Webdagen Classic September 19, 2023

# Using site search data to speak the language of the users

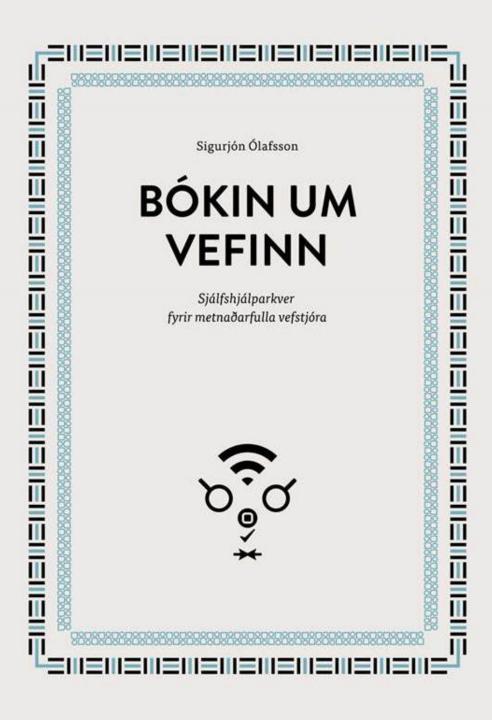
Sigurjón Ólafsson, Chef for Service and Development, Hafnarfjörður, Iceland





### Who am I?

- Political Science (BA) and International Relations (MA)
- In digital since 1996!
- Webmaster, director of web departments, consultant for six years, lecturer for ten years and now manager in a municipality
- Author of The Book About the Web (2015)
- Kaupthing Bank, Íslandsbanki, University of Iceland, Hafnarfjörður Municipality, Fúnksjón
- Born and lived in Iceland almost all my life
- Since August 2023 moved to Madrid



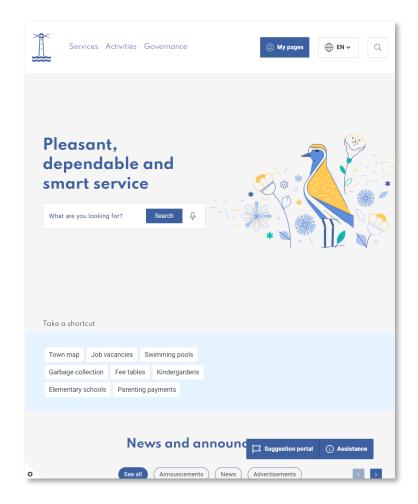
## About Hafnarfjörður

- 31,000 inhabitants
- Around 20% immigrants
- 3rd largest town in Iceland
- 2,200 municipal employees
- 9 elementary schools
- 18 kindergartens
- 3 public swimming pools
- One of the leaders in digital transformation of public services



### Why building a new website?

- Award winning website in 2016
- New design system in place (<u>honnun.hafnarfjordur.is</u>)
- Our main objectives
  - Quality content
  - Simplify the design
  - Powerful search
  - Provide clear navigation
  - Interaction / self service
  - Emphasis on top tasks
- Launched in November 2022
- Revised version of My pages

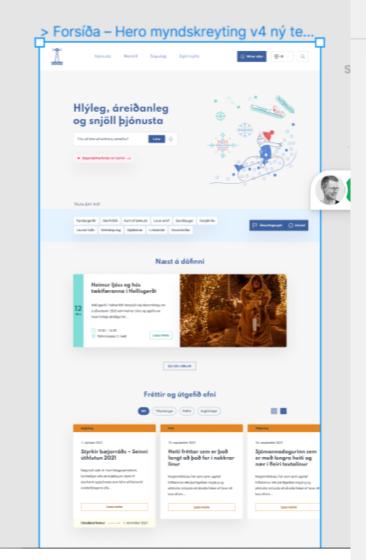


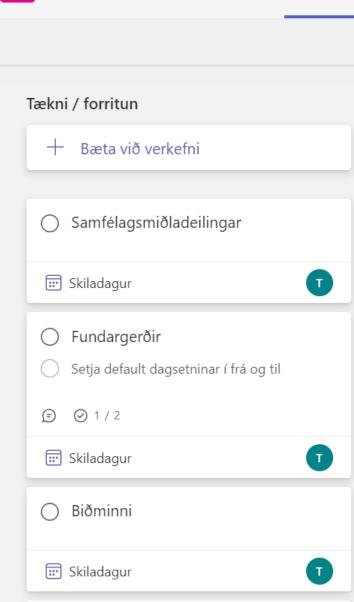


### The core team

- Myself project manager, owner
- Webmaster and web specialist
- Content designer
- Web designers (team of two)
- Developers
- UX consultants / research team
- 360 degrees meetings from the beginning – 30 minutes a week plusing communicating through Figma and Teams







hafnarfjordur.is Færslur Verkefni fyri

### User research and tests

- Extensive user research from 2021
- Expert reviews
- Interviews with staff, inhabitants / immigrants, elected officials and other stakeholders
- Web traffic data
- User tests in many phases, prototypes, before launch, after launch
- Feedback from users instrumental in the development phase, included external and internal search data

#### Hafnarfjörður | Nýr vefur - frumgerð í síma | apríl 2022

#### Helstu niðurstöður

#### Hönnun, forsíða og leiðarkerfi

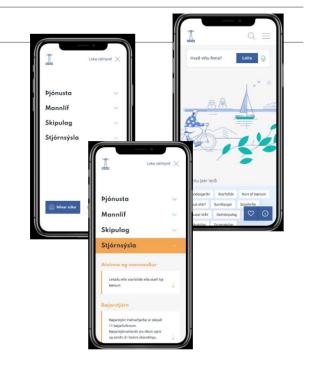
Eins og í fyrri prófun voru notendur ánægðir með hönnun og uppbyggingu forsíðunnar og vefjarins heilt yfir. Hann samræmdist almennt væntingum þeirra um vef sveitarfélags og upplifun notenda af vefnum var jákvæð. Fyrir kemur að notendum finnst flókið að fara tilbaka en það gæti stafað að því að um skissur er að ræða.

Áhersla á leit þótti góð og fram kom að notendur myndu nota hana í mörgum tilfellum.

Flýtileiðir á forsíðunni *Styttu þér leið* voru ekki mikið notaðar núna fremur en í fyrri prófun. Notendur tóku þó eftir þeim þegar þau skoðuðu forsíðuna.

Notendur voru einnig ánægðir með leiðarkerfið, fannst það þægilegt í notkun og jákvætt að yfirflokkar séu fáir. Yfirflokkarnir þóttu jafnframt gefa góða mynd af efni vefjarins.

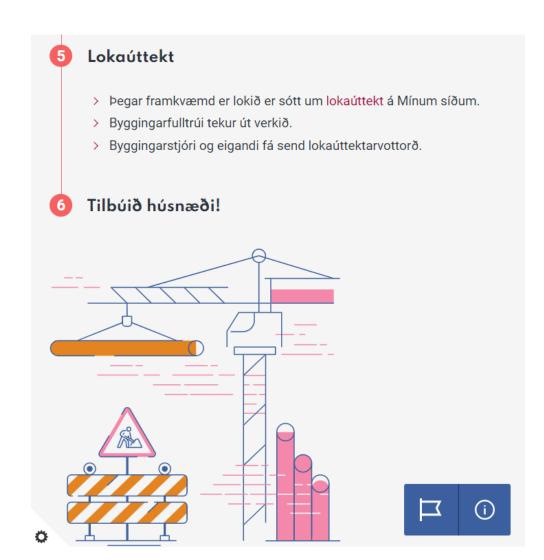
Flestir notendur nota valmyndina. Einn notandi gerði það þó ekki fyrr en eftir ábendingu um að gera það. Viðkomandi sagðist hafa séð þetta en yfirleitt ekki nota þetta þegar hún væri að skoða vefi í símanum "betta er ekki svona 60+" útskýrði notandinn.





### Content is King! (and we mean it)

- Great emphasis on content
- Tabula rasa content from scratch. No migration of page content
- Content writing based on "Tone of voice" in the design system
- Simplified, drawings with scannable content
- Content design and web designer plus stakeholders
- Complicated processes simplified, e.g. building projects





### Interaction

- Filtering options for diverse content e.g. sports / activities
- Waste collection look-up dates small but one of the most important tasks
- Easy access to self service, calculators, fee tables, links to applications on My pages

## Sports and leisure activities

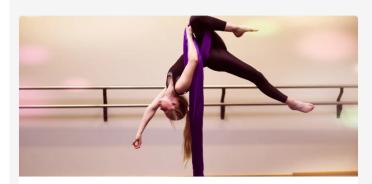
Services > Sports and outdoor activities

> Sports and leisure



There is a wide range of sports and leisure activities available in Hafnarfjörður. You can filter the availability by age and time of year.





Listdansskóli Hafnarfjarðar ightarrow

**Aerial acrobatics** 

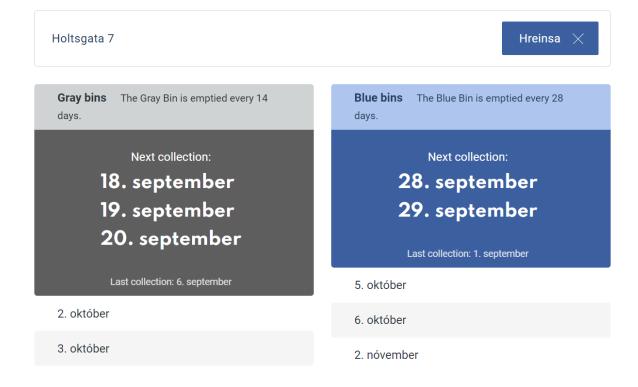


Bogfimifélagið Hrói Hötturightarrow

**Archery** 

### Next collection of waste

Enter you street name for waste collection calendar.



### Calculate the cost

How much does it cost to have

1

children in a

kindergarten for

8

hours a day

Recalculate

Residence fee

28.024 kr.

Meal fee

10.235 kr.

Totals

38.259 kr./month.

Maximum length of stay is 8 hours. This is only an estimate for the actual cost of preschool.

### So what about data mining?

- Monitoring our websites is at the core of what we do
- Various tools
  - Google Analytics (GA)
  - Google Search Console
  - Siteimprove
  - Cludo
  - Livechat
- Passionate about data
- Decisions are built on data. What we know about our users



- Live analytical GA data open for everyone. Analytical reports every six months
- Analytical tools provide daily updates on the health of our website
- Monitor it every week scheduled time
- Constant feedback from our users is also important (Was the content helpful?)
- We know a lot about users behaviour



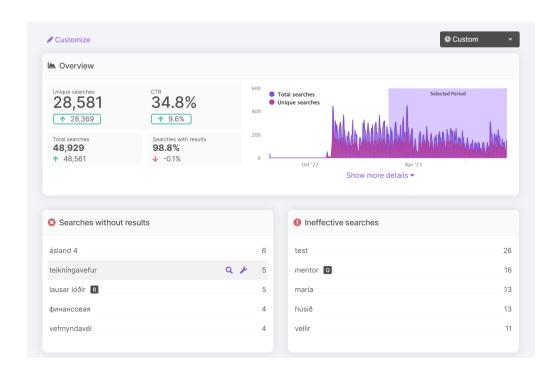
Efni á vefnum Efni á ensku Fréttalestur Viðburðir

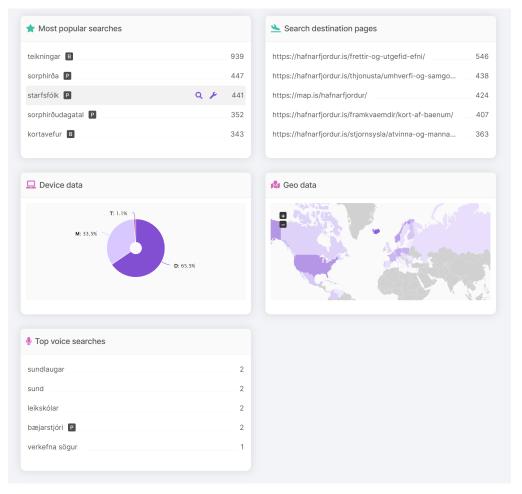
Endurgjöf og tækni

Was this content useful?	Yes No
nfo	Email (If you would like a reply from us)
Sorry about that. What would you like to suggest to make it better?	
	Send suggestion



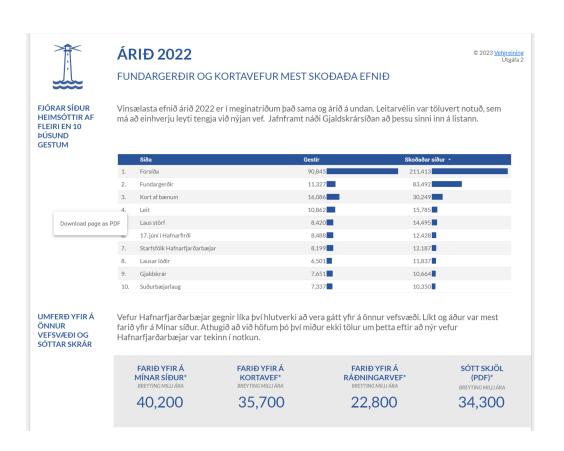
## Cludo – powerful search tool







## Most popular pages - feedback





#### **ENDURGJÖF GESTA Á EINSTAKAR SÍÐAR**

© 2021 Vefgreining

Jákvæð
Neikvæð
Ábending

Veldu tímabil: Sep 13, 2022 - Sep 13, 2023

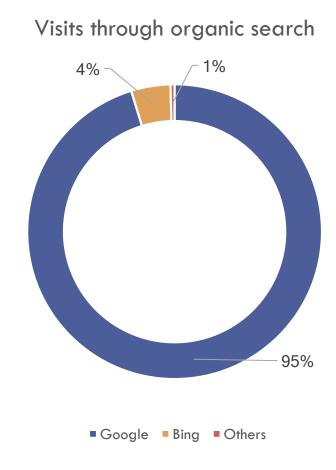
#### **ENDURGJÖF EFTIR SÍÐU**

			Flokk	ur / Endurgjöf	Takmarka sýn:
Síða	Jákvæð	Neikvæð	Ábending	Grand total	
https://www.hafnarfjordur.is/ibuar/atvinna/laus-storf/	12	2	2	16	Síða
https://www.hafnarfjordur.is/ibuar/skolar-og-born/grunns	7	3	2	12	Endurgjöf
https://www.hafnarfjordur.is/ibuar/skipulag/teikningarupp	2	6	3	11	Endargo
https://www.hafnarfjordur.is/ibuar/lodir-og-teikningar/lau	3	3	4	10	Yfirflokkur
https://www.hafnarfjordur.is/ibuar/ithrottir-og-utivera/fris	4	1	3	8	
https://www.hafnarfjordur.is/ibuar/felagsthjonusta/husna	3	3	1	7	Kyn
https://www.hafnarfjordur.is/ibuar/skolar-og-born/leikskol	6	1		7	Aldur
https://www.hafnarfjordur.is/ibuar/felagsleg-adstod/fjarha	6			6	Aldur
https://www.hafnarfjordur.is/ibuar/felagsthjonusta/husna	5	1		6	Uppsprettur
https://www.hafnarfjordur.is/ibuar/samgongur/sorphirda/l	1	1	3	5	
https://www.hafnarfjordur.is/ibuar/felagsthjonusta/felagsl	2	2	1	5	Staðsetning
https://www.hafnarfjordur.is/ibuar/lodir-og-teikningar/lau		1	3	4	
https://www.hafnarfjordur.is/stjornsysla/stjornsyslan/gjald	1	1	2	4	
https://www.hafnarfjordur.is/ibuar/ithrottir-og-utivera/su	3		1	4	
https://www.hafnarfjordur.is/ibuar/felagsthjonusta/umsae	2		1	3	
oad page as PDF	122	53	51	226	
NDURGJÖF FTIR ALDRI OG YNI 40.7%	② 25-34 ③ 35-44	42.6%	57.4%	<ul><li>Konur</li><li>Karlar</li></ul>	22.6%



### Search accounts for half of the traffic

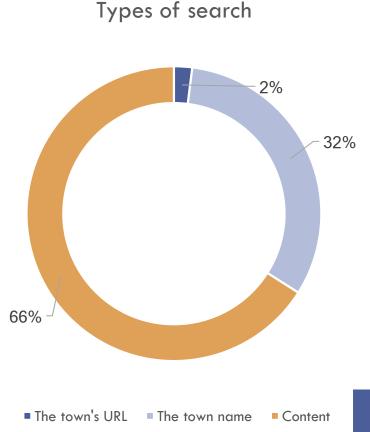
- Search traffic gives us valuable insight into what draws visitors to our website
- In 2022, we had 300,000 visits through external search (51% of the total)
- All of it was from organic search, of which Google accounted for 95%
- The following analysis is based on the first ten months of Google data





### Two-thirds of search visits for content

- In the first ten months of 2022, our website appeared in 1.65 million
  Google searches with a click-through rate of 8%
- While a third of the searches were for the town name (or a variation thereof), the rest was for content
- The objective of SEO is first and foremost to make our content known to people





## Top 10 content related searches

No	Search phrase	Clicks	Position (rounded)	English explanation
1	suðurbæjarlaug	3,205	2	A swimming pool in town
2	teikningar hafnarfjörður	3,115	1	The town's drawing plans
3	hafnarfjörður teikningar	2,679	1	The same in a different word order
4	ásvallalaug	1,965	2	Another swimming pool in town
5	vinnuskóli hafnarfjarðar	1,319	1	Youth related job program in town
6	sundhöll hafnarfjarðar	893	2	The third swimming pool in town!
7	17 júní hafnarfjörður	808	1	Town related event – National holiday
8	hafnarfjörður laus störf	695	1	Town related job vacancies
9	hjarta hafnarfjarðar 2022	664	2	Another town related event
10	víkingahátíð 2022	581	2	Yet another town related event



# How do you make use of external search data to guide web development?

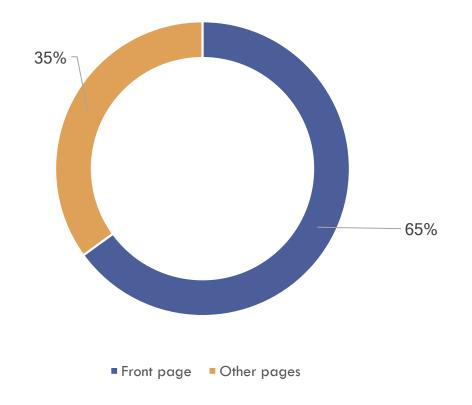
- 1. Activate Google Search Console (it's free!)
- 2. Realise that external search is partly just users typing the URL or a variant of the name of the organization (or township in our case) into Google, Bing etc.
- 3. Compare searches for content to the content that you actually want to promote
- 4. Take actions so that people are actually finding your content (improve SEO or pay for a better position)



### What about internal search?

- Search within the website shows us two different things:
  - 1. Content of key interest to users
  - 2. Content that users have trouble finding on the landing page
- So, how do we tell the difference?

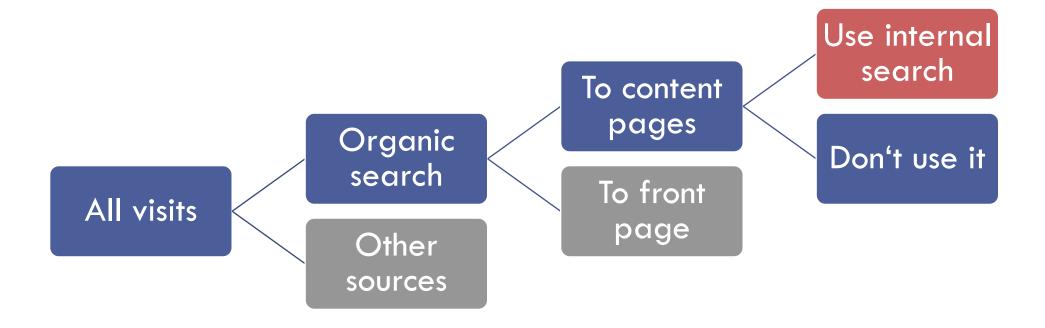
Start of internal search (Jan-Oct 2022)





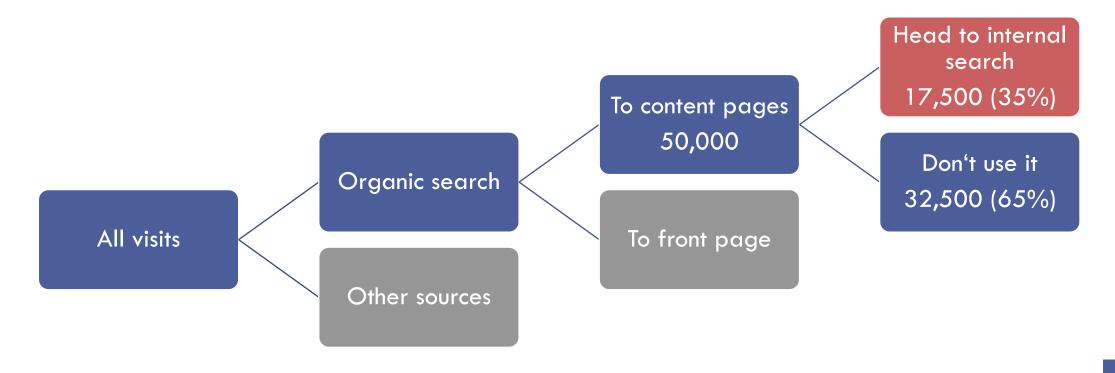
### Indicator of dissatisfaction

• If users who come through external search engines to content pages head straight to internal search, it can be an indication that they didn't find what they were looking for





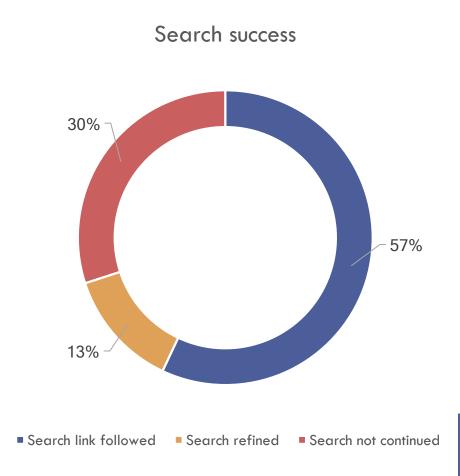
# Roughly a third may not have found what they were looking for at first try





### Another useful indicator

- Of those that used the internal search engine during the first ten months of 2022, 57% followed one of the recommended results while 13% refined their search
- 30% did neither, indicating that they may not have found what they were looking for





# Finally, analyzing the actual search phrases is always useful

No	Search phrase	English explanation
1	Teikningar	Architectural drawings and plans
2	Ásland 4	A specific building plot
3	Laus störf	Job vacancies
4	Vinnustund	Internal site for time registration
5	Lóðir	General search for building plots
6	Vinnuskólinn	Youth job program
7	Sorphirða	Trash collection
8	Deiliskipulag	Local planning
9	Gjaldskrá	Fees and prices
10	Hamranes	A specific building plot

We paid an extra attention to the top phrases when we redesigned our website



## Top tasks defined by data

No	Search phrase	English explanation
1	Teikningar	Architectural drawings and plans
2	Ásland 4	A specific building plot
3	Laus störf	Job vacancies
4	Vinnustund	Internal site for time registration
5	Lóðir	General search for building plots
6	Vinnuskólinn	Youth job program
7	Sorphirða	Trash collection
8	Deiliskipulag	Local planning
9	Gjaldskrá	Fees and prices
10	Hamranes —	A specific building plot

	Síða	Gestir	Skoðaðar síður 🔻	
1.	Forsíða	90,845	211,413	
2.	Fundargerðir	11,327	83,492	
3.	Kort af bænum	16,086	30,249	
4.	Leit	10,862	15,785	
5.	Laus störf	8,420	14,495	
6.	17. júní í Hafnarfirði	8,488	12,428	
7.	Starfsfólk Hafnarfjarðarbæjar	8,199	12,187	
8.	Lausar lóðir	6,501	11,837	
9.	Gjaldskrár	7,651	10,664	
10.	Suðurbæjarlaug	7,337	10,350	

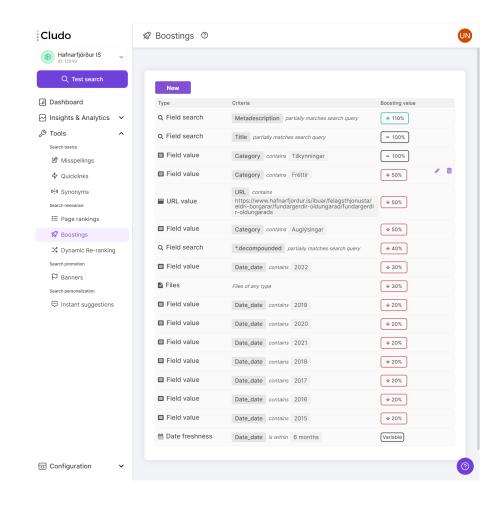
### Hlýleg, áreiðanleg og snjöll þjónusta

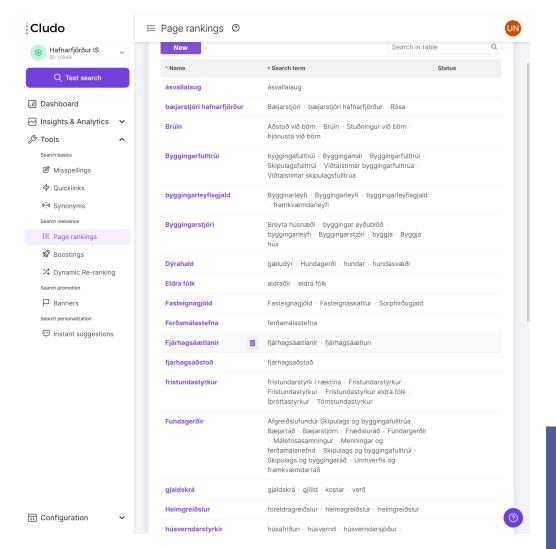
eitarorð Le



			_					*	
Fundargerði	r	Kortavefu	ır	Laus störf	Sundlauga	ar	Sorphirða 1	ausar lóðir	
Gjaldskrár	ı	Leikskólar	C	Grunnskólar	Eldra fólk	F	ólk með fötlun	Sumarstörf	

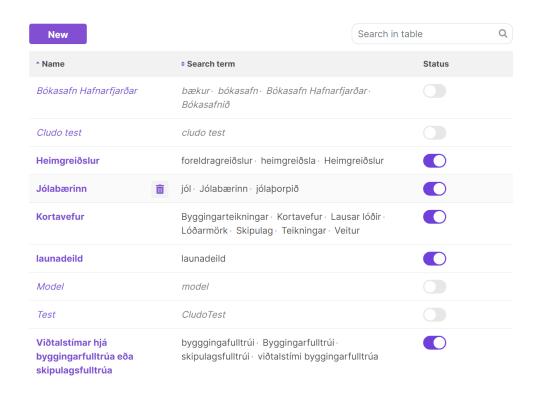
## Page ranking and boosting

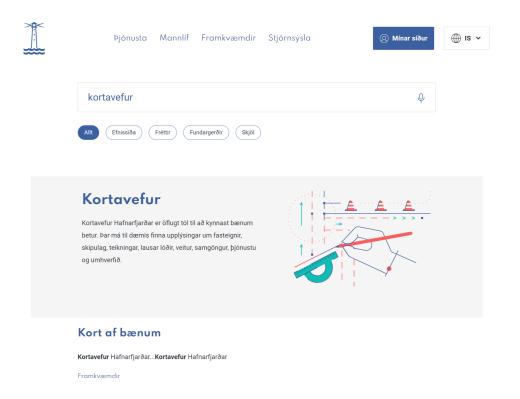




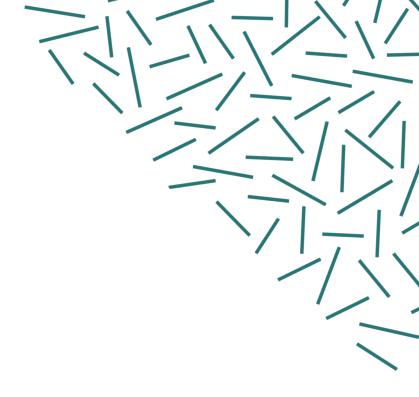


### Adverts in search









## Post launch findings



## Search is even more important

- Same traffic as before (1% increase). Google search still the most important factor for traffic
- Internal search is the most important feature / page on the new site and increased considerably
- Increase in list of vacancies and waste management
- Decrease in vacant lots (lausar lóðir)

### January - June 2023

	Síða	Gestir	Skoðaðar síður 🔻
1.	Forsíða	50,495	109,821
2.	Leit	8,166	33,365
3.	Laus störf	13,424	26,606
4.	Fundargerðir	3,670	17,687
5.	Kort af bænum	8,454	16,391
6.	17. júní í Hafnarfirði - Heildardagskrá	8,475	12,922
7.	Sorphirða	5,729	9,200
8.	Starfsfólk	4,271	6,336
9.	Sjómannadagurinn í Hafnarfirði	4,083	5,387
10.	Vinnuskólinn	3,417	4,885

### January - December 2022

	Síða	Gestir	Skoðaðar síður 🔻
1.	Forsíða	90,845	211,413
2.	Fundargerðir	11,327	83,492
3.	Kort af bænum	16,086	30,249
4.	Leit	10,862	15,785
5.	Laus störf	8,420	14,495
6.	17. júní í Hafnarfirði	8,488	12,428
7.	Starfsfólk Hafnarfjarðarbæjar	8,199	12,187
8.	Lausar lóðir	6,501	11,837
9.	Gjaldskrár	7,651	10,664
10.	Suðurbæjarlaug	7,337	10,350

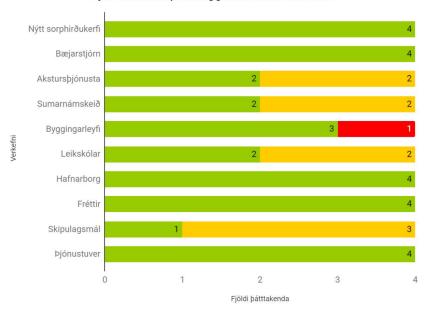


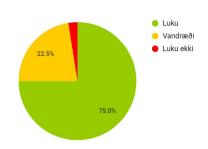
### **User tests**

- User tests give a positive indication. 97,5% success rate in solving tasks
- Ratings very good, with one exception (our strongest critic was invited to the user test on purpose)
- The site search is more used
- The health of the site is very good 10 months later
- It is hard work but the tools help us do the hardest bit

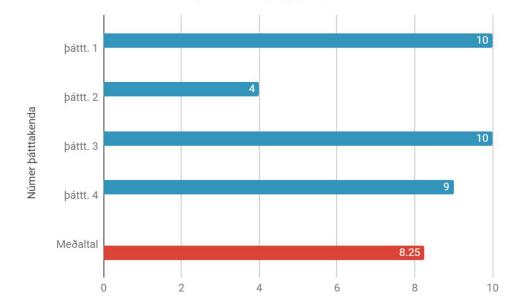
Notendur leystu verkefnin í um **97,5% tilfella** en lentu þar af í vandræðum í um 22,5% tilfellanna.

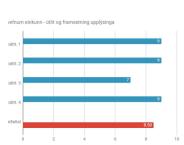
Fjöldi notenda eftir því hvernig gekk við úrlausn verkefnanna



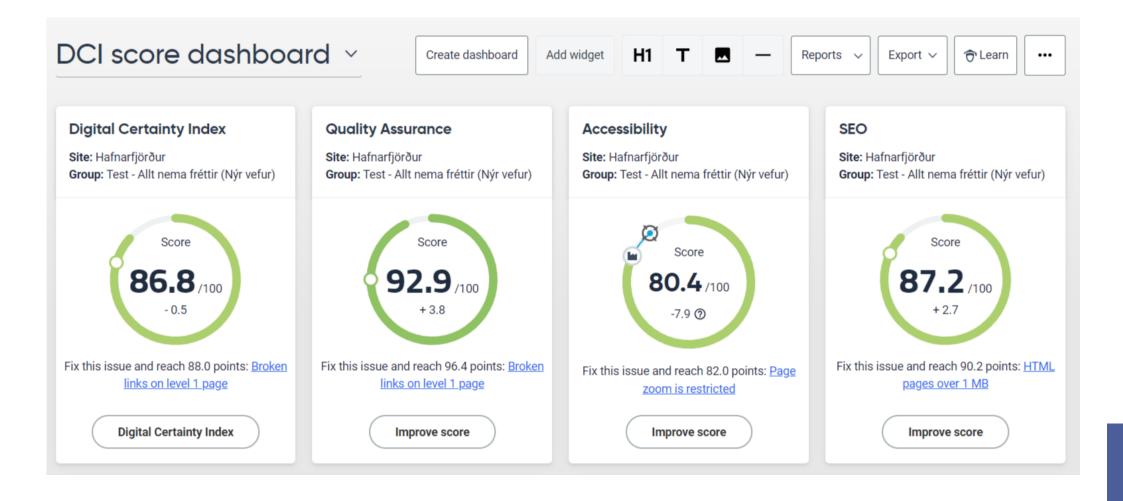


Gefðu vefnum einkunn - útlit og framsetning upplýsinga

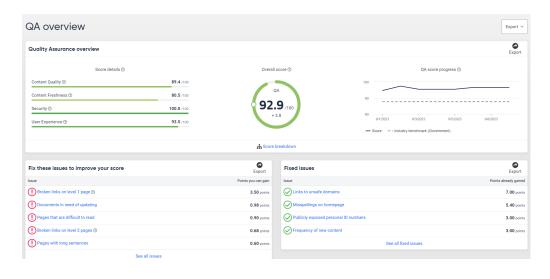


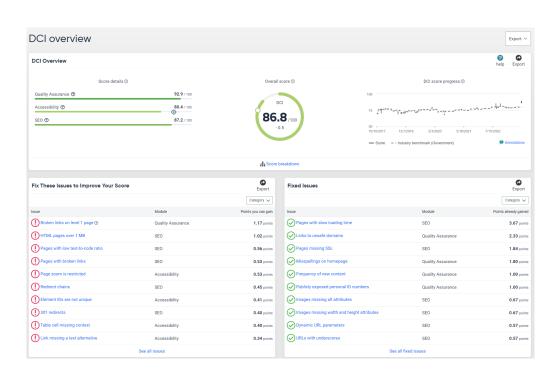


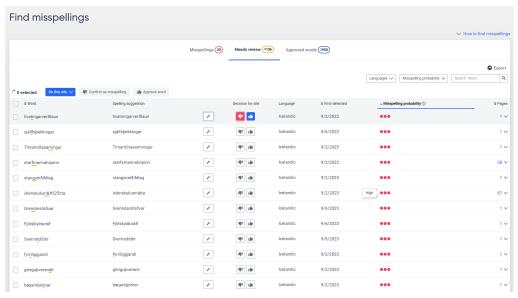
### Siteimprove measures the health

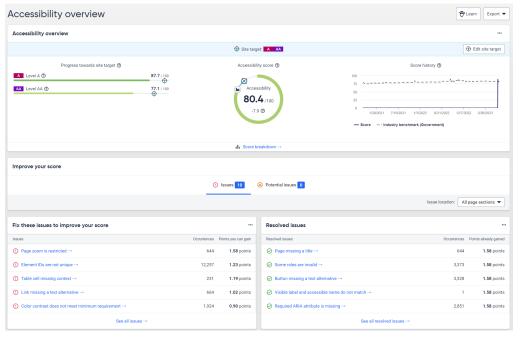














## Changes are hard for users

- Feedback from users (Content helpful) was more negavite in the beginning (users hate change)
- Site search (Cludo) has had problems with the Icelandic language. Search results were too wide, partial results and users showed their disappointment. Our main focus for improvement
- Constantly reviewing and improving the new site
- Our analytical and search tools essential in that respect



#### Frístundastyrkur

Frístundastyrkur...Hafnarfjörður styrkir íþrótta- og tómstundastarf barna 6–18 ára um 4.500 kr. á mánuði.... og tómstundafélagi er hægt að velja að nýta frístundastyrk gegnum Sportabler hjá viðkomandi félagi

Þjónusta > Skólar og börn

ÞÆR SÍÐUR SEM FENGU MESTA ENDURGJÖF Á FYRRI HLUTA ÁRSINS

			Endurgjöf / Fjöldi
Síða	Jákvæð	Neikvæð	Grand total
Leit	23	106	129
Laus störf	44	51	95
Laun	57	23	80
Fundargerðir	14	42	56
Starfsfólk	10	36	46
Vinnuskólinn	25	18	43
Nýtt sorpflokkunarkerfi	27	11	38
Sundlaugar	21	16	37
Sorphirða	7	29	36
Vinnutími og tímabil	23	8	31



### What have we learned?

- Investing time and resources in crunching site search data and analytical data in general shows its worth
- We couldn't have done without investing in the best tools available on the market
- Changes are hard. Senior users have more problems with the new site. Majority of users, especially younger people like the new design
- Building a new site is tough and a never ending task!



Tak!



