46	43	46
	7 months	56	74	44	49	42	65	47	55	51
	8 months	59	62	70	49	58	47	70	52	54
	9 months	45	47	42	60	50	48	31	56	37
	10 months	56	63	58	53	68	52	51	43	58
	11 months	84	72	75	79	80	88	64	61	46
	12 months	307	319	338	338	363	366	373	375	383
	<b>Total</b>		941	930	920	908	969	940	904	954
<b>In Person</b>	1 month	41	40	29	46	26	23	20	37	31
	2 months	47	28	29	28	36	23	22	19	30
	3 months	24	36	24	20	19	31	16	19	18
	4 months	20	23	28	24	20	15	22	12	13
	5 months	33	19	15	24	22	16	13	19	13
	6 months	21	27	18	13	14	17	12	8	12
	7 months	16	18	27	22	15	20	15	15	16
	8 months	16	10	17	27	12	13	17	13	11
	9 months	22	15	14	17	18	11	15	15	12
	10 months	20	16	15	17	15	17	14	13	15
	11 months	21	25	30	25	21	18	27	27	26
	12 months	145	138	129	147	135	129	133	130	122
	<b>Total</b>		426	395	375	410	353	333	326	327
	1 month	107	82	78	101	82	69	65	113	79
	2 months	116	82	69	68	81	67	59	66	98
	3 months	54	105	78	63	58	72	64	70	69
	4 months	78	54	96	68	71	61	73	61	50
	5 months	75	71	53	91	66	67	54	65	57
	6 months	90	72	62	44	87	63	58	51	58
	7 months	72	92	71	71	57	85	62	70	67
	8 months	75	72	87	76	70	60	87	65	65
	9 months	67	62	56	77	68	59	46	71	49
	10 months	76	79	73	70	83	69	65	56	73
	11 months	105	97	105	104	101	106	91	88	72
	12 months	452	457	467	485	498	495	506	505	505
<b>Total</b>		1,367	1,325	1,295	1,318	1,322	1,273	1,230	1,281	1,242



# Appendix H: City of Reykjavík Research Permit



Theron Howe  
Worcester Polytechnic Institute

Reykjavík, 21. september 2021  
VEL2020090039

## Leyfisbréf fyrir rannsókn

Hér með er þér veitt leyfi fyrir vísindarannsókn þinni: Digitalizing the City of Reykjavik Service Design Department.

Rannsóknin er samstarfsverkefni velferðarsviðs, þjónustu- og nýsköpunarsviðs og Worcester Polytechnic Institute. Markmið rannsóknarinnar er að aðstoða Reykjavíkurborg við að auka aðgengileika á rafrænum lausnum. Hluti af því er að skoða rafræna fjárhagsaðstoð og einkum hópinn sem sækir ekki um með rafrænni umsókn. Lögð verður fyrir valkvæð könnun meðal þeirra sem koma á þjónustumiðstöð og sækja um fjárhagsaðstoð á pappír og spurt hvaða hindranir það eru sem eru fyrir því að þessir einstaklingar sækji um rafrænt. Sömuleiðis verða tekin viðtöl við stjórnendur og starfsfólk á velferðarsviði og þjónustu- og nýsköpunarsviði og mögulega framkvæmdir valkvæðir rýnihópar notenda.

Leyfið er bundið við tímabilið 10. september til 1. nóvember 2021.

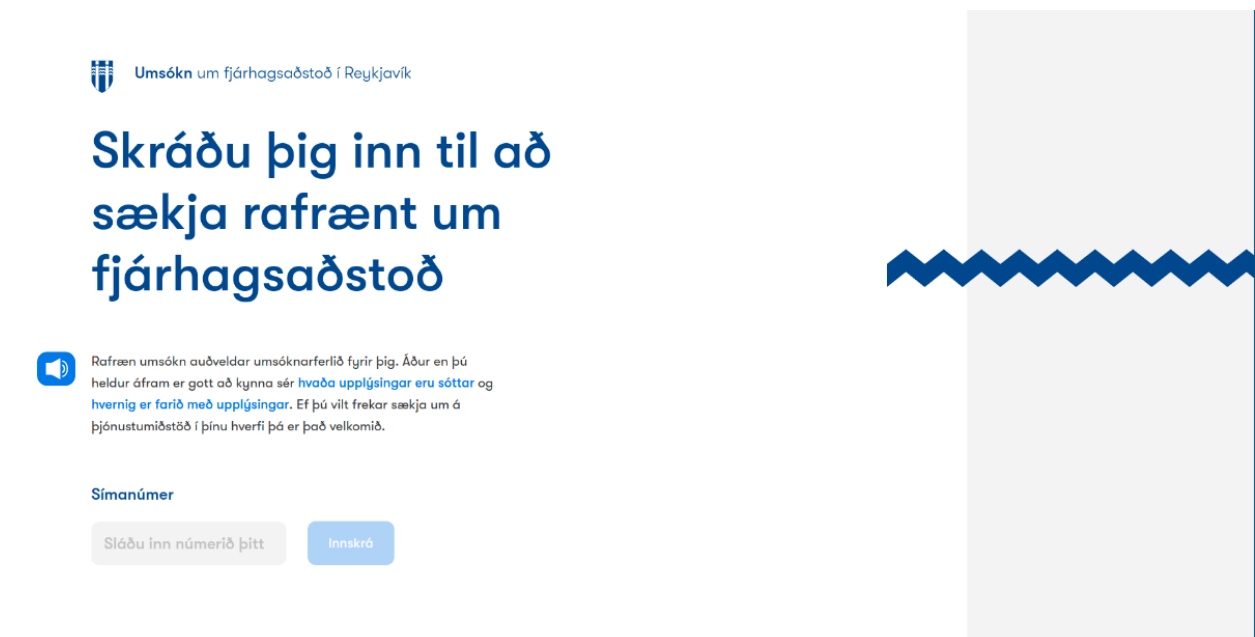
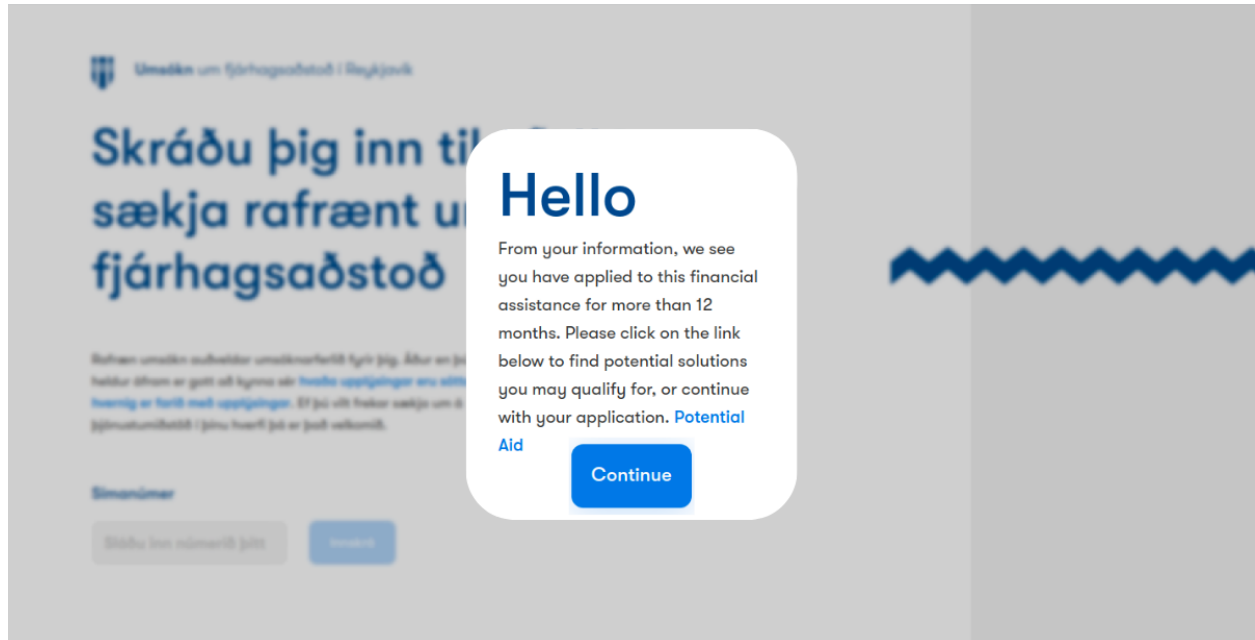
*Leyfið er gefið með þeim fyrirvara að farið sé að lögum um persónuvernd og meðferð persónuupplýsinga nr. 90/2018 sem og reglum og leiðbeiningum Persónuverndar um rannsóknir.*

Virðingarfyllst,

A handwritten signature in blue ink that reads "Ólafía D. Ásgeirsdóttir".

Ólafía Dögg Ásgeirsdóttir  
teymisstjóri á skrifstofu velferðarsviðs

## Appendix I: Deliverables and Recommendations



From our findings, we formulated the following recommendations:

1. Automatically refer people to other avenues of welfare if they have applied for financial assistance previously - specifically for individuals where they would be better suited to unemployment or disability systems.

2. Provide digital identities through the city instead of through bank accounts to increase its overall accessibility to newer immigrants who may be unfamiliar with the process of applying for electronic identification.
3. Implement official translations through the City of Reykjavík, removing the need for suboptimal Google based translations so that non-Icelandic speakers can operate the financial assistance application process efficiently.
4. Allow workers at the service centers to personally confirm people who appear in person through prior application processes and allow them to use temporary electronic credentials to use the digital financial assistance application system.
5. Construct online digital help services or easy-to-access tutorial videos in multiple languages to physically show people how to apply online - furthering the humanity behind the website to make it more personable for those who value social interaction.
6. Implement text-to-speech options on the City of Reykjavík websites that allow people who do not speak Icelandic to still operate the financial assistance application process, as well as any other future ones that go digital, efficiently.

Along with these recommendations we have specifically for the welfare department and its digital financial assistance service, there are other, broader recommendations that could further the overall user-centered development of City of Reykjavík digital and in-person services as well as further Worcester Polytechnic Institute's involvement with global projects in Iceland and with the City of Reykjavík. These broader recommendations include:

1. Expand WPI's connection with other departments of the City of Reykjavík to further the reach of their future digital services with new Interactive Qualifying Projects (IQP) focused around the user's relationship with these services.
2. Further communication through the City of Reykjavík by implementing "Job Swap Programs" among managers working for the city to expand upon the communication between

the different divisions, furthering cooperative data research pools and consistent digital systems.

3. Increase the overall visibility of digital services through further advertisement and proper showcases of how to use the system through paper instructions given out at service centers after individuals have physically applied for them for at least three months. These showcases can apply to any system the City of Reykjavík wishes to further advance the online use of their services.